



Board of Directors

Brian Brennan, Director
Richard Hajas, Director
Neil Cole, Director

Mary Bergen, Director
Pete Kaiser, Director

CASITAS MUNICIPAL WATER DISTRICT

Meeting to be held at the
District Office
1055 Ventura Ave.
Oak View, CA

The meeting will also be held remotely via Zoom

Join Zoom Meeting

<https://us06web.zoom.us/j/98414854813?pwd=UXhtWS9zdm83ZU5CazNXenlEVEIRUT09>

Meeting ID: 984 1485 4813

Passcode: 757052

To join via Telephone please call (888) 788-0099 or (877) 853-5247

Enter Meeting ID: 984 1485 4813# Passcode: 757052#

June 22, 2022 @ 5:00 PM

Right to be heard: Members of the public have a right to address the Board directly on any item of interest to the public which is within the subject matter jurisdiction of the Board. The request to be heard should be made immediately before the Board's consideration of the item. No action shall be taken on any item not appearing on the agenda unless the action is otherwise authorized by subdivision (b) of ¶54954.2 of the Government Code and except that members of a legislative body or its staff may briefly respond to statements made or questions posed by persons exercising their public testimony rights under section 54954.3 of the Government Code.

Special Accommodations: If you require special accommodations for attendance at or participation in this meeting, please notify our office 24 hours in advance at (805) 649-2251, ext. 113. (Govt. Code Section 54954.1 and 54954.2(a)).

1. CALL TO ORDER
2. ROLL CALL

3. PLEDGE OF ALLEGIANCE
4. AGENDA CONFIRMATION
5. PUBLIC COMMENTS - Presentation on District related items that are not on the agenda - three minute limit.
6. CONSENT AGENDA
 - 6.a. Accounts Payable Report.
[Accounts Payable Report.pdf](#)
 - 6.b. Minutes of the June 8, 2022 Board Meeting.
[6 08 2022 Min.pdf](#)
 - 6.c. Resolution proclaiming a local emergency persists, re-ratifying the proclamation of a state of emergency by Executive Order and re-authorizing remote teleconference meetings of the legislative bodies of Casitas Municipal Water District for the period of June 23, 2022 to July 22, 2022 pursuant to Brown Act provisions.
[Resolution Subsequent AB 361.pdf](#)
7. PUBLIC HEARING ON THE ADOPTION OF THE FISCAL YEAR 2022-2023 BUDGET.
 - 7.a. Open Public Hearing.
[Board Memo for the Draft FY 2023 Budget Hearing 062222.pdf](#)
[Budget Document 6.2.22.pdf](#)
 - 7.b. Receive General Manager's Report and Recommendations.
 - 7.c. Receive Report of Written Communications by the Clerk of the Board.
 - 7.d. Public Comments.
 - 7.e. Close Public Hearing.
 - 7.f. Discussion by Board of Directors and Possible Adoption of the Resolution Approving the General Fund Budget, Debt Service Fund and Mira Monte Water Assessment District Fund Budgets for the Fiscal Year Ending June 30, 2023.
[Resolution Adopting General Fund Budget 2022-2023.pdf](#)
8. ACTION ITEMS

- 8.a. Adopt Resolution fixing a tax rate for Fiscal Year 2022-2023 and authorizing the President of the Board to execute a certificate requesting the Ventura County Board of Supervisors to levy such a tax.
[Resolution for Tax Rate State Water 2022-2023.pdf](#)
- 8.b. Adopt Resolution to authorize, under Proposition 4, the 2022-2023 Establishment of Appropriations Limit of \$16,867,937.
[Memo- Proposition 4 2022-2023.pdf](#)
[Resolution for Prop 4 - 2022-2023.pdf](#)
- 8.c. Adopt Resolution authorizing the levy of a special tax for Fiscal Year 2022-2023 for Community Facilities District No. 2013-1 (Ojai).
[Casitas MWD CFD No. 2013-1 \(Ojai\) Reso Auth FY 2022-23 Levy.pdf](#)
[Exhibit 1 \(Special Tax Levy\) - Approval.pdf](#)
- 8.d. Adopt a resolution approving the Casitas MWD Customer Bill Relief Program.
[Board Memo Regarding Proposed Bill Relief Program.pdf](#)
[ATT1_Proposed Bill Relief Program_Draft 061722.pdf](#)
[ATT2_Bill Relief Application \(3\).pdf](#)
- 8.e. Adopt a Resolution regarding a \$2,7000,000 loan to fund the replacement Aquatic Play Structure and Regenerative Filter System at the Casitas Water Adventure.
[Board Memo CWA Improvement Loan 062222.pdf](#)
[CWA APS Reso Authorizing Installment Agreement 062222 ATT1.pdf](#)
[Draft CWA APS Installment Sale Agreement 062222 ATT2.pdf](#)
- 8.f. Approve and file the Notice of Exemption and Award contract for Emergency Generator at Rincon Pump Plant (Specification No. 21-447) to Taft Electric in the amount of \$1,551,500.
[Board Memo_Emergency Generators Award 06142022.pdf](#)
[Backup Diesel Generators-CE Environmental Impact Analysis with Attachment A_2022-0614.pdf](#)
[Backup Diesel Generators-CE Memo_2022-0614.pdf](#)
[Backup Diesel Generators-NOE Form_2021-0913.pdf](#)
- 8.g. Approve, and Authorize Board President to sign, Agreements with: 1) Michael K. Nunley & Associates, Inc.; 2) Water Works Engineers, LLC; 3) MNS Engineers, Inc.; 4) Kennedy/Jenks Consultants, Inc. and 5) Cannon Corporation, for on-call engineering services for Fiscal Year 2022-23.
[Board Memo_On-CallEngineeringFY22-23.docx.pdf](#)
- 8.h. Approve, and Authorize Board President to sign, Agreements for on-call environmental consulting services for Fiscal Year 2022-23 with: Provost & Pritchard Consulting Group; Rincon Consultants; Padre Associates, Inc.; and Catalyst Environmental Solutions.
[Board Memo_On-CallEnvironmental_FY22-23.pdf](#)

- 8.i. Approve, and Authorize Board President to sign, Agreements for on-call geotechnical services for Fiscal Year 2022-23 with: NV5 West, Inc; Bajada Geosciences, Inc.; and Yeh and Associates, Inc.
[Board Memo_On-CallGeotechnical_FY22-23.pdf](#)
- 8.j. Extend the contract for Asphalt Paving, Specification No. 21-439 for Fiscal Year (FY) 2022-2023 to BSN Construction Inc. and Wingate Earthworks; and the President of the Board execute the agreements for said work.
[Board Memo- FY 2022-23 Asphalt.pdf](#)

9. INFORMATION ITEMS

- 9.a. Receive and file the Water Year 2021 Hydrology Report.
[220607 - Final Annual Report WY 2021.pdf](#)
- 9.b. Receive and file May 2002 Hydrology Report.
[2205 May 2022.pdf](#)

10. GENERAL MANAGER COMMENTS

11. BOARD OF DIRECTOR REPORTS ON MEETINGS ATTENDED

12. BOARD OF DIRECTOR COMMENTS PER GOVERNMENT CODE SECTION 54954.2(a).

13. CLOSED SESSION

- 13.a. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION (Government Code Section 54956.9(a) Santa Barbara Channelkeeper v. State Water Resources Control Board, City of San Buenaventura, et al.; and City of San Buenaventura v Duncan Abbott, et al., Cross Complaint; Superior Court of the State of California, County of Los Angeles, Case No. 19STCP01176.

14. ADJOURNMENT

CASITAS MUNICIPAL WATER DISTRICT
General Fund Check Authorization
Checks Dated 06/02/22 - 06/15/22
Presented to the Board of Directors For Approval June 22, 2022

Check	Payee		Description	Amount
001128	Payables Fund Account	# 9759651478	Accounts Payable Batch 060322	\$ 971,613.44
001129	Payables Fund Account	# 9759651478	Accounts Payable Batch 060822	\$ 631,742.75
001130	Payables Fund Account	# 9759651478	Accounts Payable Batch 061522	\$ 793,382.22
				<u>\$ 2,396,738.41</u>
001131	Payroll Found Account	# 9469730919	Estimated Payroll 07/14/22	\$ 244,000.00
			Total	<u><u>\$ 2,640,738.41</u></u>

Publication of check register is in compliance with Section 53065.6 of the Government Code which requires the District to disclose reimbursements to employees and/or directors.

The above numbered checks, 001128-001131 have been duly audited is hereby certified as correct.



Janyne Brown, Chief Financial Officer

A/P Fund

Publication of check register is in compliance with Section 53065.6 of the Government Code which requires the District to disclose reimbursements to employees and/or directors.

001128 A/P Checks: 046702
A/P Draft
Voids:

001129 A/P Checks: 046703-046766
A/P Draft 000339
Voids:
046735 - J.W. Enterprises - Continuation of detail of check 046735
046741 - Meiners Oaks ACE hardware - Continuation of detail of check 046740

001130 A/P Checks: 046767-46826
A/P Draft 000340-000346
Voids:
046796 - Meiners Oaks Ace Hardware - Continuation of detail of check 046795



Janyne Brown , Chief Financial Officer

CERTIFICATION

Payroll disbursements for the pay period ending 06/11/22
Pay Date 06/16/22
have been duly audited and are
hereby certified as correct.

Signed: Jayne Brown
Jayne Brown

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
C-CHECK	VOID CHECK	V	6/08/2022			046735		
C-CHECK	VOID CHECK	V	6/08/2022			046741		
C-CHECK	VOID CHECK	V	6/15/2022			046796		

* * T O T A L S * *	NO	INVOICE AMOUNT	DISCOUNTS	CHECK AMOUNT
REGULAR CHECKS:	0	0.00	0.00	0.00
HAND CHECKS:	0	0.00	0.00	0.00
DRAFTS:	0	0.00	0.00	0.00
EFT:	0	0.00	0.00	0.00
NON CHECKS:	0	0.00	0.00	0.00
VOID CHECKS:	3	VOID DEBITS 0.00		
		VOID CREDITS 0.00	0.00	0.00

TOTAL ERRORS: 0

VENDOR SET: 01 BANK:	TOTALS:	NO	INVOICE AMOUNT	DISCOUNTS	CHECK AMOUNT
		3	0.00	0.00	0.00
BANK:	TOTALS:	3	0.00	0.00	0.00

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
05939	Health Equity							
I-INV3299604	Reimburse Med/Dep Care	D	6/08/2022	1,302.00		000339		
I-INV3312931	Monthly Compliance Fee	D	6/08/2022	50.00		000339		
I-INV3407700	Reimburse Med/Dep Care	D	6/08/2022	2,837.71		000339		
I-INV3849313	Reimburse Med/Dep Care	D	6/08/2022	274.57		000339		4,464.28
05939	Health Equity							
I-INV3871904	Reimburse Med/Dep Care	D	6/15/2022	262.30		000340		262.30
00131	JCI JONES CHEMICALS, INC							
I-884013	Chlorine - TP, CM 884174	D	6/15/2022	3,575.27		000341		
I-887795	Chlorine - TP, CM 887828	D	6/15/2022	3,997.77		000341		7,573.04
00128	INTERNAL REVENUE SERVICE							
I-T1 202206131992	Federal Withholding	D	6/15/2022	42,069.43		000342		
I-T3 202206131992	SS Withholding	D	6/15/2022	46,104.98		000342		
I-T4 202206131992	Medicare Withholding	D	6/15/2022	10,782.70		000342		98,957.11
00187	CALPERS							
I-PBB202206131992	PERS BUY BACK	D	6/15/2022	130.46		000343		
I-PBP202206131992	PERS BUY BACK	D	6/15/2022	161.96		000343		
I-PEB202206131992	PEPRA EMPLOYEES PORTION	D	6/15/2022	12,237.33		000343		
I-PEM202206131992	PERS EMPLOYEE PORTION MGMT	D	6/15/2022	1,774.91		000343		
I-PER202206131992	PERS EMPLOYEE PORTION	D	6/15/2022	7,124.19		000343		
I-PRB202206131992	PEBRA EMPLOYER PORTION	D	6/15/2022	13,760.24		000343		
I-PRR202206131992	PERS EMPLOYER PORTION	D	6/15/2022	11,757.36		000343		46,946.45
00180	S.E.I.U. - LOCAL 721							
I-COP202206131992	SEIU 721 COPE	D	6/15/2022	12.50		000344		
I-UND202206131992	UNION DUES	D	6/15/2022	922.75		000344		935.25
00049	STATE OF CALIFORNIA							
I-T2 202206131992	STATE WITHHOLDING (CA)	D	6/15/2022	16,117.73		000345		16,117.73
05790	STATE OF OREGON							
I-OST202206131992	OR STATE TRANSIT TAX	D	6/15/2022	5.58		000346		
I-T2 202206131992	STATE WITHHOLDING (OR)	D	6/15/2022	410.09		000346		415.67
00215	SOUTHERN CALIFORNIA EDISON							
I-060322	Acct#700028645962 03/21-04/22	R	6/03/2022	971,613.44		046702		971,613.44
02587	A&M LAWNMOWER SHOP							
I-51796	Auto Cup - LCRA	R	6/08/2022	84.54		046703		
I-51881	Chain Saw - MAINT	R	6/08/2022	35.00		046703		
I-51907	Harness - MAINT	R	6/08/2022	73.59		046703		193.13

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
00010	AIRGAS USA LLC							
I-9126321613	Electrode Arc & Stick - EM	R	6/08/2022	115.81		046704		
I-9126321614	Air Carbon Arc Gouging Tool-EM	R	6/08/2022	285.54		046704		401.35
03044	Amazon Capital Services							
I-11R4-PM36-17H9	Duct Tape - PL	R	6/08/2022	112.83		046705		
I-1DGC-6NPY-3LJY	Keyboard - ENG	R	6/08/2022	66.25		046705		
I-1JVV-PKQC-TDP6	Water Pump Assembly - LCRA	R	6/08/2022	84.76		046705		
I-1T9Q-1DJJ-GPPN	LED Bulbs - LCRA	R	6/08/2022	303.84		046705		
I-1TCT-W47X-NNQH	Toner - LCRA	R	6/08/2022	182.31		046705		
I-1TD6-9TGG-9DFT	Starter Solenoid - LCRA	R	6/08/2022	12.86		046705		
I-1XXN-C14M-DFLD	HDMI Cable - IT	R	6/08/2022	56.30		046705		
I-1XXN-C14M-MMXP	Toner - DO	R	6/08/2022	75.08		046705		894.23
00029	AMERICAN TOWER CORP							
I-3935114	Tower Rent - Red Mountain	R	6/08/2022	1,035.62		046706		1,035.62
03429	AT&T							
I-3139037961	Acct#80030939773	R	6/08/2022	12.18		046707		12.18
00030	B&R TOOL AND SUPPLY CO							
I-1900973798	Socket & Countersink - EM	R	6/08/2022	23.32		046708		
I-1900973915	Pail GST 32 Turbine Oil - TP	R	6/08/2022	558.03		046708		581.35
00679	BAKERSFIELD PIPE & SUPPLY INC							
I-00679	Slip on Flanges - PL	R	6/08/2022	165.24		046709		165.24
01062	BP Medical Supplies							
C-E425111b	Accrue Use Tax	R	6/08/2022	27.04CR		046710		
D-E425111a	Accrue Use Tax	R	6/08/2022	27.04		046710		
I-E425111	Adult Smart Pads - LCRA	R	6/08/2022	373.00		046710		373.00
00724	BUREAU OF RECLAMATION							
I-90973890	Ltr of Agreement 19WC205506	R	6/08/2022	20,000.00		046711		20,000.00
00463	Cal-Coast Machinery							
I-765216	Flat Belt - LCRA	R	6/08/2022	48.80		046712		
I-765341	Flat Belt - LCRA	R	6/08/2022	28.57		046712		77.37
09182	CalPERS							
I-100000016817523	Unfunded Accrued Liab. 06/22	R	6/08/2022	60,562.33		046713		60,562.33
09907	CARUS PHOSPHATES, INC.							
I-SLS 10100846	Blended Phosphate - TP	R	6/08/2022	32,846.32		046714		32,846.32

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
00055	CASITAS BOAT RENTALS Gas for Boats - LCRA	R	6/08/2022	237.49		046715		237.49
05964	Charter Communications Holding Acct#8448200220232531	R	6/08/2022	935.00		046716		935.00
01843	COASTAL COPY Copier Usage - DO	R	6/08/2022	722.77		046717		722.77
00060	COASTLINE EQUIPMENT Repair - Unit 116	R	6/08/2022	6,165.03		046718		6,165.03
02115	Consumers Pipe Supply Co. Repair Kits - EM	R	6/08/2022	1,231.21		046719		1,231.21
00719	CORELOGIC INFORMATION SOLUTION Realquest Subscription	R	6/08/2022	137.50		046720		137.50
01483	CORVEL CORPORATION 1102WC210300001 DOS 04/27/22	R	6/08/2022	1,350.00		046721		1,350.00
05940	Eno Scientific LLC Accrue Use Tax Accrue Use Tax Well Watch 700 - ENG	R R R	6/08/2022 6/08/2022 6/08/2022	166.38CR 166.38 2,338.00		046722 046722 046722		2,338.00
05937	Enterprise FM Trust Vehicle Maintenance	R	6/08/2022	12,119.53		046723		12,119.53
02487	Eurofins Abraxis, Inc Algal Toxin Test Kits - LAB	R	6/08/2022	715.95		046724		715.95
00095	FAMCON PIPE & SUPPLY Ball Valves - PL	R	6/08/2022	1,467.18		046725		1,467.18
00093	FEDERAL EXPRESS Shipping - UT Shipping - LAB Shipping - ENG	R R R	6/08/2022 6/08/2022 6/08/2022	29.06 31.95 79.70		046726 046726 046726		140.71
00013	FERGUSON ENTERPRISES INC MJs, Saddles - PL 1.6 GPF - LCRA	R R	6/08/2022 6/08/2022	1,693.63 266.36		046727 046727		1,959.99

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
00104	FRED'S TIRE MAN							
I-139589	Oil Service - Unit 40	R	6/08/2022	56.35		046728		56.35
02720	Garda CL West, Inc.							
I-10695046	Armored Trunk Service	R	6/08/2022	522.05		046729		522.05
05932	Ghitterman Ghitterman & Feld F							
I-060822	1102WC180000001 05/28-06/10/22	R	6/08/2022	580.00		046730		580.00
04730	Hildebrand Consulting, LLC							
I-450	2022 Water Rate Study - ADMIN	R	6/08/2022	13,110.00		046731		13,110.00
02565	Industrial Networking Solution							
I-INV-1619522	Cradlepoint 3 Year Net Could	R	6/08/2022	819.69		046732		819.69
04302	J&J Chemical Co.							
I-283308	ODO-MATIV VPE - LCRA	R	6/08/2022	438.92		046733		438.92
09910	J.W. ENTERPRISES							
I-351803	CT Pumping - AVE 1PP	R	6/08/2022	78.50		046734		
I-351804	CT Pumping - VILLANOVA	R	6/08/2022	78.50		046734		
I-351805	CT Pumping - OVPP	R	6/08/2022	78.50		046734		
I-351806	CT Pumping - 4M PP	R	6/08/2022	78.50		046734		
I-351807	CT Pumping - GRAND AVE.	R	6/08/2022	78.50		046734		
I-351808	CT Pumping - 4M RES	R	6/08/2022	78.50		046734		
I-351809	CT Pumping - SA PLANT	R	6/08/2022	157.00		046734		
I-351810	CT Pumping - OPPER OJAI RES.	R	6/08/2022	78.50		046734		
I-351811	CT Pumping - 3M PUMP	R	6/08/2022	78.50		046734		
I-351812	CT Pumping - SIGNAL RES.	R	6/08/2022	78.50		046734		
I-351813	CT Pumping - FAIRVIEW RES.	R	6/08/2022	78.50		046734		
I-351814	CT Pumping - CASITAS DAM	R	6/08/2022	78.50		046734		
I-351815	CT Pumping - RINCON TANK	R	6/08/2022	78.50		046734		
I-351816	CT Pumping - BATES RES.	R	6/08/2022	78.50		046734		1,177.50
02344	Janitek Cleaning Solutions							
I-44822A	Janitorial Service - DO	R	6/08/2022	2,435.91		046736		2,435.91
00667	Kennedy/Jenks Consultants, Inc							
I-155257	Grant Support - ENG	R	6/08/2022	1,160.00		046737		
I-155329	Wellfield Support - ENG	R	6/08/2022	1,132.50		046737		2,292.50
02658	Liebert Cassidy Whitmore							
I-217191	Metter # CA182-00001	R	6/08/2022	76.00		046738		76.00

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
04689	MDJ Management							
I-CAS 1015	Heidelberger Tank Retain Wall	R	6/08/2022	64,656.34		046739		
I-CAS 1015.2	Heidelberger Tank Retain Wall	R	6/08/2022	3,402.97		046739		68,059.31
00151	MEINERS OAKS ACE HARDWARE							
I-006845	Brake Parts Cleaner - MAINT	R	6/08/2022	27.04		046740		
I-006956	Storage Boxes & Batteries-MAIN	R	6/08/2022	41.51		046740		
I-007177	Cable Ties & Screws - LCRA	R	6/08/2022	37.33		046740		
I-007401	Caster SWVL - PL	R	6/08/2022	33.16		046740		
I-007502	Fittings - LCRA	R	6/08/2022	105.94		046740		
I-007503	EMT Conduit - LCRA	R	6/08/2022	18.43		046740		
I-007541	Fittings - LCRA	R	6/08/2022	30.34		046740		
I-007542	Panel Nail & Scratch AWL - EM	R	6/08/2022	8.69		046740		
I-007600	Hat - MAINT	R	6/08/2022	10.71		046740		
I-007691	Paint - TP	R	6/08/2022	127.48		046740		
I-007692	Bolts & Screws & Cable Ties	R	6/08/2022	139.78		046740		
I-007693	Duck Tape - TP	R	6/08/2022	59.79		046740		
I-007871	Respirator Cnst & Bolts - WP	R	6/08/2022	55.88		046740		
I-007873	Sprypaint & Clamp - LCRA	R	6/08/2022	13.43		046740		709.51
03724	Michael K. Nunley & Associates							
I-100749	Mutual Well#7 Equipment - ENG	R	6/08/2022	4,288.10		046742		
I-100750	EL Toro Watermain Ext - ENG	R	6/08/2022	69.97		046742		
I-100752	Upper Foothill Replacement	R	6/08/2022	1,153.60		046742		
I-100753	Fairview Road Engineering	R	6/08/2022	4,962.03		046742		10,473.70
03444	Mission Linen Supply							
I-517126374	Uniform Pants - PL	R	6/08/2022	38.18		046743		
I-517126375	Uniform Pants - MAINT	R	6/08/2022	28.27		046743		
I-517126379	Uniform Pants - TP	R	6/08/2022	52.09		046743		118.54
01570	Ojai Auto Supply							
C-544823	V-Belt Return - LCRA	R	6/08/2022	8.13CR		046744		
I-545704	Lamp & Oil - Unit 55 & 112	R	6/08/2022	180.95		046744		172.82
00884	OJAI TERMITE & PEST CONTROL, I							
I-226502	Monthly Rodent Service - MAINT	R	6/08/2022	75.00		046745		75.00
00169	OJAI VALLEY SANITARY DISTRICT							
I-24149	Cust #20594	R	6/08/2022	299.60		046746		299.60
00169	OJAI VALLEY SANITARY DISTRICT							
I-24227	Cust#52921	R	6/08/2022	59.92		046747		59.92

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
05713	Pops Auto Repair							
I-0230	Cav Pump Rebuild - Unit 112	R	6/08/2022	1,616.50		046748		1,616.50
00790	PROFORMA							
I-BI85006869B	Decals - LCRA	R	6/08/2022	171.09		046749		171.09
10042	PSR ENVIRONMENTAL SERVICE, INC							
I-10863	Gas Tank Inspection - DO	R	6/08/2022	230.00		046750		
I-10864	Gas Tank Inspection - LCRA	R	6/08/2022	230.00		046750		460.00
02767	Pueblo Water Resources, Inc.							
I-2022-60	Wellfield Support - ENG	R	6/08/2022	2,310.00		046751		2,310.00
00788	QUINN COMPANY							
I-21801001	Rent Mini Ex - PL	R	6/08/2022	2,319.80		046752		
I-PC010418836	Key - PL	R	6/08/2022	70.13		046752		2,389.93
05557	Keegan Shirck							
I-060622	Safety Boot Stipend	R	6/08/2022	205.00		046753		205.00
04635	John Simon							
I-060622	Safety Boot Stipend	R	6/08/2022	205.00		046754		205.00
00215	SOUTHERN CALIFORNIA EDISON							
I-060122	Acct#700028735181	R	6/08/2022	7,188.90		046755		
I-060322a	Acct#700029026585	R	6/08/2022	1,830.91		046755		
I-060322b	Acct#700598317666	R	6/08/2022	33.38		046755		
I-060722	Acct#700030209177	R	6/08/2022	2,692.25		046755		11,745.44
00047	STATE WATER CONTRACTORS							
I-060222	22-23 Member Dues	R	6/08/2022	44,572.00		046756		44,572.00
04532	Corban Suggs							
I-060622	Safety Boot Stipend	R	6/08/2022	205.00		046757		
I-June 22	Corban Suggs	R	6/08/2022	538.10		046757		743.10
02703	Sunbelt Rentals							
I-105170290-0026	Emergency Generators Rental	R	6/08/2022	2,767.36		046758		2,767.36
01147	SUPERIOR GATE SYSTEMS							
I-4700	Gate Repair - LCRA	R	6/08/2022	300.00		046759		300.00
00498	BRIAN TAYLOR							
I-060722	Reimburse Expenses 06/22	R	6/08/2022	235.94		046760		
I-Apr 22	Reimburse Expenses 04/22	R	6/08/2022	2,180.57		046760		2,416.51

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
02163	Toro Enterprises, Inc.							
I-060622	Santa Ana Bridge PL Relo - ENG	R	6/08/2022	304,776.15		046761		304,776.15
00254	VENTURA LOCKSMITHS							
I-47156	Especial Cylinder Retrofit - L	R	6/08/2022	478.61		046762		478.61
09955	VENTURA WHOLESALE ELECTRIC							
I-268517	Materials for Owl Court - LCRA	R	6/08/2022	119.60		046763		119.60
00247	County of Ventura							
I-335209	Encroachment Permit PE22-0448	R	6/08/2022	370.00		046764		
I-336197	Encroachment Permit PE21-0696-	R	6/08/2022	170.00		046764		540.00
01283	Verizon Wireless							
I-9908004904	Monthly Cell Charges - LCRA	R	6/08/2022	430.50		046765		430.50
00663	WAXIE SANITARY SUPPLY							
I-80934367	Janitorial Supplies - LCRA	R	6/08/2022	2,891.88		046766		2,891.88
00010	AIRGAS USA LLC							
I-9126545769	Welding Supplies - PL	R	6/15/2022	192.37		046767		
I-9126641056	Welding Rob - EM	R	6/15/2022	282.68		046767		
I-9126641057	Welding Supplies - EM	R	6/15/2022	78.88		046767		
I-9989099582	Gas Cylinder Rental - PL	R	6/15/2022	407.35		046767		961.28
03044	Amazon Capital Services							
I-1FPV-47G7-1WQW	Monitors - LAB	R	6/15/2022	298.16		046768		
I-1LLT-KLK9-DKR4	Flash Drive - IT	R	6/15/2022	75.03		046768		
I-1MDF-XV19-49XF	Oxygen Sensor - PL	R	6/15/2022	133.96		046768		
I-1NJQ-HWK1-QTWY	Power Adjustable Boost Buck-EM	R	6/15/2022	64.32		046768		
I-1P19-TQN7-WPDD	Hard Hat - ENG	R	6/15/2022	17.69		046768		
I-1QTF-PNC7-17HP	Aeron Chair - IT	R	6/15/2022	193.00		046768		
I-1QTF-PNC7-NHNP	Business Prime Membership -ADM	R	6/15/2022	191.98		046768		
I-1VR4-QQK7-3VK9	Ink Cartridge - ENG	R	6/15/2022	142.58		046768		
I-1XVP-QXJF-41H4	Keyboard - IT	R	6/15/2022	37.53		046768		1,154.25
00014	AQUA-FLO SUPPLY							
C-SCM0161852	Flange & Gasket Return - WP	R	6/15/2022	156.14CR		046769		
C-SCM0162080	Gasket & Flange Return - WP	R	6/15/2022	223.87CR		046769		
I-SI1926999	Fittings - PL	R	6/15/2022	211.70		046769		
I-SI1930492	Fittings - MAINT	R	6/15/2022	14.49		046769		
I-SI1933320	PVC Bushing & Nipple - PL	R	6/15/2022	7.92		046769		
I-SI1933332	Ball Valve - PL	R	6/15/2022	171.47		046769		
I-SI1935956	Fittings - LCRA	R	6/15/2022	79.34		046769		
I-SI1936639	Hat - PL	R	6/15/2022	21.33		046769		126.24

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
01666	AT & T I-000018336027 Local, Regional, Long Distance	R	6/15/2022	1,198.44		046770		1,198.44
00018	AT & T MOBILITY I-287290467941X0622 Acct#287290467941 I-287294256431X0622 Acct#287294256431X0622 I-287299383384X0622 Acct#287299383384	R	6/15/2022	244.67 1,087.10 77.76		046771 046771 046771		1,409.53
00030	B&R TOOL AND SUPPLY CO I-1900974038 Grinder - PL I-1900974236 Racket & Sockets - UT	R	6/15/2022	285.65 728.82		046772 046772		1,014.47
00679	BAKERSFIELD PIPE & SUPPLY INC I-S2928731.001 Thread Lubricant - EM	R	6/15/2022	89.74		046773		89.74
03941	Bottomline Technologies I-370160 1102WC180000001	R	6/15/2022	3.83		046774		3.83
03977	Scot Byron I-060922 Reimburse Expenses 06/22	R	6/15/2022	499.98		046775		499.98
03698	Cart-Away Concrete Systems, In C-2202062b Accrue Use Tax C-2202105b Accrue Use Tax D-2202062a Accrue Use Tax D-2202105a Accrue Use Tax I-2202062 Drum Cover - PL I-2202105 2 Yard Material Loader - PL	R	6/15/2022	9.85CR 1,997.01CR 9.85 1,997.01 135.89 27,545.00		046776 046776 046776 046776 046776 046776		27,680.89
00058	COAST TO COAST I-53221 Ground Clamp - PL I-53224 Screws - EM	R	6/15/2022	15.00 2.72		046777 046777		17.72
00062	CONSOLIDATED ELECTRICAL C-9009-1021109 85-265V Power Supp Return - TP I-9009-1020763 Screw Clamp Block - TP I-9009-1021086 PLC Automation Upgrade - TP I-9009-1021512 Analog Opt Modu - ENG	R	6/15/2022	1,063.71CR 665.40 861.20 538.44		046778 046778 046778 046778		1,001.33
02041	Custom Mailing Solutions, Inc I-9630 Spring Newsltter Mailing	R	6/15/2022	6,168.00		046779		6,168.00
01001	CUSTOM PRINTING I-163354 2022 Spring Newsletter	R	6/15/2022	4,153.36		046780		4,153.36

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
01764	DataProse, LLC							
I-DP2202089	UB Mailing 05/22	R	6/15/2022	4,154.35		046781		4,154.35
02544	Department of Justice							
I-586254	Fingerprinting - LCRA/ENG/WP	R	6/15/2022	928.00		046782		928.00
00095	FAMCON PIPE & SUPPLY							
I-S100068859.003	3/4' Ball Valve - PL	R	6/15/2022	978.12		046783		
I-S100072084.003	Ball Valve & Coupling - PL	R	6/15/2022	810.81		046783		
I-S100072522.002	10" Romac Coupling - PL	R	6/15/2022	584.51		046783		
I-S100076258.001	1" Ball Valve - PL	R	6/15/2022	3,603.60		046783		
I-S100077508.001	8" Romac Coupling - PL	R	6/15/2022	3,048.05		046783		
I-S100077695.001	10"X8" Romac Coupling - PL	R	6/15/2022	2,415.27		046783		
I-S100077980.001	Fittings & Pipe - PL	R	6/15/2022	7,611.32		046783		
I-S100079107.001	Flange & MZX Flange - PL	R	6/15/2022	705.71		046783		
I-S100080898.001	Freight - PL	R	6/15/2022	648.77		046783		20,406.16
00013	FERGUSON ENTERPRISES INC							
I-0798097	8 Di Mj Rw OI Gate Valve - PL	R	6/15/2022	4,351.29		046784		4,351.29
00099	FGL ENVIRONMENTAL							
I-206456A	Lab Water Quality 04/19/22	R	6/15/2022	55.00		046785		
I-206851A	Nitrate Monitoring 04/26/22	R	6/15/2022	54.00		046785		
I-207315A	OWS-SA TP 05/03/22	R	6/15/2022	16.00		046785		
I-207333A	Nitrate Monitoring 05/03/22	R	6/15/2022	54.00		046785		179.00
00101	FISHER SCIENTIFIC							
I-3495413	0.8 UM Membrane Filter - LAB	R	6/15/2022	156.45		046786		156.45
03886	Ramiro Garcia							
I-061322	Reimburse Expenses 06/22	R	6/15/2022	312.00		046787		312.00
04634	GHD Inc							
I-380-0014580	Emergency Generator Design	R	6/15/2022	3,575.50		046788		3,575.50
00369	HARRINGTON INDUSTRIAL PLASTICS							
I-013C3060	1/2" Ball Valve - UT	R	6/15/2022	323.17		046789		323.17
00894	HOSE-MAN, INC.							
I-5296005-0001-05	Hose - PL	R	6/15/2022	118.34		046790		118.34
00127	INDUSTRIAL BOLT & SUPPLY							
I-232814-1	B7 Bolts - EM	R	6/15/2022	1,259.38		046791		1,259.38

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
00667	Kennedy/Jenks Consultants, Inc							
I-155321	On-Call Wellfield Tech - ENG	R	6/15/2022	1,566.25		046792		
I-155423	Heidelberger Boost Wall Design	R	6/15/2022	4,675.00		046792		6,241.25
01270	SCOTT LEWIS							
I-Apr/May 22	Reimburse Expenses 04/22-05/22	R	6/15/2022	2,142.75		046793		2,142.75
05449	Matheson Tri-Gas, Inc.							
I-0025755533	Liquid Oxygen - TP	R	6/15/2022	30,829.84		046794		30,829.84
00151	MEINERS OAKS ACE HARDWARE							
I-004404	Roto Bit Driver - IT	R	6/15/2022	24.80		046795		
I-005635	Spraypaint - EM	R	6/15/2022	5.85		046795		
I-006702	Addapter & Ball Valve - UT	R	6/15/2022	55.20		046795		
I-007586	Wasp & Jacket Foam - UT	R	6/15/2022	6.82		046795		
I-007663	Tape & Coupling Hose - PL	R	6/15/2022	86.41		046795		
I-007754	Sealant - EM	R	6/15/2022	9.21		046795		
I-007856	Rope - PL	R	6/15/2022	46.81		046795		
I-008004	Poly Rope - PL	R	6/15/2022	32.20		046795		
I-008033	Duck Tape & Paint Brush - UT	R	6/15/2022	37.97		046795		
I-008076	Bolts & Screws - MAINT	R	6/15/2022	44.70		046795		
I-008271	Paint for SA - MAINT	R	6/15/2022	253.14		046795		
I-008314	Soap - EM	R	6/15/2022	9.74		046795		
I-008333	Hose Flexogen - FISH	R	6/15/2022	50.34		046795		663.19
03444	Mission Linen Supply							
I-517166000	Uniform Pants - TP	R	6/15/2022	38.18		046797		
I-517166001	Uniform Pants - MAINT	R	6/15/2022	28.27		046797		
I-517166004	Uniform Pants - TP	R	6/15/2022	52.09		046797		
I-517212160	Uniform Pants - TP	R	6/15/2022	38.18		046797		
I-517212161	Uniform Pants - MAINT	R	6/15/2022	28.27		046797		
I-517212165	Uniform Pants - TP	R	6/15/2022	52.09		046797		237.08
03701	MNS Engineers, Inc.							
I-80553	Wellfield Pipe Replace - ENG	R	6/15/2022	5,210.00		046798		
I-80554	LCRA Sewer Design - ENG	R	6/15/2022	2,900.00		046798		8,110.00
00160	OILFIELD ELECTRIC CO, INC							
I-2032470	480V PP Infrared Testeing - EM	R	6/15/2022	1,900.00		046799		
I-2032480	Install Power to camera -MAINT	R	6/15/2022	985.00		046799		
I-2032481	Install Power to Camera -MAINT	R	6/15/2022	5,350.00		046799		8,235.00
01570	Ojai Auto Supply							
I-543374	Grease Fittings - GARAGE	R	6/15/2022	15.60		046800		
I-545578	Anti Freeze - Unit 35	R	6/15/2022	21.85		046800		37.45

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
00168	OJAI VALLEY NEWS							
I-1585	Ad 04/15/22	R	6/15/2022	150.00		046801		
I-2097	Display Ad - ENG	R	6/15/2022	336.00		046801		486.00
02268	Curtis Orozco							
I-061422	Refund for FICA 2018 & 2019	R	6/15/2022	289.02		046802		289.02
02053	Photo-Scan of Los Angeles, Inc							
I-29468	Camera Repair - LCRA	R	6/15/2022	13,678.84		046803		13,678.84
02187	Pitney Bowes Inc							
I-1020890104	Quarterly Postage Maint - ADM	R	6/15/2022	112.61		046804		112.61
05713	Pops Auto Repair							
I-0231	Pressure Washer Tune Up - 117	R	6/15/2022	952.49		046805		
I-0233	Tint Windows - Unit 15	R	6/15/2022	220.00		046805		
I-0234	Carlisle Radial Trail-Unit 234	R	6/15/2022	433.00		046805		1,605.49
00790	PROFORMA							
I-BI85007249A	T-Shirts - IT	R	6/15/2022	81.80		046806		
I-BI85007252A	Hat District Logo - EM	R	6/15/2022	32.33		046806		114.13
00215	SOUTHERN CALIFORNIA EDISON							
I-061122	Acct#700387230310	R	6/15/2022	32.33		046807		32.33
02950	Stantec Consulting Services In							
I-1931487	Casitas Master Plan - ENG	R	6/15/2022	19,719.50		046808		19,719.50
00050	STATE OF CALIFORNIA - EDD							
I-L1249642256	Unemployment Insurance	R	6/15/2022	3,736.94		046809		3,736.94
02703	Sunbelt Rentals							
I-125806135-0001	Excavator Bucket Rental - PL	R	6/15/2022	504.27		046810		504.27
01147	SUPERIOR GATE SYSTEMS							
I-4709	Gate Repair - MAINT	R	6/15/2022	150.00		046811		150.00
00317	TIERRA CONTRACTING INC							
I-053122	Fairview Road PL Const. - ENG	R	6/15/2022	137,909.12		046812		137,909.12
09465	TRAVIS AGRICULTURAL CONSTRUCTI							
I-2196412	Mutual Well 7 Equip Contract	R	6/15/2022	281,637.42		046813		281,637.42

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
03529	Trench Plate Rental Co. Plate Rental - PL	R	6/15/2022	2,066.26		046814		2,066.26
00825	USA BLUEBOOK Lab Materials - LAB	R	6/15/2022	2,450.17		046815		2,450.17
01967	Robert Vasquez Refund for FICA 2018 & 2019	R	6/15/2022	81.39		046816		81.39
09955	VENTURA WHOLESALE ELECTRIC 12 STR Copper - ENG	R	6/15/2022	986.99		046817		986.99
01283	Verizon Wireless Monthly Cell Charges - DO	R	6/15/2022	3,741.59		046818		3,741.59
01396	VULCAN CONSTRUCTION MATERIALS Cold Mix - PL	R	6/15/2022	1,210.91		046819		1,210.91
03940	Wai & Connor LLP Claim#1102WC180000001	R	6/15/2022	136.00		046820		136.00
00330	WHITE CAP CONSTRUCTION SUPPLY Push Broom - PL Trash Pump - PL	R R	6/15/2022 6/15/2022	153.51 696.59		046821 046821		850.10
05719	ZZ Technology Hydraulic Transient Analyses3M	R	6/15/2022	1,250.00		046822		1,250.00
04010	CALIFORNIA STATE DISBURSEMENT 200000001181291	R	6/15/2022	386.30		046823		386.30
00102	FRANCHISE TAX BOARD Payroll Deduction	R	6/15/2022	778.37		046824		778.37
00124	ICMA RETIREMENT TRUST - 457 DEFERRED COMP FLAT DEFERRED COMP PERCENT	R R	6/15/2022 6/15/2022	1,954.17 112.84		046825 046825		2,067.01
00985	NATIONWIDE RETIREMENT SOLUTION 457 CATCH UP DEFERRED COMP FLAT DEFERRED COMP PERCENT	R R R	6/15/2022 6/15/2022 6/15/2022	480.77 7,563.11 410.77		046826 046826 046826		8,454.65

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
-------------	------	--------	------------	----------------	----------	----------	--------------	--------------

* * T O T A L S * *		NO	INVOICE AMOUNT	DISCOUNTS	CHECK AMOUNT
REGULAR CHECKS:		122	2,221,066.58	0.00	2,221,066.58
HAND CHECKS:		0	0.00	0.00	0.00
DRAFTS:		8	175,671.83	0.00	175,671.83
EFT:		0	0.00	0.00	0.00
NON CHECKS:		0	0.00	0.00	0.00
VOID CHECKS:	0 VOID DEBITS		0.00		
	VOID CREDITS		0.00	0.00	

TOTAL ERRORS: 0

VENDOR SET: 01	BANK: AP	TOTALS:	NO	INVOICE AMOUNT	DISCOUNTS	CHECK AMOUNT
			130	2,396,738.41	0.00	2,396,738.41
BANK: AP	TOTALS:		130	2,396,738.41	0.00	2,396,738.41
REPORT TOTALS:			130	2,396,738.41	0.00	2,396,738.41

Adjudication Charge Fund Account

Publication of check register is in compliance with Section 53065.6 of the Government Code which requires the District to disclose reimbursements to employees and/or directors.

Adj. Checks: 000069

Voids:



Janyne Brown , Chief Financial Officer

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
05782 I-00888.003-5	GSI Water Solutions, Inc CMWD Litigation Support	R	6/15/2022	5,729.50		000069		5,729.50

* * T O T A L S * *	NO	INVOICE AMOUNT	DISCOUNTS	CHECK AMOUNT
REGULAR CHECKS:	1	5,729.50	0.00	5,729.50
HAND CHECKS:	0	0.00	0.00	0.00
DRAFTS:	0	0.00	0.00	0.00
EFT:	0	0.00	0.00	0.00
NON CHECKS:	0	0.00	0.00	0.00
VOID CHECKS:	0	VOID DEBITS 0.00 VOID CREDITS 0.00	0.00	0.00

TOTAL ERRORS: 0

VENDOR SET: 01 BANK: ADJ TOTALS:	NO	INVOICE AMOUNT	DISCOUNTS	CHECK AMOUNT
VENDOR SET: 01 BANK: ADJ TOTALS:	1	5,729.50	0.00	5,729.50
BANK: ADJ TOTALS:	1	5,729.50	0.00	5,729.50
REPORT TOTALS:	1	5,729.50	0.00	5,729.50

Minutes of the Casitas Municipal Water District
Board Meeting Held
June 8, 2022

1. CALL TO ORDER

Vice President Hajas called the meeting to order at 5:00 p.m.

2. ROLL CALL

Directors Bergen, Kaiser, Cole and Hajas are present. Director Brennan is absent. Also present are GM Flood, AGM Dyer, EA Vieira and Counsel Mathews.

3. PLEDGE OF ALLEGIANCE

Vice President Hajas led the Pledge of Allegiance.

4. AGENDA CONFIRMATION

There were no changes.

5. PUBLIC COMMENTS - Presentation on District related items that are not on the agenda
- three minute limit.

None

6. CONSENT AGENDA

6.a. Accounts Payable Report.
[Accounts Payable Report.pdf](#)

6.b. Minutes of the May 25, 2022 Board Meeting.
[5 25 2022 Min.pdf](#)

6.c. Resolution proclaiming a local emergency persists, re-ratifying the proclamation of a state of emergency by Executive Order and re-authorizing remote teleconference meetings of the legislative bodies of Casitas Municipal Water District for the period of June 9, 2022 to July 9, 2022 pursuant to Brown Act provisions.
[Resolution Subsequent AB 361.pdf](#)

The Consent Agenda was offered by Director Kaiser, seconded by Director Bergen and adopted by the following roll call vote:

AYES: Directors: Bergen, Kaiser, Cole, Hajas
NOES: Directors: None
ABSENT: Directors: Brennan
Resolution is numbered 2022-16

7. ACTION ITEMS

- 7.a. Review and possible action on the Letter of Intent from the United Water Conservation District regarding a five-year transfer of Casitas MWD's State Water Project Table A water supply.
[Board Memo for United Letter of Intent 060822.pdf](#)
[UWCD LOI Casitas Table A 060822 ATT1.pdf](#)

On the motion of Director Cole, seconded by Director Kaiser, the above recommendation was approved by the following roll call vote:

AYES:	Directors:	Bergen, Kaiser, Cole, Hajas
NOES:	Directors:	None
ABSENT:	Directors:	Brennan

- 7.b. Approve a cost-sharing agreement with the City of Ventura, City of Ojai, and the East Ojai Group (Musick, Peeler & Garnett; LLP) for mediation services related to the Santa Barbara Channelkeeper Groundwater Adjudication (California Superior Court Case# 19STCP01176).
[Board Memo Mediation Service Letter Agreement 060822.pdf](#)
[GW Adjudication Mediation Cost Sharing Agreement 060822.pdf](#)
[Exhibit 1 GW Adjudication mediation Cost Sharing Agreement 060822 ATT1.pdf](#)
[Exhibit 2 GW Adjudication Mediation Cost Sharing Agreement 060822 ATT2.pdf](#)

GM Flood explained that the attorney has requested that there be approval for the GM to make some minor revisions if necessary.

On the motion of Director Kaiser, seconded by Director Bergen the above recommendation and approval for minor revisions if necessary was approved by the following roll call vote:

AYES:	Directors:	Bergen, Kaiser, Cole, Hajas
NOES:	Directors:	None
ABSENT:	Directors:	Brennan

- 7.c. Review and possible action on the acquisition and financing of a replacement Aquatic Play Structure (APS) and Regenerative Filter System for the Casitas Water Adventure at the Lake Casitas Recreation Area.
[Board Memo CWA APS 060822.pdf](#)

Gm Flood provided a presentation and review on the proposed Aquatic Play Structure and possible financing options. The chosen recommendation is for the Splashtacular structure which is made from stainless steel and the regenerative filter system with a combination of funding in the amount of \$300,000 from Casitas and securing a loan in the amount of \$2.4 million dollars. Financing options were discussed as well as the schedule in order to have the new structure in

place for next year's season.

On the motion of Director Kaiser, seconded by Director Cole, the above recommendation was approved and staff was directed to bring financing documentation to the following board meeting. This was approved by the following roll call vote:

AYES:	Directors:	Bergen, Kaiser, Cole, Hajas
NOES:	Directors:	None
ABSENT:	Directors:	Brennan

- 7.d. Resolution adopting a Memorandum of Understanding between Casitas and Management employees for Fiscal Years 2022-2023 and 2023-2024.
[Board Memo Mgmt Negotiations 20220608.pdf](#)

The resolution was offered by Director Kaiser, seconded by Director Bergen and adopted by the following roll call vote:

AYES:	Directors:	Bergen, Kaiser, Cole, Hajas
NOES:	Directors:	None
ABSENT:	Directors:	Brennan

Resolution is numbered 2022-17

8. DISCUSSION ITEMS/PRESENTATIONS

- 8.a. Presentation of the Fiscal Year 2022-2023 Casitas MWD Budget.
[Board Memo for the Draft FY 2023 Budget 060822.pdf](#) [Budget Document 060822 ATT1.pdf](#)

GM Flood presented the draft Fiscal Year 2022-2023 Budget and answered questions from the board. The public hearing is scheduled for the June 22nd Board Meeting.

9. INFORMATION ITEMS

- 9.a. Recreation Committee Minutes.
[Rec Minutes 051022.pdf](#)
- 9.b. Finance Committee Minutes.
[Finance Minutes 052022.pdf](#)
- 9.c. SWP Intertie Report.
[SWP Intertie Project Cost 5-31-22.pdf](#)
- 9.d. CFD 2013 Report.
[CFD 2013-1 Project Cost 5-31-2022.pdf](#)

- 9.e. Adjudication Charges Report.
[Adjudication Charges YTD 5.31.22.pdf](#)
- 9.f. March Financial Statements.
[Financial Statements 03-31-2022 Summary.pdf](#)
- 9.g. Non Budgeted Items Log.
[Non-Budgeted Items Log.pdf](#)
- 9.h. Investment Report.
[Investment Report 5.31.2022.pdf](#)

The Information Items were received.

10. GENERAL MANAGER COMMENTS

GM Flood informed the board of the fall tours of facilities scheduled for Saturday October 29 and November 5th. We have about 30 spots for each tour so please let us know if you want us to reserve a spot for other elected officials and after that the spots are available on a first come, first serve basis.

Mr. Flood then informed the board that the State Water Resources Control Board contacted us about the intertie project and asked if we need more money and we said yes. We asked for 10% more. We did get a grant from the federal government for \$2 million dollars for that project. Staff has been discussing the project and we will try to break the project in smaller pieces and get some things moving quickly to get some of the pieces under construction.

In closing out the General Manager comments, Mr. Flood mentioned that he would be out on Monday.

11. BOARD OF DIRECTOR REPORTS ON MEETINGS ATTENDED

Director Bergen listened to the Ventura River Watershed meeting and Kelley did a great presentation. She told the story well and it was well received.

12. BOARD OF DIRECTOR COMMENTS PER GOVERNMENT CODE SECTION 54954.2(a).

None

Vice President Hajas moved the meeting into closed session at 5:48 p.m.

13. CLOSED SESSION

- 13.a. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION (Government Code Section 54956.9(a) Santa Barbara Channelkeeper v. State Water Resources Control Board, City of San Buenaventura, et al.; and City of San Buenaventura v Duncan Abbott, et al., Cross Complaint; Superior Court of the State of California,

County of Los Angeles, Case No. 19STCP01176.

Vice President Hajas moved the meeting back into open session at 6:13 p.m. with Mr. Mathews stating the board met with special counsel, there was general discussion and no action taken.

14. ADJOURNMENT

Vice President Hajas adjourned the meeting at 6:14 p.m.

Neil Cole, Secretary

CASITAS MUNICIPAL WATER DISTRICT

RESOLUTION NO. 2022-18

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CASITAS MUNICIPAL WATER DISTRICT PROCLAIMING A LOCAL EMERGENCY PERSISTS, RE-RATIFYING THE PROCLAMATION OF A STATE OF EMERGENCY BY EXECUTIVE ORDER, AND RE-AUTHORIZING REMOTE TELECONFERENCE MEETINGS OF THE LEGISLATIVE BODIES OF CASITAS MUNICIPAL WATER DISTRICT FOR THE PERIOD JUNE 23, 2022 to JULY 22, 2022 PURSUANT TO BROWN ACT PROVISIONS.

WHEREAS, the Casitas Municipal Water District is committed to preserving and nurturing public access and participation in meetings of the Board of Directors; and

WHEREAS, all meetings of Casitas Municipal Water District's legislative bodies are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code 54950 – 54963), so that any member of the public may attend, participate, and watch the District's legislative bodies conduct their business; and

WHEREAS, the Brown Act, Government Code section 54953(e), makes provision for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code section 54953(b)(3), subject to the existence of certain conditions; and

WHEREAS, a required condition is that a state of emergency is declared by the Governor pursuant to Government Code section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code section 8558; and

WHEREAS, a proclamation is made when there is an actual incident, threat of disaster, or extreme peril to the safety of persons and property within the jurisdictions that are within the District's boundaries, caused by natural, technological or human-caused disasters; and

WHEREAS, it is further required that state or local officials have imposed or recommended measures to promote social distancing, or, the legislative body meeting in person would present imminent risks to the health and safety of attendees; and

WHEREAS, the Board of Directors previously adopted a Resolution, Number 2021-23 on October 13, 2021, Resolution Number 2021-24 on November 10, 2021, Resolution Number 2021-26 on December 8, 2021, Resolution Number 2021-29 ON December 15, 2021, Resolution 2022-01 on January 12, 2022, Resolution Number 2022-05 on February 9, 2022, Resolution Number 2022-07 on March 9, 2022 and Resolution 2022-09 on March 23, 2022, Resolution 2022-11 on April 13, 2022, Resolution 2022-13 on May 11, 2022, Resolution 2022-16 on June 8, 2022 finding that the requisite conditions exist for the legislative bodies of Casitas Municipal Water District to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, as a condition of extending the use of the provisions found in section 54953(e), the Board of Directors must reconsider the circumstances of the state of emergency that exists in the District, and the Board of Directors has done so; and

WHEREAS, emergency conditions persist in the District, specifically, a state of emergency remains active; and

WHEREAS, the Board of Directors does hereby find that State of Emergency, and Social Distancing requirements and conditions causing imminent risk to attendees has caused, and will continue to cause, conditions of peril to the safety of persons within the District that are likely to be beyond the control of services, personnel, equipment, and facilities of the District, and desires to affirm a local emergency exists and re-ratify the proclamation of state of emergency by the Governor of the State of California and local orders for social distancing; and

WHEREAS, as a consequence of the local emergency persisting, the Board of Directors does hereby find that the legislative bodies of Casitas Municipal Water District shall continue to conduct their meetings without compliance with paragraph (3) of subdivision (b) of Government Code section 54953, as authorized by subdivision (e) of section 54953, and that such legislative bodies shall continue to comply with the requirements to provide the public with access to the meetings as prescribed in paragraph (2) of subdivision (e) of section 54953; and

WHEREAS, Casitas Municipal Water District has taken measures to ensure meeting access for the public via the Zoom platform including electronic video and telephone access.

NOW, THEREFORE, THE BOARD OF DIRECTORS OF CASITAS MUNICIPAL WATER DISTRICT DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. Recitals. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.

Section 2. Affirmation that Local Emergency Persists. The Board of Directors hereby considers the conditions of the state of emergency in the District and proclaims that a local emergency persists throughout the District, and meeting in person would present imminent risk.

Section 3. Re-ratification of Governor's Proclamation of a State of Emergency. The Board hereby ratifies the Governor of the State of California's Proclamation of State of Emergency, effective as of its issuance date of March 4, 2020.

Section 4. Remote Teleconference Meetings. The Staff, General Manager and legislative bodies of Casitas Municipal Water District are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution including, continuing to conduct open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act.

Section 5. Effective Date of Resolution. This Resolution shall take effect immediately upon its adoption and shall be effective until the earlier of (i) July 22, 2022, or such time the Board of Directors adopts a subsequent resolution in accordance with Government Code section 54953(e)(3) to extend the time during which the legislative bodies of Casitas Municipal Water District may continue to teleconference without compliance with paragraph (3) of subdivision (b) of section 54953.

PASSED AND ADOPTED by the Board of Directors of Casitas Municipal Water District, this 22nd day of June, 2022.

Richard Hajas, Vice President

Attest:

Neil Cole, Secretary

MEMORANDUM

TO: Board of Directors
From: Michael L. Flood, General Manager
RE: **Casitas MWD Fiscal 2022-2023 Budget Hearing**
Date: June 17, 2022

RECOMMENDATION:

Adopt the Casitas MWD Draft Fiscal 2022-2023 Budget as presented.

BACKGROUND:

The Draft FY 2023 budget includes a total budgeted expenses of approximately \$38.5M and total revenues projected at \$29.8M

A revenue gap of \$8.7M is identified within the draft budget and would be covered by a combination of CFD 2013-1 bond funds and District reserves.

The capital projects budget would be set at \$11.4M for both the Casitas Legacy system and the Casitas Ojai system.

The Engineering Department would be budgeted approximately \$9.93M in capital projects which is approximately 87% of the capital projects budget.

Funds required to balance the draft budget would come from reserves equating to \$8.7M total with \$6.3M from CFD 2013-1 bond fund reserves and \$2.4M from District reserve funds.

The Draft Fiscal 2022-2023 Budget was presented at the June 8, 2022 Board Meeting

DISCUSSION:

During the presentation of the Draft Fiscal 2022-2023 budget, the Board asked for the following:

1. Update on the District's current investments and outlook for the following year.

2. Reason for the budgeted increase in the Management Services and Supplies category from \$360K in Fiscal 2021-22 to \$788K in the proposed FY 2022-23 budget.

Update and Outlook on the District’s Investments:

The District’s current status of its invested funds is attached (May 31st Investment Report).

Invested funds are earning between 0.150% and 5.4% annually with the yields largely dependent on when the issue was purchased.

During the 2022-2023 Fiscal Year, one issue will be maturing and staff expects to reinvest the funds in another issue of a six-month duration.

Casitas’ Investment Advisor, Richard Rosenthal of US Bank, indicates that June 2022 bond yields for issues that Casitas is allowed to invest in range from 1.27% and 3.07% with the yields increasing with longer maturities.

Management Services and Supplies Budget Category:

The Management Services and Supplies category has a budgeted FY 2022-2023 increase of approximately \$428K due to the following budget line items:

	FY23	FY22		
Total Other Professional Services	755,753.00	360,473.00	395,280.00	
Computer Software	45,000.00	23,000.00	22,000.00	Granicus/ Adobe
Outside Services	60,000.00	40,000.00	20,000.00	
Education Training/Travel	50,000.00	9,500.00	40,500.00	
Other Professional Services	525,000.00	180,000.00	345,000.00	Legal Fees/ antipated ligation (not Adjudication)
			427,500.00	

The largest of these changes is in the ‘Other Professional Services’ that includes anticipated costs for Casitas’ General Counsel (AtoZ) but also for Casitas’ expert services related to review of the State’s ongoing instream flow study efforts. Expenses related to these expert services will be dependent on the level of activity the State engages in during the fiscal year.

Staff also included an estimated increase in travel expenses due to conferences and other meetings transitioning back to in-person formats.



Casitas Municipal Water District
Proposed Revenue FY2022-2023
 Manager Recommended

12,500 AF- Total

**FY2022-23
Budget**

Water Sales		
11-4-00-4000-00	Water Sales - Residential Gravity	17,394.00
11-4-00-4001-00	Water Sales - Residential Pumped	1,098,604.00
11-4-00-4004-00	Water Sales - Multi Res Pump	1,157.00
11-4-00-4004-85	Water Sales - Res Pump	1,103,602.00
11-4-00-4010-00	Water Sales - Commercial Gravity	1,119.00
11-4-00-4011-00	Water Sales - Commercial Pumped	567,657.00
11-4-00-4011-85	Water Sales - Commercial Pumped- Ojai	301,946.00
11-4-00-4021-00	Water Sales - Industrial Pumped	19,064.00
11-4-00-4021-85	Water Sales - Industrial Pumped- Ojai	4,001.00
11-4-00-4030-00	Water Sales - Resale Gravity	2,025,942.00
11-4-00-4031-00	Water Sales - Resale Pumped	684,954.00
11-4-00-4040-00	Water Sales - Temporary Meter- Pumped	18,283.00
11-4-00-4041-00	Water Sales - Other- Gravity	9,081.00
11-4-00-4042-00	Water Sales - Other- Pumped	135,257.00
11-4-00-4042-85	Water Sales -Other- Pumped- Ojai	67,367.00
11-4-00-4060-00	Water Sales - Ag Domestic - Gravity	48,474.00
11-4-00-4061-00	Water Sales - Ag Domestic - Pumped	2,057,093.00
11-4-00-4061-85	Water Sales - Ag Domestic - Pumped- Ojai	49,750.00
11-4-00-4062-00	Water Sales - Ag Dom Mult - Gr	28,245.00
11-4-00-4063-00	Water Sales - Ag Dom Multi - Pu	40,227.00
11-4-00-4070-00	Water Sales - Agricultural - Gravity	44,552.00
11-4-00-4071-00	Water Sales - Agricultural - Pumped	1,405,710.00
11-4-00-4081-00	Water Sales - Interdepartmental - Pumped	105,088.00
11-4-00-4082-00	Water Sales - CMWD - Pumped	1,356.00
Total		9,835,923

Water Service Charge		
11-4-00-4150-00	Meter Chg - CMWD Residential	1,988,382
11-4-00-4150-85	Meter Chg - OJAI Residential	1,698,462
11-4-00-4151-00	Meter Chg - CMWD Commercial	170,922
11-4-00-4151-85	Meter Chg - OJAI Commercial	243,612
11-4-00-4152-00	Meter Chg - CMWD Industrial	49,008
11-4-00-4152-85	Meter Chg - OJAI Industrial	2,352
11-4-00-4153-00	Meter Chg - CMWD Agriculture	271,914
11-4-00-4154-00	Meter Chg - CMWD Institutional	66,270
11-4-00-4154-85	Meter Chg - OJAI Institutional	59,574
11-4-00-4155-00	Meter Chg - CMWD Temporary	18,780
11-4-00-4156-00	Meter Chg - CMWD Ag Residential	556,920
11-4-00-4156-85	Meter Chg - OJAI Ag Residential	9,108
11-4-00-4157-00	Meter Chg - CMWD Interdepartmental	44,022
11-4-00-4158-00	Meter Chg - CMWD Resale	563,874
11-4-00-4159-00	Meter Chg - Fire Service	28,284
11-4-00-4160-00	Meter Chg- CMWD Multi Res	1,314
11-4-00-4160-85	Meter Chg- OJAI Multi Res	9,612
11-4-00-4162-85	Meter Chg-Ojai Comm Mult	954
Total		5,783,364

Water Delinquency		
11-4-00-4350-00	Hang Tag Fee	16,910
11-4-00-4351-00	Turn Off Fee	3,180
11-4-00-4352-00	Turn On Fee	3,180
11-4-00-4353-00	Late Fee - Residential	55,071
11-4-00-4357-00	Late Fee - Business	8,412
11-4-00-4361-00	Late Fee - Industrial	731
11-4-00-4365-00	Late Fee - Resale	665
11-4-00-4369-00	Late Fee - Other	2,187
11-4-00-4377-00	Late Fee - Agriculture Domestic	5,038
11-4-00-4381-00	Late Fee - Agriculture	3,538
11-4-00-4383-00	Late Fee- Multi Res	1,663
11-4-00-4395-00	N.S.F. - Returned Check Fee	720
Total		101,295

Water Services- Other		
11-4-00-4090-00	Capital Facilities Charge	44,040
11-4-00-4093-00	Meter Tests & Installations	16,930
11-4-00-4400-00	Flexible Storage	17,888
11-4-00-4420-00	Miscellaneous Revenue - Other	49,000
11-4-00-4425-00	Sale of Fixed Assets	5,000
11-4-00-4440-00	Administration Fee	15,000
11-4-00-4450-00	SWP - Sale of Water	375,000
Total		522,858

Taxes & Assessments		
11-4-00-4200-00	1 % - Secured Current General	2,640,736
11-4-00-4235-00	RDA - Pass Through	146,641
11-4-00-4315-00	State - Homeowners Property Tax Relief	17,481
29-4-00-4010-00	Bonded Debt	1,135,687
75-4-00-4010-00	CFD 2013-1 - Tax Secured	2,890,140
Total		6,830,685

State Water Project
Debt Service

Interest		
11-4-00-4115-00	Interest on Time Deposits and Investments	282,023
Total		282,023

Other Governmental Agencies		
11-4-00-4300-00	Federal Disaster Assistance	100,000
11-4-00-4305-00	Grant Revenue - Federal	750,000
Total		850,000

Recreation- Operations		
11-4-62-4500-00	Animal Permit	11,828
11-4-62-4510-00	Boat Fees - Annual	31,030
11-4-62-4515-00	Boat Fees - Daily	9,375
11-4-62-4525-00	Boat Inspection Fees - Quagga	5,440
11-4-62-4545-00	Camping Fees	2,393,586
11-4-62-4555-00	Commercials - Recreation	2,500
11-4-62-4570-00	Events - Recreation	48,137
11-4-62-4571-00	Events - Movie Night	6,204
11-4-62-4590-00	Grants - Recreation	200,000
11-4-62-4600-00	Kayak & Canoes Annual - Recreation	4,080
11-4-62-4605-00	Kayak and Canoes Daily - Recreation	30
11-4-62-4610-00	Miscellaneous Revenue	1,466
11-4-62-4625-00	Reservations	191,710
11-4-62-4630-00	Shower Facility Fees	43,284
11-4-62-4632-00	Snow Bird Pumping	95,400
11-4-62-4635-00	Trailer Storage Fees	300,000
11-4-62-4640-00	Vehicle Fees - Daily	512,360
11-4-62-4645-00	Violation Ordinance Fees	1,073
11-4-62-4650-00	Visitor Cards	182,550
11-4-62-4705-00	Boat Rental - Concession	60,068
11-4-62-4720-00	Park Store - Recreation	57,616
11-4-62-4725-00	Cafe - Concession	27,752
Total		4,185,489

Recreation- Water Park		
11-4-65-4810-00	Water Park - Group Pass Discount	32,475
11-4-65-4840-00	Water Park - Reservation Fee	54,040
11-4-65-4850-00	Water Park - Shade Rental Fee	6,675
11-4-65-4860-00	Water Park - Single Splash Fee	669,277
11-4-65-4870-00	Water Park - Water Fitness - Fee	29,535
11-4-65-4740-00	Water Park Snack Bar	9,348
Total		801,350

Adjudication		
12-4-00-4160-00	Meter Chg- CMWD Adjud Resident	65,584
12-4-00-4160-85	Meter Chg- OJAI Adjud Resident	55,876
12-4-00-4161-00	Meter Chg- CMWD Adjud Comm	17,808
12-4-00-4161-85	Meter Chg- OJAI Adjud Comm	25,325
12-4-00-4162-00	Meter Chg- CMWD Adjud Indust	1,035
12-4-00-4163-00	Meter Chg- CMWD Adjud Ag	99,340
12-4-00-4164-00	Meter Chg- CMWD Adjud Ag Resid	152,514
12-4-00-4164-85	Meter Chg- OJAI Adjud Ag Resid	2,577
12-4-00-4165-00	Meter Chg- CMWD Adjud Interdep	3,661
12-4-00-4166-00	Meter Chg- CMWD Adjud Resale	138,682
12-4-00-4167-00	Meter Chg- CMWD Adjud Other	5,691
12-4-00-4167-85	Meter Chg- OJAI Adjud Other	5,160
12-4-00-4169-00	Meter Chg-CMWDAdjud Ag MultRes	4,043
Total		577,296

Total Revenue 29,770,283

-

General Fund Operational Funds 16,243,440

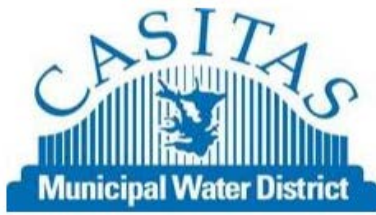
General Fund Other 3,936,881

Recreation 4,986,839

Adjudication 577,296

Debt Service 2,890,140

State Water Project 1,135,687



Casitas Municipal Water District
Revenue, Expense, & Capital Budget FY2022-2023
Manager Recommended

	FY2022-23 Budget	FY2021-22 Budget
	<i>12,500 AF- Total</i>	<i>11,787</i>
Total Revenue	29,770,283	27,558,793
Expenses		
Administration/ Warehouse	1,190,106	1,088,260
Administration: Debt Service	2,885,161	3,101,017
Administration: State Water Project	1,135,687	831,058
Board of Directors	251,492	245,610
District Maintenance	677,303	652,946
Electrical Mechanical	3,196,281	3,193,278
Engineering	1,436,349	1,544,502
Fisheries	624,151	558,823
General O&M	604,746	-
Human Resources	546,992	540,158
Information Technology	428,239	357,071
Management	1,663,455	1,167,833
Pipeline	1,735,865	1,693,105
Recreation - Operations & Water Park	4,917,066	4,302,508
Retirees	352,760	510,395
Safety / Garage	273,166	259,509
Utilities Maintenance	888,866	885,052
Water Conservation - Public/ Relations	757,636	687,917
Water Quality, Lab	913,534	809,309
Water Treatment	2,095,000	2,013,735
Adjudication	577,296	584,000
Total Expenses	27,151,149	25,026,085
Net	2,619,134	2,532,708
Capital		
Administration	-	-
Board of Directors	-	-
District Maintenance	43,500	16,000
Electrical Mechanical	273,200	80,900
Engineering	3,580,000	3,350,000
Engineering CFD	6,350,000	6,291,000
Fisheries	-	-
Human Resources	-	-
Information Technology	-	-
Management	-	-
Pipeline	208,500	73,100
Recreation - Operations & Water Park	112,500	227,500
Retirees	-	-
Safety / Garage	252,708	266,914
Utilities Maintenance	196,075	78,200
Water Conservation - Public/ Relations	-	-
Water Quality, Lab	124,572	84,544
Water Treatment	222,200	195,500
Total Capital Expenses	11,363,255	10,663,658
Net assets, end of year	(8,744,121)	(8,130,951)
Contribution from Variation of Water Sales Reserve	-	-
Contribution from Storm Damage Reserves	-	100,000
Contribution from Capital Imp Restricted Reserves	-	-
Contribution from Capital Imp Un Restricted Reserves	-	190,566
Contribution from Alternate Water Supply Studies Reserve	919,595	861,271
Contribution from CFD 2013-1 Improvement Fund	6,350,000	6,291,000
Contribution from Conservation Penalty Reserves	1,474,526	688,115
Net assets, End of Year	0	1



Casitas Municipal Water District
Revenue, Expense, & Capital Budget FY2022-2023
 Manager Recommended

	District Fund 11	Recreation Fund 11	State Water Project Fund 29	CFD 2013-01 Debt Service Fund 75	Adjudication Fund 12	
Adjudication Charge					577,296	
Interest	282,023					
Other Govt Agency	850,000					
Water Delinquency	101,295					
Water Sales	9,835,923					
Water Service Charge	5,783,364					
Water Service Other	522,858					
Recreation Operations		4,185,489				
Recreation Water Park		801,350				
Taxes & Assessments	2,804,858		1,135,687	2,890,140		
Total Revenue	20,180,321	4,986,839	1,135,687	2,890,140	577,296	29,770,283
Debt Service	77,228			2,759,913		
Legal	575,000					
Materials & Supplies	2,449,100	445,990				
Services/ Fees	987,867	81,900		26,820	250	
Outside Contracts	1,535,383	164,500	1,135,687	21,200	577,046	
Overhead	(522,650)	522,650				
Salaries & Benefits	10,518,796	3,398,826				
Utilities	2,092,445	303,200				
Total Expenses	17,713,168	4,917,066	1,135,687	2,807,933	577,296	27,151,149
Capital*						
Administration	-					
Board of Directors	-					
District Maintenance	43,500.00					
Electrical Mechanical	273,200.00					
Engineering	3,580,000.00					
Engineering CFD	6,350,000.00					
Fisheries	-					
Human Resources	-					
Information Technology	-					
Management	-					
Pipeline	208,500.00					
Recreation - Operations & Water Park	-	112,500.00				
Retirees	-					
Safety / Garage	252,708.12					
Utilities Maintenance	196,075.00					
Water Conservation - Public/ Relations	-					
Water Quality, Lab	124,571.66					
Water Treatment	222,200.00					
Total Capital Expenses	11,250,755	112,500	-	-	-	11,363,255
Total	(8,783,602)	(42,727)	1	82,208	-	(8,744,121)

*For more detail on Capital Projects see Proposed Capital Project Summary

Revenue Notes:	
- Volumetric water sales are based on 12,500 AF to various customer classes and include a 3% increase in rates starting in January 2023.	
- Recreation sales based on actual entrance totals, reservations made, or total amount of items sold from FY18-19 and include a 15% increase to the current rates.	
- Property tax revenue data isn't available until after July 1, therefore prior year's levy amount was used and increased by a factor of 2.5%.	
- Other Government Agency revenue includes \$750k FEMA grant reimbursement for emergency generators at Rincon.	
- Other Water Sales assumes \$375k State Water Project water sale.	
Expense Notes:	
- Debt service payments include Safety of the Dam Loan with the Bureau of Reclamation and Ojai CFD 2013-1.	
- Materials & Supplies Include the below:	- Outside Contracts Include the below:
Water Treatment Supplies (Liquid Oxygen, Chlorine, Ammonia etc.): \$574,855	State Water Project \$1,135,687
Pipeline General Supplies: \$406,860	Standby Generators & Maintenance \$180k
Gas & Maintenance: \$360,500	Water Quality Consulting, testing, & Reporting work \$211,546
Hydrants, meters, readers etc: \$142,600	Pipeline work (rentals, paving, leak detection, fish screen) \$211,000
- Overhead is charged to LCRA for work done by the District. Overhead charges include payroll processing and administration, payment processing, IT administration, and staff and administrative time. These costs are offset with services LCRA provides the District such as water shed management.	
- Budget includes salaries and benefits for 63 full time District employees, 1 part time employee, 5 Board of Directors, and 35 retirees. 2 parttime positions were converted to full time in the FY23 budget. LCRA has a total of 17 full time employees and an additional 27.5 full time equivalents.	
- Power purchased for pumping is estimated to be \$1.45 million for Legacy and \$260k for Ojai.	



Casitas Municipal Water District
Revenue & Expense Budget FY2022-2023
Adjudication
 Manager Recommended

	FY2022-23
Revenue	Budget
Meter Charge- CMWD Residential	65,584
Meter Charge- OJAI Residential	55,876
Meter Charge- CMWD Commercial	17,808
Meter Charge- OJAI Commercial	25,325
Meter Charge- CMWD Industrial	1,035
Meter Charge- CMWD Ag	99,340
Meter Charge- CMWD Ag Residential	152,514
Meter Charge- OJAI Ag Residential	2,577
Meter Charge- CMWD Interdepartmental	3,661
Meter Charge- CMWD Resale	138,682
Meter Charge- CMWD Other	5,691
Meter Charge- OJAI Other	5,160
Meter Charge- CMWD Ag Multi Residential	4,043
Total Revenue	577,296
Expenses	
Other Professional Fees	577,046
Bank Fees	250
Total Expenses	577,296
Net assets, end of year	-

The City of Ventura initiated a water rights adjudication of four groundwater basins within the Ventura River watershed. A pass through fee called "Adjudication Charge" was passed through a proposition 218 process for the expected costs associated with the lawsuit.



Casitas Municipal Water District
Proposed Capital Projects
Proposed for 2022 / 2023
Manager Recommended

	Amount	Funding Source	Total
33-Garage & Safety			
Unit E01 - replace #23 - original Enterprise order	6,580	Water Rates/ Reserves	
Unit #69 Dump Truck Replacement	30,000	Water Rates/ Reserves	
Unit #32 - Replacement - original Enterprise order	6,280	Water Rates/ Reserves	
Unit 42 - replacement - rollover from 21/22 budget	22,051	Water Rates/ Reserves	
Unit 51 - replacement - rollover from 21/22 budget	22,051	Water Rates/ Reserves	
Unit #15 - replacement - rollover from 21/22 budget	13,385	Water Rates/ Reserves	
Unit #4 - replacement - rollover from 21/22 budget	9,587	Water Rates/ Reserves	
Unit 14 - replacement - rollover from 21/22 budget	39,853	Water Rates/ Reserves	
New Unit - E&M - Enterprise - new vehicle purchase	13,385	Water Rates/ Reserves	
Unit #119 - JD 5100M Utility Tractor - Dept 55	22,684	Water Rates/ Reserves	
Unit #122 - Cat 420F Backhoe - Dept 53	28,353	Water Rates/ Reserves	
Tandem Axle Dump Trailer	16,000	Water Rates/ Reserves	
CAT 305 Mini Excavator	22,500	Water Rates/ Reserves	
Total Capital Projects Department - 33			252,708
40- Engineering CMWD Projects			
District Office Maintenance	100,000	Water Rates/ Reserves	
Rincon Control Tank Recoating/Rehab	275,000	Water Rates/ Reserves	
Robles Canal Maintenance	100,000	Water Rates/ Reserves	
Emergency Generators at Rincon, Avenue 1, and Avenue 2	1,000,000	FEMA Grant 75%	
Robles Fish Passage Improvements	200,000	Water Rates/ Reserves	
Ventura-Santa Barbara Counties Intertie	1,500,000	Water Rates/ Reserves	
Casitas Dam Hollow Jet Valve	250,000	Water Rates/ Reserves	
OVPP Pump 1 Replacement	70,000	Water Rates/ Reserves	
San Antonio Filter Upgrades	85,000	Water Rates/ Reserves	
Total Capital CMWD Projects			3,580,000
40- Engineering CFD 2013-1 Projects Funding from Bond Proceeds			
West and East Ojai Avenue Pipeline Replacement	4,500,000	CFD 2013-1	
Fairview/Foothill Pipeline Replacement	600,000	CFD 2013-1	
Heidelberger Pump Plant Fire Flow Pump	50,000	CFD 2013-1	
Wellfield Equipment and Hardware Upgrades	50,000	CFD 2013-1	
Mutual Well 7 Equipping and Site Work	1,000,000	CFD 2013-1	
Mutual Well #5 Rehabilitation	150,000.00	CFD 2013-1	
Total Capital CFD 2013-1 Projects			6,350,000
Total Capital Projects Department - 40			9,930,000
42 - Water Quality - Laboratory			
Lab Water Purification System	11,372	Water Rates/ Reserves	
Casitas Reservoir Protection-Continued	15,000	Water Rates/ Reserves	
Reservoir Mixers	35,000	Water Rates/ Reserves	
Algacide Storage Facility	18,200	Water Rates/ Reserves	
Laboratory Renovation carryover	5,000	Water Rates/ Reserves	
Reservoir Cleaning and Inspections (Casitas System)	40,000	Water Rates/ Reserves	
Total Capital Projects Department - 42			124,572
50 - Utilities Maintenance			
Large Meter Replacements 2" thru 6"	148,000	Water Rates/ Reserves	
Welder	5,800	Water Rates/ Reserves	
Handheld Street Valve Exerciser	11,075	Water Rates/ Reserves	
Sodium Hypochlorite Storage Tank	25,000	Water Rates/ Reserves	
Pipe Freezing Tool	6,200	Water Rates/ Reserves	
Total Capital Projects Department - 55			196,075

52 - Electrical Mechanical		
Rincon PP Surge Tank 10" Butterfly Valve	10,000	Water Rates/ Reserves
Check Valve replacement for 4M	7,500	Water Rates/ Reserves
Rewind 200hp Motor	15,000	Water Rates/ Reserves
PLC Automation Upgrade	5,500	Water Rates/ Reserves
Avenue #1 / Avenue #2 Pump Plant Upgrade	60,000	Water Rates/ Reserves
Upper Ojai Pump Plant Restoration	21,000	Water Rates/ Reserves
Emergency Generator	130,000	Water Rates/ Reserves
Pipeline Building Electrical Panel Updgrade	4,200	Water Rates/ Reserves
Rosemount Level Sensors (3)	5,000	Water Rates/ Reserves
Overhead Structure San Antonio MCC	15,000	Water Rates/ Reserves
Total Capital Projects Department - 52		273,200

53 - Pipeline		
Rincon Regulator Vault Improvements	25,000	Water Rates/ Reserves
Mercer Ave Mainline Replacement	45,000	Water Rates/ Reserves
Concrete Vacuum	8,500	Water Rates/ Reserves
Vault Painting and Rehab	55,000	Water Rates/ Reserves
Ojai Valley Main Improvements	75,000	Water Rates/ Reserves
Total Capital Projects Department - 53		208,500

54 - Water Treatment		
Backwash Residual Drying Bed Rehab	30,000	Water Rates/ Reserves
Filter Media Cleaning Filter	125,000	Water Rates/ Reserves
Reporting Sytem Upgrade	21,500	Water Rates/ Reserves
Gallery Sump Pump and Motor	6,500	Water Rates/ Reserves
6" Production Magmeter	4,200	Water Rates/ Reserves
Boat Ramp Repair	35,000	Water Rates/ Reserves
Total Capital Projects Department - 54		222,200

55- District Maintenance		
Ojai Valley PP Building Improvements	30,000	Water Rates/ Reserves
Roll-Up Door Conversion for Warehouse Deliveries	13,500	Water Rates/ Reserves
Total Capital Projects Department - 55		43,500

62/63/64/65 - Recreation		
LCRA Road Repairs	75,000	Grant 50/50 matching
Park Improvement Program	30,000	Rates/ Reserves
Restroom Refurbishment Bass	7,500	Grant 50/50 matching
Total Capital Projects Department - 62/63/64/65		112,500

Total Capital Projects / Budget 2022 / 2023

11,363,255

CASITAS MUNICIPAL WATER DISTRICT
 REVENUE/EXPENDITURES STATEMENT
 PROPOSED BUDGET FOR 2022/2023

11 -GENERAL FUND
 FINANCIAL SUMMARY

	BUDGET 2021-2022	REV. /EXP. T0:30Jun22	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
<u>REVENUE SUMMARY</u>					
<u>NON DEPARTMENTAL</u>					
WATER SALES	8,492,083	7,989,600	9,078,849	9,835,923	0
WATER SERVICES	15,218	14,925	16,930	16,930	0
WATER STANDBY	5,075,845	4,730,661	5,783,364	5,783,364	0
WATER DELINQUENCY	97,951	897,414	101,295	101,295	0
WATER REVENUE OTHER	732,162	60,859	461,888	461,888	0
CAPITAL FACILITIES	71,849	162,187	44,040	44,040	0
INTEREST	375,000	214,584	282,023	282,023	0
TAXES & ASSESSMENTS	2,497,277	2,629,675	2,640,736	2,640,736	0
OTHER GOVT. AGENCIES	1,440,915	447,702	867,481	867,481	0
MISCELLANEOUS REVENUES	<u>136,311</u>	<u>143,065</u>	<u>146,641</u>	<u>146,641</u>	<u>0</u>
TOTAL NON DEPARTMENTAL	18,934,611	17,290,671	19,423,247	20,180,321	0
<u>RECREATION - OPERATIONS</u>					
RECREATION PARK	3,748,270	3,270,674	4,040,053	4,040,053	0
RECREATION-CONCESSION	123,000	149,868	145,436	145,436	0
RECREATION OTHER	<u>0</u>	<u>4,004</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL RECREATION - OPERATIONS	3,871,270	3,424,545	4,185,489	4,185,489	0
<u>RECREATION - WATER PARK</u>					
RECREATION-CONCESSION	4,674	0	9,348	9,348	0
RECREATION-WATER PARK	<u>538,102</u>	<u>12,705</u>	<u>792,002</u>	<u>792,002</u>	<u>0</u>
TOTAL RECREATION - WATER PARK	<u>542,776</u>	<u>12,705</u>	<u>801,350</u>	<u>801,350</u>	<u>0</u>
TOTAL REVENUE	23,348,657	20,727,922	24,410,086	25,167,160	0

11 -GENERAL FUND
FINANCIAL SUMMARY

	BUDGET 2021-2022	REV. /EXP. T0:30Jun22	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
<u>EXPENDITURE SUMMARY</u>					
<u>RETIREES</u>					
Benefits	510,395	365,830	352,760	352,760	0
TOTAL RETIREES	510,395	365,830	352,760	352,760	0
<u>BOARD OF DIRECTORS</u>					
Salaries	118,812	61,782	130,693	130,693	0
Benefits	116,448	59,123	80,658	80,658	0
Services & Supplies	10,350	3,035	40,140	40,140	0
TOTAL BOARD OF DIRECTORS	245,610	123,941	251,492	251,492	0
<u>MANAGEMENT</u>					
Salaries	625,588	596,016	653,333	701,029	0
Benefits	181,373	190,425	182,513	173,674	0
Services & Supplies	360,473	218,759	768,753	788,753	0
TOTAL MANAGEMENT	1,167,433	1,005,200	1,604,599	1,663,455	0
<u>HUMAN RESOURCES</u>					
Salaries	141,228	139,444	152,727	157,687	0
Benefits	33,890	42,759	35,430	35,836	0
Services & Supplies	365,040	295,729	353,470	353,470	0
TOTAL HUMAN RESOURCES	540,158	477,933	541,627	546,992	0
<u>INFORMATION TECHNOLOGY</u>					
Salaries	237,036	225,858	252,075	252,075	0
Benefits	81,542	90,300	85,151	85,151	0
Services & Supplies	38,493	39,600	84,413	91,013	0
TOTAL INFORMATION TECHNOLOGY	357,071	355,759	421,639	428,239	0
<u>WATER CONSERVATION</u>					
Salaries	393,463	379,606	446,801	452,684	0
Benefits	137,822	147,999	146,527	147,077	0
Services & Supplies	156,032	61,409	157,375	157,875	0
TOTAL WATER CONSERVATION	687,317	589,014	750,703	757,636	0
<u>FISHERIES</u>					
Salaries	391,154	327,765	430,049	435,261	0
Benefits	116,602	125,498	132,773	133,818	0
Services & Supplies	51,068	33,084	55,073	55,073	0
TOTAL FISHERIES	558,823	486,347	617,894	624,151	0
<u>ADMINISTRATION SERVICES</u>					
Salaries	724,752	656,903	784,574	797,588	0
Benefits	240,883	257,002	270,856	271,406	0
Services & Supplies	952,093	492,947	722,830	720,990	0
Other Operating Expenses	(523,832)	0	(522,650)	(522,650)	0
TOTAL ADMINISTRATION SERVICES	1,393,896	1,406,851	1,255,610	1,267,334	0

11 -GENERAL FUND
FINANCIAL SUMMARY

	BUDGET 2021-2022	REV. /EXP. T0:30Jun22	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
<u>WAREHOUSE</u>					
Salaries	9,971	7,477	0	0	0
Benefits	3,035	1,947	0	0	0
Services & Supplies	<u>13,300</u>	<u>4,545</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL WAREHOUSE	26,306	13,969	0	0	0
<u>GARAGE</u>					
Salaries	25,814	11,112	12,399	12,399	0
Benefits	10,066	3,665	4,792	4,792	0
Services & Supplies	38,285	67,240	46,412	47,612	0
Services & Supplies-W.O.	<u>233,434</u>	<u>72,621</u>	<u>287,767</u>	<u>252,708</u>	<u>0</u>
TOTAL GARAGE	307,599	154,637	351,370	317,511	0
<u>SAFETY</u>					
Salaries	121,420	103,005	120,806	124,584	0
Benefits	48,681	51,234	45,868	46,987	0
Services & Supplies	17,843	16,873	36,793	36,793	0
Services & Supplies-W.O.	<u>33,480</u>	<u>12,500</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL SAFETY	221,424	183,611	203,467	208,363	0
<u>ENGINEERING</u>					
Salaries	864,223	582,388	889,147	896,070	0
Benefits	266,007	248,849	264,225	264,775	0
Services & Supplies	414,273	604,679	375,205	275,505	0
Salaries - Work Orders	0	193,656	0	0	0
Benefits - Work Orders	0	26,548	0	0	0
Services & Supplies-W.O.	<u>9,641,000</u>	<u>4,461,393</u>	<u>15,417,500</u>	<u>9,930,000</u>	<u>0</u>
TOTAL ENGINEERING	11,185,502	6,117,513	16,946,076	11,366,349	0
<u>WATER QUALITY - LAB</u>					
Salaries	349,477	347,077	373,081	373,081	0
Benefits	149,372	152,350	173,855	157,903	0
Services & Supplies	310,061	175,144	382,150	382,550	0
Services & Supplies-W.O.	<u>84,544</u>	<u>25,762</u>	<u>192,572</u>	<u>124,572</u>	<u>0</u>
TOTAL WATER QUALITY - LAB	893,454	700,333	1,121,659	1,038,106	0
<u>UTILITIES MAINTENANCE</u>					
Salaries	514,179	503,138	424,620	424,620	0
Benefits	189,351	216,161	187,329	187,329	0
Services & Supplies	181,522	241,012	272,692	276,917	0
Services & Supplies-W.O.	<u>78,200</u>	<u>94,582</u>	<u>196,075</u>	<u>196,075</u>	<u>0</u>
TOTAL UTILITIES MAINTENANCE	963,252	1,054,893	1,080,716	1,084,941	0
<u>ELECTRICAL MECHANICAL</u>					
Salaries	711,728	593,769	627,627	630,225	0
Benefits	239,905	242,151	227,362	227,798	0
Services & Supplies	2,241,345	909,845	2,335,138	2,338,258	0

CASITAS MUNICIPAL WATER DISTRICT
REVENUE/EXPENDITURES STATEMENT
PROPOSED BUDGET FOR 2022/2023

11 -GENERAL FUND
FINANCIAL SUMMARY

	BUDGET 2021-2022	REV. /EXP. T0:30Jun22	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
Services & Supplies-W.O.	<u>80,900</u>	<u>60,968</u>	<u>302,200</u>	<u>273,200</u>	<u>0</u>
TOTAL ELECTRICAL MECHANICAL	3,273,878	1,806,732	3,492,327	3,469,481	0
<u>DIST MAINT - PIPELINE</u>					
Salaries	676,892	636,620	598,429	602,626	0
Benefits	272,419	270,180	233,376	234,080	0
Services & Supplies	743,495	526,063	895,010	899,160	0
Services & Supplies-W.O.	<u>73,100</u>	<u>24,277</u>	<u>208,500</u>	<u>208,500</u>	<u>0</u>
TOTAL DIST MAINT - PIPELINE	1,765,905	1,457,140	1,935,314	1,944,365	0
<u>WATER TREATMENT</u>					
Salaries	860,064	816,991	821,521	821,521	0
Benefits	299,139	383,660	310,778	310,778	0
Services & Supplies	854,532	706,672	920,051	962,701	0
Services & Supplies-W.O.	<u>195,500</u>	<u>174,718</u>	<u>602,200</u>	<u>222,200</u>	<u>0</u>
TOTAL WATER TREATMENT	2,209,234	2,082,040	2,654,550	2,317,200	0
<u>OPERATIONS - MAINTENANCE</u>					
Salaries	280,357	251,448	282,981	282,981	0
Benefits	136,573	124,198	114,945	114,945	0
Services & Supplies	236,016	1,180,387	277,377	279,377	0
Services & Supplies-W.O.	<u>16,000</u>	<u>19,392</u>	<u>43,500</u>	<u>43,500</u>	<u>0</u>
TOTAL OPERATIONS - MAINTENANCE	668,946	1,575,426	718,803	720,803	0
<u>GENERAL O&M</u>					
Salaries	0	0	437,406	446,957	0
Benefits	0	0	143,801	145,410	0
Services & Supplies	<u>0</u>	<u>0</u>	<u>12,379</u>	<u>12,379</u>	<u>0</u>
TOTAL GENERAL O&M	0	0	593,586	604,746	0
<u>RECREATION - OPERATIONS</u>					
Salaries	1,208,602	1,078,136	1,306,873	1,316,712	0
Benefits	393,657	433,702	422,876	424,911	0
Services & Supplies	253,678	219,867	281,743	286,343	0
Other Operating Expenses	523,832	0	522,650	522,650	0
Salaries - Work Orders	0	130	0	0	0
Benefits - Work Orders	<u>0</u>	<u>10</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL RECREATION - OPERATIONS	2,379,769	1,731,846	2,534,142	2,550,616	0
<u>RECREATION - MAINTENANCE</u>					
Salaries	476,757	460,997	589,949	589,949	0
Benefits	129,332	142,528	128,700	128,700	0
Services & Supplies	424,990	441,872	503,770	482,370	0
Services & Supplies-W.O.	<u>137,500</u>	<u>211,672</u>	<u>112,500</u>	<u>112,500</u>	<u>0</u>
TOTAL RECREATION - MAINTENANCE	1,168,579	1,257,070	1,334,919	1,313,519	0

CASITAS MUNICIPAL WATER DISTRICT
 REVENUE/EXPENDITURES STATEMENT
 PROPOSED BUDGET FOR 2022/2023

11 -GENERAL FUND
 FINANCIAL SUMMARY

	BUDGET 2021-2022	REV. /EXP. T0:30Jun22	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
<u>RECREATION - PUBLIC REL</u>					
Salaries	208,152	82,340	137,733	137,733	0
Benefits	50,379	22,749	34,944	34,944	0
Services & Supplies	<u>115,550</u>	<u>138,353</u>	<u>122,800</u>	<u>122,800</u>	<u>0</u>
TOTAL RECREATION - PUBLIC REL	374,081	243,442	295,477	295,477	0
<u>RECREATION - WATER PARK</u>					
Salaries	376,540	184,910	676,364	676,364	0
Benefits	76,539	72,194	89,128	89,128	0
Services & Supplies	64,502	49,975	103,563	104,463	0
Services & Supplies-W.O.	<u>90,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL RECREATION - WATER PARK	607,580	307,079	869,054	869,954	0
<hr/>					
TOTAL EXPENDITURES	31,506,212	23,496,606	39,927,785	33,993,489	0
REVENUE OVER/(UNDER) EXPENDITURES	(8,157,555)	(2,768,684)	(15,517,699)	(8,826,329)	0

CASITAS MUNICIPAL WATER DISTRICT
 REVENUE/EXPENDITURES STATEMENT
 PROPOSED BUDGET FOR 2022/2023

12 -Adjudication
 FINANCIAL SUMMARY

	BUDGET 2021-2022	REV. /EXP. T0:30Jun22	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
<u>REVENUE SUMMARY</u>					
<u>Non Departmental</u>					
WATER STANDBY	584,000	481,092	577,296	577,296	0
WATER DELINQUNCY	<u>0</u>	<u>2,935</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL Non Departmental	<u>584,000</u>	<u>484,028</u>	<u>577,296</u>	<u>577,296</u>	<u>0</u>
TOTAL REVENUE	584,000	484,028	577,296	577,296	0

CASITAS MUNICIPAL WATER DISTRICT
 REVENUE/EXPENDITURES STATEMENT
 PROPOSED BUDGET FOR 2022/2023

12 -Adjudication
 FINANCIAL SUMMARY

	BUDGET 2021-2022	REV./EXP. T0:30Jun22	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
<u>EXPENDITURE SUMMARY</u>					
<u>Mangagement</u>					
Services & Supplies	450,000	572,802	577,046	577,046	0
TOTAL Mangagement	450,000	572,802	577,046	577,046	0
<u>Administration Services</u>					
Services & Supplies	250	0	250	250	0
TOTAL Administration Services	250	0	250	250	0
TOTAL EXPENDITURES	450,250	572,802	577,296	577,296	0
REVENUE OVER/(UNDER) EXPENDITURES	133,750	(88,774)	0	0	0

CASITAS MUNICIPAL WATER DISTRICT
 REVENUE/EXPENDITURES STATEMENT
 PROPOSED BUDGET FOR 2022/2023

12 -Adjudication

EXPENSES	BUDGET 2021-2022	EXPENDITURES T0:30Jun22	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
<hr/>					
Administration Services =====					
<u>Services & Supplies</u>					
12-5-30-5034-00 Bank Charges	250	0	250	250	0
TOTAL Services & Supplies	250	0	250	250	0
<hr/>					
TOTAL Administration Services	250	0	250	250	0
<hr/>					
TOTAL EXPENDITURES	450,250	572,802	577,296	577,296	0
REVENUE OVER/(UNDER) EXPENDITURES	133,750	(88,774)	0	0	0

CASITAS MUNICIPAL WATER DISTRICT
 REVENUE/EXPENDITURES STATEMENT
 PROPOSED BUDGET FOR 2022/2023

29 -USBR & SWP BONDED INDEBT
 FINANCIAL SUMMARY

	BUDGET 2021-2022	REV. /EXP. T0:30Jun22	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
<u>REVENUE SUMMARY</u>					
<u>Non Departmental</u>					
WATER SALES	834,483	955,550	1,135,687	1,135,687	0
MISCELLANEOUS REVENUES	<u>0</u>	<u>54,704</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL Non Departmental	<u>834,483</u>	<u>1,010,254</u>	<u>1,135,687</u>	<u>1,135,687</u>	<u>0</u>
TOTAL REVENUE	834,483	1,010,254	1,135,687	1,135,687	0

CASITAS MUNICIPAL WATER DISTRICT
 REVENUE/EXPENDITURES STATEMENT
 PROPOSED BUDGET FOR 2022/2023

29 -USBR & SWP BONDED INDEBT
 FINANCIAL SUMMARY

	BUDGET 2021-2022	REV. /EXP. T0:30Jun22	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
<u>EXPENDITURE SUMMARY</u>					
<u>PROPERTY TAX</u>					
Services & Supplies	831,058	3,183	1,135,687	1,135,687	0
TOTAL PROPERTY TAX	831,058	3,183	1,135,687	1,135,687	0
TOTAL EXPENDITURES	831,058	3,183	1,135,687	1,135,687	0
REVENUE OVER/(UNDER) EXPENDITURES	3,425	1,007,071	1	1	0

CASITAS MUNICIPAL WATER DISTRICT
 REVENUE/EXPENDITURES STATEMENT
 PROPOSED BUDGET FOR 2022/2023

75 -CFD -2013-1
 FINANCIAL SUMMARY

	BUDGET 2021-2022	REV. /EXP. T0:30Jun22	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
<u>REVENUE SUMMARY</u>					
<u>Non Departmental</u>					
WATER SALES	<u>2,772,642</u>	<u>2,753,309</u>	<u>2,890,140</u>	<u>2,890,140</u>	<u>0</u>
TOTAL Non Departmental	<u>2,772,642</u>	<u>2,753,309</u>	<u>2,890,140</u>	<u>2,890,140</u>	<u>0</u>
TOTAL REVENUE	2,772,642	2,753,309	2,890,140	2,890,140	0

CASITAS MUNICIPAL WATER DISTRICT
 REVENUE/EXPENDITURES STATEMENT
 PROPOSED BUDGET FOR 2022/2023

75 -CFD -2013-1
 FINANCIAL SUMMARY

	BUDGET 2021-2022	REV. /EXP. T0:30Jun22	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
<u>EXPENDITURE SUMMARY</u>					
<u>Property Tax</u>					
Services & Supplies	<u>2,748,438</u>	<u>2,351,804</u>	<u>2,807,933</u>	<u>2,807,933</u>	<u>0</u>
TOTAL Property Tax	2,748,438	2,351,804	2,807,933	2,807,933	0
<hr/>					
TOTAL EXPENDITURES	2,748,438	2,351,804	2,807,933	2,807,933	0
REVENUE OVER/(UNDER) EXPENDITURES	24,205	401,505	82,208	82,208	0

CASITAS MUNICIPAL WATER DISTRICT

RESOLUTION NO. 2022-19

RESOLUTION ADOPTING THE FINAL GENERAL FUND BUDGET AND
DEBT SERVICE FUND BUDGETS FOR THE FISCAL YEAR ENDING JUNE 30, 2023

WHEREAS, District staff has prepared a proposed budget for the 2022 / 2023 fiscal year;

WHEREAS, the General Manager has made modifications to the proposal made by the various section managers; and

WHEREAS, the resultant budget has been reviewed by the Finance Committee; and

WHEREAS, public meetings have been held to go over the budget with the public;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Casitas Municipal Water District, that the proposed budget per Board recommendations for the 2022 / 2023 fiscal year is hereby approved for the General Fund Budget broken down as follows; Revenue \$23,103,720, SWP Indebtedness Fund Budget Revenue \$1,135,687, Community Facilities District No. 2013-1 \$2,890,140 and 1% secured levy tax apportionment of \$2,640,736, Expenses \$27,151,149, Capital \$11,363,255.

Adopted this 22nd day of June, 2022.

Brian Brennan, President
Casitas Municipal Water District

ATTEST:

Neil Cole, Secretary
Casitas Municipal Water District

CASITAS MUNICIPAL WATER DISTRICT

RESOLUTION NO. 2022-20

RESOLUTION FIXING A TAX RATE FOR
FISCAL YEAR 2022-2023 AND AUTHORIZING AND
DIRECTING THE PRESIDENT OF THE BOARD TO EXECUTE A
CERTIFICATE REQUESTING THE VENTURA COUNTY
BOARD OF SUPERVISORS TO LEVY SUCH TAX

WHEREAS, the voters of the State of California passed Proposition 13 on June 6, 1978;
and

WHEREAS, Proposition 13 limits tax rates to voter-approved indebtedness; and

WHEREAS, the indebtedness for the State Water Project was approved by the voters of
Ventura county along with all the voters of the State of California on November 8, 1960, and
December 19, 1933 and the payments for fiscal year 2022-2023 totals \$980,870.; and

WHEREAS, the Ventura county collection and administrative fees are estimated to be
\$3,183.; and are voter-approved, authorized expenditures; and

WHEREAS, on the basis of valuation figures furnished by the Ventura County Auditor,
the amount to be raised by tax levy on unsecured personal property is \$43,967; and

WHEREAS, on the basis of information furnished by the Ventura County Auditor, the
amount to be raised by State subventions for voter-approved indebtedness amounts to \$4,522;
and

WHEREAS, it is estimated that \$20,213; will be received from the County in prior year
tax delinquencies; and

WHEREAS, taking account of the amount to be raised by tax levy on unsecured personal
property, the amount to be raised by state subventions, and the amount to be received in prior
delinquencies, the amount to be raised by taxation on secured property for voter-approved
indebtedness of \$1,036,100; and

WHEREAS, on the basis of figures furnished by the Ventura county Auditor, the net
assessed/market valuation of local secured property, exclusive of the utility roll, is
\$10,799,470,801; and the net assessed/market valuation of secured property on the utility roll is
estimated at \$192,082; and the net assessed/market valuation of all secured property in Casitas is
estimated at \$10,733,012,801; and

WHEREAS, with a 2.500 percent allowance for delinquency on net local secured
property of \$11,881,407,222; the current year delinquencies are estimated at \$297,035,181; and

WHEREAS, the reduction for redevelopment assessments is \$851,359,240; and

WHEREAS, the addition for the Homeowners Property Tax Relief exemption is \$66,458,000; and

WHEREAS, the tax rate required to raise the necessary funds of \$0.008958 per hundred dollars of assessed/market valuation on all property within Casitas' boundaries;

WHEREAS, the tax rate in the previous year was \$0.006805 per hundred dollars of assessed/market valuation;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Casitas Municipal Water District as follows:

1. The tax rate of Casitas Municipal Water District on all property within Casitas' boundaries for fiscal year 2022-2023 is hereby fixed at \$0.008958 per hundred dollars of assessed/market valuation for voter-approved indebtedness.
2. The president of the Board of Directors is hereby authorized and directed to execute a certificate in the form attached hereto.

Adopted this 22nd day of June, 2022.

Brian Brennan - President
Casitas Municipal Water District

ATTEST:

Neil Cole, Secretary
Casitas Municipal Water District

CERTIFICATE

The Board of Directors of Casitas Municipal Water District hereby certifies to the Board of Supervisors and Auditor of the County of Ventura as follows:

1. Casitas has voter-approved indebtedness for fiscal year 2022-23 for the following:
 - a. \$1,036,100 for the State Water Project indebtedness which was approved by the voters of the State of California on November 8, 1960 and December 19, 1933.
2. It is hereby directed that at the time and in the manner required by law for the levying of taxes for County purposes for fiscal year 2022-23, the Board of Supervisors of Ventura county shall levy, in addition to such other tax as may be levied by such Board, a tax on all property within Casitas' boundaries at the rate of \$0.008958 per hundred dollars of assessed/market valuation.

IN WITNESS WHEREOF this certificate has been executed on behalf of and at the direction of the Board of Directors of Casitas Municipal Water District by the President thereof this 22nd day of June, 2022.

Brian Brennan, President
Casitas Municipal Water District

**CASITAS MUNICIPAL WATER DISTRICT
MEMORANDUM**

TO: BOARD OF DIRECTORS
FROM: MICHAEL FLOOD – GENERAL MANAGER
SUBJECT: PROPOSITION 4 – RESOLUTION TO ADOPT THE 2022 / 2023
ESTABLISHMENT OF APPROPRIATIONS LIMIT OF \$16,867,937
DATE: 06/22/2022

RECOMMENDATION:

It is recommended that the Board of Directors adopt the Resolution for the 2022 / 2023 Establishment of Appropriations limit of \$16,867,937.

BACKGROUND AND OVERVIEW:

Article XIII B of the California Constitution as enacted by Proposition 4, the Gann Initiative of 1979, mandates a limit on the amount of proceeds from taxes that government agencies within California can receive and spend each fiscal year. The intent of this law is to limit government spending by putting a cap on the total tax proceeds that can be appropriated each year. State legislation requires government agencies to annually adopt a spending limit for each fiscal year. This limit can be re-established by a recorded vote of the Board throughout the fiscal year if deemed necessary. The calculation factors can only be revised annually. Any challenge to the declared amount must be brought within 45 days of its adoption.

The original legislation, Article XIII B was further modified by Proposition 111 and SB 88 as approved by California voters in June of 1990. Proposition 111 allows government agencies more flexibility in selecting certain inflation and population factors to calculate the Gann limit. The limit varies for each agency and can change each year. When a District's proceeds of taxes (less statutory exclusions) exceed the legal limit, excess tax revenue must be returned to the State or citizens via a process of refunds, rebates, or other means that may be determined at that time.

Each year the District must authorize both inflation and population factors to calculate its spending limitation amount. The inflation factors for FY 2022-23 are the California per capita cost of living ratio of 1.0755 and the population factor using the County of Ventura population and growth percentage change converted to a ratio is 0.9936.

As a result, the District's Proposition 4 spending limit is \$16,867,937. Total revenue subject to the spending limit is \$6,835,891. The District will be \$10,032,046 below its spending limit.

BUDGET IMPACT:

There is no fiscal impact as a result of this action.

ATTACHMENTS:

Resolution

Department of Finance Price and Population Information

Appropriation Limit Calculation

CASITAS MUNICIPAL WATER DISTRICT

A RESOLUTION ESTABLISHING THE APPROPRIATIONS LIMIT
FOR THE CASITAS MUNICIPAL WATER DISTRICT FOR THE
FISCAL YEAR ENDING JUNE 30, 2023

RESOLUTION NO.

WHEREAS, Section 7910 of the Government Code requires each local jurisdiction to establish its appropriations limit by resolution for the following fiscal year pursuant to Article XIII B of the California constitution at a regularly scheduled meeting or noticed special meeting; and

WHEREAS, 15 days prior to such meeting, documentation used in the determination of the appropriations limit has been made available to the public; and

WHEREAS, the determination of the appropriations limit is a legislative act;

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of Casitas Municipal Water District hereby establishes the appropriations limit of \$16,867,937 for Casitas Municipal Water District for the fiscal year ending June 30, 2023, pursuant to Article XIII B of the California Constitution.

ADOPTED this 22nd day of June, 2022

Brian Brennan, President
Casitas Municipal Water District

ATTEST:

Neil Cole, Secretary
Casitas Municipal Water District

Dear Fiscal Officer:

Subject: Price Factor and Population Information

Appropriations Limit

California Revenue and Taxation Code section 2227 requires the Department of Finance to transmit an estimate of the percentage change in population to local governments. Each local jurisdiction must use their percentage change in population factor for January 1, 2022, in conjunction with a change in the cost of living, or price factor, to calculate their appropriations limit for fiscal year 2022-23. Attachment A provides the change in California's per capita personal income and an example for utilizing the price factor and population percentage change factor to calculate the 2022-23 appropriations limit. Attachment B provides the city and unincorporated county population percentage change. Attachment C provides the population percentage change for counties and their summed incorporated areas. The population percentage change data excludes federal and state institutionalized populations and military populations.

Population Percent Change for Special Districts

Some special districts must establish an annual appropriations limit. California Revenue and Taxation Code section 2228 provides additional information regarding the appropriations limit. Article XIII B, section 9(C) of the California Constitution exempts certain special districts from the appropriations limit calculation mandate. The code section and the California Constitution can be accessed at the following website: <http://leginfo.legislature.ca.gov/faces/codes.xhtml>.

Special districts required by law to calculate their appropriations limit must present the calculation as part of their annual audit. Any questions special districts have on this requirement should be directed to their county, district legal counsel, or the law itself. No state agency reviews the local appropriations limits.

Population Certification

The population certification program applies only to cities and counties. California Revenue and Taxation Code section 11005.6 mandates Finance to automatically certify any population estimate that exceeds the current certified population with the State Controller's Office. **Finance will certify the higher estimate to the State Controller by June 1, 2022.**

Please Note: The prior year's city population estimates may be revised. The per capita personal income change is based on historical data.

If you have any questions regarding this data, please contact the Demographic Research Unit at (916) 323-4086.

KEELY MARTIN BOSLER
Director
By:

ERIKA LI
Chief Deputy Director

Attachment

- A. **Price Factor:** Article XIII B specifies that local jurisdictions select their cost of living factor to compute their appropriation limit by a vote of their governing body. The cost of living factor provided here is per capita personal income. If the percentage change in per capita personal income is selected, the percentage change to be used in setting the fiscal year 2022-23 appropriation limit is:

Per Capita Personal Income	
Fiscal Year (FY)	Percentage change over prior year
2022-23	7.55

- B. Following is an example using sample population change and the change in California per capita personal income as growth factors in computing a 2022-23 appropriation limit.

2022-23:

Per Capita Cost of Living Change = 7.55 percent
 Population Change = -0.30 percent

Per Capita Cost of Living converted to a ratio: $\frac{7.55 + 100}{100} = 1.0755$

Population converted to a ratio: $\frac{-0.30 + 100}{100} = 0.997$

Calculation of factor for FY 2022-23: $1.0755 \times 0.997 = 1.0723$

Attachment B
Annual Percent Change in Population Minus Exclusions*
January 1, 2021 to January 1, 2022 and Total Population, January 1, 2022

County City	<u>Percent Change</u>	<u>--- Population Minus Exclusions ---</u>		<u>Total Population</u>
	2021-2022	1-1-21	1-1-22	1-1-2022
Ventura				
Camarillo	-0.80	70,739	70,171	70,171
Fillmore	-1.27	16,681	16,469	16,469
Moorpark	-1.18	35,821	35,399	35,399
Ojai	-0.76	7,523	7,466	7,466
Oxnard	-0.21	200,480	200,050	200,050
Port Hueneme	0.00	19,662	19,662	21,599
San Buenaventura	-1.45	109,763	108,174	108,231
Santa Paula	0.86	30,629	30,892	30,892
Simi Valley	-1.18	126,478	124,985	124,985
Thousand Oaks	-1.11	125,995	124,592	124,592
Unincorporated	0.66	91,444	92,049	93,798
County Total	-0.64	835,215	829,909	833,652

*Exclusions include residents on federal military installations and group quarters residents in state mental institutions, state and federal correctional institutions and veteran homes.

Casitas Municipal Water District
Appropriation Limit

Appropriation Limit:

FY2021-22 Adopted Appropriations Limit 15,784,832 [a]

Growth/ Change Factor:

California Per Capita Income Change*	1.0755	
Change in Population-County*	<u>0.9936</u>	
Total Annual Adjustment Factor		1.0686 [b]

FY 2022-2023 Appropriation Limit 16,867,937 [a]*[b]=[c]

B. Appropriations Subject to Limit:

FY 2022-2023 Reveunes (All Funds Subject to Limit)	6,835,891
Less: Appropriations Reserves	-
Less: Non-Tax	-
Total Appropriations Subject to Limit	6,835,891

C. Amount Under/ (Over) Limit (A-B) 10,032,046

* Change in population and per capita income change is provided by the State of California Department of Finance.

CASITAS MUNICIPAL WATER DISTRICT

RESOLUTION NO. 2022-21

A RESOLUTION ESTABLISHING THE APPROPRIATIONS LIMIT
FOR THE CASITAS MUNICIPAL WATER DISTRICT FOR THE
FISCAL YEAR ENDING JUNE 30, 2023

WHEREAS, Section 7910 of the Government Code requires each local jurisdiction to establish its appropriations limit by resolution for the following fiscal year pursuant to Article XIII B of the California constitution at a regularly scheduled meeting or noticed special meeting; and

WHEREAS, 15 days prior to such meeting, documentation used in the determination of the appropriations limit has been made available to the public; and

WHEREAS, the determination of the appropriations limit is a legislative act;

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of Casitas Municipal Water District hereby establishes the appropriations limit of \$16,867,937 for Casitas Municipal Water District for the fiscal year ending June 30, 2023, pursuant to Article XIII B of the California Constitution.

ADOPTED this 22nd day of June, 2022

Brian Brennan, President
Casitas Municipal Water District

ATTEST:

Neil Cole, Secretary
Casitas Municipal Water District

CASITAS MUNICIPAL WATER DISTRICT

RESOLUTION NO. 2022-22

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CASITAS MUNICIPAL WATER DISTRICT, ACTING IN ITS CAPACITY AS THE LEGISLATIVE BODY OF CASITAS MUNICIPAL WATER DISTRICT COMMUNITY FACILITIES DISTRICT NO. 2013-1 (OJAI), AUTHORIZING THE LEVY OF A SPECIAL TAX FOR FISCAL YEAR 2022-2023

WHEREAS, on January 29, 2013 this Board of Directors (the “Board”) adopted Resolution No. 13-08, entitled “Resolution of the Board of Directors of the Casitas Municipal Water District, California Declaring Its Intention to Establish Community Facilities District No. 2013-1 (Ojai), to Authorize the Levy of Special Taxes Therein” (the “Resolution of Intention”), stating its intention to form Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) (the “CFD”) pursuant to the Mello-Roos Community Facilities Act of 1982, as amended, Section 53311 *et seq.* of the California Government Code (the “Act”); and

WHEREAS, on March 13, 2013, after providing all notice required by the Act, the Board held a noticed public hearing required by the Act relative to the formation of Community Facilities District No. 2013-1 (Ojai), the proposed levy of a special tax within Community Facilities District No. 2013-1 (Ojai) to finance certain improvements within the CFD as described in Resolution No. 13-08 and to secure the payment of any bonded indebtedness of the CFD, and the proposed issuance of up to \$60,000,000 of bonded indebtedness for Community Facilities District No. 2013-1 (Ojai); and

WHEREAS, on March 13, 2013, following the close of the public hearing, the Board adopted Resolution Nos. 13-12 (the “Resolution of Formation”) and 13-13 (the “Resolution to Incur Bonded Indebtedness”) which called a special election on August 27, 2013 within Community Facilities District No. 2013-1 (Ojai) on Measure V relating to the levying of a special tax, the incurring of bonded indebtedness and the establishment of an appropriations limit for the Community Facilities District No. 2013-1 (Ojai); and

WHEREAS, on August 27, 2013, a special election was held within Community Facilities District No. 2013-1 (Ojai) at which the qualified electors approved by more than a two-thirds vote Measure V authorizing the levy of a special tax within the Community Facilities District No. 2013-1 (Ojai) for the purposes described in the Resolution of Intention and the Resolution of Formation and the issuance of bonded indebtedness for Community Facilities District No. 2013-1 (Ojai) as described in the Resolution to Incur Bonded Indebtedness; and

WHEREAS, on November 13, 2013, the Board adopted Resolution No. 13-38 declaring the results of the special election, which results showed that the issues presented at said special election were approved by the qualified electors of the CFD by more than two-thirds of the votes cast at said special election; and

WHEREAS, on November 27, 2013 the Board adopted Ordinance No. 13-01 which authorized the levy of a special tax within Community Facilities District No. 2013-1 (Ojai) (the “Ordinance”); and

WHEREAS, this Board hereby certifies that the Ordinance authorizing the levy of the special taxes within Community Facilities District No. 2013-1 (Ojai) has been duly adopted in accordance with law and is legal and valid; and

WHEREAS, the Ordinance provides that the Board is further authorized to determine each year, by ordinance, or by resolution if permitted by then applicable law, on or before August 10 of each year, or such later date as is permitted by the law, the specific special tax rate and amount to be levied on each parcel of land in Community Facilities District No. 2013-1 (Ojai) pursuant to the rate and method of apportionment set forth for Community Facilities District No. 2013-1 (Ojai) in Exhibit “B” to Resolution No. 13-12 (the “Rate and Method”). The special tax rate to be levied pursuant to the Rate and Method shall not exceed the applicable maximum rates set forth therein, but the special tax may be levied at a lower rate; and

WHEREAS, it is now necessary and appropriate that the Board levy and collect the special taxes for Fiscal Year 2022-2023 for the purpose specified in the Ordinance, by the adoption of a resolution as specified by the Act and the Ordinance; and

NOW, therefore, the Board of Directors of the Casitas Municipal Water District acting in its capacity as the legislative body of Community Facilities District No. 2013-1 (Ojai) does hereby resolve as follows:

Section 1. The above recitals are all true and correct.

Section 2. In accordance with Section 53340 of the Act and the Ordinance, there is hereby levied upon the parcels within the CFD which are not otherwise exempt from taxation under the Act or the Ordinance the special taxes for Fiscal Year 2022-2023 (the “Special Taxes”), at the tax rates set forth in Exhibit 1 hereto. The Special Tax Consultant shall apportion the Special Taxes in the manner specified in Resolution Nos. 13-12 and 13-13. Such rates do not exceed the maximum rates set forth in the Ordinance. After adoption of this Resolution, but no later than July 5, 2022 (the County’s deadline of accepting direct assessment enrollments for tax year 2022-2023), or such later date as is permitted by the law, the Special Tax Consultant shall deliver the certified list of all parcels subject to the special tax levy, including the amount of the Special Taxes to be levied on each parcel in Fiscal Year 2022-2023 (the “Certified List”), to the Accounting Manager or designee, and thereafter, but in no event later than July 5, 2022, or such later date as is permitted by the law, the Accounting Manager or designee, shall cause a certified copy of this Resolution, together with the Certified List, to be filed with the County Auditor-Controller, or in the case of direct billing, at a different time or in a different manner if necessary to meet its financial obligations. The Certified List may contain tax rates lower than those set forth in Exhibit 1 if the Accounting Manager determines that such lower rates are adequate to accomplish the purposes of the CFD in Fiscal Year 2022-2023. The Accounting Manager or designee and the County Auditor-Controller are hereby authorized to make changes to the Certified List from time to time to correct any error in the amount of the levy on any parcel to make it consistent with the Rate and Method, including, but not limited to, adding any parcels omitted from the Certified List or deleting any parcels included in the Certified List.

Section 3. Properties or entities of the state, federal or other local governments shall be exempt from the special tax, except as otherwise provided in Sections 53317.3 and 53317.5 of the Act and the Rate and Method. No other properties or entities are exempt from the special tax

unless the properties or entities are expressly exempted in the Resolution of Formation, or in a resolution of consideration to levy a new special tax or special taxes or to alter the rate or method of apportionment of an existing special tax as provided in Section 53334 of the Act.

Section 4. All of the collections of the special tax pursuant to the Rate and Method shall be used as provided for in the Act and the Resolution of Formation. The special tax shall be levied within Community Facilities District No. 2013-1 (Ojai) only so long as needed for the purposes described in the Resolution of Formation.

Section 5. The special tax levied pursuant to the Rate and Method shall be collected in the same manner as ordinary *ad valorem* property taxes are collected and shall be subject to the same penalties and the same procedure, sale and lien priority in case of delinquency as is provided for ad valorem taxes (which such procedures include the exercise of all rights and remedies permitted by law to make corrections, including, but not limited to, the issuance of amended or supplemental tax bills), as such procedure may be modified by law or by this Board from time to time.

Section 6. As a cumulative remedy, if any amount levied as a special tax for payment of the interest or principal of any bonded indebtedness of Community Facilities District No. 2013-1 (Ojai) (the “Bonds”), together with any penalties and other charges accruing under the Ordinance, are not paid when due, the Board may, not later than four years after the due date of the last installment of principal on the Bonds, order that the same be collected by an action brought in the superior court to foreclose the lien of such special tax.

Section 7. The Chief Financial Officer or designee is hereby authorized to transmit a certified copy of this Resolution, together with the Certified List, to the County Assessor and/or the Treasurer-Tax Collector, together with other supporting documentation as may be required to place the Special Taxes on the secured property tax roll for Fiscal Year 2022-2023 and for the collection of the Special Taxes in the same manner as ordinary ad valorem property taxes and to perform all other acts which are required by the Act, the Ordinance, or by law or deemed necessary by the Accounting Manager in order to accomplish the purpose of this Resolution, the Act, or Bond covenants, or in the case of direct billing, the Accounting Manager or designer is hereby authorized to mail the applicable tax bill to the individual taxpayer.

Section 8. This Resolution shall be effective upon its adoption.

PASSED and ADOPTED by the Board of Directors of the Casitas Municipal Water District at a regular meeting held on the 22nd day of June 2022.

CASITAS MUNICIPAL WATER DISTRICT

By: _____
Brian Brennan, President
Casitas Municipal Water District

ATTEST:

By: _____
Neil Cole, Secretary
Casitas Municipal Water District

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
010-0-070-110	Single Family Detached	1	638,154	1	-	\$2,501.33	\$2,501.33
010-0-070-210	Single Family Detached	1	871,200	1	-	\$2,501.33	\$2,501.33
010-0-070-220	Single Family Detached	1	412,513	1	-	\$2,501.33	\$2,501.33
010-0-070-260	Single Family Detached	1	436,471	1	-	\$2,501.33	\$2,501.33
010-0-120-020	Single Family Detached	1	116,305	1	-	\$2,501.33	\$2,501.33
010-0-120-100	Single Family Detached	1	180,774	1	-	\$2,501.33	\$2,501.33
010-0-120-145	Single Family Detached	1	103,672	1	-	\$2,501.33	\$2,501.33
010-0-120-155	Single Family Detached	1	112,384	1	-	\$2,501.33	\$2,501.33
010-0-120-165	Single Family Detached	1	93,654	1	-	\$2,501.33	\$2,501.33
010-0-120-175	Single Family Detached	1	87,120	1	-	\$2,501.33	\$2,501.33
010-0-120-200	Single Family Detached	2	35,600	1	-	\$1,475.94	\$1,475.94
010-0-120-210	Single Family Detached	1	512,266	1	-	\$2,501.33	\$2,501.33
010-0-130-040	Single Family Detached	1	134,600	1	-	\$2,501.33	\$2,501.33
010-0-130-100	Single Family Detached	2	24,800	1	-	\$1,475.94	\$1,475.94
010-0-130-130	Single Family Detached	3	21,390	1	-	\$885.56	\$885.56
010-0-130-150	Single Family Detached	1	93,593	1	-	\$2,501.33	\$2,501.33
010-0-130-170	Single Family Detached	3	20,470	1	-	\$885.56	\$885.56
010-0-130-190	Single Family Detached	2	22,310	1	-	\$1,475.94	\$1,475.94
010-0-130-210	Single Family Detached	1	159,429	1	-	\$2,501.33	\$2,501.33
010-0-130-220	Single Family Detached	2	26,789	1	-	\$1,475.94	\$1,475.94
010-0-130-230	Single Family Detached	1	49,223	1	-	\$2,501.33	\$2,501.33
010-0-130-250	Single Family Detached	1	70,200	1	-	\$2,501.33	\$2,501.33
010-0-130-265	Single Family Detached	1	47,480	1	-	\$2,501.33	\$2,501.33
010-0-130-275	Single Family Detached	1	45,302	1	-	\$2,501.33	\$2,501.33
010-0-130-330	Single Family Detached	1	143,657	1	-	\$2,501.33	\$2,501.33
010-0-130-360	Single Family Detached	1	129,608	1	-	\$2,501.33	\$2,501.33
010-0-140-035	Single Family Detached	1	76,665	1	-	\$2,501.33	\$2,501.33
010-0-140-055	Single Family Detached	1	60,984	1	-	\$2,501.33	\$2,501.33
010-0-140-065	Single Family Detached	1	55,321	1	-	\$2,501.33	\$2,501.33
010-0-140-075	Single Family Detached	2	33,900	1	-	\$1,475.94	\$1,475.94
010-0-140-080	Single Family Detached	1	69,696	1	-	\$2,501.33	\$2,501.33
010-0-140-115	Single Family Detached	1	48,787	1	-	\$2,501.33	\$2,501.33
010-0-140-125	Single Family Detached	1	47,916	1	-	\$2,501.33	\$2,501.33
010-0-140-150	Single Family Detached	1	57,934	1	-	\$2,501.33	\$2,501.33
010-0-140-165	Single Family Detached	1	51,836	1	-	\$2,501.33	\$2,501.33
010-0-140-170	Single Family Detached	1	57,934	1	-	\$2,501.33	\$2,501.33
010-0-140-180	Single Family Detached	3	19,800	1	-	\$885.56	\$885.56
010-0-140-235	Single Family Detached	1	73,484	1	-	\$2,501.33	\$2,501.33
010-0-140-245	Single Family Detached	1	73,718	1	-	\$2,501.33	\$2,501.33
010-0-150-050	Single Family Detached	2	36,150	1	-	\$1,475.94	\$1,475.94
010-0-150-060	Single Family Detached	2	31,500	1	-	\$1,475.94	\$1,475.94
010-0-150-090	Single Family Detached	2	24,256	1	-	\$1,475.94	\$1,475.94
010-0-150-110	Single Family Detached	2	22,500	1	-	\$1,475.94	\$1,475.94
010-0-150-120	Single Family Detached	3	20,200	1	-	\$885.56	\$885.56
010-0-150-170	Single Family Detached	1	245,543	1	-	\$2,501.33	\$2,501.33
010-0-150-190	Single Family Detached	1	225,316	1	-	\$2,501.33	\$2,501.33
010-0-150-200	Single Family Detached	2	23,124	1	-	\$1,475.94	\$1,475.94

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
010-0-150-230	Single Family Detached	1	43,610	1	-	\$2,501.33	\$2,501.33
010-0-150-240	Single Family Detached	1	235,191	1	-	\$2,501.33	\$2,501.33
010-0-160-020	Single Family Detached	3	21,780	1	-	\$885.56	\$885.56
010-0-160-040	Single Family Detached	1	227,383	1	-	\$2,501.33	\$2,501.33
010-0-160-050	Single Family Detached	1	71,874	1	-	\$2,501.33	\$2,501.33
010-0-160-060	Single Family Detached	1	130,244	1	-	\$2,501.33	\$2,501.33
010-0-160-080	Single Family Detached	1	43,995	1	-	\$2,501.33	\$2,501.33
010-0-160-120	Single Family Detached	2	23,800	1	-	\$1,475.94	\$1,475.94
010-0-160-130	Single Family Detached	2	33,015	1	-	\$1,475.94	\$1,475.94
010-0-160-160	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
010-0-201-010	Single Family Detached	1	229,126	1	-	\$2,501.33	\$2,501.33
010-0-201-060	Single Family Detached	1	48,787	1	-	\$2,501.33	\$2,501.33
010-0-201-070	Single Family Detached	1	50,094	1	-	\$2,501.33	\$2,501.33
010-0-201-080	Single Family Detached	2	38,000	1	-	\$1,475.94	\$1,475.94
010-0-201-090	Single Family Detached	2	25,600	1	-	\$1,475.94	\$1,475.94
010-0-201-100	Single Family Detached	2	32,435	1	-	\$1,475.94	\$1,475.94
010-0-201-110	Single Family Detached	2	27,817	1	-	\$1,475.94	\$1,475.94
010-0-201-120	Single Family Detached	2	24,600	1	-	\$1,475.94	\$1,475.94
010-0-201-130	Single Family Detached	2	31,800	1	-	\$1,475.94	\$1,475.94
010-0-201-140	Single Family Detached	2	34,400	1	-	\$1,475.94	\$1,475.94
010-0-201-150	Single Family Detached	2	27,484	1	-	\$1,475.94	\$1,475.94
010-0-201-160	Single Family Detached	2	37,200	1	-	\$1,475.94	\$1,475.94
010-0-201-170	Single Family Detached	1	66,211	1	-	\$2,501.33	\$2,501.33
010-0-201-180	Single Family Detached	1	81,892	1	-	\$2,501.33	\$2,501.33
010-0-201-190	Single Family Detached	2	36,824	1	-	\$1,475.94	\$1,475.94
010-0-201-200	Single Family Detached	1	46,173	1	-	\$2,501.33	\$2,501.33
010-0-201-210	Single Family Detached	2	42,776	1	-	\$1,475.94	\$1,475.94
010-0-201-240	Single Family Detached	2	40,800	1	-	\$1,475.94	\$1,475.94
010-0-201-250	Single Family Detached	1	43,995	1	-	\$2,501.33	\$2,501.33
010-0-201-260	Single Family Detached	1	48,351	1	-	\$2,501.33	\$2,501.33
010-0-201-290	Single Family Detached	1	80,586	1	-	\$2,501.33	\$2,501.33
010-0-201-300	Single Family Detached	1	46,789	1	-	\$2,501.33	\$2,501.33
010-0-201-350	Single Family Detached	1	74,358	1	-	\$2,501.33	\$2,501.33
010-0-210-040	Single Family Detached	1	44,431	1	-	\$2,501.33	\$2,501.33
010-0-210-070	Single Family Detached	2	38,350	1	-	\$1,475.94	\$1,475.94
010-0-210-120	Single Family Detached	1	59,241	1	-	\$2,501.33	\$2,501.33
010-0-210-150	Single Family Detached	1	51,836	1	-	\$2,501.33	\$2,501.33
010-0-210-170	Single Family Detached	1	48,352	1	-	\$2,501.33	\$2,501.33
010-0-210-200	Single Family Detached	1	53,709	1	-	\$2,501.33	\$2,501.33
010-0-210-240	Single Family Detached	2	38,333	1	-	\$1,475.94	\$1,475.94
010-0-220-020	Single Family Detached	1	57,063	1	-	\$2,501.33	\$2,501.33
010-0-220-030	Single Family Detached	2	39,800	1	-	\$1,475.94	\$1,475.94
010-0-220-050	Single Family Detached	1	50,094	1	-	\$2,501.33	\$2,501.33
010-0-220-060	Single Family Detached	1	49,658	1	-	\$2,501.33	\$2,501.33
010-0-220-070	Single Family Detached	1	51,400	1	-	\$2,501.33	\$2,501.33
010-0-220-080	Single Family Detached	1	54,014	1	-	\$2,501.33	\$2,501.33
010-0-220-090	Single Family Detached	2	41,700	1	-	\$1,475.94	\$1,475.94

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
010-0-220-120	Single Family Detached	2	34,500	1	-	\$1,475.94	\$1,475.94
010-0-231-050	Single Family Detached	3	20,280	1	-	\$885.56	\$885.56
010-0-231-060	Single Family Detached	3	19,950	1	-	\$885.56	\$885.56
010-0-231-070	Single Family Detached	3	20,612	1	-	\$885.56	\$885.56
010-0-231-080	Single Family Detached	3	20,751	1	-	\$885.56	\$885.56
010-0-232-030	Single Family Detached	3	20,592	1	-	\$885.56	\$885.56
010-0-232-040	Single Family Detached	3	19,718	1	-	\$885.56	\$885.56
010-0-232-050	Single Family Detached	3	20,034	1	-	\$885.56	\$885.56
010-0-232-060	Single Family Detached	3	20,280	1	-	\$885.56	\$885.56
019-0-020-050	Single Family Detached	1	93,418	1	-	\$2,501.33	\$2,501.33
019-0-020-140	Single Family Detached	1	60,984	1	-	\$2,501.33	\$2,501.33
019-0-020-150	Single Family Detached	1	109,771	1	-	\$2,501.33	\$2,501.33
019-0-020-300	Single Family Detached	1	236,530	1	-	\$2,501.33	\$2,501.33
019-0-020-310	Single Family Detached	1	438,213	1	-	\$2,501.33	\$2,501.33
019-0-020-350	Single Family Detached	1	234,788	1	-	\$2,501.33	\$2,501.33
019-0-020-370	Single Family Detached	1	304,786	1	-	\$2,501.33	\$2,501.33
019-0-020-390	Single Family Detached	1	46,609	1	-	\$2,501.33	\$2,501.33
019-0-020-410	Single Family Detached	1	229,749	1	-	\$2,501.33	\$2,501.33
019-0-030-040	Single Family Detached	1	58,806	1	-	\$2,501.33	\$2,501.33
019-0-030-050	Single Family Detached	1	53,143	1	-	\$2,501.33	\$2,501.33
019-0-030-060	Single Family Detached	1	58,806	1	-	\$2,501.33	\$2,501.33
019-0-030-070	Single Family Detached	1	48,351	1	-	\$2,501.33	\$2,501.33
019-0-030-080	Single Family Detached	1	51,836	1	-	\$2,501.33	\$2,501.33
019-0-030-120	Single Family Detached	1	46,609	1	-	\$2,501.33	\$2,501.33
019-0-030-130	Single Family Detached	1	45,738	1	-	\$2,501.33	\$2,501.33
019-0-030-300	Single Family Detached	1	60,548	1	-	\$2,501.33	\$2,501.33
019-0-030-310	Single Family Detached	1	46,609	1	-	\$2,501.33	\$2,501.33
019-0-030-320	Single Family Detached	1	79,279	1	-	\$2,501.33	\$2,501.33
019-0-030-330	Single Family Detached	1	57,063	1	-	\$2,501.33	\$2,501.33
019-0-041-020	Single Family Detached	1	145,054	1	-	\$2,501.33	\$2,501.33
019-0-041-030	Single Family Detached	1	43,995	1	-	\$2,501.33	\$2,501.33
019-0-042-020	Single Family Detached	1	72,745	1	-	\$2,501.33	\$2,501.33
019-0-042-050	Single Family Detached	1	80,150	1	-	\$2,501.33	\$2,501.33
019-0-042-060	Single Family Detached	1	164,962	1	-	\$2,501.33	\$2,501.33
019-0-042-070	Single Family Detached	1	110,686	1	-	\$2,501.33	\$2,501.33
019-0-051-010	Single Family Detached	2	40,994	1	-	\$1,475.94	\$1,475.94
019-0-051-020	Single Family Detached	2	41,560	1	-	\$1,475.94	\$1,475.94
019-0-051-030	Single Family Detached	1	46,173	1	-	\$2,501.33	\$2,501.33
019-0-051-040	Single Family Detached	2	41,200	1	-	\$1,475.94	\$1,475.94
019-0-051-050	Single Family Detached	1	48,351	1	-	\$2,501.33	\$2,501.33
019-0-051-060	Single Family Detached	1	43,995	1	-	\$2,501.33	\$2,501.33
019-0-051-070	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
019-0-051-080	Single Family Detached	1	48,787	1	-	\$2,501.33	\$2,501.33
019-0-051-090	Single Family Detached	2	38,100	1	-	\$1,475.94	\$1,475.94
019-0-051-100	Single Family Detached	2	42,900	1	-	\$1,475.94	\$1,475.94
019-0-051-110	Single Family Detached	2	41,200	1	-	\$1,475.94	\$1,475.94
019-0-051-120	Single Family Detached	2	39,784	1	-	\$1,475.94	\$1,475.94

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
019-0-051-130	Single Family Detached	2	39,784	1	-	\$1,475.94	\$1,475.94
019-0-051-140	Single Family Detached	2	41,600	1	-	\$1,475.94	\$1,475.94
019-0-051-150	Single Family Detached	1	48,787	1	-	\$2,501.33	\$2,501.33
019-0-052-010	Single Family Detached	2	37,428	1	-	\$1,475.94	\$1,475.94
019-0-052-020	Single Family Detached	2	39,600	1	-	\$1,475.94	\$1,475.94
019-0-052-030	Single Family Detached	2	39,600	1	-	\$1,475.94	\$1,475.94
019-0-052-040	Single Family Detached	2	39,600	1	-	\$1,475.94	\$1,475.94
019-0-052-050	Single Family Detached	2	41,241	1	-	\$1,475.94	\$1,475.94
019-0-052-060	Single Family Detached	2	39,433	1	-	\$1,475.94	\$1,475.94
019-0-061-010	Single Family Detached	1	149,410	1	-	\$2,501.33	\$2,501.33
019-0-061-030	Single Family Detached	1	47,044	1	-	\$2,501.33	\$2,501.33
019-0-061-040	Single Family Detached	1	52,272	1	-	\$2,501.33	\$2,501.33
019-0-061-070	Single Family Detached	1	90,169	1	-	\$2,501.33	\$2,501.33
019-0-061-080	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
019-0-061-090	Single Family Detached	1	58,663	1	-	\$2,501.33	\$2,501.33
019-0-061-100	Single Family Detached	1	53,613	1	-	\$2,501.33	\$2,501.33
019-0-061-110	Single Family Detached	1	201,660	1	-	\$2,501.33	\$2,501.33
019-0-062-010	Single Family Detached	1	164,221	1	-	\$2,501.33	\$2,501.33
019-0-062-030	Single Family Detached	1	48,351	1	-	\$2,501.33	\$2,501.33
019-0-062-040	Single Family Detached	1	49,658	1	-	\$2,501.33	\$2,501.33
019-0-062-050	Single Family Detached	1	47,480	1	-	\$2,501.33	\$2,501.33
019-0-062-070	Single Family Detached	1	47,044	1	-	\$2,501.33	\$2,501.33
019-0-062-080	Single Family Detached	1	44,431	1	-	\$2,501.33	\$2,501.33
019-0-062-110	Single Family Detached	1	47,044	1	-	\$2,501.33	\$2,501.33
019-0-062-120	Single Family Detached	1	46,609	1	-	\$2,501.33	\$2,501.33
019-0-062-130	Single Family Detached	2	43,168	1	-	\$1,475.94	\$1,475.94
019-0-062-160	Single Family Detached	1	199,504	1	-	\$2,501.33	\$2,501.33
019-0-062-180	Single Family Detached	1	111,078	1	-	\$2,501.33	\$2,501.33
019-0-070-010	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
019-0-070-020	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
019-0-070-030	Single Family Detached	1	51,400	1	-	\$2,501.33	\$2,501.33
019-0-070-050	Single Family Detached	2	40,358	1	-	\$1,475.94	\$1,475.94
019-0-070-060	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
019-0-070-070	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
019-0-070-080	Single Family Detached	1	57,934	1	-	\$2,501.33	\$2,501.33
019-0-070-110	Single Family Detached	2	42,133	1	-	\$1,475.94	\$1,475.94
019-0-070-120	Single Family Detached	2	39,250	1	-	\$1,475.94	\$1,475.94
019-0-070-130	Single Family Detached	1	65,340	1	-	\$2,501.33	\$2,501.33
019-0-070-170	Single Family Detached	2	43,200	1	-	\$1,475.94	\$1,475.94
019-0-070-180	Single Family Detached	1	47,916	1	-	\$2,501.33	\$2,501.33
019-0-070-190	Single Family Detached	1	60,548	1	-	\$2,501.33	\$2,501.33
019-0-070-200	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
019-0-070-210	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
019-0-070-220	Single Family Detached	2	43,430	1	-	\$1,475.94	\$1,475.94
019-0-070-230	Single Family Detached	1	51,400	1	-	\$2,501.33	\$2,501.33
019-0-081-010	Single Family Detached	1	46,609	1	-	\$2,501.33	\$2,501.33
019-0-081-020	Single Family Detached	1	48,351	1	-	\$2,501.33	\$2,501.33

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
019-0-081-030	Single Family Detached	1	47,916	1	-	\$2,501.33	\$2,501.33
019-0-081-040	Single Family Detached	1	47,480	1	-	\$2,501.33	\$2,501.33
019-0-081-050	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
019-0-082-010	Single Family Detached	1	47,916	1	-	\$2,501.33	\$2,501.33
019-0-082-020	Single Family Detached	1	208,216	1	-	\$2,501.33	\$2,501.33
019-0-082-120	Single Family Detached	1	43,995	1	-	\$2,501.33	\$2,501.33
019-0-082-130	Single Family Detached	1	43,995	1	-	\$2,501.33	\$2,501.33
019-0-082-140	Single Family Detached	1	44,866	1	-	\$2,501.33	\$2,501.33
019-0-082-150	Single Family Detached	1	44,866	1	-	\$2,501.33	\$2,501.33
019-0-082-160	Single Family Detached	1	62,290	1	-	\$2,501.33	\$2,501.33
019-0-082-170	Single Family Detached	1	60,984	1	-	\$2,501.33	\$2,501.33
019-0-082-180	Single Family Detached	1	47,916	1	-	\$2,501.33	\$2,501.33
019-0-092-010	Commercial Property	7	-	-	1,056	\$382.38	\$382.38
019-0-092-030	Single Family Detached	1	74,923	1	-	\$2,501.33	\$2,501.33
019-0-092-040	Single Family Detached	1	51,836	1	-	\$2,501.33	\$2,501.33
019-0-092-050	Single Family Detached	2	39,800	1	-	\$1,475.94	\$1,475.94
019-0-092-060	Single Family Detached	1	45,738	1	-	\$2,501.33	\$2,501.33
019-0-092-070	Single Family Detached	2	42,000	1	-	\$1,475.94	\$1,475.94
019-0-092-120	Single Family Detached	2	38,000	1	-	\$1,475.94	\$1,475.94
019-0-092-140	Single Family Detached	2	33,200	1	-	\$1,475.94	\$1,475.94
019-0-092-150	Single Family Detached	2	35,600	1	-	\$1,475.94	\$1,475.94
019-0-092-160	Single Family Detached	2	32,000	1	-	\$1,475.94	\$1,475.94
019-0-092-170	Single Family Detached	2	37,600	1	-	\$1,475.94	\$1,475.94
019-0-092-190	Commercial Property	7	-	-	5,240	\$1,897.40	\$1,897.40
019-0-092-210	Single Family Detached	2	36,000	1	-	\$1,475.94	\$1,475.94
019-0-092-230	Single Family Detached	2	24,788	1	-	\$1,475.94	\$1,475.94
019-0-092-240	Single Family Detached	2	39,445	1	-	\$1,475.94	\$1,475.94
019-0-093-010	Single Family Detached	1	44,431	1	-	\$2,501.33	\$2,501.33
019-0-093-030	Single Family Detached	1	52,272	1	-	\$2,501.33	\$2,501.33
019-0-093-040	Single Family Detached	1	49,658	1	-	\$2,501.33	\$2,501.33
019-0-093-050	Single Family Detached	1	44,533	1	-	\$2,501.33	\$2,501.33
019-0-094-010	Single Family Detached	2	35,000	1	-	\$1,475.94	\$1,475.94
019-0-094-020	Single Family Detached	2	41,333	1	-	\$1,475.94	\$1,475.94
019-0-094-030	Single Family Detached	1	59,241	1	-	\$2,501.33	\$2,501.33
019-0-094-040	Single Family Detached	1	55,756	1	-	\$2,501.33	\$2,501.33
019-0-094-050	Single Family Detached	1	59,677	1	-	\$2,501.33	\$2,501.33
019-0-094-060	Single Family Detached	1	50,094	1	-	\$2,501.33	\$2,501.33
019-0-094-070	Single Family Detached	1	59,677	1	-	\$2,501.33	\$2,501.33
019-0-094-080	Single Family Detached	1	62,290	1	-	\$2,501.33	\$2,501.33
019-0-094-090	Single Family Detached	1	48,787	1	-	\$2,501.33	\$2,501.33
019-0-100-260	Single Family Detached	1	44,431	1	-	\$2,501.33	\$2,501.33
019-0-100-270	Single Family Detached	1	47,480	1	-	\$2,501.33	\$2,501.33
019-0-100-280	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
019-0-110-260	Commercial Property	7	-	-	11,445	\$4,144.23	\$4,144.23
019-0-110-335	Commercial Property	7	-	-	25,301	\$9,161.49	\$9,161.49
019-0-110-420	Commercial Property	7	-	-	3,538	\$1,281.11	\$1,281.11
019-0-110-470	Commercial Property	7	-	-	16,317	\$5,908.39	\$5,908.39

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
019-0-110-485	Commercial Property	7	-	-	17,992	\$6,514.90	\$6,514.90
019-0-180-010	Single Family Detached	2	29,732	1	-	\$1,475.94	\$1,475.94
019-0-180-020	Single Family Detached	1	55,756	1	-	\$2,501.33	\$2,501.33
019-0-180-030	Single Family Detached	3	19,166	1	-	\$885.56	\$885.56
019-0-180-040	Single Family Detached	3	16,552	1	-	\$885.56	\$885.56
019-0-180-060	Commercial Property	7	-	-	4,660	\$1,687.39	\$1,687.39
019-0-180-070	Commercial Property	7	-	-	1,056	\$382.38	\$382.38
019-0-180-080	Commercial Property	7	-	-	35,576	\$12,882.07	\$12,882.07
019-0-190-010	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-190-020	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-190-030	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-190-040	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-190-050	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-190-060	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-190-070	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-190-080	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-190-090	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-190-100	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-190-110	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-190-120	Condominium	5	-	1	-	\$486.40	\$486.40
019-0-190-130	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-190-140	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-190-150	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-190-160	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-190-170	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-190-180	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-190-190	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-190-200	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-190-210	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-010	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-020	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-030	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-040	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-050	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-060	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-070	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-080	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-090	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-100	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-110	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-120	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-130	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-140	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-150	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-160	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-170	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-180	Multifamily Attached	6	-	1	-	\$417.09	\$417.09

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
019-0-200-190	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-200	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-210	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-220	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-230	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-240	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-250	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-200-260	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-010	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-020	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-030	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-040	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-050	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-060	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-070	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-080	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-090	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-100	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-110	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-120	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-130	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-140	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-150	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-160	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-170	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-180	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-190	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-200	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-210	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
019-0-210-220	Multifamily Attached	6	-	1	-	\$417.09	\$417.09
020-0-010-035	Single Family Detached	1	43,995	1	-	\$2,501.33	\$2,501.33
020-0-010-100	Single Family Detached	1	121,532	1	-	\$2,501.33	\$2,501.33
020-0-010-110	Single Family Detached	1	44,431	1	-	\$2,501.33	\$2,501.33
020-0-010-140	Single Family Detached	2	42,863	1	-	\$1,475.94	\$1,475.94
020-0-010-310	Single Family Detached	2	37,430	1	-	\$1,475.94	\$1,475.94
020-0-010-320	Single Family Detached	2	36,872	1	-	\$1,475.94	\$1,475.94
020-0-010-330	Single Family Detached	2	36,930	1	-	\$1,475.94	\$1,475.94
020-0-010-340	Single Family Detached	2	40,660	1	-	\$1,475.94	\$1,475.94
020-0-010-350	Single Family Detached	1	44,862	1	-	\$2,501.33	\$2,501.33
020-0-010-360	Single Family Detached	2	43,200	1	-	\$1,475.94	\$1,475.94
020-0-010-370	Single Family Detached	2	39,700	1	-	\$1,475.94	\$1,475.94
020-0-010-380	Single Family Detached	2	40,885	1	-	\$1,475.94	\$1,475.94
020-0-010-390	Single Family Detached	2	39,039	1	-	\$1,475.94	\$1,475.94
020-0-010-400	Single Family Detached	2	37,974	1	-	\$1,475.94	\$1,475.94
020-0-010-420	Single Family Detached	1	174,937	1	-	\$2,501.33	\$2,501.33
020-0-010-430	Single Family Detached	1	197,326	1	-	\$2,501.33	\$2,501.33
020-0-010-440	Single Family Detached	1	189,050	1	-	\$2,501.33	\$2,501.33

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
020-0-010-450	Single Family Detached	1	188,614	1	-	\$2,501.33	\$2,501.33
020-0-010-470	Single Family Detached	1	52,269	1	-	\$2,501.33	\$2,501.33
020-0-010-480	Single Family Detached	1	116,741	1	-	\$2,501.33	\$2,501.33
020-0-021-020	Single Family Detached	3	17,314	1	-	\$885.56	\$885.56
020-0-021-030	Single Family Detached	1	54,014	1	-	\$2,501.33	\$2,501.33
020-0-021-050	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-021-060	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-021-070	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-021-080	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-021-110	Single Family Detached	1	60,548	1	-	\$2,501.33	\$2,501.33
020-0-021-120	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-021-130	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-021-140	Single Family Detached	2	36,853	1	-	\$1,475.94	\$1,475.94
020-0-021-150	Single Family Detached	1	85,409	1	-	\$2,501.33	\$2,501.33
020-0-021-205	Single Family Detached	1	44,350	1	-	\$2,501.33	\$2,501.33
020-0-021-210	Single Family Detached	1	74,568	1	-	\$2,501.33	\$2,501.33
020-0-022-010	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-022-020	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-022-030	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-022-050	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-030-010	Single Family Detached	1	50,965	1	-	\$2,501.33	\$2,501.33
020-0-030-030	Single Family Detached	1	72,745	1	-	\$2,501.33	\$2,501.33
020-0-030-050	Single Family Detached	1	96,465	1	-	\$2,501.33	\$2,501.33
020-0-030-060	Single Family Detached	1	43,726	1	-	\$2,501.33	\$2,501.33
020-0-030-070	Single Family Detached	1	79,364	3	-	\$7,503.99	\$7,503.99
020-0-030-080	Single Family Detached	2	23,475	3	-	\$4,427.82	\$4,427.82
020-0-040-030	Single Family Detached	1	51,400	1	-	\$2,501.33	\$2,501.33
020-0-040-040	Single Family Detached	2	25,078	1	-	\$1,475.94	\$1,475.94
020-0-040-050	Single Family Detached	2	26,630	1	-	\$1,475.94	\$1,475.94
020-0-040-080	Single Family Detached	1	60,112	1	-	\$2,501.33	\$2,501.33
020-0-040-150	Single Family Detached	3	17,550	1	-	\$885.56	\$885.56
020-0-040-160	Single Family Detached	1	104,108	1	-	\$2,501.33	\$2,501.33
020-0-052-010	Single Family Detached	1	52,707	1	-	\$2,501.33	\$2,501.33
020-0-052-020	Single Family Detached	1	51,836	1	-	\$2,501.33	\$2,501.33
020-0-052-040	Single Family Detached	2	32,000	1	-	\$1,475.94	\$1,475.94
020-0-052-050	Single Family Detached	2	34,575	1	-	\$1,475.94	\$1,475.94
020-0-052-060	Single Family Detached	1	53,578	1	-	\$2,501.33	\$2,501.33
020-0-052-070	Single Family Detached	2	35,150	1	-	\$1,475.94	\$1,475.94
020-0-052-080	Single Family Detached	1	43,585	1	-	\$2,501.33	\$2,501.33
020-0-052-090	Single Family Detached	1	45,028	1	-	\$2,501.33	\$2,501.33
020-0-053-010	Single Family Detached	1	46,609	1	-	\$2,501.33	\$2,501.33
020-0-053-020	Single Family Detached	2	37,400	1	-	\$1,475.94	\$1,475.94
020-0-053-030	Single Family Detached	1	47,480	1	-	\$2,501.33	\$2,501.33
020-0-053-060	Single Family Detached	1	48,351	1	-	\$2,501.33	\$2,501.33
020-0-061-030	Single Family Detached	1	50,965	1	-	\$2,501.33	\$2,501.33
020-0-061-040	Single Family Detached	2	42,250	1	-	\$1,475.94	\$1,475.94
020-0-061-050	Single Family Detached	2	39,100	1	-	\$1,475.94	\$1,475.94

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
020-0-061-140	Single Family Detached	1	50,094	1	-	\$2,501.33	\$2,501.33
020-0-061-150	Single Family Detached	2	34,700	1	-	\$1,475.94	\$1,475.94
020-0-061-160	Single Family Detached	2	42,070	1	-	\$1,475.94	\$1,475.94
020-0-061-170	Single Family Detached	1	47,480	1	-	\$2,501.33	\$2,501.33
020-0-061-180	Single Family Detached	1	46,609	1	-	\$2,501.33	\$2,501.33
020-0-062-010	Single Family Detached	1	58,806	1	-	\$2,501.33	\$2,501.33
020-0-062-020	Single Family Detached	1	71,874	1	-	\$2,501.33	\$2,501.33
020-0-062-030	Single Family Detached	1	63,162	1	-	\$2,501.33	\$2,501.33
020-0-062-040	Single Family Detached	2	35,360	1	-	\$1,475.94	\$1,475.94
020-0-062-060	Single Family Detached	1	46,173	1	-	\$2,501.33	\$2,501.33
020-0-062-070	Single Family Detached	1	76,230	1	-	\$2,501.33	\$2,501.33
020-0-071-120	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
020-0-071-130	Single Family Detached	4	7,000	1	-	\$573.64	\$573.64
020-0-071-160	Single Family Detached	3	15,654	1	-	\$885.56	\$885.56
020-0-071-200	Single Family Detached	4	8,325	1	-	\$573.64	\$573.64
020-0-071-210	Single Family Detached	3	16,650	1	-	\$885.56	\$885.56
020-0-071-220	Single Family Detached	3	16,656	1	-	\$885.56	\$885.56
020-0-071-230	Single Family Detached	4	3,843	1	-	\$573.64	\$573.64
020-0-071-240	Single Family Detached	4	6,248	1	-	\$573.64	\$573.64
020-0-071-250	Single Family Detached	3	12,218	2	-	\$1,771.12	\$1,771.12
020-0-071-260	Single Family Detached	3	11,100	2	-	\$1,771.12	\$1,771.12
020-0-071-270	Single Family Detached	4	7,462	1	-	\$573.64	\$573.64
020-0-071-280	Single Family Detached	4	7,538	1	-	\$573.64	\$573.64
020-0-071-290	Single Family Detached	4	4,971	1	-	\$573.64	\$573.64
020-0-071-300	Single Family Detached	4	2,486	1	-	\$573.64	\$573.64
020-0-071-310	Single Family Detached	3	10,786	3	-	\$2,656.68	\$2,656.68
020-0-071-370	Multifamily Attached	6	-	24	-	\$10,010.16	\$10,010.16
020-0-071-390	Single Family Detached	4	8,358	1	-	\$573.64	\$573.64
020-0-071-400	Single Family Detached	3	18,373	1	-	\$885.56	\$885.56
020-0-071-450	Single Family Detached	4	7,528	1	-	\$573.64	\$573.64
020-0-071-460	Single Family Detached	4	7,650	1	-	\$573.64	\$573.64
020-0-071-470	Multifamily Attached	6	-	10	-	\$4,170.90	\$4,170.90
020-0-071-530	Single Family Detached	4	7,000	1	-	\$573.64	\$573.64
020-0-071-540	Single Family Detached	4	7,000	1	-	\$573.64	\$573.64
020-0-072-010	Single Family Detached	3	15,083	1	-	\$885.56	\$885.56
020-0-072-030	Single Family Detached	4	9,823	1	-	\$573.64	\$573.64
020-0-072-050	Single Family Detached	4	6,102	2	-	\$1,147.28	\$1,147.28
020-0-072-065	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-072-075	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-072-085	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-072-095	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-072-105	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-072-115	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-072-125	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-072-135	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-073-010	Single Family Detached	3	17,200	1	-	\$885.56	\$885.56
020-0-073-020	Single Family Detached	2	22,500	1	-	\$1,475.94	\$1,475.94

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
020-0-073-030	Single Family Detached	4	6,566	1	-	\$573.64	\$573.64
020-0-073-040	Single Family Detached	3	13,171	1	-	\$885.56	\$885.56
020-0-073-050	Single Family Detached	4	6,594	1	-	\$573.64	\$573.64
020-0-073-060	Single Family Detached	4	7,392	1	-	\$573.64	\$573.64
020-0-073-070	Single Family Detached	3	10,598	1	-	\$885.56	\$885.56
020-0-073-080	Single Family Detached	3	16,712	1	-	\$885.56	\$885.56
020-0-073-090	Single Family Detached	4	3,981	1	-	\$573.64	\$573.64
020-0-073-100	Single Family Detached	3	13,193	1	-	\$885.56	\$885.56
020-0-073-110	Single Family Detached	3	13,193	2	-	\$1,771.12	\$1,771.12
020-0-073-120	Single Family Detached	4	6,187	1	-	\$573.64	\$573.64
020-0-080-180	Single Family Detached	1	608,032	1	-	\$2,501.33	\$2,501.33
020-0-080-190	Single Family Detached	1	145,926	1	-	\$2,501.33	\$2,501.33
020-0-080-200	Single Family Detached	1	60,113	1	-	\$2,501.33	\$2,501.33
020-0-080-210	Single Family Detached	1	80,586	1	-	\$2,501.33	\$2,501.33
020-0-080-225	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-080-235	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-080-245	Single Family Detached	1	43,996	1	-	\$2,501.33	\$2,501.33
020-0-080-255	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-080-265	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-080-275	Single Family Detached	1	50,530	1	-	\$2,501.33	\$2,501.33
020-0-080-310	Single Family Detached	1	74,187	1	-	\$2,501.33	\$2,501.33
020-0-080-330	Single Family Detached	1	74,118	1	-	\$2,501.33	\$2,501.33
020-0-090-050	Single Family Detached	1	47,044	1	-	\$2,501.33	\$2,501.33
020-0-090-060	Single Family Detached	2	33,400	1	-	\$1,475.94	\$1,475.94
020-0-090-070	Single Family Detached	2	30,800	1	-	\$1,475.94	\$1,475.94
020-0-090-080	Single Family Detached	2	31,250	1	-	\$1,475.94	\$1,475.94
020-0-090-110	Single Family Detached	2	31,600	1	-	\$1,475.94	\$1,475.94
020-0-090-120	Single Family Detached	1	44,431	1	-	\$2,501.33	\$2,501.33
020-0-090-150	Single Family Detached	1	47,480	1	-	\$2,501.33	\$2,501.33
020-0-090-160	Single Family Detached	1	73,616	1	-	\$2,501.33	\$2,501.33
020-0-090-170	Single Family Detached	2	27,250	1	-	\$1,475.94	\$1,475.94
020-0-090-180	Single Family Detached	2	40,400	1	-	\$1,475.94	\$1,475.94
020-0-090-190	Single Family Detached	2	31,950	1	-	\$1,475.94	\$1,475.94
020-0-090-200	Single Family Detached	1	55,321	1	-	\$2,501.33	\$2,501.33
020-0-100-030	Single Family Detached	2	31,350	1	-	\$1,475.94	\$1,475.94
020-0-100-050	Single Family Detached	1	63,597	1	-	\$2,501.33	\$2,501.33
020-0-100-060	Single Family Detached	1	49,658	1	-	\$2,501.33	\$2,501.33
020-0-100-070	Single Family Detached	1	62,726	1	-	\$2,501.33	\$2,501.33
020-0-100-090	Single Family Detached	1	59,241	1	-	\$2,501.33	\$2,501.33
020-0-110-030	Single Family Detached	1	48,787	1	-	\$2,501.33	\$2,501.33
020-0-110-040	Single Family Detached	1	65,340	1	-	\$2,501.33	\$2,501.33
020-0-110-050	Single Family Detached	1	78,843	1	-	\$2,501.33	\$2,501.33
020-0-110-070	Single Family Detached	1	65,340	1	-	\$2,501.33	\$2,501.33
020-0-110-080	Single Family Detached	1	56,628	1	-	\$2,501.33	\$2,501.33
020-0-110-090	Single Family Detached	1	48,351	1	-	\$2,501.33	\$2,501.33
020-0-110-100	Single Family Detached	1	50,529	1	-	\$2,501.33	\$2,501.33
020-0-110-110	Single Family Detached	1	61,855	1	-	\$2,501.33	\$2,501.33

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
020-0-110-120	Single Family Detached	2	42,688	1	-	\$1,475.94	\$1,475.94
020-0-130-010	Single Family Detached	2	41,600	1	-	\$1,475.94	\$1,475.94
020-0-130-020	Single Family Detached	2	31,560	1	-	\$1,475.94	\$1,475.94
020-0-130-050	Single Family Detached	2	33,420	1	-	\$1,475.94	\$1,475.94
020-0-130-060	Single Family Detached	2	34,000	1	-	\$1,475.94	\$1,475.94
020-0-130-070	Single Family Detached	2	32,500	1	-	\$1,475.94	\$1,475.94
020-0-130-080	Single Family Detached	2	39,830	1	-	\$1,475.94	\$1,475.94
020-0-130-090	Single Family Detached	2	33,660	1	-	\$1,475.94	\$1,475.94
020-0-130-100	Single Family Detached	2	33,000	1	-	\$1,475.94	\$1,475.94
020-0-130-110	Single Family Detached	2	31,400	1	-	\$1,475.94	\$1,475.94
020-0-130-140	Single Family Detached	2	25,800	1	-	\$1,475.94	\$1,475.94
020-0-130-150	Single Family Detached	2	31,860	1	-	\$1,475.94	\$1,475.94
020-0-130-160	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
020-0-141-010	Single Family Detached	2	39,450	1	-	\$1,475.94	\$1,475.94
020-0-141-020	Single Family Detached	2	26,900	1	-	\$1,475.94	\$1,475.94
020-0-141-030	Single Family Detached	2	27,950	1	-	\$1,475.94	\$1,475.94
020-0-141-040	Single Family Detached	2	33,900	1	-	\$1,475.94	\$1,475.94
020-0-141-050	Single Family Detached	2	34,480	1	-	\$1,475.94	\$1,475.94
020-0-141-060	Single Family Detached	2	40,650	1	-	\$1,475.94	\$1,475.94
020-0-141-070	Single Family Detached	2	23,800	1	-	\$1,475.94	\$1,475.94
020-0-141-080	Single Family Detached	2	22,550	1	-	\$1,475.94	\$1,475.94
020-0-141-090	Single Family Detached	2	23,800	1	-	\$1,475.94	\$1,475.94
020-0-141-100	Single Family Detached	2	26,385	1	-	\$1,475.94	\$1,475.94
020-0-142-010	Single Family Detached	2	36,850	1	-	\$1,475.94	\$1,475.94
020-0-142-020	Single Family Detached	3	19,097	1	-	\$885.56	\$885.56
020-0-142-040	Single Family Detached	2	35,850	1	-	\$1,475.94	\$1,475.94
020-0-142-050	Single Family Detached	2	31,400	1	-	\$1,475.94	\$1,475.94
020-0-142-060	Single Family Detached	2	29,350	1	-	\$1,475.94	\$1,475.94
020-0-142-070	Single Family Detached	2	27,400	1	-	\$1,475.94	\$1,475.94
020-0-142-080	Single Family Detached	2	25,312	1	-	\$1,475.94	\$1,475.94
020-0-142-090	Single Family Detached	3	16,639	1	-	\$885.56	\$885.56
020-0-142-100	Single Family Detached	2	25,750	1	-	\$1,475.94	\$1,475.94
020-0-142-110	Single Family Detached	2	25,947	1	-	\$1,475.94	\$1,475.94
020-0-170-020	Single Family Detached	2	40,075	1	-	\$1,475.94	\$1,475.94
020-0-170-050	Single Family Detached	2	34,848	1	-	\$1,475.94	\$1,475.94
020-0-181-010	Single Family Detached	2	37,050	1	-	\$1,475.94	\$1,475.94
020-0-181-020	Single Family Detached	3	12,300	1	-	\$885.56	\$885.56
020-0-181-030	Single Family Detached	3	10,867	1	-	\$885.56	\$885.56
020-0-181-040	Single Family Detached	3	18,550	1	-	\$885.56	\$885.56
020-0-181-050	Single Family Detached	3	16,325	1	-	\$885.56	\$885.56
020-0-181-070	Commercial Property	7	-	-	1,964	\$711.16	\$711.16
020-0-181-080	Commercial Property	7	-	-	2,366	\$856.73	\$856.73
020-0-181-090	Commercial Property	7	-	-	12,032	\$4,356.79	\$4,356.79
020-0-181-110	Commercial Property	7	-	-	7,920	\$2,867.83	\$2,867.83
020-0-181-120	Multifamily Attached	6	-	6	-	\$2,502.54	\$2,502.54
020-0-181-160	Commercial Property	7	-	-	8,968	\$3,247.31	\$3,247.31
020-0-191-010	Single Family Detached	1	50,094	1	-	\$2,501.33	\$2,501.33

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
020-0-191-020	Single Family Detached	1	47,044	1	-	\$2,501.33	\$2,501.33
020-0-191-030	Single Family Detached	3	21,582	1	-	\$885.56	\$885.56
020-0-191-040	Single Family Detached	2	29,540	1	-	\$1,475.94	\$1,475.94
020-0-192-010	Single Family Detached	2	27,550	1	-	\$1,475.94	\$1,475.94
020-0-192-020	Single Family Detached	3	16,533	1	-	\$885.56	\$885.56
020-0-192-030	Single Family Detached	3	17,050	1	-	\$885.56	\$885.56
020-0-192-040	Single Family Detached	3	13,575	1	-	\$885.56	\$885.56
020-0-192-060	Single Family Detached	3	12,666	1	-	\$885.56	\$885.56
020-0-192-070	Single Family Detached	3	10,338	1	-	\$885.56	\$885.56
020-0-192-080	Single Family Detached	4	7,859	1	-	\$573.64	\$573.64
020-0-192-090	Single Family Detached	2	25,821	3	-	\$4,427.82	\$4,427.82
020-0-192-120	Single Family Detached	1	62,804	1	-	\$2,501.33	\$2,501.33
020-0-192-160	Single Family Detached	2	22,693	1	-	\$1,475.94	\$1,475.94
020-0-201-010	Single Family Detached	4	7,085	1	-	\$573.64	\$573.64
020-0-201-030	Single Family Detached	4	6,679	1	-	\$573.64	\$573.64
020-0-201-040	Single Family Detached	4	5,477	1	-	\$573.64	\$573.64
020-0-201-050	Single Family Detached	4	5,626	1	-	\$573.64	\$573.64
020-0-201-060	Single Family Detached	4	5,696	1	-	\$573.64	\$573.64
020-0-201-070	Single Family Detached	3	12,829	3	-	\$2,656.68	\$2,656.68
020-0-201-090	Single Family Detached	4	6,460	1	-	\$573.64	\$573.64
020-0-201-100	Single Family Detached	4	6,860	1	-	\$573.64	\$573.64
020-0-201-120	Single Family Detached	4	7,115	1	-	\$573.64	\$573.64
020-0-201-130	Multifamily Attached	6	-	3	-	\$1,251.27	\$1,251.27
020-0-201-140	Single Family Detached	4	7,499	1	-	\$573.64	\$573.64
020-0-201-150	Single Family Detached	4	7,201	1	-	\$573.64	\$573.64
020-0-201-160	Single Family Detached	4	7,003	1	-	\$573.64	\$573.64
020-0-201-170	Single Family Detached	4	8,036	1	-	\$573.64	\$573.64
020-0-201-190	Single Family Detached	4	8,940	1	-	\$573.64	\$573.64
020-0-201-200	Single Family Detached	4	8,066	1	-	\$573.64	\$573.64
020-0-202-010	Single Family Detached	3	14,700	1	-	\$885.56	\$885.56
020-0-202-030	Single Family Detached	3	11,250	1	-	\$885.56	\$885.56
020-0-202-040	Single Family Detached	3	11,250	1	-	\$885.56	\$885.56
020-0-202-050	Single Family Detached	3	11,229	1	-	\$885.56	\$885.56
020-0-202-060	Single Family Detached	3	11,250	1	-	\$885.56	\$885.56
020-0-202-070	Single Family Detached	3	11,241	1	-	\$885.56	\$885.56
020-0-202-080	Single Family Detached	3	11,231	1	-	\$885.56	\$885.56
020-0-202-090	Single Family Detached	3	11,249	1	-	\$885.56	\$885.56
020-0-202-100	Single Family Detached	3	11,225	1	-	\$885.56	\$885.56
020-0-202-110	Single Family Detached	3	11,242	1	-	\$885.56	\$885.56
020-0-202-120	Single Family Detached	3	11,239	1	-	\$885.56	\$885.56
020-0-202-130	Single Family Detached	3	11,236	1	-	\$885.56	\$885.56
020-0-202-140	Single Family Detached	3	14,000	1	-	\$885.56	\$885.56
020-0-202-150	Single Family Detached	3	11,250	1	-	\$885.56	\$885.56
020-0-202-160	Single Family Detached	3	11,250	1	-	\$885.56	\$885.56
020-0-203-010	Single Family Detached	3	19,200	1	-	\$885.56	\$885.56
020-0-203-020	Single Family Detached	3	11,222	1	-	\$885.56	\$885.56
020-0-203-030	Single Family Detached	3	11,224	1	-	\$885.56	\$885.56

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
020-0-203-040	Single Family Detached	3	11,226	1	-	\$885.56	\$885.56
020-0-203-050	Single Family Detached	3	11,225	1	-	\$885.56	\$885.56
020-0-203-060	Multifamily Attached	6	-	4	-	\$1,668.36	\$1,668.36
020-0-203-070	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
020-0-203-080	Single Family Detached	3	11,250	1	-	\$885.56	\$885.56
020-0-203-090	Single Family Detached	3	11,250	1	-	\$885.56	\$885.56
020-0-203-100	Single Family Detached	3	14,100	1	-	\$885.56	\$885.56
020-0-211-010	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-211-025	Single Family Detached	2	43,200	1	-	\$1,475.94	\$1,475.94
020-0-212-010	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-212-020	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-212-030	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-213-010	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-213-020	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-213-030	Single Family Detached	2	43,200	1	-	\$1,475.94	\$1,475.94
020-0-213-040	Single Family Detached	2	43,300	1	-	\$1,475.94	\$1,475.94
020-0-213-050	Single Family Detached	2	43,200	1	-	\$1,475.94	\$1,475.94
020-0-213-060	Single Family Detached	1	43,995	1	-	\$2,501.33	\$2,501.33
020-0-213-070	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-213-080	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-213-090	Single Family Detached	2	43,300	1	-	\$1,475.94	\$1,475.94
020-0-213-100	Single Family Detached	2	43,200	1	-	\$1,475.94	\$1,475.94
020-0-214-010	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-214-020	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-214-030	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-221-010	Single Family Detached	2	41,300	1	-	\$1,475.94	\$1,475.94
020-0-221-030	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-221-040	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-221-050	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-221-060	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
020-0-221-070	Single Family Detached	1	47,916	1	-	\$2,501.33	\$2,501.33
020-0-221-080	Single Family Detached	1	49,460	1	-	\$2,501.33	\$2,501.33
020-0-222-020	Single Family Detached	2	39,100	1	-	\$1,475.94	\$1,475.94
020-0-230-015	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-230-025	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-230-035	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-230-045	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-230-055	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-230-065	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-230-075	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-230-085	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-230-095	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-240-015	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-240-025	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-240-035	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-240-045	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-240-055	Condominium	5	-	1	-	\$486.40	\$486.40

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
020-0-240-065	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-250-015	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-250-025	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-250-035	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-250-045	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-250-055	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-250-065	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-250-075	Condominium	5	-	1	-	\$486.40	\$486.40
020-0-250-085	Condominium	5	-	1	-	\$486.40	\$486.40
021-0-011-050	Single Family Detached	1	90,532	1	-	\$2,501.33	\$2,501.33
021-0-011-060	Single Family Detached	1	57,499	1	-	\$2,501.33	\$2,501.33
021-0-011-070	Single Family Detached	1	96,935	1	-	\$2,501.33	\$2,501.33
021-0-011-100	Single Family Detached	3	20,134	1	-	\$885.56	\$885.56
021-0-011-110	Single Family Detached	3	19,995	1	-	\$885.56	\$885.56
021-0-011-120	Single Family Detached	2	35,980	1	-	\$1,475.94	\$1,475.94
021-0-011-130	Single Family Detached	2	30,726	1	-	\$1,475.94	\$1,475.94
021-0-011-140	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
021-0-011-150	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
021-0-011-160	Single Family Detached	1	99,752	1	-	\$2,501.33	\$2,501.33
021-0-011-170	Single Family Detached	1	51,401	1	-	\$2,501.33	\$2,501.33
021-0-011-180	Single Family Detached	1	66,211	1	-	\$2,501.33	\$2,501.33
021-0-011-190	Single Family Detached	1	78,071	1	-	\$2,501.33	\$2,501.33
021-0-011-215	Single Family Detached	1	358,687	1	-	\$2,501.33	\$2,501.33
021-0-011-225	Single Family Detached	1	87,377	1	-	\$2,501.33	\$2,501.33
021-0-011-235	Single Family Detached	1	88,131	1	-	\$2,501.33	\$2,501.33
021-0-011-240	Single Family Detached	1	68,290	1	-	\$2,501.33	\$2,501.33
021-0-031-030	Single Family Detached	4	6,000	1	-	\$573.64	\$573.64
021-0-031-040	Single Family Detached	4	6,824	1	-	\$573.64	\$573.64
021-0-031-050	Single Family Detached	4	6,544	1	-	\$573.64	\$573.64
021-0-031-070	Single Family Detached	4	4,771	1	-	\$573.64	\$573.64
021-0-031-080	Single Family Detached	4	7,772	1	-	\$573.64	\$573.64
021-0-031-090	Single Family Detached	3	14,044	2	-	\$1,771.12	\$1,771.12
021-0-031-100	Single Family Detached	3	12,694	2	-	\$1,771.12	\$1,771.12
021-0-031-110	Single Family Detached	3	11,801	1	-	\$885.56	\$885.56
021-0-031-120	Single Family Detached	3	12,101	1	-	\$885.56	\$885.56
021-0-031-130	Single Family Detached	3	11,350	1	-	\$885.56	\$885.56
021-0-031-150	Single Family Detached	3	12,290	1	-	\$885.56	\$885.56
021-0-031-160	Commercial Property	7	-	-	14,352	\$5,196.86	\$5,196.86
021-0-031-180	Single Family Detached	3	17,581	1	-	\$885.56	\$885.56
021-0-031-190	Multifamily Attached	6	-	3	-	\$1,251.27	\$1,251.27
021-0-031-200	Single Family Detached	3	13,697	1	-	\$885.56	\$885.56
021-0-032-010	Single Family Detached	3	10,516	1	-	\$885.56	\$885.56
021-0-032-020	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
021-0-032-030	Single Family Detached	4	5,110	2	-	\$1,147.28	\$1,147.28
021-0-032-040	Single Family Detached	4	5,110	1	-	\$573.64	\$573.64
021-0-032-050	Single Family Detached	3	15,000	1	-	\$885.56	\$885.56
021-0-032-080	Single Family Detached	4	5,600	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
021-0-032-090	Single Family Detached	4	8,429	1	-	\$573.64	\$573.64
021-0-032-100	Single Family Detached	3	10,490	1	-	\$885.56	\$885.56
021-0-033-010	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-033-020	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-033-030	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-033-050	Multifamily Attached	6	-	21	-	\$8,758.89	\$8,758.89
021-0-034-080	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
021-0-034-090	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-034-100	Single Family Detached	3	10,000	2	-	\$1,771.12	\$1,771.12
021-0-034-110	Single Family Detached	4	5,000	1	-	\$573.64	\$573.64
021-0-034-170	Commercial Property	7	-	-	6,900	\$2,498.49	\$2,498.49
021-0-034-190	Multifamily Attached	6	-	4	-	\$1,668.36	\$1,668.36
021-0-034-210	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-034-220	Multifamily Attached	6	-	4	-	\$1,668.36	\$1,668.36
021-0-034-230	Multifamily Attached	6	-	4	-	\$1,668.36	\$1,668.36
021-0-041-030	Single Family Detached	4	9,750	2	-	\$1,147.28	\$1,147.28
021-0-041-040	Single Family Detached	4	9,750	2	-	\$1,147.28	\$1,147.28
021-0-041-060	Single Family Detached	4	7,218	1	-	\$573.64	\$573.64
021-0-041-070	Single Family Detached	3	13,109	2	-	\$1,771.12	\$1,771.12
021-0-042-010	Single Family Detached	3	15,000	1	-	\$885.56	\$885.56
021-0-042-030	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-042-050	Single Family Detached	4	4,500	1	-	\$573.64	\$573.64
021-0-042-060	Single Family Detached	3	18,750	1	-	\$885.56	\$885.56
021-0-042-070	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-042-080	Single Family Detached	4	3,750	1	-	\$573.64	\$573.64
021-0-042-100	Single Family Detached	4	6,750	1	-	\$573.64	\$573.64
021-0-042-110	Single Family Detached	3	11,250	2	-	\$1,771.12	\$1,771.12
021-0-042-120	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-042-130	Single Family Detached	4	7,452	2	-	\$1,147.28	\$1,147.28
021-0-043-040	Multifamily Attached	6	-	4	-	\$1,668.36	\$1,668.36
021-0-043-050	Single Family Detached	4	7,085	1	-	\$573.64	\$573.64
021-0-043-120	Single Family Detached	3	15,013	1	-	\$885.56	\$885.56
021-0-043-140	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
021-0-043-150	Single Family Detached	4	8,100	2	-	\$1,147.28	\$1,147.28
021-0-043-160	Single Family Detached	4	6,711	1	-	\$573.64	\$573.64
021-0-043-180	Single Family Detached	4	6,512	1	-	\$573.64	\$573.64
021-0-044-020	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-044-060	Single Family Detached	4	8,950	1	-	\$573.64	\$573.64
021-0-044-070	Single Family Detached	4	9,380	1	-	\$573.64	\$573.64
021-0-044-080	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-044-090	Multifamily Attached	6	-	3	-	\$1,251.27	\$1,251.27
021-0-044-100	Single Family Detached	3	11,250	1	-	\$885.56	\$885.56
021-0-044-110	Multifamily Attached	6	-	9	-	\$3,753.81	\$3,753.81
021-0-044-130	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
021-0-044-180	Multifamily Attached	6	-	14	-	\$5,839.26	\$5,839.26
021-0-044-190	Multifamily Attached	6	-	10	-	\$4,170.90	\$4,170.90
021-0-044-215	Condominium	5	-	1	-	\$486.40	\$486.40

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
021-0-044-225	Condominium	5	-	1	-	\$486.40	\$486.40
021-0-044-235	Condominium	5	-	1	-	\$486.40	\$486.40
021-0-051-050	Single Family Detached	4	9,900	1	-	\$573.64	\$573.64
021-0-051-080	Single Family Detached	4	7,671	1	-	\$573.64	\$573.64
021-0-051-090	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
021-0-051-100	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-051-170	Single Family Detached	3	10,060	1	-	\$885.56	\$885.56
021-0-051-190	Single Family Detached	2	22,433	2	-	\$2,951.88	\$2,951.88
021-0-051-200	Single Family Detached	2	22,433	2	-	\$2,951.88	\$2,951.88
021-0-051-235	Single Family Detached	3	11,761	1	-	\$885.56	\$885.56
021-0-051-240	Single Family Detached	3	13,939	2	-	\$1,771.12	\$1,771.12
021-0-051-250	Multifamily Attached	6	-	4	-	\$1,668.36	\$1,668.36
021-0-051-280	Commercial Property	7	-	-	20,828	\$7,541.82	\$7,541.82
021-0-051-290	Single Family Detached	4	9,029	1	-	\$573.64	\$573.64
021-0-052-010	Multifamily Attached	6	-	3	-	\$1,251.27	\$1,251.27
021-0-052-020	Single Family Detached	3	11,564	1	-	\$885.56	\$885.56
021-0-052-030	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
021-0-052-040	Single Family Detached	3	14,826	1	-	\$885.56	\$885.56
021-0-052-050	Multifamily Attached	6	-	4	-	\$1,668.36	\$1,668.36
021-0-052-060	Multifamily Attached	6	-	21	-	\$8,758.89	\$8,758.89
021-0-061-010	Commercial Property	7	-	-	4,904	\$1,775.74	\$1,775.74
021-0-061-020	Single Family Detached	3	10,140	1	-	\$885.56	\$885.56
021-0-061-030	Single Family Detached	4	8,280	2	-	\$1,147.28	\$1,147.28
021-0-061-040	Single Family Detached	3	18,013	1	-	\$885.56	\$885.56
021-0-061-050	Single Family Detached	4	9,936	1	-	\$573.64	\$573.64
021-0-062-010	Single Family Detached	3	12,882	1	-	\$885.56	\$885.56
021-0-062-020	Single Family Detached	4	6,818	1	-	\$573.64	\$573.64
021-0-062-040	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-062-050	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-062-060	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-062-070	Commercial Property	7	-	-	4,858	\$1,759.08	\$1,759.08
021-0-063-010	Single Family Detached	4	6,156	1	-	\$573.64	\$573.64
021-0-063-020	Single Family Detached	3	13,796	1	-	\$885.56	\$885.56
021-0-063-030	Single Family Detached	3	11,250	1	-	\$885.56	\$885.56
021-0-063-040	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-063-050	Single Family Detached	4	8,250	1	-	\$573.64	\$573.64
021-0-063-080	Single Family Detached	4	5,328	1	-	\$573.64	\$573.64
021-0-063-090	Single Family Detached	4	8,400	1	-	\$573.64	\$573.64
021-0-063-100	Single Family Detached	4	8,400	1	-	\$573.64	\$573.64
021-0-063-110	Multifamily Attached	6	-	6	-	\$2,502.54	\$2,502.54
021-0-063-120	Single Family Detached	3	10,480	1	-	\$885.56	\$885.56
021-0-064-010	Single Family Detached	4	6,145	1	-	\$573.64	\$573.64
021-0-064-020	Single Family Detached	4	6,397	1	-	\$573.64	\$573.64
021-0-064-030	Single Family Detached	4	6,661	1	-	\$573.64	\$573.64
021-0-064-060	Multifamily Attached	6	-	7	-	\$2,919.63	\$2,919.63
021-0-064-070	Multifamily Attached	6	-	9	-	\$3,753.81	\$3,753.81
021-0-064-080	Single Family Detached	2	23,524	1	-	\$1,475.94	\$1,475.94

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
021-0-071-010	Single Family Detached	4	5,600	2	-	\$1,147.28	\$1,147.28
021-0-071-020	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
021-0-071-030	Multifamily Attached	6	-	4	-	\$1,668.36	\$1,668.36
021-0-071-040	Single Family Detached	4	9,450	1	-	\$573.64	\$573.64
021-0-071-060	Single Family Detached	4	6,550	1	-	\$573.64	\$573.64
021-0-071-070	Single Family Detached	4	6,550	1	-	\$573.64	\$573.64
021-0-071-090	Single Family Detached	3	13,350	1	-	\$885.56	\$885.56
021-0-071-100	Single Family Detached	4	6,502	1	-	\$573.64	\$573.64
021-0-071-110	Single Family Detached	3	10,604	1	-	\$885.56	\$885.56
021-0-071-120	Single Family Detached	4	9,046	2	-	\$1,147.28	\$1,147.28
021-0-072-010	Single Family Detached	4	6,000	1	-	\$573.64	\$573.64
021-0-072-020	Single Family Detached	4	6,000	1	-	\$573.64	\$573.64
021-0-072-030	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-072-040	Single Family Detached	3	11,250	1	-	\$885.56	\$885.56
021-0-072-060	Multifamily Attached	6	-	16	-	\$6,673.44	\$6,673.44
021-0-072-070	Single Family Detached	3	15,000	1	-	\$885.56	\$885.56
021-0-072-080	Commercial Property	7	-	-	2,621	\$949.06	\$949.06
021-0-072-090	Single Family Detached	4	8,500	1	-	\$573.64	\$573.64
021-0-072-100	Single Family Detached	4	5,625	1	-	\$573.64	\$573.64
021-0-072-110	Single Family Detached	4	5,625	1	-	\$573.64	\$573.64
021-0-073-020	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-073-030	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-073-060	Single Family Detached	4	7,500	2	-	\$1,147.28	\$1,147.28
021-0-073-070	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-073-100	Single Family Detached	4	7,000	1	-	\$573.64	\$573.64
021-0-073-110	Single Family Detached	4	7,000	1	-	\$573.64	\$573.64
021-0-073-120	Single Family Detached	4	7,000	1	-	\$573.64	\$573.64
021-0-073-130	Single Family Detached	4	5,000	1	-	\$573.64	\$573.64
021-0-073-140	Single Family Detached	4	5,000	1	-	\$573.64	\$573.64
021-0-073-150	Single Family Detached	4	6,100	1	-	\$573.64	\$573.64
021-0-073-160	Commercial Property	7	-	-	1,362	\$493.18	\$493.18
021-0-073-170	Single Family Detached	4	5,643	1	-	\$573.64	\$573.64
021-0-073-180	Multifamily Attached	6	-	5	-	\$2,085.45	\$2,085.45
021-0-073-200	Single Family Detached	4	8,400	1	-	\$573.64	\$573.64
021-0-073-210	Single Family Detached	4	6,185	1	-	\$573.64	\$573.64
021-0-073-220	Single Family Detached	4	9,489	1	-	\$573.64	\$573.64
021-0-073-230	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-073-240	Single Family Detached	3	10,329	1	-	\$885.56	\$885.56
021-0-073-250	Multifamily Attached	6	-	5	-	\$2,085.45	\$2,085.45
021-0-074-020	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
021-0-074-030	Multifamily Attached	6	-	6	-	\$2,502.54	\$2,502.54
021-0-074-040	Single Family Detached	3	17,500	1	-	\$885.56	\$885.56
021-0-074-050	Single Family Detached	4	7,500	2	-	\$1,147.28	\$1,147.28
021-0-074-060	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-074-070	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-074-100	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-074-110	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
021-0-074-120	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-074-130	Single Family Detached	4	6,250	1	-	\$573.64	\$573.64
021-0-074-140	Multifamily Attached	6	-	10	-	\$4,170.90	\$4,170.90
021-0-074-150	Single Family Detached	4	6,250	1	-	\$573.64	\$573.64
021-0-074-160	Multifamily Attached	6	-	4	-	\$1,668.36	\$1,668.36
021-0-074-170	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
021-0-074-180	Single Family Detached	4	9,525	1	-	\$573.64	\$573.64
021-0-074-190	Commercial Property	7	-	-	1,705	\$617.38	\$617.38
021-0-081-040	Single Family Detached	3	10,400	1	-	\$885.56	\$885.56
021-0-081-050	Commercial Property	7	-	-	1,232	\$446.11	\$446.11
021-0-081-070	Commercial Property	7	-	-	7,129	\$2,581.41	\$2,581.41
021-0-081-080	Single Family Detached	4	5,921	1	-	\$573.64	\$573.64
021-0-081-120	Single Family Detached	4	8,250	1	-	\$573.64	\$573.64
021-0-081-130	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-081-140	Single Family Detached	4	9,000	1	-	\$573.64	\$573.64
021-0-081-150	Single Family Detached	4	6,000	1	-	\$573.64	\$573.64
021-0-081-170	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-081-180	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-081-220	Single Family Detached	3	10,273	1	-	\$885.56	\$885.56
021-0-081-230	Commercial Property	7	-	-	2,112	\$764.76	\$764.76
021-0-081-240	Single Family Detached	4	8,325	1	-	\$573.64	\$573.64
021-0-081-250	Multifamily Attached	6	-	3	-	\$1,251.27	\$1,251.27
021-0-081-335	Condominium	5	-	1	-	\$486.40	\$486.40
021-0-081-345	Condominium	5	-	1	-	\$486.40	\$486.40
021-0-081-355	Condominium	5	-	1	-	\$486.40	\$486.40
021-0-081-365	Condominium	5	-	1	-	\$486.40	\$486.40
021-0-081-375	Condominium	5	-	1	-	\$486.40	\$486.40
021-0-081-385	Condominium	5	-	1	-	\$486.40	\$486.40
021-0-081-395	Condominium	5	-	1	-	\$486.40	\$486.40
021-0-081-405	Condominium	5	-	1	-	\$486.40	\$486.40
021-0-081-430	Commercial Property	7	-	-	1,863	\$674.59	\$674.59
021-0-082-010	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
021-0-082-020	Single Family Detached	4	4,291	1	-	\$573.64	\$573.64
021-0-082-030	Commercial Property	7	-	-	770	\$278.82	\$278.82
021-0-082-060	Multifamily Attached	6	-	4	-	\$1,668.36	\$1,668.36
021-0-082-070	Single Family Detached	4	8,353	1	-	\$573.64	\$573.64
021-0-082-080	Single Family Detached	4	8,353	1	-	\$573.64	\$573.64
021-0-082-090	Single Family Detached	3	10,180	2	-	\$1,771.12	\$1,771.12
021-0-082-100	Single Family Detached	3	10,200	1	-	\$885.56	\$885.56
021-0-082-110	Single Family Detached	4	9,760	2	-	\$1,147.28	\$1,147.28
021-0-082-120	Single Family Detached	4	9,554	1	-	\$573.64	\$573.64
021-0-082-130	Single Family Detached	4	8,509	1	-	\$573.64	\$573.64
021-0-082-140	Commercial Property	7	-	-	1,685	\$610.14	\$610.14
021-0-082-150	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
021-0-082-160	Multifamily Attached	6	-	16	-	\$6,673.44	\$6,673.44
021-0-091-010	Multifamily Attached	6	-	4	-	\$1,668.36	\$1,668.36
021-0-091-020	Single Family Detached	4	4,880	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
021-0-091-030	Single Family Detached	4	4,796	1	-	\$573.64	\$573.64
021-0-091-040	Single Family Detached	4	4,796	1	-	\$573.64	\$573.64
021-0-091-050	Single Family Detached	4	4,769	1	-	\$573.64	\$573.64
021-0-091-060	Single Family Detached	4	4,889	1	-	\$573.64	\$573.64
021-0-092-020	Single Family Detached	4	4,989	1	-	\$573.64	\$573.64
021-0-092-030	Single Family Detached	4	5,078	1	-	\$573.64	\$573.64
021-0-092-040	Single Family Detached	4	5,078	1	-	\$573.64	\$573.64
021-0-092-050	Single Family Detached	4	5,078	1	-	\$573.64	\$573.64
021-0-092-060	Single Family Detached	4	5,121	1	-	\$573.64	\$573.64
021-0-092-070	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
021-0-092-080	Single Family Detached	3	14,280	1	-	\$885.56	\$885.56
021-0-092-090	Single Family Detached	4	6,000	1	-	\$573.64	\$573.64
021-0-092-100	Single Family Detached	3	12,000	3	-	\$2,656.68	\$2,656.68
021-0-092-110	Commercial Property	7	-	-	3,852	\$1,394.81	\$1,394.81
021-0-092-120	Single Family Detached	3	11,250	1	-	\$885.56	\$885.56
021-0-101-010	Single Family Detached	3	13,500	1	-	\$885.56	\$885.56
021-0-101-020	Single Family Detached	4	9,000	3	-	\$1,720.92	\$1,720.92
021-0-101-050	Single Family Detached	4	7,500	2	-	\$1,147.28	\$1,147.28
021-0-101-080	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-101-090	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
021-0-101-100	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-101-110	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-101-120	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
021-0-101-130	Single Family Detached	3	15,000	3	-	\$2,656.68	\$2,656.68
021-0-102-010	Multifamily Attached	6	-	7	-	\$2,919.63	\$2,919.63
021-0-102-040	Single Family Detached	3	10,000	1	-	\$885.56	\$885.56
021-0-102-060	Single Family Detached	3	13,500	1	-	\$885.56	\$885.56
021-0-102-070	Commercial Property	7	-	-	2,650	\$959.57	\$959.57
021-0-102-090	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-102-100	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-102-110	Commercial Property	7	-	-	4,710	\$1,705.49	\$1,705.49
021-0-103-020	Commercial Property	7	-	-	3,915	\$1,417.62	\$1,417.62
021-0-103-030	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-103-040	Commercial Property	7	-	-	1,760	\$637.30	\$637.30
021-0-104-010	Single Family Detached	4	5,000	1	-	\$573.64	\$573.64
021-0-104-020	Commercial Property	7	-	-	792	\$286.78	\$286.78
021-0-104-030	Commercial Property	7	-	-	1,676	\$606.88	\$606.88
021-0-104-050	Commercial Property	7	-	-	5,000	\$1,810.50	\$1,810.50
021-0-104-060	Commercial Property	7	-	-	3,500	\$1,267.35	\$1,267.35
021-0-104-080	Commercial Property	7	-	-	3,011	\$1,090.28	\$1,090.28
021-0-104-090	Commercial Property	7	-	-	11,665	\$4,223.90	\$4,223.90
021-0-105-010	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-105-040	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-105-060	Multifamily Attached	6	-	6	-	\$2,502.54	\$2,502.54
021-0-105-070	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-105-080	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-105-100	Commercial Property	7	-	-	2,467	\$893.30	\$893.30

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
021-0-105-110	Single Family Detached	4	5,000	1	-	\$573.64	\$573.64
021-0-105-120	Single Family Detached	4	4,914	1	-	\$573.64	\$573.64
021-0-106-020	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
021-0-106-030	Commercial Property	7	-	-	948	\$343.27	\$343.27
021-0-106-040	Commercial Property	7	-	-	7,951	\$2,879.06	\$2,879.06
021-0-106-100	Commercial Property	7	-	-	1,736	\$628.61	\$628.61
021-0-111-010	Single Family Detached	3	12,000	1	-	\$885.56	\$885.56
021-0-111-030	Commercial Property	7	-	-	980	\$354.86	\$354.86
021-0-111-040	Commercial Property	7	-	-	2,290	\$829.21	\$829.21
021-0-111-050	Commercial Property	7	-	-	3,566	\$1,291.25	\$1,291.25
021-0-111-070	Multifamily Attached	6	-	4	-	\$1,668.36	\$1,668.36
021-0-111-080	Single Family Detached	4	6,000	2	-	\$1,147.28	\$1,147.28
021-0-111-100	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
021-0-111-110	Single Family Detached	4	9,000	1	-	\$573.64	\$573.64
021-0-112-020	Commercial Property	7	-	-	34,500	\$12,492.45	\$12,492.45
021-0-113-040	Single Family Detached	4	7,700	1	-	\$573.64	\$573.64
021-0-113-050	Single Family Detached	4	7,000	1	-	\$573.64	\$573.64
021-0-113-060	Single Family Detached	4	7,700	1	-	\$573.64	\$573.64
021-0-113-070	Single Family Detached	4	8,400	1	-	\$573.64	\$573.64
021-0-113-100	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
021-0-113-110	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
021-0-113-120	Commercial Property	7	-	-	4,784	\$1,732.29	\$1,732.29
021-0-113-130	Commercial Property	7	-	-	2,654	\$961.01	\$961.01
021-0-113-150	Commercial Property	7	-	-	2,212	\$800.97	\$800.97
021-0-113-180	Commercial Property	7	-	-	1,955	\$707.91	\$707.91
021-0-113-200	Commercial Property	7	-	-	3,843	\$1,391.55	\$1,391.55
021-0-113-230	Commercial Property	7	-	-	1,254	\$454.07	\$454.07
021-0-113-250	Commercial Property	7	-	-	13,926	\$5,042.60	\$5,042.60
021-0-113-260	Commercial Property	7	-	-	9,600	\$3,476.16	\$3,476.16
021-0-113-270	Commercial Property	7	-	-	1,240	\$449.00	\$449.00
021-0-113-280	Commercial Property	7	-	-	4,429	\$1,603.74	\$1,603.74
021-0-113-290	Commercial Property	7	-	-	3,065	\$1,109.84	\$1,109.84
021-0-113-300	Commercial Property	7	-	-	2,712	\$982.02	\$982.02
021-0-113-310	Single Family Detached	4	8,739	1	-	\$573.64	\$573.64
021-0-131-010	Multifamily Attached	6	-	34	-	\$14,181.06	\$14,181.06
021-0-131-020	Single Family Detached	1	378,100	1	-	\$2,501.33	\$2,501.33
021-0-131-030	Single Family Detached	4	5,100	1	-	\$573.64	\$573.64
021-0-131-040	Single Family Detached	3	11,900	1	-	\$885.56	\$885.56
021-0-131-060	Single Family Detached	3	19,940	1	-	\$885.56	\$885.56
021-0-131-080	Single Family Detached	3	18,332	1	-	\$885.56	\$885.56
021-0-131-090	Single Family Detached	2	28,108	1	-	\$1,475.94	\$1,475.94
021-0-131-110	Single Family Detached	1	49,658	1	-	\$2,501.33	\$2,501.33
021-0-131-120	Single Family Detached	1	70,654	1	-	\$2,501.33	\$2,501.33
021-0-131-160	Single Family Detached	1	97,119	1	-	\$2,501.33	\$2,501.33
021-0-131-170	Single Family Detached	1	92,072	1	-	\$2,501.33	\$2,501.33
021-0-131-180	Single Family Detached	2	40,775	1	-	\$1,475.94	\$1,475.94
021-0-131-300	Single Family Detached	4	9,103	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
021-0-131-310	Single Family Detached	2	30,139	1	-	\$1,475.94	\$1,475.94
021-0-140-020	Commercial Property	7	-	-	7,750	\$2,806.28	\$2,806.28
021-0-140-140	Commercial Property	7	-	-	1,037	\$375.50	\$375.50
021-0-140-150	Commercial Property	7	-	-	1,505	\$544.96	\$544.96
021-0-140-160	Commercial Property	7	-	-	2,960	\$1,071.82	\$1,071.82
021-0-140-170	Commercial Property	7	-	-	2,847	\$1,030.90	\$1,030.90
021-0-140-180	Commercial Property	7	-	-	9,336	\$3,380.57	\$3,380.57
021-0-140-190	Commercial Property	7	-	-	5,676	\$2,055.28	\$2,055.28
021-0-140-205	Commercial Property	7	-	-	5,870	\$2,125.53	\$2,125.53
021-0-140-210	Commercial Property	7	-	-	8,178	\$2,961.25	\$2,961.25
021-0-140-220	Commercial Property	7	-	-	7,818	\$2,830.90	\$2,830.90
021-0-140-260	Commercial Property	7	-	-	6,895	\$2,496.68	\$2,496.68
021-0-140-330	Commercial Property	7	-	-	5,750	\$2,082.08	\$2,082.08
021-0-140-340	Commercial Property	7	-	-	8,332	\$3,017.02	\$3,017.02
021-0-140-360	Commercial Property	7	-	-	682	\$246.95	\$246.95
021-0-140-370	Commercial Property	7	-	-	563	\$203.86	\$203.86
021-0-140-380	Commercial Property	7	-	-	2,500	\$905.25	\$905.25
021-0-140-400	Commercial Property	7	-	-	2,400	\$869.04	\$869.04
021-0-140-410	Commercial Property	7	-	-	337	\$122.03	\$122.03
021-0-140-420	Commercial Property	7	-	-	3,800	\$1,375.98	\$1,375.98
021-0-140-430	Commercial Property	7	-	-	650	\$235.37	\$235.37
021-0-140-440	Commercial Property	7	-	-	5,814	\$2,105.25	\$2,105.25
021-0-140-450	Commercial Property	7	-	-	2,759	\$999.03	\$999.03
021-0-140-460	Commercial Property	7	-	-	1,102	\$399.03	\$399.03
021-0-140-490	Commercial Property	7	-	-	942	\$341.10	\$341.10
021-0-140-500	Commercial Property	7	-	-	19,674	\$7,123.96	\$7,123.96
021-0-140-510	Commercial Property	7	-	-	7,128	\$2,581.05	\$2,581.05
021-0-150-015	Condominium	5	-	1	-	\$486.40	\$486.40
021-0-150-025	Condominium	5	-	1	-	\$486.40	\$486.40
021-0-150-035	Condominium	5	-	1	-	\$486.40	\$486.40
021-0-160-015	Condominium	5	-	1	-	\$486.40	\$486.40
021-0-160-025	Condominium	5	-	1	-	\$486.40	\$486.40
021-0-160-035	Condominium	5	-	1	-	\$486.40	\$486.40
021-0-160-045	Condominium	5	-	1	-	\$486.40	\$486.40
022-0-012-010	Single Family Detached	1	186,001	1	-	\$2,501.33	\$2,501.33
022-0-012-020	Single Family Detached	2	36,400	1	-	\$1,475.94	\$1,475.94
022-0-012-030	Single Family Detached	1	86,248	1	-	\$2,501.33	\$2,501.33
022-0-012-040	Single Family Detached	2	43,108	1	-	\$1,475.94	\$1,475.94
022-0-012-050	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
022-0-012-060	Single Family Detached	1	75,358	1	-	\$2,501.33	\$2,501.33
022-0-012-070	Single Family Detached	1	81,021	1	-	\$2,501.33	\$2,501.33
022-0-012-080	Single Family Detached	2	42,000	1	-	\$1,475.94	\$1,475.94
022-0-012-090	Single Family Detached	1	61,419	1	-	\$2,501.33	\$2,501.33
022-0-012-100	Single Family Detached	1	179,249	1	-	\$2,501.33	\$2,501.33
022-0-012-110	Single Family Detached	1	188,436	1	-	\$2,501.33	\$2,501.33
022-0-012-120	Single Family Detached	2	25,920	1	-	\$1,475.94	\$1,475.94
022-0-012-160	Single Family Detached	2	24,300	1	-	\$1,475.94	\$1,475.94

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-012-170	Single Family Detached	3	17,010	1	-	\$885.56	\$885.56
022-0-012-180	Single Family Detached	3	17,010	1	-	\$885.56	\$885.56
022-0-012-230	Single Family Detached	1	116,740	3	-	\$7,503.99	\$7,503.99
022-0-012-240	Single Family Detached	3	11,200	1	-	\$885.56	\$885.56
022-0-012-250	Single Family Detached	3	10,500	1	-	\$885.56	\$885.56
022-0-012-260	Single Family Detached	3	10,500	1	-	\$885.56	\$885.56
022-0-012-270	Single Family Detached	3	10,500	1	-	\$885.56	\$885.56
022-0-012-280	Single Family Detached	3	11,795	1	-	\$885.56	\$885.56
022-0-012-290	Single Family Detached	3	11,795	1	-	\$885.56	\$885.56
022-0-012-300	Single Family Detached	3	17,715	1	-	\$885.56	\$885.56
022-0-012-320	Single Family Detached	3	13,200	1	-	\$885.56	\$885.56
022-0-012-330	Single Family Detached	3	13,198	1	-	\$885.56	\$885.56
022-0-012-340	Single Family Detached	3	14,965	1	-	\$885.56	\$885.56
022-0-012-350	Single Family Detached	3	15,068	1	-	\$885.56	\$885.56
022-0-012-360	Single Family Detached	3	14,934	1	-	\$885.56	\$885.56
022-0-012-370	Single Family Detached	3	14,232	1	-	\$885.56	\$885.56
022-0-012-380	Single Family Detached	3	16,291	1	-	\$885.56	\$885.56
022-0-012-390	Single Family Detached	2	37,276	1	-	\$1,475.94	\$1,475.94
022-0-012-400	Single Family Detached	3	18,096	1	-	\$885.56	\$885.56
022-0-012-410	Single Family Detached	2	22,195	1	-	\$1,475.94	\$1,475.94
022-0-012-420	Single Family Detached	3	21,843	1	-	\$885.56	\$885.56
022-0-012-430	Single Family Detached	2	23,895	1	-	\$1,475.94	\$1,475.94
022-0-012-440	Single Family Detached	2	25,233	1	-	\$1,475.94	\$1,475.94
022-0-012-450	Single Family Detached	2	25,237	1	-	\$1,475.94	\$1,475.94
022-0-012-460	Single Family Detached	1	101,494	1	-	\$2,501.33	\$2,501.33
022-0-012-480	Single Family Detached	1	47,044	1	-	\$2,501.33	\$2,501.33
022-0-012-490	Single Family Detached	3	16,553	1	-	\$885.56	\$885.56
022-0-012-500	Single Family Detached	1	64,468	1	-	\$2,501.33	\$2,501.33
022-0-012-525	Single Family Detached	1	53,579	1	-	\$2,501.33	\$2,501.33
022-0-012-535	Single Family Detached	1	63,597	1	-	\$2,501.33	\$2,501.33
022-0-012-545	Single Family Detached	1	74,052	1	-	\$2,501.33	\$2,501.33
022-0-012-555	Single Family Detached	1	236,531	1	-	\$2,501.33	\$2,501.33
022-0-012-565	Single Family Detached	1	88,862	1	-	\$2,501.33	\$2,501.33
022-0-012-575	Single Family Detached	1	46,173	1	-	\$2,501.33	\$2,501.33
022-0-012-615	Single Family Detached	1	81,783	1	-	\$2,501.33	\$2,501.33
022-0-012-625	Single Family Detached	1	63,813	1	-	\$2,501.33	\$2,501.33
022-0-012-640	Single Family Detached	1	264,942	1	-	\$2,501.33	\$2,501.33
022-0-012-665	Single Family Detached	1	89,298	1	-	\$2,501.33	\$2,501.33
022-0-013-015	Single Family Detached	1	46,174	1	-	\$2,501.33	\$2,501.33
022-0-013-025	Single Family Detached	1	43,996	1	-	\$2,501.33	\$2,501.33
022-0-013-035	Single Family Detached	1	43,996	1	-	\$2,501.33	\$2,501.33
022-0-013-045	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
022-0-013-055	Single Family Detached	3	14,972	1	-	\$885.56	\$885.56
022-0-013-060	Single Family Detached	3	12,632	1	-	\$885.56	\$885.56
022-0-013-070	Single Family Detached	3	14,912	1	-	\$885.56	\$885.56
022-0-013-080	Single Family Detached	3	13,033	1	-	\$885.56	\$885.56
022-0-013-090	Single Family Detached	3	14,512	1	-	\$885.56	\$885.56

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-013-105	Single Family Detached	3	15,000	1	-	\$885.56	\$885.56
022-0-013-110	Single Family Detached	3	14,906	1	-	\$885.56	\$885.56
022-0-013-120	Single Family Detached	3	15,000	1	-	\$885.56	\$885.56
022-0-013-130	Single Family Detached	3	15,128	1	-	\$885.56	\$885.56
022-0-013-140	Single Family Detached	3	15,019	1	-	\$885.56	\$885.56
022-0-013-150	Single Family Detached	3	14,506	1	-	\$885.56	\$885.56
022-0-013-160	Single Family Detached	3	14,289	1	-	\$885.56	\$885.56
022-0-021-020	Single Family Detached	1	62,290	1	-	\$2,501.33	\$2,501.33
022-0-021-030	Single Family Detached	3	12,150	1	-	\$885.56	\$885.56
022-0-021-040	Single Family Detached	4	8,100	1	-	\$573.64	\$573.64
022-0-021-050	Single Family Detached	4	8,019	1	-	\$573.64	\$573.64
022-0-021-060	Single Family Detached	4	7,919	1	-	\$573.64	\$573.64
022-0-021-070	Single Family Detached	3	12,150	1	-	\$885.56	\$885.56
022-0-021-080	Single Family Detached	3	20,250	1	-	\$885.56	\$885.56
022-0-021-090	Single Family Detached	3	12,150	1	-	\$885.56	\$885.56
022-0-022-040	Single Family Detached	3	12,555	2	-	\$1,771.12	\$1,771.12
022-0-022-060	Single Family Detached	2	23,683	1	-	\$1,475.94	\$1,475.94
022-0-022-070	Single Family Detached	3	15,531	1	-	\$885.56	\$885.56
022-0-022-090	Single Family Detached	4	7,912	1	-	\$573.64	\$573.64
022-0-022-100	Single Family Detached	4	8,100	1	-	\$573.64	\$573.64
022-0-022-110	Single Family Detached	2	26,247	1	-	\$1,475.94	\$1,475.94
022-0-023-020	Commercial Property	7	-	-	54,703	\$19,807.96	\$19,807.96
022-0-024-020	Single Family Detached	4	6,297	2	-	\$1,147.28	\$1,147.28
022-0-024-030	Single Family Detached	4	5,585	1	-	\$573.64	\$573.64
022-0-024-050	Single Family Detached	3	12,015	1	-	\$885.56	\$885.56
022-0-024-080	Single Family Detached	3	13,737	1	-	\$885.56	\$885.56
022-0-024-090	Single Family Detached	3	13,740	1	-	\$885.56	\$885.56
022-0-024-110	Single Family Detached	2	33,450	1	-	\$1,475.94	\$1,475.94
022-0-024-120	Single Family Detached	3	12,605	1	-	\$885.56	\$885.56
022-0-024-130	Single Family Detached	4	5,348	1	-	\$573.64	\$573.64
022-0-024-140	Single Family Detached	4	7,859	1	-	\$573.64	\$573.64
022-0-025-010	Single Family Detached	4	9,686	1	-	\$573.64	\$573.64
022-0-025-020	Single Family Detached	3	12,010	2	-	\$1,771.12	\$1,771.12
022-0-025-040	Single Family Detached	3	12,700	1	-	\$885.56	\$885.56
022-0-025-050	Single Family Detached	3	10,660	1	-	\$885.56	\$885.56
022-0-025-060	Single Family Detached	4	9,793	1	-	\$573.64	\$573.64
022-0-025-100	Single Family Detached	4	7,267	1	-	\$573.64	\$573.64
022-0-025-110	Single Family Detached	4	8,902	1	-	\$573.64	\$573.64
022-0-025-120	Single Family Detached	4	8,902	1	-	\$573.64	\$573.64
022-0-025-150	Single Family Detached	4	8,340	1	-	\$573.64	\$573.64
022-0-025-180	Single Family Detached	3	10,594	1	-	\$885.56	\$885.56
022-0-025-190	Commercial Property	7	-	-	5,095	\$1,844.90	\$1,844.90
022-0-025-200	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
022-0-030-030	Single Family Detached	1	65,340	1	-	\$2,501.33	\$2,501.33
022-0-030-070	Single Family Detached	3	10,548	1	-	\$885.56	\$885.56
022-0-030-080	Single Family Detached	3	11,250	1	-	\$885.56	\$885.56
022-0-030-090	Single Family Detached	3	11,250	1	-	\$885.56	\$885.56

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-030-100	Single Family Detached	3	11,250	1	-	\$885.56	\$885.56
022-0-030-110	Single Family Detached	4	9,954	1	-	\$573.64	\$573.64
022-0-030-120	Single Family Detached	3	11,700	1	-	\$885.56	\$885.56
022-0-030-130	Single Family Detached	4	7,964	1	-	\$573.64	\$573.64
022-0-030-140	Single Family Detached	4	7,800	1	-	\$573.64	\$573.64
022-0-030-150	Single Family Detached	4	9,900	1	-	\$573.64	\$573.64
022-0-030-180	Single Family Detached	3	18,757	1	-	\$885.56	\$885.56
022-0-030-190	Single Family Detached	3	19,169	1	-	\$885.56	\$885.56
022-0-030-210	Single Family Detached	4	5,800	1	-	\$573.64	\$573.64
022-0-030-220	Single Family Detached	4	5,800	1	-	\$573.64	\$573.64
022-0-030-230	Single Family Detached	4	5,800	1	-	\$573.64	\$573.64
022-0-030-240	Single Family Detached	4	6,052	1	-	\$573.64	\$573.64
022-0-030-250	Single Family Detached	4	8,046	1	-	\$573.64	\$573.64
022-0-030-260	Single Family Detached	4	8,047	1	-	\$573.64	\$573.64
022-0-030-300	Single Family Detached	1	68,824	1	-	\$2,501.33	\$2,501.33
022-0-030-340	Single Family Detached	3	12,064	1	-	\$885.56	\$885.56
022-0-030-350	Single Family Detached	3	12,064	1	-	\$885.56	\$885.56
022-0-030-360	Single Family Detached	1	59,677	1	-	\$2,501.33	\$2,501.33
022-0-030-370	Single Family Detached	2	27,362	1	-	\$1,475.94	\$1,475.94
022-0-030-380	Single Family Detached	1	60,112	1	-	\$2,501.33	\$2,501.33
022-0-030-390	Single Family Detached	2	22,053	1	-	\$1,475.94	\$1,475.94
022-0-030-400	Single Family Detached	3	12,350	1	-	\$885.56	\$885.56
022-0-030-410	Single Family Detached	3	12,196	1	-	\$885.56	\$885.56
022-0-030-460	Single Family Detached	2	40,162	1	-	\$1,475.94	\$1,475.94
022-0-030-490	Single Family Detached	3	17,300	1	-	\$885.56	\$885.56
022-0-030-500	Single Family Detached	3	21,733	1	-	\$885.56	\$885.56
022-0-030-510	Single Family Detached	3	12,014	1	-	\$885.56	\$885.56
022-0-030-520	Single Family Detached	3	12,986	1	-	\$885.56	\$885.56
022-0-030-535	Single Family Detached	3	12,000	1	-	\$885.56	\$885.56
022-0-030-545	Single Family Detached	3	12,065	1	-	\$885.56	\$885.56
022-0-030-555	Single Family Detached	3	12,058	1	-	\$885.56	\$885.56
022-0-030-565	Single Family Detached	3	13,774	1	-	\$885.56	\$885.56
022-0-030-575	Single Family Detached	3	12,011	1	-	\$885.56	\$885.56
022-0-030-585	Single Family Detached	3	15,340	1	-	\$885.56	\$885.56
022-0-030-595	Single Family Detached	3	12,781	1	-	\$885.56	\$885.56
022-0-030-605	Single Family Detached	3	12,024	1	-	\$885.56	\$885.56
022-0-030-615	Single Family Detached	3	12,000	1	-	\$885.56	\$885.56
022-0-030-625	Single Family Detached	3	12,026	1	-	\$885.56	\$885.56
022-0-030-635	Single Family Detached	3	14,340	1	-	\$885.56	\$885.56
022-0-030-645	Single Family Detached	3	12,002	1	-	\$885.56	\$885.56
022-0-030-655	Single Family Detached	3	15,431	1	-	\$885.56	\$885.56
022-0-030-665	Single Family Detached	3	12,152	1	-	\$885.56	\$885.56
022-0-030-675	Single Family Detached	3	18,557	1	-	\$885.56	\$885.56
022-0-040-020	Single Family Detached	2	34,857	1	-	\$1,475.94	\$1,475.94
022-0-040-030	Single Family Detached	2	34,842	1	-	\$1,475.94	\$1,475.94
022-0-040-060	Single Family Detached	2	27,847	1	-	\$1,475.94	\$1,475.94
022-0-040-070	Single Family Detached	3	20,877	1	-	\$885.56	\$885.56

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-040-080	Single Family Detached	2	22,612	1	-	\$1,475.94	\$1,475.94
022-0-040-100	Single Family Detached	2	31,274	1	-	\$1,475.94	\$1,475.94
022-0-040-110	Single Family Detached	2	24,318	1	-	\$1,475.94	\$1,475.94
022-0-040-120	Single Family Detached	3	20,835	1	-	\$885.56	\$885.56
022-0-040-130	Single Family Detached	2	28,562	1	-	\$1,475.94	\$1,475.94
022-0-040-150	Single Family Detached	3	15,024	1	-	\$885.56	\$885.56
022-0-040-190	Single Family Detached	1	46,609	1	-	\$2,501.33	\$2,501.33
022-0-040-210	Single Family Detached	2	33,507	1	-	\$1,475.94	\$1,475.94
022-0-040-220	Single Family Detached	3	19,975	1	-	\$885.56	\$885.56
022-0-040-230	Single Family Detached	3	14,855	1	-	\$885.56	\$885.56
022-0-040-240	Single Family Detached	3	18,233	1	-	\$885.56	\$885.56
022-0-040-250	Single Family Detached	3	13,800	1	-	\$885.56	\$885.56
022-0-040-260	Single Family Detached	2	37,452	1	-	\$1,475.94	\$1,475.94
022-0-051-030	Single Family Detached	4	5,950	1	-	\$573.64	\$573.64
022-0-051-040	Single Family Detached	4	6,459	1	-	\$573.64	\$573.64
022-0-051-050	Single Family Detached	4	8,318	1	-	\$573.64	\$573.64
022-0-051-080	Multifamily Attached	6	-	12	-	\$5,005.08	\$5,005.08
022-0-051-090	Single Family Detached	3	19,820	1	-	\$885.56	\$885.56
022-0-051-100	Single Family Detached	1	78,843	1	-	\$2,501.33	\$2,501.33
022-0-051-110	Single Family Detached	3	21,804	1	-	\$885.56	\$885.56
022-0-051-120	Single Family Detached	3	21,804	1	-	\$885.56	\$885.56
022-0-051-130	Single Family Detached	2	28,745	1	-	\$1,475.94	\$1,475.94
022-0-051-140	Single Family Detached	3	11,139	1	-	\$885.56	\$885.56
022-0-051-150	Single Family Detached	3	11,139	1	-	\$885.56	\$885.56
022-0-051-180	Single Family Detached	3	11,209	1	-	\$885.56	\$885.56
022-0-051-190	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
022-0-051-230	Single Family Detached	4	7,960	1	-	\$573.64	\$573.64
022-0-051-260	Single Family Detached	3	14,000	1	-	\$885.56	\$885.56
022-0-051-270	Single Family Detached	3	14,071	1	-	\$885.56	\$885.56
022-0-051-280	Single Family Detached	2	24,265	3	-	\$4,427.82	\$4,427.82
022-0-051-290	Single Family Detached	1	58,372	1	-	\$2,501.33	\$2,501.33
022-0-052-010	Multifamily Attached	6	-	7	-	\$2,919.63	\$2,919.63
022-0-052-020	Single Family Detached	1	54,450	1	-	\$2,501.33	\$2,501.33
022-0-052-050	Single Family Detached	4	6,940	1	-	\$573.64	\$573.64
022-0-052-060	Single Family Detached	4	6,798	1	-	\$573.64	\$573.64
022-0-052-070	Single Family Detached	4	6,798	1	-	\$573.64	\$573.64
022-0-052-080	Single Family Detached	3	10,164	1	-	\$885.56	\$885.56
022-0-052-090	Single Family Detached	4	6,535	1	-	\$573.64	\$573.64
022-0-052-100	Single Family Detached	4	7,108	1	-	\$573.64	\$573.64
022-0-052-120	Single Family Detached	3	12,001	1	-	\$885.56	\$885.56
022-0-052-130	Single Family Detached	3	15,437	1	-	\$885.56	\$885.56
022-0-052-140	Single Family Detached	3	18,667	1	-	\$885.56	\$885.56
022-0-061-025	Single Family Detached	3	14,000	1	-	\$885.56	\$885.56
022-0-061-035	Single Family Detached	4	7,620	1	-	\$573.64	\$573.64
022-0-061-045	Single Family Detached	4	7,639	1	-	\$573.64	\$573.64
022-0-061-055	Single Family Detached	4	7,639	1	-	\$573.64	\$573.64
022-0-061-065	Single Family Detached	4	7,639	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-061-075	Single Family Detached	4	7,639	1	-	\$573.64	\$573.64
022-0-061-085	Single Family Detached	4	7,639	1	-	\$573.64	\$573.64
022-0-061-095	Single Family Detached	4	7,639	1	-	\$573.64	\$573.64
022-0-061-105	Single Family Detached	4	7,639	1	-	\$573.64	\$573.64
022-0-061-115	Single Family Detached	4	7,639	1	-	\$573.64	\$573.64
022-0-061-125	Single Family Detached	4	8,624	1	-	\$573.64	\$573.64
022-0-061-135	Single Family Detached	3	12,850	1	-	\$885.56	\$885.56
022-0-061-145	Single Family Detached	4	9,872	1	-	\$573.64	\$573.64
022-0-061-155	Single Family Detached	4	7,184	1	-	\$573.64	\$573.64
022-0-061-165	Single Family Detached	4	9,404	1	-	\$573.64	\$573.64
022-0-061-180	Single Family Detached	3	16,563	1	-	\$885.56	\$885.56
022-0-062-015	Single Family Detached	4	7,206	1	-	\$573.64	\$573.64
022-0-062-025	Single Family Detached	4	6,972	1	-	\$573.64	\$573.64
022-0-062-035	Single Family Detached	4	6,972	1	-	\$573.64	\$573.64
022-0-062-045	Single Family Detached	4	6,972	1	-	\$573.64	\$573.64
022-0-062-055	Single Family Detached	4	6,972	1	-	\$573.64	\$573.64
022-0-062-065	Single Family Detached	4	6,972	1	-	\$573.64	\$573.64
022-0-062-075	Single Family Detached	4	6,972	1	-	\$573.64	\$573.64
022-0-062-085	Single Family Detached	4	6,972	1	-	\$573.64	\$573.64
022-0-062-095	Single Family Detached	4	6,972	1	-	\$573.64	\$573.64
022-0-062-105	Single Family Detached	4	7,206	1	-	\$573.64	\$573.64
022-0-062-115	Single Family Detached	4	7,206	1	-	\$573.64	\$573.64
022-0-062-125	Single Family Detached	4	6,972	1	-	\$573.64	\$573.64
022-0-062-135	Single Family Detached	4	6,972	1	-	\$573.64	\$573.64
022-0-062-145	Single Family Detached	4	6,972	1	-	\$573.64	\$573.64
022-0-062-155	Single Family Detached	4	6,972	1	-	\$573.64	\$573.64
022-0-062-165	Single Family Detached	4	6,972	1	-	\$573.64	\$573.64
022-0-062-175	Single Family Detached	4	6,972	1	-	\$573.64	\$573.64
022-0-062-185	Single Family Detached	4	6,972	1	-	\$573.64	\$573.64
022-0-062-195	Single Family Detached	4	6,972	1	-	\$573.64	\$573.64
022-0-062-205	Single Family Detached	4	7,206	1	-	\$573.64	\$573.64
022-0-063-015	Single Family Detached	4	7,766	1	-	\$573.64	\$573.64
022-0-063-025	Single Family Detached	4	7,179	1	-	\$573.64	\$573.64
022-0-063-035	Single Family Detached	4	7,095	1	-	\$573.64	\$573.64
022-0-063-045	Single Family Detached	4	7,940	1	-	\$573.64	\$573.64
022-0-063-055	Single Family Detached	4	7,644	1	-	\$573.64	\$573.64
022-0-063-065	Single Family Detached	4	7,644	1	-	\$573.64	\$573.64
022-0-063-075	Single Family Detached	4	7,644	1	-	\$573.64	\$573.64
022-0-063-085	Single Family Detached	4	7,644	1	-	\$573.64	\$573.64
022-0-063-095	Single Family Detached	4	7,644	1	-	\$573.64	\$573.64
022-0-063-105	Single Family Detached	4	7,644	1	-	\$573.64	\$573.64
022-0-063-115	Single Family Detached	4	7,644	1	-	\$573.64	\$573.64
022-0-063-125	Single Family Detached	4	7,644	1	-	\$573.64	\$573.64
022-0-063-135	Single Family Detached	4	7,644	1	-	\$573.64	\$573.64
022-0-063-145	Single Family Detached	4	7,206	1	-	\$573.64	\$573.64
022-0-064-015	Single Family Detached	4	8,624	1	-	\$573.64	\$573.64
022-0-064-025	Single Family Detached	4	7,684	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-065-015	Single Family Detached	4	7,206	1	-	\$573.64	\$573.64
022-0-065-025	Single Family Detached	4	7,644	1	-	\$573.64	\$573.64
022-0-065-035	Single Family Detached	4	7,644	1	-	\$573.64	\$573.64
022-0-065-045	Single Family Detached	4	7,206	1	-	\$573.64	\$573.64
022-0-066-015	Single Family Detached	4	7,206	1	-	\$573.64	\$573.64
022-0-066-025	Single Family Detached	4	7,644	1	-	\$573.64	\$573.64
022-0-071-010	Single Family Detached	4	9,714	1	-	\$573.64	\$573.64
022-0-071-020	Single Family Detached	4	9,061	1	-	\$573.64	\$573.64
022-0-071-030	Single Family Detached	4	9,061	1	-	\$573.64	\$573.64
022-0-071-040	Single Family Detached	4	9,061	1	-	\$573.64	\$573.64
022-0-071-050	Single Family Detached	4	9,061	1	-	\$573.64	\$573.64
022-0-071-060	Single Family Detached	4	9,061	1	-	\$573.64	\$573.64
022-0-071-070	Single Family Detached	3	10,706	1	-	\$885.56	\$885.56
022-0-071-080	Single Family Detached	3	10,706	1	-	\$885.56	\$885.56
022-0-071-090	Single Family Detached	3	10,706	1	-	\$885.56	\$885.56
022-0-071-100	Single Family Detached	3	10,706	1	-	\$885.56	\$885.56
022-0-071-110	Single Family Detached	3	10,658	1	-	\$885.56	\$885.56
022-0-072-010	Single Family Detached	4	7,952	1	-	\$573.64	\$573.64
022-0-072-020	Single Family Detached	4	8,540	1	-	\$573.64	\$573.64
022-0-072-030	Single Family Detached	4	8,540	1	-	\$573.64	\$573.64
022-0-072-040	Single Family Detached	4	8,540	1	-	\$573.64	\$573.64
022-0-072-050	Single Family Detached	4	8,540	1	-	\$573.64	\$573.64
022-0-072-060	Single Family Detached	4	8,540	1	-	\$573.64	\$573.64
022-0-072-070	Single Family Detached	3	10,090	1	-	\$885.56	\$885.56
022-0-072-080	Single Family Detached	3	10,090	1	-	\$885.56	\$885.56
022-0-072-090	Single Family Detached	3	10,090	1	-	\$885.56	\$885.56
022-0-072-100	Single Family Detached	3	10,090	1	-	\$885.56	\$885.56
022-0-072-110	Single Family Detached	3	10,042	1	-	\$885.56	\$885.56
022-0-081-010	Single Family Detached	4	8,626	1	-	\$573.64	\$573.64
022-0-081-020	Single Family Detached	4	8,003	1	-	\$573.64	\$573.64
022-0-081-030	Single Family Detached	4	8,003	1	-	\$573.64	\$573.64
022-0-081-040	Single Family Detached	4	8,185	1	-	\$573.64	\$573.64
022-0-081-050	Single Family Detached	4	8,185	1	-	\$573.64	\$573.64
022-0-081-060	Single Family Detached	4	8,185	1	-	\$573.64	\$573.64
022-0-081-070	Single Family Detached	4	8,168	1	-	\$573.64	\$573.64
022-0-081-080	Single Family Detached	4	9,050	1	-	\$573.64	\$573.64
022-0-081-090	Single Family Detached	3	12,600	1	-	\$885.56	\$885.56
022-0-081-100	Single Family Detached	3	11,008	1	-	\$885.56	\$885.56
022-0-081-110	Single Family Detached	3	11,008	1	-	\$885.56	\$885.56
022-0-081-120	Single Family Detached	4	8,541	1	-	\$573.64	\$573.64
022-0-081-130	Single Family Detached	4	8,541	1	-	\$573.64	\$573.64
022-0-081-140	Single Family Detached	4	8,541	1	-	\$573.64	\$573.64
022-0-081-150	Single Family Detached	4	8,493	1	-	\$573.64	\$573.64
022-0-081-230	Single Family Detached	1	48,787	1	-	\$2,501.33	\$2,501.33
022-0-081-240	Single Family Detached	4	7,988	1	-	\$573.64	\$573.64
022-0-081-250	Single Family Detached	4	8,025	1	-	\$573.64	\$573.64
022-0-081-260	Single Family Detached	4	7,875	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-081-270	Single Family Detached	4	8,231	1	-	\$573.64	\$573.64
022-0-081-280	Single Family Detached	4	8,125	1	-	\$573.64	\$573.64
022-0-081-290	Single Family Detached	4	7,662	1	-	\$573.64	\$573.64
022-0-081-300	Single Family Detached	4	8,988	1	-	\$573.64	\$573.64
022-0-081-310	Single Family Detached	4	8,838	1	-	\$573.64	\$573.64
022-0-081-320	Single Family Detached	4	8,009	1	-	\$573.64	\$573.64
022-0-081-330	Single Family Detached	4	8,500	1	-	\$573.64	\$573.64
022-0-081-340	Single Family Detached	4	7,950	1	-	\$573.64	\$573.64
022-0-081-350	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-081-360	Single Family Detached	4	8,002	1	-	\$573.64	\$573.64
022-0-081-370	Single Family Detached	4	8,002	1	-	\$573.64	\$573.64
022-0-081-380	Single Family Detached	4	8,003	1	-	\$573.64	\$573.64
022-0-081-390	Single Family Detached	4	8,020	1	-	\$573.64	\$573.64
022-0-081-400	Single Family Detached	4	8,938	1	-	\$573.64	\$573.64
022-0-082-010	Single Family Detached	4	8,631	1	-	\$573.64	\$573.64
022-0-082-020	Single Family Detached	4	8,050	1	-	\$573.64	\$573.64
022-0-082-030	Single Family Detached	4	8,050	1	-	\$573.64	\$573.64
022-0-082-040	Single Family Detached	4	8,050	1	-	\$573.64	\$573.64
022-0-082-050	Single Family Detached	4	8,050	1	-	\$573.64	\$573.64
022-0-082-060	Single Family Detached	4	8,050	1	-	\$573.64	\$573.64
022-0-082-070	Single Family Detached	4	8,050	1	-	\$573.64	\$573.64
022-0-082-080	Single Family Detached	4	8,050	1	-	\$573.64	\$573.64
022-0-082-090	Single Family Detached	4	8,050	1	-	\$573.64	\$573.64
022-0-082-100	Single Family Detached	4	8,050	1	-	\$573.64	\$573.64
022-0-082-110	Single Family Detached	4	8,050	1	-	\$573.64	\$573.64
022-0-082-120	Single Family Detached	4	8,050	1	-	\$573.64	\$573.64
022-0-082-130	Single Family Detached	4	8,050	1	-	\$573.64	\$573.64
022-0-082-140	Single Family Detached	4	8,050	1	-	\$573.64	\$573.64
022-0-082-150	Single Family Detached	4	8,002	1	-	\$573.64	\$573.64
022-0-083-020	Single Family Detached	4	8,100	1	-	\$573.64	\$573.64
022-0-083-030	Single Family Detached	4	8,312	1	-	\$573.64	\$573.64
022-0-083-040	Single Family Detached	4	8,200	1	-	\$573.64	\$573.64
022-0-083-050	Single Family Detached	4	9,375	1	-	\$573.64	\$573.64
022-0-083-060	Single Family Detached	4	9,888	1	-	\$573.64	\$573.64
022-0-083-070	Single Family Detached	3	10,125	1	-	\$885.56	\$885.56
022-0-083-080	Single Family Detached	4	8,425	1	-	\$573.64	\$573.64
022-0-083-090	Single Family Detached	4	8,064	1	-	\$573.64	\$573.64
022-0-083-100	Single Family Detached	4	8,036	1	-	\$573.64	\$573.64
022-0-083-110	Single Family Detached	4	8,036	1	-	\$573.64	\$573.64
022-0-083-120	Single Family Detached	4	8,036	1	-	\$573.64	\$573.64
022-0-083-130	Single Family Detached	4	8,011	1	-	\$573.64	\$573.64
022-0-083-140	Single Family Detached	4	8,150	1	-	\$573.64	\$573.64
022-0-084-010	Single Family Detached	4	8,675	1	-	\$573.64	\$573.64
022-0-084-020	Single Family Detached	4	8,325	1	-	\$573.64	\$573.64
022-0-084-030	Single Family Detached	4	7,875	1	-	\$573.64	\$573.64
022-0-084-040	Single Family Detached	4	8,250	1	-	\$573.64	\$573.64
022-0-084-070	Single Family Detached	4	8,438	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-084-080	Single Family Detached	4	8,700	1	-	\$573.64	\$573.64
022-0-084-090	Single Family Detached	4	8,488	1	-	\$573.64	\$573.64
022-0-084-100	Single Family Detached	4	8,038	1	-	\$573.64	\$573.64
022-0-084-110	Single Family Detached	4	8,603	1	-	\$573.64	\$573.64
022-0-084-130	Single Family Detached	4	8,258	1	-	\$573.64	\$573.64
022-0-090-010	Multifamily Attached	6	-	3	-	\$1,251.27	\$1,251.27
022-0-090-040	Single Family Detached	1	158,994	1	-	\$2,501.33	\$2,501.33
022-0-090-070	Single Family Detached	4	6,096	1	-	\$573.64	\$573.64
022-0-090-080	Single Family Detached	4	9,828	1	-	\$573.64	\$573.64
022-0-090-100	Single Family Detached	4	7,835	1	-	\$573.64	\$573.64
022-0-090-110	Single Family Detached	4	8,219	1	-	\$573.64	\$573.64
022-0-090-120	Single Family Detached	4	7,822	1	-	\$573.64	\$573.64
022-0-090-140	Single Family Detached	4	7,115	1	-	\$573.64	\$573.64
022-0-090-150	Single Family Detached	4	7,100	1	-	\$573.64	\$573.64
022-0-090-160	Single Family Detached	4	7,261	1	-	\$573.64	\$573.64
022-0-090-180	Single Family Detached	4	8,834	1	-	\$573.64	\$573.64
022-0-090-190	Single Family Detached	4	9,018	1	-	\$573.64	\$573.64
022-0-090-200	Single Family Detached	4	8,671	1	-	\$573.64	\$573.64
022-0-090-210	Single Family Detached	4	6,739	1	-	\$573.64	\$573.64
022-0-090-220	Single Family Detached	4	7,045	1	-	\$573.64	\$573.64
022-0-090-230	Single Family Detached	4	7,609	2	-	\$1,147.28	\$1,147.28
022-0-090-250	Multifamily Attached	6	-	16	-	\$6,673.44	\$6,673.44
022-0-090-260	Multifamily Attached	6	-	5	-	\$2,085.45	\$2,085.45
022-0-090-270	Single Family Detached	4	7,464	1	-	\$573.64	\$573.64
022-0-090-280	Multifamily Attached	6	-	3	-	\$1,251.27	\$1,251.27
022-0-090-290	Single Family Detached	3	10,164	1	-	\$885.56	\$885.56
022-0-090-300	Single Family Detached	3	10,164	1	-	\$885.56	\$885.56
022-0-090-400	Single Family Detached	3	10,106	1	-	\$885.56	\$885.56
022-0-090-410	Single Family Detached	4	5,677	1	-	\$573.64	\$573.64
022-0-090-420	Single Family Detached	3	13,497	2	-	\$1,771.12	\$1,771.12
022-0-090-450	Multifamily Attached	6	-	16	-	\$6,673.44	\$6,673.44
022-0-090-480	Single Family Detached	4	7,267	1	-	\$573.64	\$573.64
022-0-090-490	Single Family Detached	4	7,546	1	-	\$573.64	\$573.64
022-0-090-500	Single Family Detached	4	8,122	1	-	\$573.64	\$573.64
022-0-090-520	Commercial Property	7	-	-	8,079	\$2,925.41	\$2,925.41
022-0-100-020	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-100-030	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-100-080	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-100-090	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-100-100	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-100-110	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-100-130	Single Family Detached	4	6,562	1	-	\$573.64	\$573.64
022-0-100-150	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-100-160	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-100-170	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-100-180	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-100-190	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-100-200	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-100-230	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-100-240	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-100-250	Single Family Detached	4	8,250	1	-	\$573.64	\$573.64
022-0-100-260	Single Family Detached	4	6,750	1	-	\$573.64	\$573.64
022-0-100-270	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-100-280	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-100-290	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-100-300	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-100-310	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-100-320	Single Family Detached	4	7,119	1	-	\$573.64	\$573.64
022-0-100-330	Single Family Detached	4	6,706	1	-	\$573.64	\$573.64
022-0-100-340	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-100-350	Single Family Detached	4	8,228	1	-	\$573.64	\$573.64
022-0-100-360	Single Family Detached	4	6,580	1	-	\$573.64	\$573.64
022-0-100-380	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-100-390	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-100-420	Single Family Detached	2	31,050	1	-	\$1,475.94	\$1,475.94
022-0-100-430	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-100-440	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-100-450	Multifamily Attached	6	-	3	-	\$1,251.27	\$1,251.27
022-0-100-460	Single Family Detached	4	5,036	1	-	\$573.64	\$573.64
022-0-100-470	Commercial Property	7	-	-	3,070	\$1,111.65	\$1,111.65
022-0-110-010	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-110-020	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-110-040	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-110-060	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-110-070	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-110-090	Single Family Detached	4	7,184	1	-	\$573.64	\$573.64
022-0-110-100	Single Family Detached	4	7,815	1	-	\$573.64	\$573.64
022-0-110-130	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-110-150	Single Family Detached	4	8,577	1	-	\$573.64	\$573.64
022-0-110-160	Single Family Detached	4	8,160	1	-	\$573.64	\$573.64
022-0-110-190	Single Family Detached	4	7,871	1	-	\$573.64	\$573.64
022-0-110-200	Single Family Detached	2	27,543	1	-	\$1,475.94	\$1,475.94
022-0-110-210	Single Family Detached	3	17,649	1	-	\$885.56	\$885.56
022-0-110-220	Single Family Detached	3	14,618	1	-	\$885.56	\$885.56
022-0-110-230	Single Family Detached	2	26,665	1	-	\$1,475.94	\$1,475.94
022-0-110-240	Single Family Detached	3	19,100	1	-	\$885.56	\$885.56
022-0-110-250	Single Family Detached	4	8,982	1	-	\$573.64	\$573.64
022-0-110-260	Single Family Detached	4	9,846	1	-	\$573.64	\$573.64
022-0-110-300	Single Family Detached	4	7,475	1	-	\$573.64	\$573.64
022-0-110-320	Single Family Detached	4	7,465	1	-	\$573.64	\$573.64
022-0-110-330	Single Family Detached	4	7,465	1	-	\$573.64	\$573.64
022-0-110-340	Single Family Detached	3	10,909	1	-	\$885.56	\$885.56
022-0-110-350	Single Family Detached	3	10,909	1	-	\$885.56	\$885.56
022-0-110-380	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-110-390	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-110-400	Single Family Detached	4	7,200	1	-	\$573.64	\$573.64
022-0-110-410	Single Family Detached	4	8,100	1	-	\$573.64	\$573.64
022-0-110-430	Single Family Detached	3	13,778	1	-	\$885.56	\$885.56
022-0-110-440	Single Family Detached	4	7,465	1	-	\$573.64	\$573.64
022-0-110-460	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-110-470	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-110-480	Single Family Detached	4	8,866	1	-	\$573.64	\$573.64
022-0-110-490	Single Family Detached	4	7,920	1	-	\$573.64	\$573.64
022-0-110-520	Single Family Detached	4	9,000	1	-	\$573.64	\$573.64
022-0-110-530	Single Family Detached	3	11,778	1	-	\$885.56	\$885.56
022-0-110-540	Single Family Detached	4	9,929	2	-	\$1,147.28	\$1,147.28
022-0-110-550	Single Family Detached	4	7,918	1	-	\$573.64	\$573.64
022-0-110-560	Single Family Detached	3	11,714	1	-	\$885.56	\$885.56
022-0-110-570	Single Family Detached	3	14,003	1	-	\$885.56	\$885.56
022-0-120-040	Single Family Detached	2	28,300	1	-	\$1,475.94	\$1,475.94
022-0-120-050	Single Family Detached	3	20,264	1	-	\$885.56	\$885.56
022-0-120-065	Single Family Detached	4	6,815	1	-	\$573.64	\$573.64
022-0-120-075	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-085	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-095	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-105	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-115	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-125	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-135	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-145	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-155	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-165	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-175	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-185	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-195	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-205	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-215	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-225	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-235	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-245	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-255	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-265	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-275	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-285	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-120-290	Single Family Detached	4	6,958	1	-	\$573.64	\$573.64
022-0-120-300	Single Family Detached	3	10,289	1	-	\$885.56	\$885.56
022-0-120-330	Single Family Detached	4	6,431	1	-	\$573.64	\$573.64
022-0-120-340	Single Family Detached	4	6,431	1	-	\$573.64	\$573.64
022-0-120-350	Single Family Detached	4	6,431	1	-	\$573.64	\$573.64
022-0-120-360	Single Family Detached	4	6,431	1	-	\$573.64	\$573.64
022-0-120-370	Single Family Detached	4	6,128	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-120-380	Single Family Detached	4	6,030	1	-	\$573.64	\$573.64
022-0-120-390	Single Family Detached	4	9,003	1	-	\$573.64	\$573.64
022-0-120-400	Single Family Detached	4	9,563	1	-	\$573.64	\$573.64
022-0-120-410	Single Family Detached	4	9,285	1	-	\$573.64	\$573.64
022-0-130-015	Single Family Detached	4	8,520	1	-	\$573.64	\$573.64
022-0-130-025	Single Family Detached	4	8,519	1	-	\$573.64	\$573.64
022-0-130-035	Single Family Detached	4	8,518	1	-	\$573.64	\$573.64
022-0-130-045	Single Family Detached	4	8,516	1	-	\$573.64	\$573.64
022-0-130-055	Single Family Detached	4	8,515	1	-	\$573.64	\$573.64
022-0-130-065	Single Family Detached	4	8,514	1	-	\$573.64	\$573.64
022-0-130-075	Single Family Detached	4	8,513	1	-	\$573.64	\$573.64
022-0-130-085	Single Family Detached	4	8,512	1	-	\$573.64	\$573.64
022-0-130-095	Single Family Detached	4	8,511	1	-	\$573.64	\$573.64
022-0-130-105	Single Family Detached	4	8,510	1	-	\$573.64	\$573.64
022-0-130-115	Single Family Detached	4	8,509	1	-	\$573.64	\$573.64
022-0-130-125	Single Family Detached	4	8,508	1	-	\$573.64	\$573.64
022-0-130-135	Single Family Detached	4	8,507	1	-	\$573.64	\$573.64
022-0-130-145	Single Family Detached	4	8,506	1	-	\$573.64	\$573.64
022-0-130-155	Single Family Detached	4	8,504	1	-	\$573.64	\$573.64
022-0-130-165	Single Family Detached	4	8,503	1	-	\$573.64	\$573.64
022-0-130-175	Single Family Detached	4	8,502	1	-	\$573.64	\$573.64
022-0-130-185	Single Family Detached	4	8,501	1	-	\$573.64	\$573.64
022-0-130-195	Single Family Detached	4	8,500	1	-	\$573.64	\$573.64
022-0-130-205	Single Family Detached	4	8,499	1	-	\$573.64	\$573.64
022-0-130-215	Single Family Detached	4	8,498	1	-	\$573.64	\$573.64
022-0-130-225	Single Family Detached	4	8,497	1	-	\$573.64	\$573.64
022-0-130-235	Single Family Detached	3	10,208	1	-	\$885.56	\$885.56
022-0-140-030	Single Family Detached	3	12,768	1	-	\$885.56	\$885.56
022-0-140-040	Single Family Detached	3	11,130	1	-	\$885.56	\$885.56
022-0-140-050	Single Family Detached	3	11,130	1	-	\$885.56	\$885.56
022-0-140-060	Single Family Detached	3	11,450	1	-	\$885.56	\$885.56
022-0-140-080	Single Family Detached	4	7,750	1	-	\$573.64	\$573.64
022-0-140-090	Single Family Detached	3	11,950	1	-	\$885.56	\$885.56
022-0-140-100	Single Family Detached	4	7,807	1	-	\$573.64	\$573.64
022-0-140-110	Single Family Detached	4	7,576	1	-	\$573.64	\$573.64
022-0-140-120	Single Family Detached	4	6,907	1	-	\$573.64	\$573.64
022-0-140-140	Single Family Detached	4	8,123	1	-	\$573.64	\$573.64
022-0-140-150	Single Family Detached	4	8,726	1	-	\$573.64	\$573.64
022-0-140-160	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
022-0-140-170	Single Family Detached	3	10,187	1	-	\$885.56	\$885.56
022-0-140-180	Single Family Detached	4	9,837	1	-	\$573.64	\$573.64
022-0-140-190	Single Family Detached	4	8,544	2	-	\$1,147.28	\$1,147.28
022-0-140-200	Single Family Detached	4	8,296	1	-	\$573.64	\$573.64
022-0-140-210	Single Family Detached	4	8,388	1	-	\$573.64	\$573.64
022-0-140-220	Single Family Detached	4	8,175	1	-	\$573.64	\$573.64
022-0-140-230	Multifamily Attached	6	-	6	-	\$2,502.54	\$2,502.54
022-0-140-260	Single Family Detached	4	6,959	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-140-270	Single Family Detached	4	6,000	1	-	\$573.64	\$573.64
022-0-140-290	Single Family Detached	4	5,000	1	-	\$573.64	\$573.64
022-0-140-300	Single Family Detached	4	5,000	1	-	\$573.64	\$573.64
022-0-140-310	Single Family Detached	4	5,814	1	-	\$573.64	\$573.64
022-0-140-320	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-140-330	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-140-340	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-140-350	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-140-365	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-140-370	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-140-380	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-140-390	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-140-400	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-140-410	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-140-470	Commercial Property	7	-	-	3,220	\$1,165.96	\$1,165.96
022-0-140-490	Single Family Detached	3	10,047	2	-	\$1,771.12	\$1,771.12
022-0-140-500	Single Family Detached	4	9,490	1	-	\$573.64	\$573.64
022-0-140-510	Multifamily Attached	6	-	3	-	\$1,251.27	\$1,251.27
022-0-140-520	Multifamily Attached	6	-	4	-	\$1,668.36	\$1,668.36
022-0-140-530	Single Family Detached	4	6,705	1	-	\$573.64	\$573.64
022-0-140-540	Single Family Detached	4	6,000	1	-	\$573.64	\$573.64
022-0-140-550	Single Family Detached	4	6,000	1	-	\$573.64	\$573.64
022-0-140-560	Single Family Detached	4	6,000	1	-	\$573.64	\$573.64
022-0-140-570	Single Family Detached	4	5,878	1	-	\$573.64	\$573.64
022-0-140-580	Single Family Detached	4	5,933	1	-	\$573.64	\$573.64
022-0-140-590	Commercial Property	7	-	-	1,000	\$362.10	\$362.10
022-0-140-600	Commercial Property	7	-	-	730	\$264.33	\$264.33
022-0-140-610	Single Family Detached	4	4,650	1	-	\$573.64	\$573.64
022-0-140-630	Multifamily Attached	6	-	4	-	\$1,668.36	\$1,668.36
022-0-140-640	Commercial Property	7	-	-	1,000	\$362.10	\$362.10
022-0-151-010	Commercial Property	7	-	-	4,302	\$1,557.75	\$1,557.75
022-0-151-020	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-151-030	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-151-040	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-151-050	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-151-060	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-151-070	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-151-080	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-151-090	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-151-100	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-151-110	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-151-120	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-151-130	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-151-140	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-151-150	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-151-160	Single Family Detached	4	6,500	1	-	\$573.64	\$573.64
022-0-151-170	Single Family Detached	4	6,071	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-151-180	Single Family Detached	4	6,476	1	-	\$573.64	\$573.64
022-0-151-190	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-151-200	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-151-210	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-151-220	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-151-230	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-151-240	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-151-250	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-151-260	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-151-270	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-151-280	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-151-290	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-151-300	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-151-310	Single Family Detached	4	7,500	2	-	\$1,147.28	\$1,147.28
022-0-151-320	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-151-330	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-151-340	Single Family Detached	3	11,250	1	-	\$885.56	\$885.56
022-0-151-350	Single Family Detached	3	11,250	1	-	\$885.56	\$885.56
022-0-151-360	Commercial Property	7	-	-	1,800	\$651.78	\$651.78
022-0-152-010	Commercial Property	7	-	-	8,236	\$2,982.26	\$2,982.26
022-0-152-020	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-152-030	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-152-040	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-152-050	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-152-070	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-152-080	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-152-090	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-152-100	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-152-110	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-152-120	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-152-130	Single Family Detached	4	7,373	1	-	\$573.64	\$573.64
022-0-152-140	Single Family Detached	4	7,627	1	-	\$573.64	\$573.64
022-0-152-150	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-152-160	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-152-170	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-152-180	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
022-0-152-190	Single Family Detached	3	10,910	1	-	\$885.56	\$885.56
022-0-152-200	Single Family Detached	3	10,908	1	-	\$885.56	\$885.56
022-0-152-210	Single Family Detached	4	8,702	1	-	\$573.64	\$573.64
022-0-152-220	Single Family Detached	4	8,509	1	-	\$573.64	\$573.64
022-0-152-230	Single Family Detached	4	8,509	2	-	\$1,147.28	\$1,147.28
022-0-152-240	Single Family Detached	4	8,957	1	-	\$573.64	\$573.64
022-0-152-250	Single Family Detached	4	8,957	1	-	\$573.64	\$573.64
022-0-152-280	Single Family Detached	3	10,301	1	-	\$885.56	\$885.56
022-0-152-290	Single Family Detached	3	10,301	1	-	\$885.56	\$885.56
022-0-152-300	Commercial Property	7	-	-	3,857	\$1,396.62	\$1,396.62
022-0-152-310	Commercial Property	7	-	-	1,188	\$430.17	\$430.17

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-152-320	Single Family Detached	3	10,400	1	-	\$885.56	\$885.56
022-0-152-330	Single Family Detached	3	10,301	1	-	\$885.56	\$885.56
022-0-152-340	Single Family Detached	3	12,764	1	-	\$885.56	\$885.56
022-0-152-350	Single Family Detached	4	7,912	1	-	\$573.64	\$573.64
022-0-152-360	Single Family Detached	4	7,464	1	-	\$573.64	\$573.64
022-0-152-370	Single Family Detached	4	7,464	1	-	\$573.64	\$573.64
022-0-161-015	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-161-025	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-161-035	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-161-040	Single Family Detached	3	11,301	1	-	\$885.56	\$885.56
022-0-161-060	Single Family Detached	4	9,443	1	-	\$573.64	\$573.64
022-0-161-070	Single Family Detached	4	9,443	1	-	\$573.64	\$573.64
022-0-161-080	Single Family Detached	4	6,295	1	-	\$573.64	\$573.64
022-0-161-090	Single Family Detached	4	6,628	1	-	\$573.64	\$573.64
022-0-161-100	Single Family Detached	4	6,998	1	-	\$573.64	\$573.64
022-0-161-110	Single Family Detached	4	7,320	1	-	\$573.64	\$573.64
022-0-161-120	Single Family Detached	4	7,646	1	-	\$573.64	\$573.64
022-0-161-130	Single Family Detached	4	6,295	1	-	\$573.64	\$573.64
022-0-161-140	Single Family Detached	4	6,295	1	-	\$573.64	\$573.64
022-0-161-150	Single Family Detached	4	6,295	1	-	\$573.64	\$573.64
022-0-161-160	Single Family Detached	4	6,295	1	-	\$573.64	\$573.64
022-0-161-170	Single Family Detached	3	12,590	1	-	\$885.56	\$885.56
022-0-161-180	Single Family Detached	3	10,018	1	-	\$885.56	\$885.56
022-0-161-195	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-161-205	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-161-215	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-161-225	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-161-235	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-161-240	Single Family Detached	4	8,092	1	-	\$573.64	\$573.64
022-0-161-250	Single Family Detached	4	6,188	1	-	\$573.64	\$573.64
022-0-161-270	Single Family Detached	4	6,226	1	-	\$573.64	\$573.64
022-0-161-280	Single Family Detached	4	6,240	1	-	\$573.64	\$573.64
022-0-161-290	Single Family Detached	4	6,252	1	-	\$573.64	\$573.64
022-0-161-300	Single Family Detached	4	6,266	1	-	\$573.64	\$573.64
022-0-161-310	Single Family Detached	4	5,025	1	-	\$573.64	\$573.64
022-0-161-320	Single Family Detached	4	5,379	1	-	\$573.64	\$573.64
022-0-161-330	Commercial Property	7	-	-	5,058	\$1,831.50	\$1,831.50
022-0-161-340	Commercial Property	7	-	-	1,693	\$613.04	\$613.04
022-0-161-350	Commercial Property	7	-	-	2,328	\$842.97	\$842.97
022-0-161-370	Commercial Property	7	-	-	2,898	\$1,049.37	\$1,049.37
022-0-161-380	Commercial Property	7	-	-	1,707	\$618.10	\$618.10
022-0-161-390	Commercial Property	7	-	-	6,048	\$2,189.98	\$2,189.98
022-0-161-405	Single Family Detached	4	8,773	1	-	\$573.64	\$573.64
022-0-161-415	Commercial Property	7	-	-	3,375	\$1,222.09	\$1,222.09
022-0-161-420	Single Family Detached	4	6,295	1	-	\$573.64	\$573.64
022-0-161-430	Single Family Detached	4	6,295	1	-	\$573.64	\$573.64
022-0-161-440	Single Family Detached	4	6,200	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-161-450	Single Family Detached	4	6,213	1	-	\$573.64	\$573.64
022-0-162-015	Single Family Detached	4	8,521	1	-	\$573.64	\$573.64
022-0-162-035	Single Family Detached	4	8,522	1	-	\$573.64	\$573.64
022-0-162-045	Single Family Detached	4	8,523	1	-	\$573.64	\$573.64
022-0-162-055	Single Family Detached	4	8,524	1	-	\$573.64	\$573.64
022-0-162-065	Single Family Detached	4	8,525	1	-	\$573.64	\$573.64
022-0-162-075	Single Family Detached	4	8,526	1	-	\$573.64	\$573.64
022-0-162-085	Single Family Detached	4	8,527	1	-	\$573.64	\$573.64
022-0-162-095	Single Family Detached	4	8,528	1	-	\$573.64	\$573.64
022-0-162-105	Single Family Detached	4	8,528	1	-	\$573.64	\$573.64
022-0-162-145	Commercial Property	7	-	-	5,407	\$1,957.87	\$1,957.87
022-0-171-015	Single Family Detached	4	8,003	1	-	\$573.64	\$573.64
022-0-171-025	Single Family Detached	4	8,003	1	-	\$573.64	\$573.64
022-0-171-035	Single Family Detached	4	8,003	1	-	\$573.64	\$573.64
022-0-171-045	Single Family Detached	4	8,003	1	-	\$573.64	\$573.64
022-0-171-055	Single Family Detached	4	8,003	1	-	\$573.64	\$573.64
022-0-171-065	Single Family Detached	4	8,003	1	-	\$573.64	\$573.64
022-0-171-075	Single Family Detached	4	8,003	1	-	\$573.64	\$573.64
022-0-171-085	Single Family Detached	4	8,626	1	-	\$573.64	\$573.64
022-0-172-015	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-172-025	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-172-035	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-172-045	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-172-055	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-172-065	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-172-075	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-172-085	Single Family Detached	4	8,631	1	-	\$573.64	\$573.64
022-0-172-095	Single Family Detached	4	8,631	1	-	\$573.64	\$573.64
022-0-172-105	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-172-115	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-172-125	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-172-135	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-172-145	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-172-155	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-172-165	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-173-015	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-173-025	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-173-035	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-173-045	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-173-055	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-173-065	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-173-075	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-173-085	Single Family Detached	4	8,631	1	-	\$573.64	\$573.64
022-0-181-015	Single Family Detached	4	8,626	1	-	\$573.64	\$573.64
022-0-181-025	Single Family Detached	4	8,003	1	-	\$573.64	\$573.64
022-0-181-035	Single Family Detached	4	8,003	1	-	\$573.64	\$573.64
022-0-181-045	Single Family Detached	4	8,185	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-181-055	Single Family Detached	4	8,185	1	-	\$573.64	\$573.64
022-0-181-065	Single Family Detached	4	8,186	1	-	\$573.64	\$573.64
022-0-181-075	Single Family Detached	4	8,160	1	-	\$573.64	\$573.64
022-0-181-085	Single Family Detached	4	9,378	1	-	\$573.64	\$573.64
022-0-181-095	Single Family Detached	3	13,008	1	-	\$885.56	\$885.56
022-0-181-105	Single Family Detached	3	11,010	1	-	\$885.56	\$885.56
022-0-181-115	Single Family Detached	3	11,088	1	-	\$885.56	\$885.56
022-0-182-015	Single Family Detached	4	8,631	1	-	\$573.64	\$573.64
022-0-182-025	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-182-035	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-182-045	Single Family Detached	4	8,190	1	-	\$573.64	\$573.64
022-0-182-055	Single Family Detached	4	8,190	1	-	\$573.64	\$573.64
022-0-182-065	Single Family Detached	4	8,190	1	-	\$573.64	\$573.64
022-0-182-075	Single Family Detached	4	9,086	1	-	\$573.64	\$573.64
022-0-182-085	Single Family Detached	4	9,086	1	-	\$573.64	\$573.64
022-0-182-095	Single Family Detached	4	8,190	1	-	\$573.64	\$573.64
022-0-182-105	Single Family Detached	4	8,190	1	-	\$573.64	\$573.64
022-0-182-115	Single Family Detached	4	8,190	1	-	\$573.64	\$573.64
022-0-182-125	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-182-135	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-182-145	Single Family Detached	4	8,631	1	-	\$573.64	\$573.64
022-0-183-015	Single Family Detached	4	8,631	1	-	\$573.64	\$573.64
022-0-183-025	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-183-035	Single Family Detached	4	8,008	1	-	\$573.64	\$573.64
022-0-183-045	Single Family Detached	4	8,190	1	-	\$573.64	\$573.64
022-0-183-055	Single Family Detached	4	8,190	1	-	\$573.64	\$573.64
022-0-183-065	Single Family Detached	4	8,190	1	-	\$573.64	\$573.64
022-0-183-075	Single Family Detached	4	8,190	1	-	\$573.64	\$573.64
022-0-183-085	Single Family Detached	4	8,190	1	-	\$573.64	\$573.64
022-0-183-095	Single Family Detached	4	8,372	1	-	\$573.64	\$573.64
022-0-183-100	Single Family Detached	3	10,035	1	-	\$885.56	\$885.56
022-0-183-110	Single Family Detached	3	10,035	1	-	\$885.56	\$885.56
022-0-183-120	Single Family Detached	3	10,035	1	-	\$885.56	\$885.56
022-0-184-010	Single Family Detached	3	10,224	1	-	\$885.56	\$885.56
022-0-184-020	Single Family Detached	3	10,300	1	-	\$885.56	\$885.56
022-0-184-030	Single Family Detached	3	11,150	1	-	\$885.56	\$885.56
022-0-184-040	Single Family Detached	3	10,000	1	-	\$885.56	\$885.56
022-0-184-050	Single Family Detached	3	10,000	1	-	\$885.56	\$885.56
022-0-184-060	Single Family Detached	3	10,000	1	-	\$885.56	\$885.56
022-0-184-070	Single Family Detached	3	11,150	1	-	\$885.56	\$885.56
022-0-184-080	Single Family Detached	3	10,300	1	-	\$885.56	\$885.56
022-0-184-090	Single Family Detached	3	10,002	1	-	\$885.56	\$885.56
022-0-185-010	Single Family Detached	3	10,035	1	-	\$885.56	\$885.56
022-0-185-020	Single Family Detached	3	10,035	1	-	\$885.56	\$885.56
022-0-185-030	Single Family Detached	3	10,035	1	-	\$885.56	\$885.56
022-0-191-015	Single Family Detached	4	8,169	1	-	\$573.64	\$573.64
022-0-191-025	Single Family Detached	3	12,333	1	-	\$885.56	\$885.56

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-191-035	Single Family Detached	3	11,092	1	-	\$885.56	\$885.56
022-0-191-045	Single Family Detached	3	10,018	1	-	\$885.56	\$885.56
022-0-191-055	Single Family Detached	3	11,183	1	-	\$885.56	\$885.56
022-0-192-015	Single Family Detached	4	8,250	1	-	\$573.64	\$573.64
022-0-192-025	Single Family Detached	3	10,950	1	-	\$885.56	\$885.56
022-0-192-035	Single Family Detached	3	14,967	1	-	\$885.56	\$885.56
022-0-192-045	Single Family Detached	4	9,100	1	-	\$573.64	\$573.64
022-0-192-055	Single Family Detached	4	9,400	1	-	\$573.64	\$573.64
022-0-192-065	Single Family Detached	3	10,450	1	-	\$885.56	\$885.56
022-0-192-075	Single Family Detached	4	8,850	1	-	\$573.64	\$573.64
022-0-192-085	Single Family Detached	4	8,629	1	-	\$573.64	\$573.64
022-0-192-095	Single Family Detached	4	8,500	1	-	\$573.64	\$573.64
022-0-192-105	Single Family Detached	4	9,722	1	-	\$573.64	\$573.64
022-0-192-115	Single Family Detached	4	8,800	1	-	\$573.64	\$573.64
022-0-192-125	Single Family Detached	4	9,600	1	-	\$573.64	\$573.64
022-0-192-135	Single Family Detached	4	8,659	1	-	\$573.64	\$573.64
022-0-192-145	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-192-150	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-192-160	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-192-170	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-192-180	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-192-190	Single Family Detached	4	8,103	1	-	\$573.64	\$573.64
022-0-192-205	Single Family Detached	4	8,103	1	-	\$573.64	\$573.64
022-0-192-215	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-192-225	Single Family Detached	4	8,050	1	-	\$573.64	\$573.64
022-0-192-245	Single Family Detached	4	9,958	1	-	\$573.64	\$573.64
022-0-192-255	Single Family Detached	4	8,876	1	-	\$573.64	\$573.64
022-0-192-265	Single Family Detached	4	9,880	1	-	\$573.64	\$573.64
022-0-192-275	Single Family Detached	3	17,367	1	-	\$885.56	\$885.56
022-0-192-285	Single Family Detached	3	16,750	1	-	\$885.56	\$885.56
022-0-192-295	Single Family Detached	4	8,600	1	-	\$573.64	\$573.64
022-0-192-305	Single Family Detached	4	8,322	1	-	\$573.64	\$573.64
022-0-192-315	Single Family Detached	4	8,433	1	-	\$573.64	\$573.64
022-0-192-325	Single Family Detached	4	8,545	1	-	\$573.64	\$573.64
022-0-192-335	Single Family Detached	4	8,657	1	-	\$573.64	\$573.64
022-0-192-345	Single Family Detached	4	9,100	1	-	\$573.64	\$573.64
022-0-192-355	Single Family Detached	3	15,250	1	-	\$885.56	\$885.56
022-0-192-365	Single Family Detached	4	9,000	1	-	\$573.64	\$573.64
022-0-192-375	Single Family Detached	4	8,010	1	-	\$573.64	\$573.64
022-0-192-385	Single Family Detached	4	8,010	1	-	\$573.64	\$573.64
022-0-192-395	Single Family Detached	4	8,010	1	-	\$573.64	\$573.64
022-0-192-405	Single Family Detached	4	8,010	1	-	\$573.64	\$573.64
022-0-192-415	Single Family Detached	4	8,010	1	-	\$573.64	\$573.64
022-0-192-425	Single Family Detached	4	7,962	1	-	\$573.64	\$573.64
022-0-193-015	Single Family Detached	4	8,100	1	-	\$573.64	\$573.64
022-0-193-025	Single Family Detached	4	8,150	1	-	\$573.64	\$573.64
022-0-193-035	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-193-045	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-193-055	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-193-060	Single Family Detached	4	7,952	1	-	\$573.64	\$573.64
022-0-193-075	Single Family Detached	4	7,952	1	-	\$573.64	\$573.64
022-0-193-080	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-193-095	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-193-105	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-194-015	Single Family Detached	4	8,300	1	-	\$573.64	\$573.64
022-0-194-025	Single Family Detached	4	8,300	1	-	\$573.64	\$573.64
022-0-194-035	Single Family Detached	4	8,006	1	-	\$573.64	\$573.64
022-0-194-045	Single Family Detached	4	8,006	1	-	\$573.64	\$573.64
022-0-194-055	Single Family Detached	4	8,006	1	-	\$573.64	\$573.64
022-0-194-065	Single Family Detached	4	8,006	1	-	\$573.64	\$573.64
022-0-194-075	Single Family Detached	4	8,006	1	-	\$573.64	\$573.64
022-0-194-080	Single Family Detached	4	8,006	1	-	\$573.64	\$573.64
022-0-194-095	Single Family Detached	4	7,958	1	-	\$573.64	\$573.64
022-0-194-105	Single Family Detached	4	7,958	1	-	\$573.64	\$573.64
022-0-194-110	Single Family Detached	4	8,006	1	-	\$573.64	\$573.64
022-0-194-120	Single Family Detached	4	8,006	1	-	\$573.64	\$573.64
022-0-194-130	Single Family Detached	4	8,006	1	-	\$573.64	\$573.64
022-0-194-145	Single Family Detached	4	8,006	1	-	\$573.64	\$573.64
022-0-194-155	Single Family Detached	4	8,006	1	-	\$573.64	\$573.64
022-0-194-165	Single Family Detached	4	8,006	1	-	\$573.64	\$573.64
022-0-195-010	Single Family Detached	4	8,001	1	-	\$573.64	\$573.64
022-0-195-020	Single Family Detached	4	8,027	1	-	\$573.64	\$573.64
022-0-195-030	Single Family Detached	4	8,150	1	-	\$573.64	\$573.64
022-0-195-045	Single Family Detached	3	13,400	1	-	\$885.56	\$885.56
022-0-195-055	Single Family Detached	4	8,400	1	-	\$573.64	\$573.64
022-0-196-015	Single Family Detached	4	8,225	1	-	\$573.64	\$573.64
022-0-196-020	Single Family Detached	4	8,003	1	-	\$573.64	\$573.64
022-0-196-030	Single Family Detached	4	8,003	1	-	\$573.64	\$573.64
022-0-196-040	Single Family Detached	4	8,003	1	-	\$573.64	\$573.64
022-0-196-050	Single Family Detached	4	8,003	1	-	\$573.64	\$573.64
022-0-196-060	Single Family Detached	4	8,003	1	-	\$573.64	\$573.64
022-0-196-070	Single Family Detached	4	8,003	1	-	\$573.64	\$573.64
022-0-196-080	Single Family Detached	4	8,003	1	-	\$573.64	\$573.64
022-0-196-090	Single Family Detached	4	8,001	1	-	\$573.64	\$573.64
022-0-200-035	Single Family Detached	4	7,985	1	-	\$573.64	\$573.64
022-0-200-045	Single Family Detached	4	8,128	1	-	\$573.64	\$573.64
022-0-200-055	Single Family Detached	4	8,128	1	-	\$573.64	\$573.64
022-0-200-065	Single Family Detached	4	8,128	1	-	\$573.64	\$573.64
022-0-200-075	Single Family Detached	4	8,084	1	-	\$573.64	\$573.64
022-0-200-085	Single Family Detached	4	8,091	1	-	\$573.64	\$573.64
022-0-200-095	Single Family Detached	4	8,173	1	-	\$573.64	\$573.64
022-0-200-105	Single Family Detached	4	8,173	1	-	\$573.64	\$573.64
022-0-200-115	Single Family Detached	4	8,173	1	-	\$573.64	\$573.64
022-0-200-125	Single Family Detached	4	8,173	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-200-135	Single Family Detached	4	8,173	1	-	\$573.64	\$573.64
022-0-200-145	Single Family Detached	4	8,173	1	-	\$573.64	\$573.64
022-0-200-155	Single Family Detached	4	8,173	1	-	\$573.64	\$573.64
022-0-200-165	Single Family Detached	4	8,173	1	-	\$573.64	\$573.64
022-0-200-175	Single Family Detached	4	8,315	1	-	\$573.64	\$573.64
022-0-200-185	Single Family Detached	4	7,862	1	-	\$573.64	\$573.64
022-0-200-195	Single Family Detached	4	8,001	1	-	\$573.64	\$573.64
022-0-200-205	Single Family Detached	4	8,001	1	-	\$573.64	\$573.64
022-0-200-215	Single Family Detached	4	8,001	1	-	\$573.64	\$573.64
022-0-200-225	Single Family Detached	4	8,194	1	-	\$573.64	\$573.64
022-0-200-235	Single Family Detached	4	7,750	1	-	\$573.64	\$573.64
022-0-200-245	Single Family Detached	4	9,750	1	-	\$573.64	\$573.64
022-0-200-255	Single Family Detached	4	8,150	1	-	\$573.64	\$573.64
022-0-200-265	Single Family Detached	4	9,750	1	-	\$573.64	\$573.64
022-0-200-275	Single Family Detached	4	7,750	1	-	\$573.64	\$573.64
022-0-200-285	Single Family Detached	4	8,060	1	-	\$573.64	\$573.64
022-0-200-295	Single Family Detached	4	8,070	1	-	\$573.64	\$573.64
022-0-200-305	Single Family Detached	4	8,146	1	-	\$573.64	\$573.64
022-0-200-315	Single Family Detached	4	8,279	1	-	\$573.64	\$573.64
022-0-200-325	Single Family Detached	4	8,412	1	-	\$573.64	\$573.64
022-0-200-335	Single Family Detached	4	8,483	1	-	\$573.64	\$573.64
022-0-200-345	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-200-355	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-200-365	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-200-375	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-200-385	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-200-395	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-200-405	Single Family Detached	4	8,085	1	-	\$573.64	\$573.64
022-0-200-415	Single Family Detached	4	7,916	1	-	\$573.64	\$573.64
022-0-200-425	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-200-435	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-200-445	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-200-455	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-200-465	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-200-475	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-200-485	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-200-495	Single Family Detached	4	8,000	1	-	\$573.64	\$573.64
022-0-200-505	Single Family Detached	4	8,085	1	-	\$573.64	\$573.64
022-0-200-525	Single Family Detached	4	7,952	1	-	\$573.64	\$573.64
022-0-200-535	Single Family Detached	4	9,585	1	-	\$573.64	\$573.64
022-0-210-010	Single Family Detached	1	319,294	1	-	\$2,501.33	\$2,501.33
022-0-210-020	Single Family Detached	1	458,251	1	-	\$2,501.33	\$2,501.33
022-0-210-170	Single Family Detached	3	11,429	1	-	\$885.56	\$885.56
022-0-210-180	Single Family Detached	2	26,021	1	-	\$1,475.94	\$1,475.94
022-0-210-190	Single Family Detached	3	13,556	1	-	\$885.56	\$885.56
022-0-210-200	Single Family Detached	3	12,626	1	-	\$885.56	\$885.56
022-0-210-210	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-210-245	Single Family Detached	1	364,030	1	-	\$2,501.33	\$2,501.33
023-0-010-010	Single Family Detached	2	32,673	1	-	\$1,475.94	\$1,475.94
023-0-010-080	Single Family Detached	2	32,500	1	-	\$1,475.94	\$1,475.94
023-0-010-100	Single Family Detached	2	38,850	1	-	\$1,475.94	\$1,475.94
023-0-010-120	Single Family Detached	2	39,361	1	-	\$1,475.94	\$1,475.94
023-0-020-010	Commercial Property	7	-	-	3,065	\$1,109.84	\$1,109.84
023-0-020-020	Single Family Detached	2	31,940	1	-	\$1,475.94	\$1,475.94
023-0-020-030	Single Family Detached	2	32,053	1	-	\$1,475.94	\$1,475.94
023-0-020-050	Single Family Detached	2	32,279	1	-	\$1,475.94	\$1,475.94
023-0-020-060	Single Family Detached	2	23,292	1	-	\$1,475.94	\$1,475.94
023-0-020-080	Single Family Detached	2	32,500	1	-	\$1,475.94	\$1,475.94
023-0-020-100	Single Family Detached	2	32,500	1	-	\$1,475.94	\$1,475.94
023-0-020-130	Single Family Detached	2	32,500	1	-	\$1,475.94	\$1,475.94
023-0-020-150	Single Family Detached	2	32,500	1	-	\$1,475.94	\$1,475.94
023-0-020-160	Single Family Detached	2	32,500	1	-	\$1,475.94	\$1,475.94
023-0-020-170	Commercial Property	7	-	-	21,998	\$7,965.48	\$7,965.48
023-0-020-180	Single Family Detached	3	16,250	1	-	\$885.56	\$885.56
023-0-020-200	Single Family Detached	2	33,813	1	-	\$1,475.94	\$1,475.94
023-0-030-020	Single Family Detached	3	15,580	1	-	\$885.56	\$885.56
023-0-030-030	Single Family Detached	3	15,580	1	-	\$885.56	\$885.56
023-0-030-040	Commercial Property	7	-	-	19,515	\$7,066.38	\$7,066.38
023-0-030-050	Single Family Detached	1	45,738	1	-	\$2,501.33	\$2,501.33
023-0-030-060	Single Family Detached	2	24,162	1	-	\$1,475.94	\$1,475.94
023-0-030-140	Commercial Property	7	-	-	4,413	\$1,597.95	\$1,597.95
023-0-030-150	Multifamily Attached	6	-	12	-	\$5,005.08	\$5,005.08
023-0-030-180	Commercial Property	7	-	-	8,115	\$2,938.44	\$2,938.44
023-0-030-190	Commercial Property	7	-	-	3,008	\$1,089.20	\$1,089.20
023-0-040-040	Single Family Detached	3	13,825	1	-	\$885.56	\$885.56
023-0-040-060	Single Family Detached	2	29,850	1	-	\$1,475.94	\$1,475.94
023-0-050-010	Single Family Detached	1	47,916	1	-	\$2,501.33	\$2,501.33
023-0-050-020	Single Family Detached	1	47,916	1	-	\$2,501.33	\$2,501.33
023-0-050-080	Single Family Detached	1	75,358	1	-	\$2,501.33	\$2,501.33
023-0-050-130	Single Family Detached	1	71,002	1	-	\$2,501.33	\$2,501.33
023-0-061-040	Commercial Property	7	-	-	1,670	\$604.71	\$604.71
023-0-061-050	Single Family Detached	4	7,537	1	-	\$573.64	\$573.64
023-0-061-080	Single Family Detached	4	5,674	1	-	\$573.64	\$573.64
023-0-061-090	Single Family Detached	4	6,750	1	-	\$573.64	\$573.64
023-0-061-100	Single Family Detached	4	5,300	1	-	\$573.64	\$573.64
023-0-061-110	Single Family Detached	4	8,059	1	-	\$573.64	\$573.64
023-0-061-120	Single Family Detached	4	7,504	1	-	\$573.64	\$573.64
023-0-061-130	Single Family Detached	4	7,226	1	-	\$573.64	\$573.64
023-0-061-140	Single Family Detached	4	6,948	1	-	\$573.64	\$573.64
023-0-061-150	Single Family Detached	3	13,062	1	-	\$885.56	\$885.56
023-0-061-160	Commercial Property	7	-	-	1,388	\$502.59	\$502.59
023-0-061-170	Single Family Detached	4	6,988	1	-	\$573.64	\$573.64
023-0-061-210	Commercial Property	7	-	-	2,708	\$980.57	\$980.57
023-0-061-220	Single Family Detached	4	7,781	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
023-0-061-230	Commercial Property	7	-	-	3,144	\$1,138.44	\$1,138.44
023-0-061-250	Single Family Detached	4	6,114	1	-	\$573.64	\$573.64
023-0-061-260	Single Family Detached	4	5,836	1	-	\$573.64	\$573.64
023-0-061-270	Commercial Property	7	-	-	2,062	\$746.65	\$746.65
023-0-061-280	Commercial Property	7	-	-	1,397	\$505.85	\$505.85
023-0-062-010	Single Family Detached	3	12,952	1	-	\$885.56	\$885.56
023-0-062-020	Single Family Detached	4	8,022	1	-	\$573.64	\$573.64
023-0-062-030	Single Family Detached	4	7,868	1	-	\$573.64	\$573.64
023-0-062-040	Single Family Detached	4	7,713	1	-	\$573.64	\$573.64
023-0-062-050	Single Family Detached	4	7,559	1	-	\$573.64	\$573.64
023-0-062-060	Single Family Detached	4	9,800	1	-	\$573.64	\$573.64
023-0-062-070	Single Family Detached	4	9,700	1	-	\$573.64	\$573.64
023-0-062-080	Single Family Detached	4	6,176	1	-	\$573.64	\$573.64
023-0-062-090	Single Family Detached	4	6,390	1	-	\$573.64	\$573.64
023-0-062-100	Single Family Detached	4	6,745	1	-	\$573.64	\$573.64
023-0-062-110	Single Family Detached	4	7,246	1	-	\$573.64	\$573.64
023-0-062-120	Single Family Detached	2	22,900	1	-	\$1,475.94	\$1,475.94
023-0-062-130	Single Family Detached	4	9,200	1	-	\$573.64	\$573.64
023-0-062-150	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
023-0-062-160	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
023-0-062-170	Single Family Detached	4	7,500	2	-	\$1,147.28	\$1,147.28
023-0-062-240	Single Family Detached	4	4,256	1	-	\$573.64	\$573.64
023-0-062-250	Single Family Detached	4	7,492	1	-	\$573.64	\$573.64
023-0-062-270	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
023-0-063-060	Single Family Detached	4	6,736	1	-	\$573.64	\$573.64
023-0-063-070	Single Family Detached	4	5,819	1	-	\$573.64	\$573.64
023-0-063-080	Single Family Detached	4	8,088	1	-	\$573.64	\$573.64
023-0-063-140	Commercial Property	7	-	-	5,296	\$1,917.68	\$1,917.68
023-0-063-170	Commercial Property	7	-	-	5,107	\$1,849.24	\$1,849.24
023-0-063-220	Single Family Detached	4	7,800	1	-	\$573.64	\$573.64
023-0-063-230	Commercial Property	7	-	-	2,100	\$760.41	\$760.41
023-0-063-240	Single Family Detached	4	7,075	1	-	\$573.64	\$573.64
023-0-071-030	Single Family Detached	2	22,500	2	-	\$2,951.88	\$2,951.88
023-0-071-050	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
023-0-072-020	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
023-0-072-030	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
023-0-072-040	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
023-0-072-050	Single Family Detached	3	11,250	2	-	\$1,771.12	\$1,771.12
023-0-072-060	Single Family Detached	2	22,500	1	-	\$1,475.94	\$1,475.94
023-0-073-010	Single Family Detached	4	6,000	1	-	\$573.64	\$573.64
023-0-073-020	Single Family Detached	4	5,500	1	-	\$573.64	\$573.64
023-0-073-030	Single Family Detached	4	5,500	1	-	\$573.64	\$573.64
023-0-073-050	Single Family Detached	4	6,195	1	-	\$573.64	\$573.64
023-0-073-060	Single Family Detached	4	5,725	1	-	\$573.64	\$573.64
023-0-073-070	Single Family Detached	4	5,433	1	-	\$573.64	\$573.64
023-0-073-080	Single Family Detached	4	5,175	1	-	\$573.64	\$573.64
023-0-073-090	Single Family Detached	4	5,400	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
023-0-073-100	Single Family Detached	4	5,500	1	-	\$573.64	\$573.64
023-0-073-110	Single Family Detached	4	6,376	1	-	\$573.64	\$573.64
023-0-074-010	Single Family Detached	3	11,250	1	-	\$885.56	\$885.56
023-0-074-020	Single Family Detached	3	18,750	1	-	\$885.56	\$885.56
023-0-074-030	Commercial Property	7	-	-	4,964	\$1,797.46	\$1,797.46
023-0-074-050	Single Family Detached	3	18,000	1	-	\$885.56	\$885.56
023-0-074-060	Single Family Detached	4	9,000	1	-	\$573.64	\$573.64
023-0-074-070	Single Family Detached	3	18,000	1	-	\$885.56	\$885.56
023-0-075-185	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-075-195	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-075-205	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-075-220	Commercial Property	7	-	-	1,532	\$554.74	\$554.74
023-0-076-020	Commercial Property	7	-	-	21,040	\$7,618.58	\$7,618.58
023-0-077-040	Commercial Property	7	-	-	2,406	\$871.21	\$871.21
023-0-077-050	Commercial Property	7	-	-	6,263	\$2,267.83	\$2,267.83
023-0-077-060	Commercial Property	7	-	-	1,990	\$720.58	\$720.58
023-0-077-070	Commercial Property	7	-	-	2,329	\$843.33	\$843.33
023-0-077-080	Commercial Property	7	-	-	1,539	\$557.27	\$557.27
023-0-081-010	Single Family Detached	3	13,850	1	-	\$885.56	\$885.56
023-0-081-020	Single Family Detached	4	6,496	1	-	\$573.64	\$573.64
023-0-081-030	Single Family Detached	4	5,850	1	-	\$573.64	\$573.64
023-0-081-040	Single Family Detached	4	5,850	1	-	\$573.64	\$573.64
023-0-081-050	Single Family Detached	4	5,850	1	-	\$573.64	\$573.64
023-0-081-060	Single Family Detached	4	5,850	1	-	\$573.64	\$573.64
023-0-081-070	Single Family Detached	4	6,000	1	-	\$573.64	\$573.64
023-0-081-080	Single Family Detached	4	7,200	1	-	\$573.64	\$573.64
023-0-081-090	Single Family Detached	4	5,850	1	-	\$573.64	\$573.64
023-0-081-100	Single Family Detached	4	5,850	1	-	\$573.64	\$573.64
023-0-081-110	Single Family Detached	4	5,850	1	-	\$573.64	\$573.64
023-0-081-120	Single Family Detached	4	5,850	1	-	\$573.64	\$573.64
023-0-081-130	Single Family Detached	3	11,750	1	-	\$885.56	\$885.56
023-0-081-145	Single Family Detached	4	9,100	1	-	\$573.64	\$573.64
023-0-081-150	Single Family Detached	3	19,600	1	-	\$885.56	\$885.56
023-0-081-160	Single Family Detached	3	20,450	1	-	\$885.56	\$885.56
023-0-081-300	Single Family Detached	3	19,800	1	-	\$885.56	\$885.56
023-0-081-315	Single Family Detached	3	17,900	1	-	\$885.56	\$885.56
023-0-081-325	Single Family Detached	3	13,900	1	-	\$885.56	\$885.56
023-0-081-335	Single Family Detached	3	16,400	1	-	\$885.56	\$885.56
023-0-081-345	Single Family Detached	2	26,300	1	-	\$1,475.94	\$1,475.94
023-0-081-355	Single Family Detached	2	36,700	1	-	\$1,475.94	\$1,475.94
023-0-081-365	Single Family Detached	3	12,400	1	-	\$885.56	\$885.56
023-0-081-370	Single Family Detached	3	10,300	1	-	\$885.56	\$885.56
023-0-081-400	Single Family Detached	3	10,856	1	-	\$885.56	\$885.56
023-0-081-410	Single Family Detached	3	10,500	1	-	\$885.56	\$885.56
023-0-081-420	Single Family Detached	3	12,150	1	-	\$885.56	\$885.56
023-0-081-430	Single Family Detached	3	13,420	1	-	\$885.56	\$885.56
023-0-081-440	Single Family Detached	3	12,786	1	-	\$885.56	\$885.56

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
023-0-081-450	Single Family Detached	3	12,152	1	-	\$885.56	\$885.56
023-0-081-460	Single Family Detached	3	10,800	1	-	\$885.56	\$885.56
023-0-082-010	Single Family Detached	4	8,250	1	-	\$573.64	\$573.64
023-0-082-020	Single Family Detached	4	8,560	1	-	\$573.64	\$573.64
023-0-082-030	Single Family Detached	4	8,414	1	-	\$573.64	\$573.64
023-0-082-040	Single Family Detached	4	8,220	1	-	\$573.64	\$573.64
023-0-082-050	Single Family Detached	3	10,050	1	-	\$885.56	\$885.56
023-0-082-070	Single Family Detached	3	15,100	1	-	\$885.56	\$885.56
023-0-082-105	Single Family Detached	3	11,524	1	-	\$885.56	\$885.56
023-0-082-120	Single Family Detached	3	17,339	1	-	\$885.56	\$885.56
023-0-082-130	Single Family Detached	3	19,650	1	-	\$885.56	\$885.56
023-0-083-010	Single Family Detached	3	10,568	1	-	\$885.56	\$885.56
023-0-083-020	Single Family Detached	3	10,000	1	-	\$885.56	\$885.56
023-0-083-030	Single Family Detached	3	10,300	1	-	\$885.56	\$885.56
023-0-083-040	Single Family Detached	3	13,400	1	-	\$885.56	\$885.56
023-0-083-050	Single Family Detached	4	7,854	1	-	\$573.64	\$573.64
023-0-083-060	Single Family Detached	4	8,500	1	-	\$573.64	\$573.64
023-0-083-070	Single Family Detached	4	7,262	1	-	\$573.64	\$573.64
023-0-083-080	Single Family Detached	4	5,850	1	-	\$573.64	\$573.64
023-0-083-090	Single Family Detached	4	5,850	1	-	\$573.64	\$573.64
023-0-083-100	Single Family Detached	4	5,850	1	-	\$573.64	\$573.64
023-0-083-110	Single Family Detached	4	5,850	1	-	\$573.64	\$573.64
023-0-083-120	Single Family Detached	4	5,850	1	-	\$573.64	\$573.64
023-0-083-130	Single Family Detached	4	6,750	1	-	\$573.64	\$573.64
023-0-083-140	Single Family Detached	4	6,550	1	-	\$573.64	\$573.64
023-0-083-150	Single Family Detached	4	5,525	1	-	\$573.64	\$573.64
023-0-090-040	Single Family Detached	4	9,105	1	-	\$573.64	\$573.64
023-0-090-060	Single Family Detached	2	23,250	1	-	\$1,475.94	\$1,475.94
023-0-090-080	Single Family Detached	2	36,080	1	-	\$1,475.94	\$1,475.94
023-0-090-140	Single Family Detached	3	11,128	1	-	\$885.56	\$885.56
023-0-090-150	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
023-0-090-235	Single Family Detached	4	9,674	1	-	\$573.64	\$573.64
023-0-090-295	Single Family Detached	4	9,955	1	-	\$573.64	\$573.64
023-0-090-305	Single Family Detached	3	10,125	1	-	\$885.56	\$885.56
023-0-090-310	Single Family Detached	3	21,453	1	-	\$885.56	\$885.56
023-0-090-320	Single Family Detached	2	42,681	1	-	\$1,475.94	\$1,475.94
023-0-090-330	Single Family Detached	3	14,483	1	-	\$885.56	\$885.56
023-0-090-345	Single Family Detached	2	31,871	1	-	\$1,475.94	\$1,475.94
023-0-100-040	Commercial Property	7	-	-	2,002	\$724.92	\$724.92
023-0-100-050	Commercial Property	7	-	-	1,482	\$536.63	\$536.63
023-0-100-060	Commercial Property	7	-	-	7,380	\$2,672.30	\$2,672.30
023-0-100-080	Commercial Property	7	-	-	4,999	\$1,810.14	\$1,810.14
023-0-100-140	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
023-0-100-150	Single Family Detached	4	6,000	1	-	\$573.64	\$573.64
023-0-100-160	Single Family Detached	4	6,700	1	-	\$573.64	\$573.64
023-0-100-170	Single Family Detached	4	7,700	1	-	\$573.64	\$573.64
023-0-100-180	Single Family Detached	3	10,500	1	-	\$885.56	\$885.56

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
023-0-100-190	Single Family Detached	4	7,700	1	-	\$573.64	\$573.64
023-0-100-220	Commercial Property	7	-	-	5,500	\$1,991.55	\$1,991.55
023-0-100-230	Commercial Property	7	-	-	6,050	\$2,190.71	\$2,190.71
023-0-100-240	Commercial Property	7	-	-	10,244	\$3,709.35	\$3,709.35
023-0-110-040	Single Family Detached	3	20,000	1	-	\$885.56	\$885.56
023-0-110-080	Commercial Property	7	-	-	2,214	\$801.69	\$801.69
023-0-110-120	Commercial Property	7	-	-	2,877	\$1,041.76	\$1,041.76
023-0-110-130	Commercial Property	7	-	-	2,504	\$906.70	\$906.70
023-0-110-150	Single Family Detached	3	14,100	1	-	\$885.56	\$885.56
023-0-110-170	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
023-0-110-180	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
023-0-110-190	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
023-0-110-200	Single Family Detached	4	5,200	1	-	\$573.64	\$573.64
023-0-110-210	Commercial Property	7	-	-	2,140	\$774.89	\$774.89
023-0-110-220	Single Family Detached	4	5,200	1	-	\$573.64	\$573.64
023-0-110-230	Commercial Property	7	-	-	982	\$355.58	\$355.58
023-0-110-240	Single Family Detached	4	5,575	1	-	\$573.64	\$573.64
023-0-110-250	Single Family Detached	4	5,575	1	-	\$573.64	\$573.64
023-0-110-260	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
023-0-110-270	Single Family Detached	4	7,500	2	-	\$1,147.28	\$1,147.28
023-0-110-280	Single Family Detached	4	7,500	1	-	\$573.64	\$573.64
023-0-110-290	Single Family Detached	3	10,350	1	-	\$885.56	\$885.56
023-0-110-310	Single Family Detached	3	14,302	1	-	\$885.56	\$885.56
023-0-110-330	Single Family Detached	4	7,151	1	-	\$573.64	\$573.64
023-0-110-340	Single Family Detached	4	7,160	1	-	\$573.64	\$573.64
023-0-110-370	Single Family Detached	2	27,374	1	-	\$1,475.94	\$1,475.94
023-0-110-400	Commercial Property	7	-	-	5,619	\$2,034.64	\$2,034.64
023-0-110-410	Commercial Property	7	-	-	6,979	\$2,527.10	\$2,527.10
023-0-110-440	Commercial Property	7	-	-	1,044	\$378.03	\$378.03
023-0-110-450	Commercial Property	7	-	-	4,872	\$1,764.15	\$1,764.15
023-0-110-460	Commercial Property	7	-	-	4,125	\$1,493.66	\$1,493.66
023-0-110-470	Commercial Property	7	-	-	3,552	\$1,286.18	\$1,286.18
023-0-110-490	Single Family Detached	4	7,498	1	-	\$573.64	\$573.64
023-0-110-500	Commercial Property	7	-	-	1,200	\$434.52	\$434.52
023-0-110-510	Single Family Detached	4	7,498	1	-	\$573.64	\$573.64
023-0-120-010	Single Family Detached	3	13,940	1	-	\$885.56	\$885.56
023-0-120-040	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
023-0-120-090	Single Family Detached	3	11,300	1	-	\$885.56	\$885.56
023-0-120-105	Single Family Detached	3	11,285	1	-	\$885.56	\$885.56
023-0-120-110	Single Family Detached	4	9,857	1	-	\$573.64	\$573.64
023-0-120-190	Single Family Detached	4	8,118	1	-	\$573.64	\$573.64
023-0-120-200	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
023-0-120-210	Multifamily Attached	6	-	3	-	\$1,251.27	\$1,251.27
023-0-120-220	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
023-0-120-230	Multifamily Attached	6	-	2	-	\$834.18	\$834.18
023-0-132-070	Single Family Detached	2	41,000	1	-	\$1,475.94	\$1,475.94
023-0-132-090	Multifamily Attached	6	-	8	-	\$3,336.72	\$3,336.72

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
023-0-132-110	Multifamily Attached	6	-	3	-	\$1,251.27	\$1,251.27
023-0-132-120	Single Family Detached	2	27,000	1	-	\$1,475.94	\$1,475.94
023-0-132-160	Single Family Detached	3	15,200	1	-	\$885.56	\$885.56
023-0-132-170	Single Family Detached	3	14,600	1	-	\$885.56	\$885.56
023-0-132-180	Single Family Detached	2	34,166	1	-	\$1,475.94	\$1,475.94
023-0-141-010	Single Family Detached	4	8,400	1	-	\$573.64	\$573.64
023-0-141-020	Commercial Property	7	-	-	2,706	\$979.84	\$979.84
023-0-141-030	Single Family Detached	4	7,355	1	-	\$573.64	\$573.64
023-0-141-040	Single Family Detached	4	4,226	1	-	\$573.64	\$573.64
023-0-141-050	Single Family Detached	4	6,930	1	-	\$573.64	\$573.64
023-0-141-060	Industrial Property	8	-	-	4,074	\$774.06	\$774.06
023-0-141-070	Single Family Detached	4	7,350	1	-	\$573.64	\$573.64
023-0-141-080	Single Family Detached	4	5,250	1	-	\$573.64	\$573.64
023-0-141-090	Single Family Detached	4	4,867	1	-	\$573.64	\$573.64
023-0-141-100	Single Family Detached	4	7,350	1	-	\$573.64	\$573.64
023-0-141-110	Single Family Detached	4	5,250	1	-	\$573.64	\$573.64
023-0-141-120	Single Family Detached	4	5,250	1	-	\$573.64	\$573.64
023-0-141-130	Commercial Property	7	-	-	2,078	\$752.44	\$752.44
023-0-141-140	Commercial Property	7	-	-	3,148	\$1,139.89	\$1,139.89
023-0-141-170	Single Family Detached	4	8,102	1	-	\$573.64	\$573.64
023-0-141-200	Single Family Detached	4	6,481	1	-	\$573.64	\$573.64
023-0-141-210	Single Family Detached	3	12,152	1	-	\$885.56	\$885.56
023-0-141-220	Single Family Detached	3	12,152	1	-	\$885.56	\$885.56
023-0-141-230	Single Family Detached	4	8,131	1	-	\$573.64	\$573.64
023-0-141-240	Single Family Detached	4	8,131	1	-	\$573.64	\$573.64
023-0-141-250	Single Family Detached	4	8,131	1	-	\$573.64	\$573.64
023-0-141-260	Single Family Detached	4	8,133	1	-	\$573.64	\$573.64
023-0-141-270	Single Family Detached	4	8,133	1	-	\$573.64	\$573.64
023-0-141-280	Single Family Detached	4	8,133	1	-	\$573.64	\$573.64
023-0-141-310	Multifamily Attached	6	-	4	-	\$1,668.36	\$1,668.36
023-0-141-330	Multifamily Attached	6	-	6	-	\$2,502.54	\$2,502.54
023-0-141-340	Commercial Property	7	-	-	4,933	\$1,786.24	\$1,786.24
023-0-141-430	Commercial Property	7	-	-	2,690	\$974.05	\$974.05
023-0-141-430	Multifamily Attached	6	-	6	-	\$2,502.54	\$2,502.54
023-0-141-515	Single Family Detached	4	2,927	1	-	\$573.64	\$573.64
023-0-142-010	Single Family Detached	4	5,377	1	-	\$573.64	\$573.64
023-0-142-020	Single Family Detached	4	6,050	1	-	\$573.64	\$573.64
023-0-142-030	Single Family Detached	4	8,521	1	-	\$573.64	\$573.64
023-0-142-040	Single Family Detached	3	14,259	1	-	\$885.56	\$885.56
023-0-142-050	Single Family Detached	4	8,102	1	-	\$573.64	\$573.64
023-0-142-060	Single Family Detached	4	8,102	1	-	\$573.64	\$573.64
023-0-142-070	Single Family Detached	4	8,102	1	-	\$573.64	\$573.64
023-0-142-080	Multifamily Attached	6	-	3	-	\$1,251.27	\$1,251.27
023-0-142-090	Multifamily Attached	6	-	10	-	\$4,170.90	\$4,170.90
023-0-142-150	Single Family Detached	4	5,100	1	-	\$573.64	\$573.64
023-0-142-170	Commercial Property	7	-	-	8,488	\$3,073.50	\$3,073.50
023-0-150-030	Commercial Property	7	-	-	1,865	\$675.32	\$675.32

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
023-0-150-040	Single Family Detached	4	7,200	1	-	\$573.64	\$573.64
023-0-150-050	Single Family Detached	3	13,314	1	-	\$885.56	\$885.56
023-0-150-060	Commercial Property	7	-	-	1,996	\$722.75	\$722.75
023-0-150-070	Single Family Detached	2	35,800	1	-	\$1,475.94	\$1,475.94
023-0-150-175	Single Family Detached	2	25,620	1	-	\$1,475.94	\$1,475.94
023-0-150-205	Commercial Property	7	-	-	1,312	\$475.08	\$475.08
023-0-150-250	Commercial Property	7	-	-	845	\$305.97	\$305.97
023-0-150-285	Commercial Property	7	-	-	3,900	\$1,412.19	\$1,412.19
023-0-150-295	Industrial Property	8	-	-	6,156	\$1,169.64	\$1,169.64
023-0-150-315	Commercial Property	7	-	-	11,148	\$4,036.69	\$4,036.69
023-0-150-345	Commercial Property	7	-	-	1,658	\$600.36	\$600.36
023-0-150-405	Commercial Property	7	-	-	1,287	\$466.02	\$466.02
023-0-150-415	Industrial Property	8	-	-	2,886	\$548.34	\$548.34
023-0-150-425	Industrial Property	8	-	-	8,507	\$1,616.33	\$1,616.33
023-0-150-425	Commercial Property	7	-	-	312	\$112.98	\$112.98
023-0-150-435	Commercial Property	7	-	-	2,735	\$990.34	\$990.34
023-0-150-455	Commercial Property	7	-	-	2,613	\$946.17	\$946.17
023-0-150-475	Industrial Property	8	-	-	29,147	\$5,537.93	\$5,537.93
023-0-150-480	Single Family Detached	2	35,719	1	-	\$1,475.94	\$1,475.94
023-0-150-490	Single Family Detached	3	10,019	1	-	\$885.56	\$885.56
023-0-150-500	Single Family Detached	3	10,019	1	-	\$885.56	\$885.56
023-0-150-510	Commercial Property	7	-	-	6,848	\$2,479.66	\$2,479.66
023-0-160-075	Commercial Property	7	-	-	2,293	\$830.30	\$830.30
023-0-160-115	Commercial Property	7	-	-	2,795	\$1,012.07	\$1,012.07
023-0-160-125	Industrial Property	8	-	-	1,184	\$224.96	\$224.96
023-0-160-195	Industrial Property	8	-	-	832	\$158.08	\$158.08
023-0-160-205	Single Family Detached	4	5,676	1	-	\$573.64	\$573.64
023-0-160-255	Industrial Property	8	-	-	4,180	\$794.20	\$794.20
023-0-160-285	Industrial Property	8	-	-	5,115	\$971.85	\$971.85
023-0-160-315	Industrial Property	8	-	-	6,143	\$1,167.17	\$1,167.17
023-0-160-335	Industrial Property	8	-	-	9,321	\$1,770.99	\$1,770.99
023-0-160-345	Commercial Property	7	-	-	3,707	\$1,342.30	\$1,342.30
023-0-160-365	Commercial Property	7	-	-	6,164	\$2,231.98	\$2,231.98
023-0-172-055	Industrial Property	8	-	-	76,188	\$14,475.72	\$14,475.72
023-0-173-030	Industrial Property	8	-	-	736	\$139.84	\$139.84
023-0-180-010	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-180-020	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-180-030	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-180-040	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-180-050	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-180-060	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-180-070	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-180-080	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-190-110	Commercial Property	7	-	-	23,196	\$8,399.27	\$8,399.27
023-0-190-120	Commercial Property	7	-	-	12,831	\$4,646.11	\$4,646.11
023-0-200-025	Single Family Detached	4	3,905	1	-	\$573.64	\$573.64
023-0-200-035	Single Family Detached	4	3,868	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
023-0-200-045	Single Family Detached	4	3,979	1	-	\$573.64	\$573.64
023-0-200-055	Single Family Detached	4	3,869	1	-	\$573.64	\$573.64
023-0-200-065	Single Family Detached	4	3,869	1	-	\$573.64	\$573.64
023-0-200-075	Single Family Detached	4	3,979	1	-	\$573.64	\$573.64
023-0-200-085	Single Family Detached	4	3,390	1	-	\$573.64	\$573.64
023-0-200-095	Single Family Detached	4	4,769	1	-	\$573.64	\$573.64
023-0-200-105	Single Family Detached	4	4,095	1	-	\$573.64	\$573.64
023-0-200-115	Single Family Detached	4	4,076	1	-	\$573.64	\$573.64
023-0-200-125	Single Family Detached	4	4,232	1	-	\$573.64	\$573.64
023-0-200-135	Single Family Detached	4	4,258	1	-	\$573.64	\$573.64
023-0-200-145	Single Family Detached	4	4,114	1	-	\$573.64	\$573.64
023-0-200-155	Single Family Detached	4	4,077	1	-	\$573.64	\$573.64
023-0-200-165	Single Family Detached	4	4,040	1	-	\$573.64	\$573.64
023-0-200-175	Single Family Detached	4	4,204	1	-	\$573.64	\$573.64
023-0-200-185	Single Family Detached	4	4,501	1	-	\$573.64	\$573.64
023-0-200-195	Single Family Detached	4	3,622	1	-	\$573.64	\$573.64
023-0-200-205	Single Family Detached	4	3,338	1	-	\$573.64	\$573.64
023-0-200-215	Single Family Detached	4	3,309	1	-	\$573.64	\$573.64
023-0-200-225	Single Family Detached	4	3,338	1	-	\$573.64	\$573.64
023-0-200-235	Single Family Detached	4	3,309	1	-	\$573.64	\$573.64
023-0-200-245	Single Family Detached	4	3,338	1	-	\$573.64	\$573.64
023-0-200-250	Single Family Detached	4	6,498	1	-	\$573.64	\$573.64
023-0-200-290	Industrial Property	8	-	-	3,575	\$679.25	\$679.25
023-0-200-305	Single Family Detached	4	4,347	1	-	\$573.64	\$573.64
023-0-210-015	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-025	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-035	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-045	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-055	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-065	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-075	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-085	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-095	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-105	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-115	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-125	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-135	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-145	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-155	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-165	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-175	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-185	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-195	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-205	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-215	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-225	Condominium	5	-	1	-	\$486.40	\$486.40
023-0-210-235	Condominium	5	-	1	-	\$486.40	\$486.40

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
024-0-010-020	Commercial Property	7	-	-	59,329	\$21,483.03	\$21,483.03
024-0-010-090	Commercial Property	7	-	-	10,233	\$3,705.37	\$3,705.37
024-0-010-110	Commercial Property	7	-	-	44,879	\$16,250.69	\$16,250.69
024-0-020-100	Commercial Property	7	-	-	6,402	\$2,318.16	\$2,318.16
024-0-031-020	Single Family Detached	1	94,089	1	-	\$2,501.33	\$2,501.33
024-0-031-030	Single Family Detached	1	103,237	1	-	\$2,501.33	\$2,501.33
024-0-031-060	Single Family Detached	1	85,377	1	-	\$2,501.33	\$2,501.33
024-0-031-070	Single Family Detached	1	94,525	1	-	\$2,501.33	\$2,501.33
024-0-031-150	Single Family Detached	1	255,822	1	-	\$2,501.33	\$2,501.33
024-0-031-160	Single Family Detached	1	203,300	1	-	\$2,501.33	\$2,501.33
024-0-031-170	Single Family Detached	3	19,707	1	-	\$885.56	\$885.56
024-0-031-180	Single Family Detached	1	48,869	1	-	\$2,501.33	\$2,501.33
024-0-033-020	Single Family Detached	1	175,546	1	-	\$2,501.33	\$2,501.33
024-0-033-040	Single Family Detached	1	71,438	1	-	\$2,501.33	\$2,501.33
024-0-033-070	Single Family Detached	1	110,642	1	-	\$2,501.33	\$2,501.33
024-0-033-080	Single Family Detached	1	111,513	1	-	\$2,501.33	\$2,501.33
024-0-033-100	Single Family Detached	1	105,850	1	-	\$2,501.33	\$2,501.33
024-0-033-130	Single Family Detached	1	135,471	1	-	\$2,501.33	\$2,501.33
024-0-033-150	Single Family Detached	1	132,422	1	-	\$2,501.33	\$2,501.33
024-0-033-160	Single Family Detached	2	41,817	1	-	\$1,475.94	\$1,475.94
024-0-033-170	Single Family Detached	2	43,124	1	-	\$1,475.94	\$1,475.94
024-0-033-180	Single Family Detached	2	43,124	1	-	\$1,475.94	\$1,475.94
024-0-033-230	Single Family Detached	1	94,960	1	-	\$2,501.33	\$2,501.33
024-0-033-240	Single Family Detached	1	53,578	1	-	\$2,501.33	\$2,501.33
024-0-042-040	Single Family Detached	1	125,017	1	-	\$2,501.33	\$2,501.33
024-0-071-085	Single Family Detached	2	22,331	1	-	\$1,475.94	\$1,475.94
024-0-071-095	Single Family Detached	2	22,331	1	-	\$1,475.94	\$1,475.94
024-0-071-105	Single Family Detached	2	22,331	1	-	\$1,475.94	\$1,475.94
024-0-072-015	Single Family Detached	3	19,762	1	-	\$885.56	\$885.56
024-0-072-025	Single Family Detached	2	39,525	1	-	\$1,475.94	\$1,475.94
024-0-072-035	Single Family Detached	2	22,088	1	-	\$1,475.94	\$1,475.94
024-0-072-055	Single Family Detached	1	347,173	1	-	\$2,501.33	\$2,501.33
024-0-072-155	Single Family Detached	2	36,000	1	-	\$1,475.94	\$1,475.94
024-0-072-245	Single Family Detached	3	18,400	1	-	\$885.56	\$885.56
024-0-072-265	Single Family Detached	2	23,275	1	-	\$1,475.94	\$1,475.94
024-0-072-305	Single Family Detached	3	20,000	1	-	\$885.56	\$885.56
024-0-072-335	Single Family Detached	2	26,500	1	-	\$1,475.94	\$1,475.94
024-0-072-345	Single Family Detached	1	47,916	1	-	\$2,501.33	\$2,501.33
024-0-072-385	Single Family Detached	3	17,000	1	-	\$885.56	\$885.56
024-0-072-395	Single Family Detached	3	17,000	1	-	\$885.56	\$885.56
024-0-072-445	Single Family Detached	3	18,000	1	-	\$885.56	\$885.56
024-0-072-465	Single Family Detached	2	26,136	1	-	\$1,475.94	\$1,475.94
024-0-072-475	Single Family Detached	2	26,500	1	-	\$1,475.94	\$1,475.94
024-0-072-485	Single Family Detached	3	20,000	1	-	\$885.56	\$885.56
024-0-072-505	Single Family Detached	3	18,000	1	-	\$885.56	\$885.56
024-0-072-525	Single Family Detached	2	26,500	1	-	\$1,475.94	\$1,475.94
024-0-072-535	Single Family Detached	2	26,500	1	-	\$1,475.94	\$1,475.94

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
024-0-072-545	Single Family Detached	2	26,136	1	-	\$1,475.94	\$1,475.94
024-0-072-555	Single Family Detached	2	26,500	1	-	\$1,475.94	\$1,475.94
024-0-072-565	Single Family Detached	2	24,910	1	-	\$1,475.94	\$1,475.94
024-0-072-705	Single Family Detached	1	57,020	1	-	\$2,501.33	\$2,501.33
024-0-072-715	Single Family Detached	2	26,789	1	-	\$1,475.94	\$1,475.94
024-0-120-025	Single Family Detached	1	278,348	1	-	\$2,501.33	\$2,501.33
024-0-120-035	Single Family Detached	1	203,425	1	-	\$2,501.33	\$2,501.33
024-0-120-045	Single Family Detached	1	213,880	1	-	\$2,501.33	\$2,501.33
024-0-120-055	Single Family Detached	1	232,175	1	-	\$2,501.33	\$2,501.33
024-0-120-105	Industrial Property	8	-	-	56,446	\$10,724.74	\$10,724.74
024-0-120-145	Industrial Property	8	-	-	48,906	\$9,292.14	\$9,292.14
024-0-120-155	Industrial Property	8	-	-	16,206	\$3,079.14	\$3,079.14
024-0-120-165	Industrial Property	8	-	-	16,110	\$3,060.90	\$3,060.90
024-0-120-175	Industrial Property	8	-	-	19,089	\$3,626.91	\$3,626.91
024-0-120-225	Industrial Property	8	-	-	28,103	\$5,339.57	\$5,339.57
024-0-120-285	Industrial Property	8	-	-	30,960	\$5,882.40	\$5,882.40
024-0-120-295	Commercial Property	7	-	-	25,467	\$9,221.60	\$9,221.60
024-0-131-015	Single Family Detached	1	194,278	1	-	\$2,501.33	\$2,501.33
024-0-131-025	Single Family Detached	1	206,039	1	-	\$2,501.33	\$2,501.33
024-0-131-035	Single Family Detached	1	165,528	1	-	\$2,501.33	\$2,501.33
024-0-131-045	Single Family Detached	1	165,092	1	-	\$2,501.33	\$2,501.33
024-0-131-055	Single Family Detached	1	163,350	1	-	\$2,501.33	\$2,501.33
024-0-131-065	Single Family Detached	1	168,577	1	-	\$2,501.33	\$2,501.33
024-0-132-015	Single Family Detached	1	104,544	1	-	\$2,501.33	\$2,501.33
024-0-132-025	Single Family Detached	1	153,767	1	-	\$2,501.33	\$2,501.33
024-0-132-035	Single Family Detached	1	148,540	1	-	\$2,501.33	\$2,501.33
024-0-132-045	Single Family Detached	1	157,687	1	-	\$2,501.33	\$2,501.33
024-0-132-055	Single Family Detached	1	144,619	1	-	\$2,501.33	\$2,501.33
024-0-132-065	Single Family Detached	1	152,024	1	-	\$2,501.33	\$2,501.33
024-0-132-075	Single Family Detached	1	106,722	1	-	\$2,501.33	\$2,501.33
024-0-133-015	Single Family Detached	1	104,108	1	-	\$2,501.33	\$2,501.33
024-0-133-025	Single Family Detached	1	106,286	1	-	\$2,501.33	\$2,501.33
024-0-133-035	Single Family Detached	1	137,214	1	-	\$2,501.33	\$2,501.33
024-0-133-045	Single Family Detached	1	132,422	1	-	\$2,501.33	\$2,501.33
024-0-133-055	Single Family Detached	1	119,354	1	-	\$2,501.33	\$2,501.33
024-0-133-065	Single Family Detached	1	130,680	1	-	\$2,501.33	\$2,501.33
024-0-133-075	Single Family Detached	1	121,097	1	-	\$2,501.33	\$2,501.33
024-0-141-015	Single Family Detached	1	94,525	1	-	\$2,501.33	\$2,501.33
024-0-141-025	Single Family Detached	1	91,912	1	-	\$2,501.33	\$2,501.33
024-0-141-035	Single Family Detached	1	99,752	1	-	\$2,501.33	\$2,501.33
024-0-141-045	Single Family Detached	1	107,158	1	-	\$2,501.33	\$2,501.33
024-0-141-055	Single Family Detached	1	128,938	1	-	\$2,501.33	\$2,501.33
024-0-141-065	Single Family Detached	1	118,483	1	-	\$2,501.33	\$2,501.33
024-0-142-015	Single Family Detached	1	159,430	1	-	\$2,501.33	\$2,501.33
024-0-142-025	Single Family Detached	1	184,259	1	-	\$2,501.33	\$2,501.33
024-0-142-035	Single Family Detached	1	140,699	1	-	\$2,501.33	\$2,501.33
024-0-142-045	Single Family Detached	1	147,233	1	-	\$2,501.33	\$2,501.33

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
024-0-142-055	Single Family Detached	1	129,373	1	-	\$2,501.33	\$2,501.33
024-0-142-065	Single Family Detached	1	170,755	1	-	\$2,501.33	\$2,501.33
024-0-142-075	Single Family Detached	1	168,577	1	-	\$2,501.33	\$2,501.33
024-0-142-085	Single Family Detached	1	168,577	1	-	\$2,501.33	\$2,501.33
024-0-142-110	Single Family Detached	3	14,086	1	-	\$885.56	\$885.56
024-0-143-015	Single Family Detached	1	92,783	1	-	\$2,501.33	\$2,501.33
024-0-143-025	Single Family Detached	1	104,544	1	-	\$2,501.33	\$2,501.33
024-0-143-035	Single Family Detached	1	99,317	1	-	\$2,501.33	\$2,501.33
024-0-143-045	Single Family Detached	1	105,851	1	-	\$2,501.33	\$2,501.33
024-0-151-015	Industrial Property	8	-	-	1,868	\$354.92	\$354.92
024-0-151-025	Industrial Property	8	-	-	1,176	\$223.44	\$223.44
024-0-151-035	Industrial Property	8	-	-	1,257	\$238.83	\$238.83
024-0-151-045	Industrial Property	8	-	-	1,500	\$285.00	\$285.00
024-0-151-055	Industrial Property	8	-	-	1,721	\$326.99	\$326.99
024-0-151-065	Industrial Property	8	-	-	1,756	\$333.64	\$333.64
024-0-151-075	Industrial Property	8	-	-	1,764	\$335.16	\$335.16
024-0-151-085	Industrial Property	8	-	-	1,412	\$268.28	\$268.28
024-0-151-095	Industrial Property	8	-	-	1,156	\$219.64	\$219.64
024-0-151-105	Industrial Property	8	-	-	1,259	\$239.21	\$239.21
024-0-151-115	Industrial Property	8	-	-	1,308	\$248.52	\$248.52
024-0-160-015	Commercial Property	7	-	-	3,296	\$1,193.48	\$1,193.48
024-0-160-025	Commercial Property	7	-	-	2,968	\$1,074.71	\$1,074.71
024-0-160-035	Commercial Property	7	-	-	2,868	\$1,038.50	\$1,038.50
024-0-160-045	Commercial Property	7	-	-	3,183	\$1,152.56	\$1,152.56
024-0-160-055	Commercial Property	7	-	-	2,676	\$968.98	\$968.98
024-0-160-065	Commercial Property	7	-	-	2,765	\$1,001.21	\$1,001.21
024-0-160-075	Commercial Property	7	-	-	2,250	\$814.73	\$814.73
024-0-160-085	Commercial Property	7	-	-	2,406	\$871.21	\$871.21
028-0-072-030	Single Family Detached	2	23,303	1	-	\$1,475.94	\$1,475.94
028-0-072-040	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
028-0-072-050	Single Family Detached	2	42,540	1	-	\$1,475.94	\$1,475.94
028-0-072-060	Single Family Detached	2	28,571	1	-	\$1,475.94	\$1,475.94
028-0-072-070	Single Family Detached	3	14,286	1	-	\$885.56	\$885.56
028-0-072-080	Single Family Detached	2	22,111	1	-	\$1,475.94	\$1,475.94
028-0-072-090	Single Family Detached	2	22,119	1	-	\$1,475.94	\$1,475.94
028-0-072-100	Single Family Detached	3	20,012	1	-	\$885.56	\$885.56
028-0-072-110	Single Family Detached	2	22,550	1	-	\$1,475.94	\$1,475.94
028-0-072-120	Single Family Detached	3	20,224	1	-	\$885.56	\$885.56
028-0-072-130	Single Family Detached	2	22,335	1	-	\$1,475.94	\$1,475.94
028-0-072-180	Single Family Detached	3	20,452	1	-	\$885.56	\$885.56
028-0-072-190	Single Family Detached	3	20,059	1	-	\$885.56	\$885.56
028-0-072-200	Single Family Detached	3	20,441	1	-	\$885.56	\$885.56
028-0-072-220	Single Family Detached	3	20,045	1	-	\$885.56	\$885.56
028-0-072-230	Single Family Detached	2	32,061	1	-	\$1,475.94	\$1,475.94
028-0-072-240	Single Family Detached	3	10,563	1	-	\$885.56	\$885.56
028-0-072-250	Single Family Detached	3	10,563	1	-	\$885.56	\$885.56
028-0-072-260	Single Family Detached	4	8,712	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
028-0-072-290	Commercial Property	7	-	-	17,934	\$6,493.90	\$6,493.90
028-0-072-300	Commercial Property	7	-	-	711	\$257.45	\$257.45
028-0-072-310	Commercial Property	7	-	-	19,863	\$7,192.39	\$7,192.39
028-0-072-340	Single Family Detached	2	22,531	1	-	\$1,475.94	\$1,475.94
028-0-072-350	Single Family Detached	3	20,026	1	-	\$885.56	\$885.56
028-0-072-360	Single Family Detached	3	20,495	1	-	\$885.56	\$885.56
028-0-072-370	Single Family Detached	3	20,014	1	-	\$885.56	\$885.56
028-0-072-390	Single Family Detached	3	20,003	1	-	\$885.56	\$885.56
028-0-072-400	Single Family Detached	3	20,503	1	-	\$885.56	\$885.56
028-0-072-410	Single Family Detached	3	10,000	1	-	\$885.56	\$885.56
028-0-072-420	Single Family Detached	3	10,297	1	-	\$885.56	\$885.56
028-0-072-430	Single Family Detached	3	20,248	1	-	\$885.56	\$885.56
028-0-072-440	Single Family Detached	3	20,248	1	-	\$885.56	\$885.56
028-0-072-460	Commercial Property	7	-	-	4,647	\$1,682.68	\$1,682.68
028-0-073-010	Commercial Property	7	-	-	16,264	\$5,889.19	\$5,889.19
028-0-073-040	Commercial Property	7	-	-	19,863	\$7,192.39	\$7,192.39
028-0-080-020	Single Family Detached	2	30,106	1	-	\$1,475.94	\$1,475.94
028-0-080-030	Single Family Detached	3	13,452	1	-	\$885.56	\$885.56
028-0-080-040	Multifamily Attached	6	-	4	-	\$1,668.36	\$1,668.36
028-0-080-070	Single Family Detached	1	130,680	1	-	\$2,501.33	\$2,501.33
028-0-080-100	Single Family Detached	1	43,701	1	-	\$2,501.33	\$2,501.33
028-0-080-110	Single Family Detached	1	80,009	1	-	\$2,501.33	\$2,501.33
028-0-080-120	Single Family Detached	2	41,382	1	-	\$1,475.94	\$1,475.94
028-0-080-130	Single Family Detached	2	41,382	1	-	\$1,475.94	\$1,475.94
028-0-091-040	Single Family Detached	2	35,828	1	-	\$1,475.94	\$1,475.94
028-0-091-090	Single Family Detached	2	32,932	1	-	\$1,475.94	\$1,475.94
028-0-091-100	Single Family Detached	2	35,454	1	-	\$1,475.94	\$1,475.94
028-0-092-040	Single Family Detached	2	42,312	1	-	\$1,475.94	\$1,475.94
028-0-092-070	Single Family Detached	1	87,120	1	-	\$2,501.33	\$2,501.33
028-0-092-080	Single Family Detached	2	38,166	1	-	\$1,475.94	\$1,475.94
028-0-100-080	Single Family Detached	2	41,347	1	-	\$1,475.94	\$1,475.94
028-0-100-090	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
028-0-100-100	Single Family Detached	1	48,787	1	-	\$2,501.33	\$2,501.33
028-0-100-110	Single Family Detached	1	43,560	1	-	\$2,501.33	\$2,501.33
028-0-100-120	Single Family Detached	3	20,318	1	-	\$885.56	\$885.56
028-0-100-130	Single Family Detached	3	20,404	1	-	\$885.56	\$885.56
028-0-100-140	Single Family Detached	1	260,053	3	-	\$7,503.99	\$7,503.99
028-0-151-035	Single Family Detached	4	2,178	1	-	\$573.64	\$573.64
028-0-151-045	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-151-055	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-151-065	Single Family Detached	4	4,356	1	-	\$573.64	\$573.64
028-0-152-125	Single Family Detached	4	4,463	1	-	\$573.64	\$573.64
028-0-152-135	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-152-145	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-152-155	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-152-165	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-152-175	Single Family Detached	4	4,356	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
028-0-152-185	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-152-195	Single Family Detached	4	4,356	1	-	\$573.64	\$573.64
028-0-152-205	Single Family Detached	4	4,356	1	-	\$573.64	\$573.64
028-0-152-215	Single Family Detached	4	4,356	1	-	\$573.64	\$573.64
028-0-152-225	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-152-235	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-152-245	Single Family Detached	4	5,227	1	-	\$573.64	\$573.64
028-0-152-255	Single Family Detached	4	6,098	1	-	\$573.64	\$573.64
028-0-152-265	Single Family Detached	4	6,969	1	-	\$573.64	\$573.64
028-0-152-275	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-152-285	Single Family Detached	4	4,356	1	-	\$573.64	\$573.64
028-0-152-295	Single Family Detached	4	3,484	1	-	\$573.64	\$573.64
028-0-152-305	Single Family Detached	4	2,178	1	-	\$573.64	\$573.64
028-0-152-315	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-152-325	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-152-335	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-153-185	Single Family Detached	4	4,356	1	-	\$573.64	\$573.64
028-0-153-195	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-153-205	Single Family Detached	4	5,227	1	-	\$573.64	\$573.64
028-0-153-215	Single Family Detached	4	3,484	1	-	\$573.64	\$573.64
028-0-153-225	Single Family Detached	4	4,791	1	-	\$573.64	\$573.64
028-0-153-235	Single Family Detached	4	2,613	1	-	\$573.64	\$573.64
028-0-153-245	Single Family Detached	4	2,613	1	-	\$573.64	\$573.64
028-0-153-255	Single Family Detached	4	6,098	1	-	\$573.64	\$573.64
028-0-153-265	Single Family Detached	4	3,484	1	-	\$573.64	\$573.64
028-0-153-275	Single Family Detached	4	4,791	1	-	\$573.64	\$573.64
028-0-153-285	Single Family Detached	4	6,098	1	-	\$573.64	\$573.64
028-0-153-295	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-153-305	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-153-315	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-153-325	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-153-335	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-153-345	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-153-355	Single Family Detached	4	4,356	1	-	\$573.64	\$573.64
028-0-153-365	Single Family Detached	4	4,356	1	-	\$573.64	\$573.64
028-0-153-375	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-153-385	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-153-395	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-153-405	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-153-415	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-153-425	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-153-435	Single Family Detached	4	1,742	1	-	\$573.64	\$573.64
028-0-153-445	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-153-455	Single Family Detached	4	4,356	1	-	\$573.64	\$573.64
028-0-153-465	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-153-475	Single Family Detached	4	6,098	1	-	\$573.64	\$573.64
028-0-153-485	Single Family Detached	4	5,227	1	-	\$573.64	\$573.64

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
028-0-153-495	Single Family Detached	4	4,356	1	-	\$573.64	\$573.64
028-0-153-505	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-153-515	Single Family Detached	4	4,356	1	-	\$573.64	\$573.64
028-0-154-095	Single Family Detached	4	4,356	1	-	\$573.64	\$573.64
028-0-154-105	Single Family Detached	4	4,356	1	-	\$573.64	\$573.64
028-0-154-115	Single Family Detached	4	3,484	1	-	\$573.64	\$573.64
028-0-154-125	Single Family Detached	4	4,356	1	-	\$573.64	\$573.64
028-0-154-135	Single Family Detached	4	2,178	1	-	\$573.64	\$573.64
028-0-154-145	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-154-155	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-154-165	Single Family Detached	4	4,356	1	-	\$573.64	\$573.64
028-0-154-175	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-154-185	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-154-195	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-154-205	Single Family Detached	4	2,613	1	-	\$573.64	\$573.64
028-0-154-215	Single Family Detached	4	5,227	1	-	\$573.64	\$573.64
028-0-154-225	Single Family Detached	4	7,840	1	-	\$573.64	\$573.64
028-0-154-235	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-154-245	Single Family Detached	4	4,356	1	-	\$573.64	\$573.64
028-0-155-055	Single Family Detached	4	6,534	1	-	\$573.64	\$573.64
028-0-155-065	Single Family Detached	4	4,356	1	-	\$573.64	\$573.64
028-0-155-075	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-155-085	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-155-095	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-155-105	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-155-115	Single Family Detached	4	3,920	1	-	\$573.64	\$573.64
028-0-155-125	Single Family Detached	4	4,791	1	-	\$573.64	\$573.64
028-0-161-015	Single Family Detached	3	10,350	1	-	\$885.56	\$885.56
028-0-161-025	Single Family Detached	3	10,350	1	-	\$885.56	\$885.56
028-0-161-035	Single Family Detached	3	10,350	1	-	\$885.56	\$885.56
028-0-161-045	Single Family Detached	3	10,350	1	-	\$885.56	\$885.56
028-0-161-055	Single Family Detached	3	10,350	1	-	\$885.56	\$885.56
028-0-161-065	Single Family Detached	3	11,219	1	-	\$885.56	\$885.56
028-0-161-075	Single Family Detached	3	20,468	1	-	\$885.56	\$885.56
028-0-161-085	Single Family Detached	3	11,778	1	-	\$885.56	\$885.56
028-0-161-095	Single Family Detached	3	10,101	1	-	\$885.56	\$885.56
028-0-161-105	Single Family Detached	3	10,006	1	-	\$885.56	\$885.56
028-0-161-115	Single Family Detached	3	10,006	1	-	\$885.56	\$885.56
028-0-161-125	Single Family Detached	3	10,006	1	-	\$885.56	\$885.56
028-0-161-135	Single Family Detached	3	10,150	1	-	\$885.56	\$885.56
028-0-161-145	Single Family Detached	3	13,514	1	-	\$885.56	\$885.56
028-0-161-155	Single Family Detached	3	10,650	1	-	\$885.56	\$885.56
028-0-161-165	Single Family Detached	3	10,516	1	-	\$885.56	\$885.56
028-0-161-175	Single Family Detached	3	10,545	1	-	\$885.56	\$885.56
028-0-161-185	Single Family Detached	3	10,021	1	-	\$885.56	\$885.56
028-0-162-015	Single Family Detached	3	10,350	1	-	\$885.56	\$885.56
028-0-162-025	Single Family Detached	3	10,350	1	-	\$885.56	\$885.56

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
028-0-162-035	Single Family Detached	3	10,350	1	-	\$885.56	\$885.56
028-0-162-045	Single Family Detached	3	10,350	1	-	\$885.56	\$885.56
028-0-162-055	Single Family Detached	3	10,350	1	-	\$885.56	\$885.56
028-0-162-065	Single Family Detached	3	10,076	1	-	\$885.56	\$885.56
028-0-162-075	Single Family Detached	3	10,240	1	-	\$885.56	\$885.56
028-0-162-085	Single Family Detached	3	10,350	1	-	\$885.56	\$885.56
028-0-162-095	Single Family Detached	3	10,350	1	-	\$885.56	\$885.56
028-0-162-105	Single Family Detached	3	10,350	1	-	\$885.56	\$885.56
028-0-162-115	Single Family Detached	3	10,359	1	-	\$885.56	\$885.56
028-0-162-125	Single Family Detached	3	12,023	1	-	\$885.56	\$885.56
028-0-162-135	Single Family Detached	3	15,828	1	-	\$885.56	\$885.56
028-0-162-145	Single Family Detached	3	13,266	1	-	\$885.56	\$885.56
028-0-162-155	Single Family Detached	3	10,911	1	-	\$885.56	\$885.56
028-0-171-010	Single Family Detached	3	10,780	1	-	\$885.56	\$885.56
028-0-171-020	Single Family Detached	3	10,000	1	-	\$885.56	\$885.56
028-0-171-030	Single Family Detached	3	10,000	1	-	\$885.56	\$885.56
028-0-171-040	Single Family Detached	3	10,613	1	-	\$885.56	\$885.56
028-0-171-050	Single Family Detached	3	10,463	1	-	\$885.56	\$885.56
028-0-171-060	Single Family Detached	3	10,459	1	-	\$885.56	\$885.56
028-0-171-070	Single Family Detached	3	10,580	1	-	\$885.56	\$885.56
028-0-171-080	Single Family Detached	3	10,000	1	-	\$885.56	\$885.56
028-0-171-090	Single Family Detached	3	10,000	1	-	\$885.56	\$885.56
028-0-171-100	Single Family Detached	3	10,914	1	-	\$885.56	\$885.56
028-0-171-110	Single Family Detached	3	10,914	1	-	\$885.56	\$885.56
028-0-171-120	Single Family Detached	3	10,000	1	-	\$885.56	\$885.56
028-0-171-130	Single Family Detached	3	10,000	1	-	\$885.56	\$885.56
028-0-171-140	Single Family Detached	3	10,555	1	-	\$885.56	\$885.56
028-0-171-150	Single Family Detached	3	10,463	1	-	\$885.56	\$885.56
028-0-171-160	Single Family Detached	3	10,459	1	-	\$885.56	\$885.56
028-0-171-170	Single Family Detached	3	10,522	1	-	\$885.56	\$885.56
028-0-171-180	Single Family Detached	3	10,000	1	-	\$885.56	\$885.56
028-0-171-190	Single Family Detached	3	10,000	1	-	\$885.56	\$885.56
028-0-171-200	Single Family Detached	3	10,914	1	-	\$885.56	\$885.56
028-0-171-210	Single Family Detached	3	10,685	1	-	\$885.56	\$885.56
028-0-171-220	Single Family Detached	3	10,135	1	-	\$885.56	\$885.56
028-0-171-230	Single Family Detached	3	10,019	1	-	\$885.56	\$885.56
028-0-171-240	Single Family Detached	3	10,292	1	-	\$885.56	\$885.56
028-0-171-250	Single Family Detached	3	15,017	1	-	\$885.56	\$885.56
028-0-171-260	Single Family Detached	3	10,309	1	-	\$885.56	\$885.56
028-0-171-270	Single Family Detached	3	10,069	1	-	\$885.56	\$885.56
028-0-171-280	Single Family Detached	3	10,701	1	-	\$885.56	\$885.56
028-0-172-010	Single Family Detached	3	10,161	1	-	\$885.56	\$885.56
028-0-172-020	Single Family Detached	3	10,000	1	-	\$885.56	\$885.56
028-0-172-030	Single Family Detached	3	12,370	1	-	\$885.56	\$885.56
028-0-172-040	Single Family Detached	3	10,000	1	-	\$885.56	\$885.56
028-0-172-050	Single Family Detached	3	10,066	1	-	\$885.56	\$885.56
028-0-172-060	Single Family Detached	3	10,114	1	-	\$885.56	\$885.56

Exhibit 1

Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2022-2023 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
028-0-172-070	Single Family Detached	3	10,000	1	-	\$885.56	\$885.56
028-0-172-080	Single Family Detached	3	10,911	1	-	\$885.56	\$885.56
028-0-172-090	Single Family Detached	3	12,320	1	-	\$885.56	\$885.56
028-0-172-100	Single Family Detached	3	10,000	1	-	\$885.56	\$885.56
028-0-172-110	Single Family Detached	3	10,053	1	-	\$885.56	\$885.56
028-0-172-120	Single Family Detached	3	10,787	1	-	\$885.56	\$885.56
028-0-172-130	Single Family Detached	3	12,314	1	-	\$885.56	\$885.56
028-0-172-140	Single Family Detached	3	10,911	1	-	\$885.56	\$885.56
028-0-172-150	Single Family Detached	3	10,000	1	-	\$885.56	\$885.56
028-0-172-160	Single Family Detached	3	10,114	1	-	\$885.56	\$885.56
028-0-173-010	Single Family Detached	1	67,500	1	-	\$2,501.33	\$2,501.33
028-0-173-020	Single Family Detached	3	11,988	1	-	\$885.56	\$885.56
028-0-173-030	Single Family Detached	3	12,003	1	-	\$885.56	\$885.56
028-0-173-040	Single Family Detached	3	12,019	1	-	\$885.56	\$885.56
028-0-173-050	Single Family Detached	3	12,034	1	-	\$885.56	\$885.56
028-0-173-060	Single Family Detached	3	12,050	1	-	\$885.56	\$885.56
028-0-173-070	Single Family Detached	3	11,698	1	-	\$885.56	\$885.56
028-0-173-080	Single Family Detached	3	10,066	1	-	\$885.56	\$885.56
028-0-173-090	Single Family Detached	3	10,014	1	-	\$885.56	\$885.56
028-0-173-100	Single Family Detached	3	15,210	1	-	\$885.56	\$885.56
028-0-173-110	Single Family Detached	3	15,442	1	-	\$885.56	\$885.56
028-0-173-120	Single Family Detached	3	10,004	1	-	\$885.56	\$885.56
028-0-173-130	Single Family Detached	3	10,000	1	-	\$885.56	\$885.56
028-0-173-140	Single Family Detached	3	10,013	1	-	\$885.56	\$885.56
028-0-181-065	Single Family Detached	3	11,970	1	-	\$885.56	\$885.56
028-0-181-075	Single Family Detached	3	10,002	1	-	\$885.56	\$885.56
028-0-181-085	Single Family Detached	3	10,003	1	-	\$885.56	\$885.56
028-0-181-095	Single Family Detached	3	12,508	1	-	\$885.56	\$885.56
028-0-181-105	Single Family Detached	3	12,493	1	-	\$885.56	\$885.56
028-0-181-115	Single Family Detached	3	10,143	1	-	\$885.56	\$885.56
028-0-181-125	Single Family Detached	3	10,001	1	-	\$885.56	\$885.56
028-0-181-135	Single Family Detached	3	10,001	1	-	\$885.56	\$885.56
028-0-182-015	Single Family Detached	3	10,001	1	-	\$885.56	\$885.56
028-0-182-025	Single Family Detached	3	10,001	1	-	\$885.56	\$885.56
028-0-182-035	Single Family Detached	3	10,040	1	-	\$885.56	\$885.56
028-0-182-045	Single Family Detached	3	10,043	1	-	\$885.56	\$885.56
028-0-182-055	Single Family Detached	3	10,002	1	-	\$885.56	\$885.56
028-0-182-065	Single Family Detached	3	10,002	1	-	\$885.56	\$885.56

Totals:

\$3,213,742.43 \$3,213,742.43

Percentage Levy of Maximum Special Tax: 100.00%

Printed:
6/15/2022

MEMORANDUM

TO: Board of Directors
From: Michael L. Flood, General Manager
RE: **Proposed Bill Relief Program**
Date: June 22, 2022

RECOMMENDATION:

The Board of Directors adopt a bill relief program.

BACKGROUND:

Historically, Casitas has implemented a leak relief program under Section 11.1.3 of the adopted 2009 Rates and Regulations. The full document is available on the District website at: <https://www.casitaswater.org/about-us/finance>

In more recent years, severe drought conditions resulted in the District's declaration of a Stage 3 Water Shortage condition in which extraordinary conservation was expected of customers. In order to preserve remaining water supplies, a reduced allocation of water was assigned to customers and a penalty of \$5/HCF was charged for any usage over the allocation. During this time, the Board directed staff to temporarily cease implementation of the leak relief program while the Conservation Penalty and Appeals process was being implemented under the Water Efficiency and Allocation Program in place and as amended. The current WEAP is available on the District website here: <https://www.casitaswater.org/for-customers/water-conservation/allocation>

DISCUSSION:

The collective conservation efforts of Casitas customers have been above and beyond the required Stage 3 reductions, and have reached Stage 4 and 5 demand reduction levels. Given the consistent conservation, staff is recommending a bill relief program for customers who regularly practice water conservation but have one-time extraordinary water charges due to unknown plumbing issues that are resolved in a timely manner.

While all customers are responsible for plumbing issues on private property, sometimes a hidden leak is not detected and can result in a large water bill. A Bill Relief Program would provide financial assistance to customers for extraordinary water charges in the event of hidden leaks, undetected line breaks, or other circumstances beyond reasonable control of the customer. In order to receive financial assistance from the District, the customer would need to demonstrate timely action and accountability in resolving the water loss problem, which is a conservation measure that preserves available water supply for all customers.

A proposed Bill Relief Program is attached, which relates to leak relief and conservation penalty appeals. The proposed program would streamline the process for reviewing customer requests for bill relief related to extraordinary water use by authorizing the General Manager to approve bill relief up to a certain dollar amount. Any bill relief requests exceeding the authority provided to the General Manager would require approval by the Conservation Penalty Appeals Panel.

ATTACHMENT(S):

- Draft Proposed Bill Relief Program

CASITAS MUNICIPAL WATER DISTRICT

RESOLUTION 22-**XX**

A RESOLUTION OF THE CASITAS MUNICIPAL WATER DISTRICT ADOPTING A
REVISED BILL RELIEF PROGRAM

WHEREAS, provisions of the Rates and Regulations for Water Service, adopted by the Casitas Municipal Water District Board of Directors on December 19, 2009 provided for a Leak Adjustment Program;

WHEREAS, on April 11, 2015, the District declared a Stage 2 condition existed due to declining Lake Casitas water supplies and implemented measures to ensure efficient use of water,

WHEREAS, on May 13, 2015, the District suspended the Leak Adjustment Program and began implementation of a Conservation Penalty and Appeals process in accordance with the Water Efficiency and Allocation Program at the time and as amended;

WHEREAS, the District desires to streamline the process for reviewing customer requests for bill relief related to extraordinary water use through a revised Bill Relief Program;

WHEREAS, the purpose of the Bill Relief Program is to relieve eligible customers of extraordinary water charges when the circumstances giving rise to the extraordinary water charges were caused by circumstances beyond the customer's reasonable control;

WHEREAS, customers are expected to use water efficiently and are responsible for timely action and accountability in resolving leak issues;

WHEREAS, in order to receive financial relief from the District, resolving the leak issue is a conservation measure that preserves available water supply for all customers.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Casitas Municipal Water District as follows:

The Leak Adjustment program described in Section 11.1.3 of the 2009 Rates and Regulations for Water Service, and the Conservation Penalty Appeals process described in Section 5.7.e of the 2021 Water Efficiency and Allocation Program (WEAP), shall be rescinded and replaced with the Bill Relief Program described herein.

BILL RELIEF PROGRAM

1. Purpose of Bill Relief: The District offers this program to its customers to relieve eligible customers of extraordinary water charges when the circumstances giving rise to the extraordinary water charges were caused by circumstances beyond the customer's reasonable control.
2. Types of Bill Relief: A District customer may only seek the following forms of bill relief:
 - 2.1. A bill adjustment for leak relief relating to volumetric water rates
 - 2.2. A bill adjustment relating to WEAP Conservation Penalty
3. Eligibility for Bill Relief:
 - 3.1. Leak Relief Adjustment: A leak relief adjustment shall only be available to a customer who satisfies all the following conditions:
 - 3.1.1. Applications for relief submitted after the effective date of this Resolution.
 - 3.1.2. The customer is receiving Residential or Ag Domestic water service;
 - 3.1.3. For Ag Domestic customers, a maximum of 50 HCF per month is eligible for relief (relating to Tier 1 and 2 water rates intended for domestic use)
 - 3.1.4. The water usage caused by the leak is twice the average of the customer's three (3) year historical usage;
 - 3.1.5. The circumstances giving rise to the customer's request for relief were beyond the customer's reasonable control and not due to a negligent failure to properly maintain and/or replace in a timely manner any leaking water fixtures, water pipes, or other water infrastructure on the customer's property;
 - 3.1.6. The customer has not received another form of bill adjustment for Leak Relief or Conservation Penalty Relief from the District in the past five (5) years.
 - 3.1.7. The request for relief is only for volumetric water rates; and
 - 3.1.8. The customer submitted a timely request for relief per Section 4.
 - 3.1.9. If the leak relief request occurs when mandatory conservation measures are being implemented under the WEAP, the customer must have a reasonable record of staying within their annual allocation prior to the extraordinary use occurring.
 - 3.2. WEAP Conservation Penalty Relief: Relief from a Conservation Penalty shall only be available to a customer who satisfies all the following conditions:
 - 3.2.1. Applications for relief submitted after the effective date of this Resolution, unless a customer previously submitted an application and a final determination by the District is still pending as of the effective date of this Resolution.
 - 3.2.2. All customer classes are eligible for Conservation Penalty relief.
 - 3.2.3. The customer has not received another form of bill adjustment for Leak Relief or Conservation Penalty Relief from the District in the past five (5) years.
 - 3.2.4. The circumstances giving rise to the customer's request for relief were beyond the customer's reasonable control and not due to a negligent failure to properly

maintain and/or replace in a timely manner any leaking water fixtures, water pipes, or other water infrastructure on the customer's property;

3.2.5. The customer submitted a timely request for relief per Section 4.

3.2.6. If the leak relief request occurs when mandatory conservation measures are being implemented under the WEAP, the customer must have a reasonable record of staying within their annual allocation prior to the extraordinary use occurring.

4. Process to Apply for Bill Relief: To apply for bill relief, the applicant shall:

4.1. Submit a request for relief, in writing on a form provided by the District, to the District's Bill Hearing Officer¹ within forty-five (45) days of the billing date for which the customer seeks relief. Failure to submit a request within forty-five (45) days renders a request untimely and the customer shall be ineligible for relief.

4.2. The written request for relief shall be accompanied with and supported by substantial and adequate written and photographic documentation that provides evidentiary support that the cause of the event giving rise to extraordinary water charges were caused by circumstances beyond the customer's reasonable control and have been promptly repaired. Failure to include any evidentiary support with a written request for relief will result in denial of the request.

4.2.1. Examples of Adequate Supporting Evidence

4.2.1.1. Evidence that a leak was discovered.

4.2.1.2. Evidence of a naturally occurring phenomenon such as an earthquake, wildfire, landslide, or vegetative growth which was likely to have caused the leak.

4.2.1.3. Evidence that the leak was timely repaired.

4.2.1.4. Photographs of the leak and of the repair.

4.2.1.5. Repair receipts from a plumber.

4.2.1.6. Receipts for materials used in the repair.

4.2.1.7. Any other evidence the leak has been repaired.

4.3. The customer shall remain current on payment of water bills. All fixed and volumetric charges shall be paid in order to avoid late fees. Upon District approval of a Leak Relief Adjustment, eligible volumetric charges will be provided as a credit back to the customer. Only the WEAP Conservation Penalties may be put into abeyance until a final determination is made.

5. District Review.

The Bill Hearing Officer will review the request and the documentation or evidence provided by the customer supporting the appeal. The Bill Hearing Officer may request additional information from the customer. Following a review of the request, the Bill Hearing Officer shall make a recommendation and provide to it the General Manager.

¹ As designated consistent with the Rates and Regulations.

5.1. Requests for bill relief for a total amount less than or equal to \$1,500.00 (combined total relief relating to Leak Relief Adjustments and WEAP Conservation Penalties) shall be granted if the General Manager finds all of the following:

- 5.1.1. The customer is eligible for the type of relief requested;
- 5.1.2. The customer's claim for relief is due to circumstances beyond the customer's reasonable control;
- 5.1.3. The customer's claim for relief is supported with substantial and adequate evidence.
- 5.1.4. The District has verified that a repair has been made and water use has returned to normal.

5.2. If a request for bill relief for an amount equal or less than \$1,500.00 is denied by the General Manager, the customer may request an appeal of the decision with the Casitas Board of Directors' Appeals Panel per the process described in Section 5.3.

5.3. If a request for bill relief is more than \$1,500.00, the following process shall apply:

- 5.3.1. The General Manager shall schedule an evidentiary appeal hearing before the Board of Directors' Appeals Panel.
- 5.3.2. The General Manager shall make a recommendation to the Appeals Panel. A copy of the General Manager's recommendation will be provided to the customer/appellant.
- 5.3.3. The customer /appellant shall have an opportunity to state their case and present evidence supporting their appeal.
- 5.3.4. Following the customer's presentation of the grounds for appeal, the Appeals Panel shall review the General Manager's recommendation and determine whether to grant the appeal in full, apportion the penalty or deny the appeal.

5.4 This process will remain in effect until water conditions improve and Conservation Penalties are no longer being assessed by the District. At such time, the Board of Directors will assume the duties of the Appeals Panel related to the Leak Relief Adjustment Program.

6. Bill Relief.

If Bill Relief is granted, the following calculations will be used for bill adjustment:

- 6.1.1. For a Leak Relief Adjustment relating to volumetric water rates, the adjustment will be calculated as follows:

The cost of the leak shall be divided by two, equally splitting the District's calculation of the water cost that is eligible for leak adjustment between the customer and the District. The cost of the leak shall be determined based on either:

REVISED DRAFT – 06/15/2022

6.1.1.1. The difference in the bill based on the quantity of water used over the leak period (maximum of 2 months) less the bill based on average water use over the same period in 3 prior years (provided there is prior water use history available for the customer seeking bill relief), or

6.1.1.2. The difference in the bill based on the total amount of water used at a cost per HCF of the lowest unit rate for residential customers.

6.1.2. For Conservation Penalties, the District may provide full or partial relief of penalties based on review of the claim.

This resolution shall become effective upon its adoption.

ADOPTED this ____th day of _____ 2022.

_____, President
Casitas Municipal Water District

ATTEST:

_____, Secretary
Casitas Municipal Water District

CASITAS MUNICIPAL WATER DISTRICT



1055 Ventura Avenue
Oak View, CA 93022
(805) 649-2251
customerservice@casitaswater.com

BILL RELIEF APPLICATION

IMPORTANT!

Before completing this application, please read the following:

Casitas Municipal Water District authorizes partial relief from extraordinary water charges and Conservation Penalties when an eligible account holders bill relief application is:

1. Received within 45 days of date of bill.
2. Supported by written and photographic documentation.
3. Submitted with support detailing permanent repairs have been made (i.e. invoices, receipts).

- Requested Bill Relief:
- Bill adjustment for leak relief relating to volumetric water rates
(Only Residential and Ag Domestic customers are eligible)
 - Bill adjustment relating to Conservation Penalty
(All customers are eligible)

Name on Account: _____ Account Number: _____

Service Address: _____

Email Address: _____ Phone Number: _____

1. Billing dates for which you are applying for relief (Dates of Water Bill)

From: _____ To: _____

2. Approximate Date of Incident: _____ 3. Bill Amount: _____

3. Attach a brief description of the nature of the incident that caused the high water consumption and what action was taken to rectify the situation, along with all supporting documentation.

4. Dates repairs were made: _____

Print Name: _____

Signature: _____ Date: _____

By signing above, I understand and acknowledge that if approved for an adjustment, I will be ineligible for any future relief for a period of five (5) years from the date of approval.

The Bill Hearing Officer will review the request and all supporting documentation. A recommendation will be made and reported to the General Manager. The General Manger has the authority to make adjustments to extraordinary water charges as long as the customers is eligible for type of relief requested, claim for relief is due to circumstances beyond customers reasonable control, claim is supported with substantial evidence, and repairs have been made. Adjustments shall be made in accordance with guidelines approved by Board of Directors.

Who qualifies for leak relief?

A complete list of qualifications can be found in section 3 of the Bill Relief Program. A summary of qualifications are as follows:

1. Agriculture Domestic or Residential customers.
2. For Ag Domestic customers, a maximum of 50 HCF per month is eligible for relief (relating to Tier 1 and 2 water rates intended for domestic use).
3. Water usage caused by the leak is twice the average of the customer's three (3) year historical usage;
4. The circumstances giving rise to the customer's request for relief were beyond the customer's reasonable control and not due to a negligent failure to properly maintain and/or replace in a timely manner any leaking water fixtures, water pipes, or other water infrastructure on the customer's property;
5. The customer has not received another form of bill adjustment for Leak Relief or Conservation Penalty Relief from the District in the past five (5) years.
6. The request for relief is only for volumetric water rates and customer shall remain current on payment of water bill.
7. The completed application must be received within 45 days of the bill date in which the leak occurred.

Who qualifies for penalty relief?

A complete list of qualifications can be found in section 3 of the Bill Relief Program. A summary of qualifications are as follows:

1. All customer classes.
2. The circumstances giving rise to the customer's request for relief were beyond the customer's reasonable control and not due to a negligent failure to properly maintain and/or replace in a timely manner any leaking water fixtures, water pipes, or other water infrastructure on the customer's property;
3. The customer has not received another form of bill adjustment for Leak Relief or Conservation Penalty Relief from the District in the past five (5) years.
4. The completed application must be received within 45 days of the bill date in which the leak occurred.

What types of documentation should be submitted?

Examples of adequate supporting evidence include:

Evidence that a leak was discovered.

Evidence of a naturally occurring phenomenon such as an earthquake, wildfire, landslide, or vegetative growth which was likely to have caused the leak.

Evidence that the leak was timely repaired.

Photographs of the leak and of the repair.

Repair receipts from a plumber.

Receipts for materials used in the repair.

Do I still need to pay the fixed and volumetric charges?

Customers shall remain current on payment of water bills. Only Conservation Penalties may be put into abeyance until final determination.

If approved, how many billings will be adjusted? Is there a maximum relief amount?

The maximum period of time we can make adjustments is two months' worth of billings. Requests for bill relief less than \$1,500 (combined total relief relating to leak relief adjustments and conservation penalties) shall be granted if all the conditions listed in section 5.1 of the relief program are met.

What happens if bill relief request is more than \$1,500?

The General Manager will schedule an appeal hearing before the Board of Directors Appeals Panel for consideration of the bill relief request.

I am filling the application but my bill is due shortly. What should I do?

We always recommend that you pay your bill in full and if your application is approved, your discount will appear as a credit on future billings. If you cannot afford to pay the entire bill when it's due, please contact customer service at 805-649-2251 x 0 or by customerservice@casitaswater.com requesting a payment plan arrangement.

If I am approved for the discount now and I have another leak later, can I get another discount?

Relief is granted once every 5 years per account.

How is the relief being calculated?

The cost of the leak shall be divided by two, equally splitting the District's calculation of water cost that is eligible for leak adjustment between the customer and the District. Please see section 6 of the Bill Relief Program for more information on how the discount is being calculated.

For more information please visit the Bill Relief Program on our website by going to www.casitaswater.org

**CASITAS MUNICIPAL WATER DISTRICT
Board of Directors Memo**

DATE: June 17, 2022

TO: Board of Directors

FROM: Michael Flood, General Manager

SUBJECT: Adopt a Resolution regarding a \$2,7000,000 loan to fund the replacement Aquatic Play Structure and Regenerative Filter System at the Casitas Water Adventure.

RECOMMENDATION:

Adopt the Resolution.

BACKGROUND:

The Casitas Water Adventure began operating the Aquatic Play Structure (APS) in 1998 and expanded in 2003 to include the Lazy River, Lagoon, Splash Pad and Shower House. The CWA provides a safe and sanitary environment to enjoy aquatic recreation to approximately 80,000 guests each summer. The CWA also provides additional revenue to help offset staff costs and operational expenses.

During the February, March and April Recreation Committee Meetings, options for the acquisition of a replacement APS and the purchase of a Regenerative Media Filter System were reviewed by the Committee.

At the May 25, 2022 Board Meeting, staff presented the information compiled during the Recreation Committee Meetings and was directed to bring back information on financing options.

At the June 8, 2022 Board Meeting, staff presented equipment and financing recommendations.

DISCUSSION:

During the June 8th Board Meeting, staff made the following recommendations:

1. Equipment:

a. APS: Splashtacular MPU: \$1,943,324

b. Regen Filter: \$ 183,276

Total: \$ 2,126,600

Total including 25% Contingency: \$ 2,658,250

2. Recommended Budget: **\$ 2.7M**
3. **Recommended Financing: Combination of Traditional and Self-Financing**

Casitas Portion: \$ **300,000**

Bank Loan: \$ **2,400,000**

Staff was directed to bring back documents to the June 22, 2022 meeting to initiate financing for the project.

The financial mechanism for this transaction will be a bank installment loan that would have a term of ten years.

The proposed resolution will also allow Casitas to enter into an agreement that would lock-in the interest rate of the loan and includes a 'Good Faith Estimate' of costs (See Exhibit A)

The Placement Agent (Hilltop Securities, Inc.) has solicited proposals from banks, the results of which will be available prior to the Board Meeting.

A copy of the Draft Installment Sale Agreement is attached and is subject to Casitas' and its financial team's final review.

The financing team will be available at the Board Meeting in order to answer questions and provide updated information.

RESOLUTION NO. 2022-24

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CASITAS MUNICIPAL WATER DISTRICT AUTHORIZING THE FINANCING OF CAPITAL IMPROVEMENTS, AND APPROVING RELATED DOCUMENTS AND ACTIONS

WHEREAS, the Casitas Municipal Water District (the “District”) owns and operates facilities for the collection, treatment and distribution of water within the service area of the District, as well as related recreational facilities (collectively, the “Water System”); and

WHEREAS, to provide financing for improvements to the Water System, specifically, replacement equipment at the Casitas Water Adventure at the Lake Casitas Recreation Area (the “Improvements”), the District wishes to enter into an Installment Sale Agreement under which an investor or lender (the “Lender”) will provide funds to acquire and/or construct the Improvements and sell such Improvements to the District in consideration of the agreement by the District to pay the purchase price thereof in semiannual installment payments; and

WHEREAS, the Lender will be an institutional investor or bank to be selected pursuant to a competitive process; and

WHEREAS, in accordance with Government Code Section 5852.1, the Board of Directors has obtained and wishes to disclose the information set forth in Exhibit A hereto.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Casitas Municipal Water District as follows:

1. The Board of Directors hereby approves the financing plan outlined above. To that end, District staff has caused to be prepared an Installment Sale Agreement between the District and the Lender, which is on file with the Clerk of the Board, whereby the District agrees to purchase from the Lender the Improvements to be financed for the Water System. The Board of Directors hereby approves the Installment Sale Agreement in substantially the form on file with the Clerk of the Board together with any changes therein or additions thereto deemed advisable by the General Manager, the Assistant General Manager, Chief Financial Officer or any of their designees (each, an “Authorized Officer”). Each Authorized Officer or his or her designee is authorized and directed for and in the name and on behalf of the District to execute the final form of the Installment Sale Agreement.

2. The Board of Directors hereby authorizes the General Manager to execute a letter agreement for purchase and rate lock, by and between the selected Lender and the District (the “Term Sheet”), in an amount not to exceed \$2,700,000, with an interest rate not-to-exceed 5% and a maturity not later than August 1, 2032.

3. In connection with the financing proceedings described herein, the District hereby engages the services of (a) Rutan & Tucker LLP, as special counsel; (b) Harrell & Company Advisors, LLC, as municipal advisor; and (c) Hilltop Securities Inc. as placement agent.

Compensation to said consultants shall be payable from a portion of the proceeds received by the District under the Installment Sale Agreement, contingent on its execution and delivery.

4. The President, the General Manager, the Assistant General Manager, Chief Financial Officer, the District Secretary and all other officers of the District are each authorized and directed in the name and on behalf of the District to execute and deliver any and all certificates, requisitions, agreements, notices, consents, and other documents, which they or any of them might deem necessary or appropriate in order to consummate the transaction contemplated by this Resolution. Whenever in this Resolution any officer of the District is authorized to execute or countersign any document or take any action, such execution, countersigning or action may be taken on behalf of such officer by any person designated by such officer to act on his or her behalf in the case such officer is absent or unavailable.

5. This Resolution shall take effect upon its adoption.

PASSED and ADOPTED by the Board of Directors of the Casitas Municipal Water District at a regular meeting held on the _____ day of _____, 2022.

Brian Brennan, President
Casitas Municipal Water District

ATTEST:

Rebekah Vieira, Clerk of the Board,
CASITAS MUNICIPAL WATER DISTRICT

STATE OF CALIFORNIA
COUNTY OF VENTURA
CASITAS MUNICIPAL WATER DISTRICT

I, _____, Clerk of the Board of Directors of the Casitas Municipal Water District hereby certify that the foregoing Resolution was duly adopted at a regular meeting of the Board of Directors of the Casitas Municipal Water District, held on the _____ day of _____, 2022, by the following vote:

AYES: DIRECTORS:
NOES: DIRECTORS:
ABSENT: DIRECTORS:

CLERK OF THE BOARD OF
DIRECTORS OF THE CASITAS
MUNICIPAL WATER DISTRICT

EXHIBIT A

GOOD FAITH ESTIMATES

The good faith estimates set forth herein are provided with respect to the Installment Sale Agreement (“Agreement”) in accordance with California Government Code Section 5852.1. Such good faith estimates have been provided to the District by Harrell & Company Advisors (the “Municipal Advisor”).

1. The Municipal Advisor has informed the District that, based on the District’s financing plan and current market conditions, its good faith estimate of the aggregate principal amount of the Agreement to be entered into is \$2,765,000 (the “Estimated Principal Amount”).

2. The Municipal Advisor has informed the District that, assuming that the Estimated Principal Amount of the Agreement and based on market interest rates prevailing at the time of preparation of such estimate:

(a) *True Interest Cost of the Agreement.* The good faith estimate of the true interest cost of the Agreement, which means the rate necessary to discount the amounts payable on the principal and interest payment dates to the purchase price received for the Agreement (excluding costs of issuance), is 4.0%.

(b) *Finance Charge.* The good faith estimate of the finance charge for the Agreement, which means the sum of all fees and charges paid to third parties upon issuance (or costs associated with the Agreement), is \$65,000.

(c) *Amount of Proceeds to be Received.* The good faith estimate of the amount of proceeds expected to be received by the District for execution of the Agreement less the finance charge, as estimated above, paid or funded with proceeds of the Agreement, is \$2,700,000.

(d) *Total Payment Amount.* The good faith estimate of the total payment amount, which means the sum total of all payments the District will make to pay debt service on the Agreement, plus the finance charge for the Agreement, as described above, not paid with the proceeds of the Agreement, calculated to the final maturity of the Agreement (assumed to be 10 years), is \$3,408,000, and the sum of annual ongoing costs to administer the Agreement through maturity, not paid with proceeds of the Agreement, approximately \$1,500 per year and \$15,000 in total.

The foregoing estimates constitute good faith estimates only and are based on market conditions prevailing at the time of preparation of such estimates on June 10, 2022.

DRAFT INSTALLMENT SALE AGREEMENT

This INSTALLMENT SALE AGREEMENT (as may be amended and supplemented hereafter, this “Agreement”), dated _____, 2022, is between _____ (the “Bank”), as seller, and the CASITAS MUNICIPAL WATER DISTRICT, a municipal water district duly organized and existing under and pursuant to the Constitution and laws of the State of California (the “District”), as purchaser.

BACKGROUND:

1. The District owns and operates a system for the collection, treatment and distribution of water within the service area of the District, as well as related recreational facilities (as further defined herein, the “Water System”), and the District wishes to raise funds to finance improvements to the Water System as described in more detail on Appendix B (the “Project”).

2. In order to provide financing for the Project, the Bank and the District wish to enter into this Agreement under which the Bank will provide funds to acquire and/or construct the Project and sell the Project to the District in consideration of the agreement by the District to pay the purchase price thereof in semiannual installment payments.

3. The obligation of the District to pay installment payments under this Agreement will be secured by a pledge of and lien on the Net Revenues and Taxes (as defined herein) of the Water System on parity with the Parity Obligations (as defined herein).

AGREEMENT:

In consideration of the foregoing and the material covenants hereinafter contained, the District and the Bank formally covenant, agree and bind themselves as follows:

ARTICLE I DEFINITIONS AND APPENDICES

SECTION 1.1. *Definitions.* All terms defined in this Section shall for all purposes of this Agreement have the meanings herein specified.

“Applicable Environmental Laws” means and shall include, but shall not be limited to, the Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA”), 42 USC Sections 9601 *et seq.*; the Resource Conservation and Recovery Act (“RCRA”), 42 USC Sections 6901 *et seq.*; the Federal Water Pollution Control Act, 33 USC Sections 1251 *et seq.*; the Clean Air Act, 42 USC Sections 7401 *et seq.*; the California Hazardous Waste Control Law (“HWCL”), California Health & Safety Code Sections 25100 *et seq.*; the Hazardous Substance Account Act (“HSAA”), California Health & Safety Code Sections 25300 *et seq.*; the Porter-Cologne Water Quality Control Act (the “Porter-Cologne Act”), California Water Code Sections 1300 *et seq.*; the Air Resources Act, California Health & Safety Code Sections 3900 *et seq.*; the Safe Drinking Water & Toxic Enforcement Act, California Health & Safety Code Sections 25249.5 *et seq.*; and the regulations under each thereof.

“Applicable Law” means all applicable provisions of all constitutions, statutes, rules, regulations and orders of all Governmental Authorities, Applicable Environmental Laws, applicable seismic building code requirements at the time of construction, and orders, decisions, judgments, writs, injunctions and decrees of all courts (whether at law or in equity) and arbitrators.

“Arbitrage Rebate Fund” means the fund (if any) which is established and held by the District under Section 5.10(e).

“Authorized Representative” means: (a) with respect to the Bank, its Chair, Vice Chair, Executive Director or Treasurer, or any other person designated as an Authorized Representative of the Bank by a Written Certificate of the Bank; and (b) with respect to the District, its General Manager, Assistant General Manager, Chief Financial Officer or any other person designated as an Authorized Representative of the District by a Written Certificate of the District.

“Bank” means _____.

“Bond Counsel” means (a) Rutan & Tucker LP, or (b) any other attorney or firm of attorneys of nationally recognized expertise with respect to legal matters relating to obligations the interest on which is excludable from gross income for purposes of federal income taxation under Section 103 of the Tax Code.

“Business Day” means a day which is not a Saturday, Sunday or legal holiday on which banking institutions in the State of California are closed.

“Closing Date” means _____, 2022, being the date of execution and delivery of this Agreement.

“Date of Taxability” means the date from and for the interest component of the Installment Payments is subject to federal or State income taxation as a result of a Determination of Taxability.

“Debt Service” means, for any Fiscal Year, the sum of (a) the interest falling due during such Fiscal Year on all Parity Obligations that are outstanding under the documents or agreements pursuant to which they were issued, assuming that all outstanding serial Parity Obligations are retired as scheduled and that all outstanding term Parity Obligations are redeemed from sinking fund payments as scheduled (except to the extent that such interest has been fully capitalized and is invested in Federal Securities that mature at times and in such amounts as are necessary to pay the interest to which such amounts are pledged), (b) the principal amount of all serial Parity Obligations (that are outstanding under the documents or agreements pursuant to which they were issued) falling due by their terms during such Fiscal Year, and (c) the minimum amount of term Parity Obligations (that are outstanding under the documents or agreements pursuant to which they were issued) required to be paid or called and redeemed during such Fiscal Year, together with the redemption premiums, if any, thereon; provided, however, that, (i) whenever interest as described herein accrues at other than a fixed rate, such interest shall be assumed to be a rate equal to the greater of (A) the actual rate on the date of calculation, or if the Parity Obligations are not yet outstanding, the initial rate (if established and binding), (B) if the Parity Obligations have been outstanding for at least 12 months, the average rate over the 12 months immediately preceding the date of calculation, (C) if interest on the Parity Obligations is excludable from gross income under the applicable provisions of the Tax Code, the most recently published The Bond Buyer Bond Revenue Index (or comparable index if no longer published) plus 150 basis points, or (D) if interest is not so excludable, the interest rate on direct U.S. Treasury Obligations with comparable maturities, plus 150 basis points, and (ii) for purposes of calculating the Debt Service on any Parity Obligation requiring a balloon payment at maturity, such interest shall be assumed to be a rate equal to the greater of (A) the actual rate on the date of calculation, or (B) 6%, and the principal shall be assumed to be fully amortized, solved for substantially level debt service, over a period of 15 years from the date of calculation.

“Default Rate” means, at any given time, the then-current interest rate, plus ____%.

“Determination of Taxability” means and shall be deemed to have occurred on the first to occur of the following:

- (a) on that date when the District files any statement, supplemental statement or other tax schedule, return or document which discloses that an Event of Taxability shall have occurred;
- (b) on the date when the Bank notifies the District that it has received a written opinion from Bond Counsel to the effect that an Event of Taxability has occurred, which notice shall be accompanied by a copy of such opinion of Bond Counsel, unless, within 180 days after receipt by the District of such notification and copy of such opinion from the Bank, the District shall deliver to the Bank a ruling or determination letter issued to or on behalf of the District by the Commissioner or any District Director of the Internal Revenue Service (or any other governmental official exercising the same or a substantially similar function from time to time) to the effect that, after taking into consideration such facts as form the basis for the opinion that

an Event of Taxability has occurred, an Event of Taxability shall not have occurred;

- (c) on the date when the District shall be advised in writing by the Commissioner or any District Director of the Internal Revenue Service (or any other government official or agent exercising the same or a substantially similar function from time to time) that, based upon any review or audit or upon any other ground whatsoever, an Event of Taxability has occurred; or
- (d) on that date when the District shall receive notice from the Bank that the Internal Revenue Service (or any other government official or agency exercising the same or a substantially similar function from time to time) has assessed the interest component of the Installment Payments as includable in the gross income of the Bank due to the occurrence of an Event of Taxability;

provided, however, that no Determination of Taxability shall occur under subparagraph (c) or subparagraph (d) above unless the District has been afforded the opportunity, at its expense, to contest any such assessment, and, further, no Determination of Taxability shall occur until such contest, if made, has been finally determined.

“District” means the Casitas Municipal Water District, a municipal water district duly organized and existing under and pursuant to the Constitution and laws of the State of California.

“Event of Taxability” means a change in law or fact or the interpretation thereof, or the occurrence or existence of any fact, event or circumstance (including, without limitation, the taking of any action by the District, or the failure to take any action by the District, or the making by the District of any misrepresentation in this Agreement or the certificate regarding federal arbitrage which has been executed and delivered by the District in connection with this Agreement) which has the effect of causing the interest component of the Installment Payments to be includable, in whole or in part, in the gross income of the Bank for federal income tax purposes. The District shall inform the Bank promptly upon the occurrence of a Determination of Taxability.

“Excess Investment Earnings” means an amount required to be rebated to the United States of America under Section 148(f) of the Tax Code due to investment of gross proceeds of the Installment Payments at a yield in excess of the yield on the Installment Payments.

“Event of Default” means an event of default as described in Section 6.1.

“Federal Securities” means (a) any direct general obligations of the United States of America (including obligations issued or held in book entry form on the books of the Department of the Treasury of the United States of America), for which the full faith and credit of the United States of America are pledged; and (b) obligations of any agency, department or instrumentality of the United States of America, the timely payment of principal and interest on which are directly or indirectly secured or guaranteed by the full faith and credit of the United States of America.

“Fiscal Year” means the twelve-month period beginning on July 1 of any year and ending on June 30 of the next succeeding year, or any other twelve-month period selected by the District as its fiscal year.

“Governmental Authority” means any governmental or quasi-governmental entity, including any court, department, commission, board, bureau, agency, administration, central bank, service, district or other instrumentality of any governmental entity or other entity exercising executive, legislative, judicial, taxing, regulatory, fiscal, monetary or administrative powers or functions of or pertaining to government, or any arbitrator, mediator or other person with authority to bind a party at law.

“Gross Revenues” means all gross income and revenue received or receivable by the District from the ownership and operation of the Water System, calculated in accordance with generally accepted accounting principles, including all rates, fees, charges (including connection fees), recreation fees, insurance proceeds and condemnation awards received by the District and all other income and revenue howsoever derived by the District from the Water System; provided, however, that (i) any specific charges levied for the express purpose of reimbursing others for all or a portion of the cost of the acquisition or construction of specific water facilities, (ii) grants that are designated by the grantor for a specific Water System purpose (and are therefore not available for general operational purposes) and (iii) customers’ water related deposits or any other water related deposits subject to refund until such deposits have become the property of the District, are not Gross Revenues and are not subject to the lien hereof. Notwithstanding the foregoing, there shall be deducted from Gross Revenues any amounts (of Gross Revenues) transferred into the Rate Stabilization Fund as contemplated by Section 4.6, and there shall be added to Gross Revenues any amounts transferred out of the Rate Stabilization Fund and into the Water Fund, as contemplated by Section 4.6.

“Hazardous Substance” means any substance that shall, at any time, be listed as “hazardous” or “toxic” in any Applicable Environmental Law or that has been or shall be determined at any time by any agency or court to be a hazardous or toxic substance regulated under Applicable Environmental Laws; and also means, without limitation, raw materials, building components, the products of any manufacturing, or other activities on the Water System, wastes, petroleum, and source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (42 USC Sections 3011 et seq.)

“Independent Accountant” means any independent certified public accountant or firm of independent certified public accountants appointed and paid by the District, and who, or each of whom: (a) is in fact independent and not under domination of the District; (b) does not have any substantial interest, direct or indirect, with the District; and (c) is not connected with the District as an officer or employee of the District, but who may be regularly retained to make annual or other audits of the books of or reports to the District.

“Independent Engineer” means any engineer, consultant or firm of such engineers or consultants appointed by the District and who, or each of whom:

- (a) is judged by the District to have experience in matters relating to the financing of Water Systems;

- (b) is in fact independent and not under domination of the District;
- (c) does not have any substantial interest, direct or indirect, with the District other than as purchaser of any Parity Obligation; and
- (d) is not connected with the District as an officer or employee of the District, but who may be regularly retained to make reports to the District.

“Installment Payment Date” means the date on which Installment Payments are required to be paid, being February 1 and August 1 in each year, commencing February 1, 2023, as shown in Appendix A.

“Installment Payments” means all payments required to be paid by the District on any date under Section 4.4, including any amounts payable upon delinquent installments and including any prepayment thereof under Sections 7.2 or 7.3.

“Maintenance and Operation Costs” means the reasonable and necessary costs and expenses paid by the District for maintaining and operating the Water System, as determined in accordance with generally accepted accounting principles, including but not limited to (a) costs of acquisition of water, including all associated treatment and delivery costs, to be used by the Water System, (b) costs of electricity and other forms of energy supplied to the Water System, (c) the reasonable expenses of management and repair and other costs and expenses necessary to maintain and preserve the Water System in good repair and working order, (d) the reasonable administrative costs of the District attributable to the operation and maintenance of the Water System, such as salaries and wages of employees, overhead, taxes (if any) and insurance premiums, (e) the costs of the District attributable to the operation and maintenance of the recreation facilities and (f) all other reasonable and necessary costs of the District or charges required to be paid by it to comply with the terms hereof or of any resolution authorizing the issuance of any Parity Obligations or of such Parity Obligations, such as compensation, reimbursement and indemnification of the trustee for any such Parity Obligations and fees and expenses of Independent Accountants and Independent Engineers, but in all cases excluding (i) debt service payable on obligations incurred by the District with respect to the Water System, (ii) depreciation, replacement and obsolescence charges or reserves therefor, and (iii) amortization of intangibles or other bookkeeping entries of a similar nature.

“Material Adverse Effect” means an event or occurrence which adversely affects in a material manner (a) the assets, liabilities, condition (financial or otherwise), business, facilities or operations of the Water System, (b) the ability of the District to operate the Water System in the manner conducted as of the date of this Agreement or to meet or perform its obligations under this Agreement on a timely basis, or (c) the validity or enforceability of this Agreement.

“Material Litigation” means any action, suit, proceeding, inquiry or investigation against the District in any court or before any arbitrator of any kind or before or by any Governmental Authority, of which the District has notice or knowledge and which, (a) if determined adversely to the District, may have a Material Adverse Effect, (b) seek to restrain or enjoin any of the transactions contemplated hereby or by this Agreement, or (c) may adversely affect the exclusion of the interest component of the Installment Payments from gross income for federal income tax purposes or the exemption of such

interest for state income tax purposes or the ability of the District to perform its obligations under this Agreement.

“Maximum Annual Debt Service” means the greatest amount of Debt Service with respect to the Parity Obligations to which reference is made coming due in any Fiscal Year including the Fiscal Year in which the calculation is made or any subsequent Fiscal Year.

“Net Revenues” means, for any period, all of the Gross Revenues during such period less all of the Maintenance and Operation Costs during such period.

“Parity Obligation” means the USBR Contract and any bonds, notes, loans, leases, installment sale agreements or other obligations of the District payable from and secured by a pledge of and lien upon any of the Net Revenues and Taxes on a parity with the Installment Payments, entered into or issued under and in accordance with Section 5.8.

“Parity Obligations Documents” means the USBR Contract and any indenture of trust, trust agreement or other document authorizing the issuance of any Parity Obligation or any securities which evidence any Parity Obligation.

“Project” means, collectively, the facilities, improvements and other property constituting part of the Water System, the acquisition, construction and/or improvement of which are financed in accordance with this Agreement, as described more fully in Appendix B attached hereto, as that Appendix may be amended from time to time by written notice provided by an Authorized Representative of the District to the Bank.

“Project Costs” means all costs of the acquisition, construction and/or improvement of the Project, including but not limited to:

- (a) all costs required to be paid to any person under the terms of any agreement for or relating to the acquisition, construction and installation of any capital improvements for the Water System;
- (b) obligations incurred for labor and materials in connection with the acquisition, construction and installation of the Project;
- (c) the cost of performance or other bonds and any and all types of insurance that may be necessary or appropriate to have in effect in connection with the acquisition, construction and installation of the Project;
- (d) all preliminary costs of the Project, including but not limited to design, environmental, engineering and architectural services, costs for testing, surveys, estimates, plans and specifications and preliminary investigations therefor, development fees and costs for supervising construction, as well as for the performance of all other duties required by or consequent to the proper acquisition, construction and installation of the Project;
- (e) any sums required to reimburse the District for advances made for any of the above items or for any other costs incurred and for work

done which are properly chargeable to the acquisition, construction and installation of the Project;

- (f) all financing costs incurred in connection with the acquisition, construction and installation of the Project; and
- (g) the interest components of the Installment Payments during the period of acquisition, construction and installation of the Project.

“Project Fund” means the fund or account by that name established and held by the District under Section 3.3.

“Rate Stabilization Fund” means any fund established and held by the District as a fund for the stabilization of rates and charges imposed by the District with respect to the Water System, which fund is established, held and maintained in accordance with Section 4.6.

“Tax Code” means the Internal Revenue Code of 1986 as in effect on the Closing Date or (except as otherwise referenced herein) as it may be amended to apply to obligations issued on the Closing Date, together with applicable temporary and final regulations promulgated, and applicable official guidance published, under the Tax Code.

“Taxable Rate” means _____%.

“Taxes” means all taxes, including *ad valorem* taxes of the District, other than taxes imposed pursuant to Chapter 1 of Part 9 of the Law to secure general obligation bonds of the District, to secure any assessment district or community facilities district thereof, or levied for the State Water Project.

“Term” means the time during which this Agreement is in effect, as provided in Section 4.3.

“USBR Contract” means the Contract, dated as of _____, by and between the District and United States of America, Department of the Interior, Bureau of Reclamation, for the Repayment of Funds Expended for the Federally Performed Safety of Dams Act Modification Program at the Casitas Dam and Reservoir.

“Water Fund” means the fund or funds established and held by the District for the deposit of Gross Revenues from the Water System.

“Water System” means, collectively, the entire water collection, storage, treatment, transmission and distribution system and recreation facilities now owned or operated by the District, and all other properties, structures or works hereafter acquired and constructed by the District and determined to be a part of the Water System, including all facilities, works, properties, structures and assets, real and personal, tangible and intangible, of the District, now or hereafter existing, used or pertaining to the collection, storage, treatment, transmission and distribution of potable and non-potable water and the recreational facilities, including all contractual rights to water supplies, transmission capacity supply, easements, rights-of-way and other works, property or structures necessary or convenient for such facilities, and any necessary lands, rights of way and other real or personal property useful in connection therewith, together with all additions,

betterments, extension and improvements to such facilities or any part thereof hereafter acquired or constructed. References in any Parity Obligation to the "Enterprise," "Water Enterprise" or "Water System" shall be to the Water System as defined and used herein.

SECTION 1.2. *Appendices.* The following Appendices are attached to, and by this reference are made a part of, this Agreement:

Appendix A: Installment Payment Schedule

Appendix B: Description of Project

ARTICLE II REPRESENTATIONS, COVENANTS AND WARRANTIES

SECTION 2.1. *Representations, Covenants and Warranties of the District.* The District represents, covenants and warrants to the Bank as follows:

- (a) The District is a municipal water district duly organized and existing under and pursuant to the Constitution and laws of the State of California, and is empowered, among other things, to maintain and operate the Water System and to acquire in the name of the District any interest in real or personal property necessary or convenient for the operation of the Water System.
- (b) The laws of the State authorize the District to enter into this Agreement, and to enter into the transactions contemplated hereby and to carry out its obligations hereunder.
- (c) Neither the execution and delivery of this Agreement, nor the fulfillment of or compliance with the terms and conditions hereof, nor the consummation of the transactions contemplated hereby, conflicts with or results in a material breach of the terms, conditions or provisions of any restriction or any agreement or instrument to which the District is now a party or by which the District is bound or constitutes a default under any of the foregoing.
- (d) The District has duly authorized, executed and delivered this Agreement in accordance with the laws of the State of California. This Agreement is legal, valid and binding obligation of the District, enforceable in accordance with its terms, subject only to laws related to insolvency or bankruptcy and general equitable principles.
- (e) There is no action, suit, proceeding, inquiry or investigation before or by any court or federal, state, educational or other Governmental Authority pending or, to the knowledge of the District after reasonable investigation, threatened against or affecting the District or the assets, properties or operations of the District which, if determined adversely to the District or its interests, would have a material and adverse effect upon the consummation of the transactions contemplated by or the validity of this Agreement or upon the financial

condition, assets, properties or operations of the District and the District's ability to make the Installment Payments, and the District is not in default with respect to any order or decree of any court or any order, regulation or demand of any federal, state, educational or other Governmental Authority, which default might have consequences that would materially and adversely affect the consummation of the transactions contemplated by this Agreement or the financial conditions, assets, properties or operations of the District.

- (f) During the term of this Agreement, the Project will be used by the District for the Water System.
- (g) The statement of financial position of the Water System as of June 30, 2021, and the related statement of activities and statement of cash flows and changes in financial position for the year then ended and the auditors' reports with respect thereto, copies of which have heretofore been furnished to the Bank, are complete and correct and fairly present the financial condition, changes in financial position and results of operations of the Water System at such date and for such period, and were prepared in accordance with generally accepted accounting principles.
- (h) All information, reports and other papers and data furnished by the District to the Bank were, at the time the same were so furnished, complete and accurate in all material respects and insofar as necessary to give the Bank a true and accurate knowledge of the subject matter and were provided in expectation of Bank's reliance thereon in entering into the transactions contemplated by this Agreement. No fact is known to the District which has had or, so far as the District can now reasonably foresee, may in the future have a Material Adverse Effect, which has not been set forth in the financial statements previously furnished to the Bank or in other such information, reports, papers and data or otherwise disclosed in writing to the Bank prior to the Closing Date. Any financial, budget and other projections furnished to the Bank by the District or its or their agents were prepared in good faith on the basis of the assumptions stated therein, which assumptions were fair and reasonable in light of the conditions existing at the time of delivery of such financial, budget or other projections, and represented, and as of the date of this representation, represent the District's best estimate of the Water System's future financial performance. No document furnished nor any representation, warranty or other written statement made to the Bank in connection with the negotiation, preparation or execution of this Agreement contains or will contain any untrue statement of a material fact or omits or will omit to state (as of the date made or furnished) any material fact necessary in order to make the statements contained herein or therein, in light of the circumstances under which they were or will be made, not misleading.
- (i) The District has structured fees, estimated revenues and/or taken other lawful actions necessary to ensure that the pledge of and lien

on Net Revenues and Taxes are sufficient to pay all Installment Payments when due and payable, and such moneys have been and will continue to be applied in the funds and accounts as required herein and towards payment of all Installment Payments when due and payable.

- (j) The District acknowledges that (i) the Bank is acting solely for its own loan account and not as a fiduciary for the District or in the capacity of broker, dealer, placement agent, municipal securities underwriter or municipal advisor, (ii) the Bank has not provided, and will not provide, financial, legal (including securities law), tax, accounting or other advice to or on behalf of the District or with respect to the Installment Payments, and (iii) the Bank has expressed no view regarding the legal sufficiency of its representations for purposes of compliance with any legal requirements applicable to any other party, or the correctness of any legal interpretation made by counsel to any other party with respect to any such matters.
- (k) There are no obligations of the District payable from the Gross Revenues or Net Revenues and Taxes of the Water System on a basis that is senior to, or on parity with, the payment of the Installment Payments, other than the Parity Obligations which are payable on a parity basis.

**ARTICLE III
SALE OF PROJECT TO SELLER; DEPOSIT AND
APPLICATION OF SALE PROCEEDS; ACQUISITION AND
CONSTRUCTION OF THE PROJECT**

SECTION 3.1. *Sale of Project to District; Deposit of Moneys.* The District hereby sells and conveys the Project to the Bank, and the Bank hereby purchases the Project from the District for a purchase price in the amount of \$_____. On the Closing Date, the Bank shall pay the purchase price to the District, which will be applied as set forth in Section 3.2.

SECTION 3.2. *Payment of Financing Costs.* On the Closing Date, (a) \$_____ of the purchase price shall be deposited into the Project Fund and used by the District in accordance with Section 3.3, and (b) \$_____ shall be used by the District to pay consultant costs related to this Agreement, which shall be paid on behalf of the District to the payees identified in a written requisition submitted by the District to the Bank dated the Closing Date.

SECTION 3.3. *Project Fund.* The District shall establish and maintain an account that is designated as the "Project Fund" into which the amount set forth in Section 3.2(a). Except as otherwise provided herein, moneys in the Project Fund shall be used solely for the payment of (or reimbursement to the District for) the Project Costs. The District shall maintain accurate records showing the expenditures of moneys from the Project Fund.

SECTION 3.4. *Construction of the Project.* The Bank hereby appoints the District as its agent to carry out all phases of the acquisition, construction and installation of the Project under and in accordance with the provisions hereof. The District hereby accepts such appointment and assumes all rights, liabilities, duties and responsibilities of the Bank regarding the acquisition, construction and installation of the Project. As agent of the Bank hereunder, the District shall enter into, administer and enforce all purchase orders or other contracts relating to the Project.

Payment of Project Costs shall be made by the District from amounts requested from the Bank in accordance with the provisions of this Agreement. If and to the extent the amounts funded by the Bank are insufficient to enable the District to complete the Project in full, the District has the sole responsibility for completing the Project and the District will finance such completion from any source of legally available funds of the District.

The District hereby agrees with due diligence to supervise and provide for, or cause to be supervised and provided for, the acquisition, construction and installation of the Project in accordance with the plans and specifications, purchase orders, construction contracts and other documents relating thereto and approved by the District under all applicable requirements of law. All contracts for, and all work relating to, the acquisition, construction and installation of the Project are subject to all applicable provisions of law relating to the acquisition and construction of public works by the District. The District has the right to specify the exact scope, nature and identification of the Project and the respective components thereof, and to modify the description of the Project or any component thereof.

The failure to complete the Project by its estimated completion date does not constitute an Event of Default hereunder or a ground for termination hereof, nor will any such failure result in the diminution, abatement or extinguishment of the obligations of the District hereunder to pay the Installment Payments when due. Nothing contained herein shall be deemed to be waiver of the Bank's or the Bank's rights and remedies should the District fail to complete the Project and to complete other improvement and modification of the Project as represented, warranted and covenanted herein.

Upon the completion of the Project, but in any event not later than 30 days following such completion, the District shall execute and deliver to the Bank a written certificate which states that the acquisition, construction and installation of the Project has been completed. All amounts in the Project Fund not required for payment of future Project Costs may be applied by the District to pay the principal portion of the Installment Payments in accordance with Section 7.2.

ARTICLE IV INSTALLMENT SALE OF PROJECT TO DISTRICT; INSTALLMENT PAYMENTS

SECTION 4.1. *Sale of Project to District.* The Bank hereby sells and conveys the Project back to the District, and the District hereby purchases the Project from the Bank upon the terms and conditions set forth in this Article IV.

SECTION 4.2. *Title; Taxes.* Title to the Project shall be vested in the District on the Closing Date. The Bank shall take all actions necessary to vest in the District all of the Bank's rights in and title to the Project. Such title shall be held by the District in trust pending the satisfaction of the payment obligations under this Agreement.

The parties to this Agreement contemplate that the Project will be used for a governmental or proprietary purpose of the District and, therefore, that the Project will be exempt from all property taxes, including any licensing fees. The Installment Payments payable by the District under this Agreement have been established to reflect the savings resulting from this exemption from taxation. The District will take such actions necessary under applicable law to obtain said exemption. Nevertheless, if the use, possession or acquisition of the Project is determined to be subject to taxation, or licensing fees, or later becomes subject to such taxes, or licensing fees, the District shall pay when due all taxes and governmental charges lawfully assessed or levied against or with respect to the Project.

SECTION 4.3. *Term of this Agreement.* The Term of this Agreement commences on the Closing Date and ends on August 1, ____ (provided the District has paid all Installment Payments and other amounts due hereunder through such date), unless such term is extended or sooner terminated as hereinafter provided.

SECTION 4.4. *Installment Payments and Funding of Purchase Price.*

(a) Obligation to Pay. The District agrees to pay to the Bank, its successors and assigns, as the purchase price of the Project, the Installment Payments, consisting of components of principal in the amount of \$_____ and interest calculated in accordance with Section 4.4(b), on the Installment Payment Dates. The Installment Payments shall be secured by and payable from Net Revenues and Taxes as hereinafter provided.

(b) Calculation of Interest Rate. The interest components of the Installment Payments shall be calculated based on the unpaid principal components of the Installment Payments at an interest rate of ____% per annum, on the basis of a 360-day year of twelve 30-day months as shown in Appendix B; provided, however, that:

(i) from and after the Date of Taxability, if applicable, the interest rate with respect to the Installment Payments shall increase to the Taxable Rate; and

(ii) for the duration of any Event of Default, the interest components of the Installment Payments shall be calculated based on the unpaid principal components of the Installment Payments at the Default Rate.

(c) Rate on Overdue Payments. If the District fails to make any of the payments required in this Section on or before the due date therefor, the Installment Payment in default shall continue as an obligation of the District until the amount in default shall have been fully paid and the District agrees to pay the same with interest thereon, to the extent permitted by law, from the date thereof at the Default Rate, or, if lower, the maximum rate then permitted by law.

(d) Assignment. The District understands and agrees that all Installment Payments have been assigned by the Bank to the Bank under the Assignment Agreement,

and the District hereby assents to such assignment. The Bank hereby directs the District, and the District hereby agrees, to pay to the Bank all payments payable by the District under this Section and all amounts payable by the District under Article VII.

SECTION 4.5. *Pledge and Application of Net Revenues and Taxes.*

(a) Pledge. All of the Net Revenues and Taxes are hereby irrevocably pledged, charged and assigned to the punctual payment of the Installment Payments. Such pledge, charge and assignment constitutes a lien on the Net Revenues and Taxes for the payment of the Installment Payments in accordance with the terms hereof, which lien shall be on a parity with the pledge and lien which secures any Parity Obligation. The Net Revenues and Taxes shall constitute a trust fund for the security and payment of the Installment Payments and any Parity Obligation.

(b) Deposit of Gross Revenues Into Water Fund; Transfers to Make Payments. The District shall establish the Water Fund, which the District shall hold and maintain for the purposes and uses set forth herein. The District shall deposit all Gross Revenues and Taxes in the Water Fund immediately on receipt. The District shall apply amounts in the Water Fund as set forth in this Agreement and any Parity Obligations Documents. Amounts on deposit in the Water Fund shall be applied by the District to pay when due the following amounts in the following order of priority:

- (i) all Operation and Maintenance Costs;
- (ii) the Installment Payments and all payments of principal of and interest on any Parity Obligation, on a parity basis among them;
- (iii) the amount of any deficiency in any reserve fund established for Parity Obligation, the notice of which deficiency has been given to the District in accordance with the related documents; and
- (iv) any other payments required to comply with the provisions of this Agreement and any Parity Obligations Documents, on a parity basis among them.

For each Fiscal Year, after the District has made any required payments described in clauses (i) through (iv) above, any remaining Net Revenues and Taxes in the Water Fund shall be released from the lien of this Agreement and shall be available for any lawful purpose of the District.

(c) No Preference or Priority. Payment of the Installment Payments and the principal of and interest on any Parity Obligation shall be made without preference or priority. If the amount of Net Revenues and Taxes on deposit in the Water Fund are at any time insufficient to enable the District to pay when due the Installment Payments and the principal of and interest on any Parity Obligation, such payments will be made on a pro rata basis.

SECTION 4.6. *Establishment of Rate Stabilization Fund.* The District has the right at any time to establish a fund to be held by it and administered in accordance with this Section, for the purpose of stabilizing the rates and charges imposed by the District with respect to the Water System. From time to time the District may deposit amounts in the

Rate Stabilization Fund, from any source of legally available funds, including but not limited to Net Revenues and Taxes which are released from the pledge and lien which secures the Installment Payments and any Parity Obligation, as the District may determine.

The District may, but is not required to, withdraw from any amounts on deposit in the Rate Stabilization Fund and deposit such amounts in the Water Fund in any Fiscal Year for the purpose of paying any lawful expenses of the Water System, including the Installment Payments and any Parity Obligation. Amounts so transferred from the Rate Stabilization Fund to the Water Fund constitute Gross Revenues for the Fiscal Year (except as otherwise provided herein), and shall be applied for the purposes of the Water Fund. Amounts on deposit in the Rate Stabilization Fund may not be pledged to or otherwise secure the Installment Payments or any Parity Obligation. All interest or other earnings on amounts in the Rate Stabilization Fund shall be retained therein or, at the option of the District, be applied for any other lawful purposes. The District has the right at any time to withdraw any or all amounts on deposit in the Rate Stabilization Fund and apply such amounts for any other lawful purposes of the District.

SECTION 4.7. *Special Obligation of the District; Obligations Absolute.* The District's obligation to pay the Installment Payments and any other amounts coming due and payable hereunder shall be a special obligation of the District limited solely to the Net Revenues. Under no circumstances is the District required to advance moneys derived from any source of income other than the Net Revenues and Taxes and other sources specifically identified herein for the payment of the Installment Payments and such other amounts, and no other funds or property of the District are liable for the payment of the Installment Payments.

The obligation of the District to pay the Installment Payments, and the obligation of the District to perform and observe the other agreements contained herein, are absolute and unconditional and are not subject to any defense or any right of setoff, counterclaim or recoupment arising out of any breach of the Bank or the Bank of any obligation to the District or otherwise with respect to the Water System, whether hereunder or otherwise, or out of indebtedness or liability at any time owing to the District by the Bank or the Bank.

Until such time as all of the Installment Payments have been fully paid or prepaid, the District: (i) will not suspend or discontinue payment of any Installment Payments, (ii) will perform and observe all other agreements contained in this Agreement, and (iii) will not terminate this Agreement for any cause, including, without limiting the generality of the foregoing, the occurrence of any acts or circumstances that may constitute failure of consideration, eviction or constructive eviction, destruction of or damage to the Water System, the sale of the Water System, the taking by eminent domain of title to or temporary use of any component of the Water System, commercial frustration of purpose, any change in the tax or other laws of the United States of America or the State of California or any political subdivision of either thereof or any failure of the Bank to perform and observe any agreement, whether express or implied, or any duty, liability or obligation arising out of or connected with this Agreement.

ARTICLE V COVENANTS OF THE DISTRICT

SECTION 5.1. *Disclaimer of Warranties.* The Bank does not make any warranty or representation, either express or implied, as to the value, design, condition, merchantability or fitness for any particular purpose or fitness for the use contemplated by the District of the Project or any component thereof, or any other representation or warranty with respect to any of the Project or any component thereof. In no event is the Bank liable for incidental, indirect, special or consequential damages, in connection with or arising out of this Agreement for the existence, furnishing, functioning or use of the Project.

SECTION 5.2. *Release and Indemnification Covenants.* The District agrees to indemnify the Bank, and its respective officers, agents, successors and assigns, against all claims, losses and damages, including legal fees and expenses, arising out of:

- (a) the use, maintenance, condition or management of, or from any work or thing done on or about the Water System or the selection, construction or sale of the Project by or to the District, its employees, agents, contractors, vendors, and subcontractors;
- (b) any breach or default on the part of the District in the performance of any of its representation, warranties, covenants, and obligations under this Agreement,
- (c) any act or omission of the District or of any of its agents, contractors, servants, employees or licensees with respect to the Water System or the Project,
- (d) any act or omission of any lessee of the District with respect to the Water System or Project;
- (e) Any loss, claim, damage to the environment relating to the Project or the Water System, including but not limited to any investigation, cleanup, remedial, or other costs; and
- (f) any strict liability under the laws or judicial decisions of any state or the United States.

No indemnification is made under this Section or elsewhere in this Agreement for willful misconduct or gross negligence under this Agreement by the Bank, or their respective officers, agents, employees, successors or assigns. The provisions of this Section survive the expiration of the Term of this Agreement.

SECTION 5.3. *Sale or Eminent Domain of Water System.* Except as provided herein, the District covenants that the Water System will not be encumbered, sold, leased, pledged, any charge placed thereon, or otherwise disposed of, as a whole or substantially as a whole if such encumbrance, sale, lease, pledge, charge or other disposition would materially impair the ability of the District to pay any obligations of the Water System, or would materially adversely affect its ability to comply with the terms of this Agreement or any Parity Obligations Documents. The District may not enter into any agreement which

impairs the operation of the Water System or any part of it necessary to secure adequate Net Revenues and Taxes to pay the Installment Payments or any Parity Obligation, or which otherwise would impair the rights of the Bank with respect to the Net Revenues and Taxes.

If any substantial part of the Water System is sold, the payment therefor shall, with the prior written consent of the Bank, either (a) be used for the acquisition or construction of improvements and extensions or replacement facilities or (b) be applied to prepay the Installment Payments and/or any Parity Obligation on the next available prepayment date, as determined in the District's sole discretion.

Any amounts received as awards as a result of the taking of all or any part of the Water System by the lawful exercise of eminent domain, if and to the extent that such right can be exercised against such property of the District shall, either (a) be used for the acquisition or construction of improvements and extension of the Water System, or (b) be applied to prepay the Installment Payments and/or Parity Obligation on the next available prepayment date, as determined in the District's sole discretion.

SECTION 5.4. *Insurance.* The District shall at all times maintain with responsible insurers all such insurance on the Water System as is customarily maintained with respect to works and properties of like character against accident to, loss of or damage to the Water System. Such insurance shall include coverage for casualty losses to the facilities constituting part of the Water System; provided, the deductible for hazard insurance shall be no more than \$10,000 per occurrence (absent prior written consent of the Bank). All amounts collected from insurance against accident to or destruction of any portion of the Water System shall either (a) be used to repair or rebuild such damaged or destroyed portion of the Water System, or (b) be applied to prepay the Installment Payments and/or Parity Obligation on the next available prepayment date, as determined in the District's sole discretion.

The District shall also maintain, with responsible insurers, worker's compensation insurance and insurance against public liability and property damage to the extent reasonably necessary to protect the interests of the District and the Bank.

Any policy of insurance required under this Section may be maintained as part of or in conjunction with any other insurance coverage carried by the District, and may be maintained in whole or in part in the form of self-insurance by the District or in the form of the participation by the District in a joint powers agency or other program providing pooled insurance. The District shall file evidence of all insurance policies maintained under this Section with the Bank and the Bank, upon request.

SECTION 5.5. *Records and Accounts.* The District shall keep proper books of record and accounts in which complete and correct entries shall be made of all transactions relating to the Water System. Said books shall, upon prior request, be subject to the reasonable inspection of the Bank upon not less than 5 Business Days' prior notice to the District.

The District shall cause the books and accounts of the District (which includes the Water System) to be audited annually by an Independent Accountant by no later than 270 days after the end of the prior Fiscal Year, and shall file a copy of such report with the

Bank and the Bank. Such report may be part of a combined financial audit or report covering all or part of the District's finances.

SECTION 5.6. *Rates and Charges.*

(a) The District shall fix, prescribe, revise and collect rates, fees and charges for the services and facilities furnished by the Water System during each Fiscal Year, which are at least sufficient, after making allowances for contingencies and error in the estimates, to yield Gross Revenues (excluding any amounts derived from the Rate Stabilization Fund) sufficient, together with Taxes, to pay the following amounts in the following order of priority:

- (i) All Operation and Maintenance Costs estimated by the District to become due and payable in the Fiscal Year.
- (ii) All Installment Payments and all payments of principal of and interest on any Parity Obligation as they become due and payable during the Fiscal Year, without preference or priority. If interest with respect to any Parity Obligation is computed at a variable rate, the amount required to be taken into account for any Fiscal Year under this Section shall be the actual rate borne by such Parity Obligation during such Fiscal Year.
- (iii) All payments required to meet any other obligations of the District which are charges, liens, encumbrances upon, or which are otherwise payable from, the Gross Revenues or the Net Revenues and Taxes during such Fiscal Year.

(b) In addition, the District shall fix, prescribe, revise and collect rates, fees and charges for the services and facilities furnished by the Water System during each Fiscal Year which are sufficient to yield Net Revenues and Taxes which are at least equal to 110% of the aggregate amount of the Installment Payments and Debt Service on all Parity Obligations coming due and payable during such the Fiscal Year. For purposes of this Section 5.6(b), (i) any transfers into the Water Fund from the Rate Stabilization Fund during a Fiscal Year are included in the calculation of Gross Revenues for that Fiscal Year, and (ii) any deposits into the Rate Stabilization Fund in a Fiscal Year are deducted from Gross Revenues, but only to the extent that such deposits are made from Gross Revenues received by the District during that Fiscal Year.

(c) If the District violates the covenants set forth in subsections (a) or (b) hereof, such violation shall not, in and of itself, be a default under this Agreement and shall not give rise to a declaration of an Event of Default so long as (i) Net Revenues and Taxes (calculated without taking into account any amounts transferred into the Water Fund from the Rate Stabilization Fund), are at least equal to the Maximum Annual Debt Service, and (ii) within 120 days after the date such violation is discovered, the District either (A) transfers enough moneys from the Rate Stabilization Fund sufficient to yield estimated Net Revenues which are at least equal to one 110% of the aggregate amount of Debt Service on all Parity Obligations payable from Net Revenues and Taxes coming due and payable during such Fiscal Year in compliance with subsection (b) hereof, or (B) hires an Independent Engineer to review the revenues and expenses of the Water System, and abides by such consultant's recommendations to revise the schedule of rates, fees,

expenses and charges, and to revise any Maintenance and Operation Costs insofar as practicable, and to take such other actions as are necessary so as to produce Net Revenues and Taxes to cure such violation for future compliance.

SECTION 5.7. *Superior and Subordinate Obligations.* The District may not issue or incur any additional bonds or other obligations during the Term of this Agreement having any preference or priority in payment of principal or interest out of the Gross Revenues or the Net Revenues and Taxes over the Installment Payments.

Nothing herein limits or affects the ability of the District to issue or incur (a) Parity Obligation under and in compliance with Section 5.8, or (b) obligations which are either unsecured or which are secured by an interest in the Net Revenues and Taxes which is junior and subordinate to the pledge of and lien upon the Net Revenues and Taxes established hereunder.

SECTION 5.8. *Issuance of Parity Obligations.* Except for obligations incurred to prepay or discharge the Installment Payments or any Parity Obligation, the District may not issue or incur any Parity Obligation during the Term hereof unless:

- (a) no Event of Default has occurred and is continuing (unless such Event of Default shall be cured upon such issuance); and
- (b) the Net Revenues (excluding any amounts derived from the Rate Stabilization Fund), calculated in accordance with generally accepted accounting principles, as shown by the books of the District for the latest Fiscal Year or for any more recent 12-month period within the preceding 18 months selected by the District, plus (at the option of the District) the Additional Revenues, shall be at least equal to 120% of the amount of Maximum Annual Debt Service on all outstanding Parity Obligations and the Parity Obligations to be issued;

provided, however, that the provisions of subsection (b) of this Section shall not apply to any Parity Obligation if, and to the extent that (i) the net proceeds of such Parity Obligation shall be deposited in an irrevocable escrow held in cash or invested in Federal Securities for the purpose of paying the principal of and interest and premium (if any) on such outstanding Parity Obligations, and (ii) at the time of the incurring of such Parity Obligations, the District certifies in writing that Maximum Annual Debt Service that includes the Parity Obligation proposed to be issued will not exceed Maximum Annual Debt Service that includes the then-outstanding Parity Obligations being refunded, and (iii) the final maturity of the Parity Obligation proposed to be issued is not later than the final maturity of the Parity Obligations being refunded.

SECTION 5.9. *Operation of Water System in Efficient and Economical Manner.* The District shall operate the Water System in an efficient and economical manner and maintain and preserve the Water System in good repair and working order and in accordance with all Applicable Laws.

SECTION 5.10. *Tax Covenants.*

(a) Generally. The District shall not take any action or permit to be taken any action or omission which would cause or which, with the passage of time if not cured would cause, the interest components of the Installment Payments to become includable in gross income of the Bank for federal income tax purposes.

(b) Private Activity Bond Limitation. The District shall assure that the proceeds of the Installment Payments are not so used as to cause the Installment Payments to satisfy the private business tests of Section 141(b) of the Tax Code or the private loan financing test of section 141(c) of the Tax Code.

(c) Federal Guarantee Prohibition. The District shall not take any action or permit or suffer any action to be taken if the result of the same would be to cause the Installment Payments to be “federally guaranteed” within the meaning of Section 149(b) of the Tax Code.

(d) No Arbitrage. The District shall not take, or permit or suffer to be taken, any action with respect to the proceeds of the Installment Payments which, if such action had been reasonably expected to have been taken, or had been deliberately and intentionally taken, on the Closing Date would have caused the Installment Payments to constitute “arbitrage bonds” within the meaning of Section 148(a) of the Tax Code.

(e) Arbitrage Rebate; Arbitrage Rebate Fund. The District shall take any and all actions necessary to assure compliance with section 148(f) of the Tax Code, relating to the rebate of excess investment earnings, if any, to the federal government, to the extent that such section is applicable to this Agreement.

The District may in its discretion establish and maintain a special fund designated as the “Arbitrage Rebate Fund”. The District shall deposit into the Arbitrage Rebate Fund any amounts provided by the District for that purpose. Amounts on deposit in the Arbitrage Rebate Fund shall be disbursed by the District for the purpose of making payments of Excess Investment Earnings in accordance with this subsection (e). If the District determines that any amounts held by it in the Arbitrage Rebate Fund are not required to make payments of Excess Investment Earnings, the District may apply amounts in the Arbitrage Rebate Fund for any other lawful purposes of the District.

(f) Record Retention. The District will retain its records of all accounting and monitoring it carries out with respect to this Agreement for at least three years after the payment or prepayment in full of the Installment Payments, whichever is earlier, or for such lesser period of time as may be permitted under the Tax Code.

(h) Acquisition, Disposition and Valuation of Investments. Except as otherwise provided in the following sentence, the District covenants that all investments of amounts deposited in any fund or account created by or under this Agreement, or otherwise containing gross proceeds of this Agreement (within the meaning of Section 148 of the Tax Code) shall be acquired, disposed of, and valued (as of the date that valuation is required by this Agreement or the Tax Code) at Fair Market Value. Investments in funds or accounts (or portions thereof) that are subject to a yield restriction under applicable provisions of the Tax Code shall be valued at their present value (within the meaning of section 148 of the Tax Code).

For purposes of this subsection (h), the term “Fair Market Value” means the price at which a willing buyer would purchase the investment from a willing seller in a bona fide, arm's length transaction (determined as of the date the contract to purchase or sell the investment becomes binding) if the investment is traded on an established securities market (within the meaning of section 1273 of the Tax Code) and, otherwise, the term “Fair Market Value” means the acquisition price in a bona fide arm's length transaction (as referenced above) if (i) the investment is a certificate of deposit that is acquired in accordance with applicable regulations under the Tax Code, (ii) the investment is an agreement with specifically negotiated withdrawal or reinvestment provisions and a specifically negotiated interest rate (for example, a guaranteed investment contract, a forward supply contract or other investment agreement) that is acquired in accordance with applicable regulations under the Tax Code, (iii) the investment is a United States Treasury Security – State and Local Government Series that is acquired in accordance with applicable regulations of the United States Bureau of Public Debt, or (iv) any commingled investment fund in which the District and related parties do not own more than a 10% beneficial interest therein if the return paid by the fund is without regard to the source of the investment.

SECTION 5.11. *Access to the Water System and Records.* To the extent permitted by law, the District agrees that the Bank, any Authorized Representative of the Bank, and the Bank's successors or assigns, including the Bank, shall have the right at all reasonable times to enter upon and to examine and inspect the Water System. The District further agrees that the Bank, any Authorized Representative of the Bank, and the Bank's successors or assigns, including the Bank, shall have such rights of access to the Water System as may be reasonably necessary to cause the proper maintenance of the Water System in the event of failure by the District to perform its obligations hereunder. In addition, the District agrees that the Bank, any Authorized Representative of the Bank, and the Bank's successors or assigns, including the Bank, shall have the right at all reasonable times to inspect and examine all books, papers and records of the District pertaining to the Water System, to make copies thereof and to take non-privileged memoranda therefrom or with respect thereto as may be desired.

SECTION 5.12. *Reporting and Filing Requirements.* During the Term of this Agreement, the District shall make the following filings with the Bank:

- (a) Audited Financial Statements. The District shall file with the Bank the District's audited financial statements that include the accounting of the Water System for each Fiscal Year for which they are prepared in accordance with Section 5.5, by no later than the April 1 that immediately succeeds the close of such Fiscal Year.
- (b) Annual Budgets. The District shall file with the Bank the preliminary annual budget that includes the budget for the Water System for each Fiscal Year along with the resolution of the District Council approving the final such budget within 30 days of the adoption but not more than 30 days after the commencement of such Fiscal Year.
- (c) Additional Information. The District shall file with the Bank such additional information as the Bank may reasonably request in writing, within a

reasonable period of time after the receipt of such written request by the District.

ARTICLE VI EVENTS OF DEFAULT AND REMEDIES

SECTION 6.1. *Events of Default Defined.* Any one or more of the following events shall constitute Events of Default hereunder:

- (a) Failure by the District to pay any Installment Payment by the Installment Payment Date or failure to make any other payment required within 10 days after the date on which such Installment Payment or other payment becomes due.
- (b) Failure by the District to observe and perform any covenant, condition or agreement on its part to be observed or performed in this Agreement, other than as referred to in subsection (a), for a period of 30 days after written notice specifying such failure and requesting that it be remedied has been given to the District by the Bank; provided, however, that if the failure stated in the notice cannot be corrected within the applicable period, the Bank shall not unreasonably withhold their consent to an extension of such time if corrective action is instituted by the District within the applicable period and diligently pursued until the default is corrected, provided that such period shall not extend beyond 60 days.
- (c) The filing by the District of a petition or answer seeking arrangement or reorganization under the federal bankruptcy laws or any other applicable law of the United States of America or any state therein, or the approval by a court of competent jurisdiction of a petition filed with or without the consent of the District seeking arrangement or reorganization under the federal bankruptcy laws or any other applicable law of the United States of America or any state therein, or, under the provisions of any other law for the relief or aid of debtors, any court of competent jurisdiction assumes custody or control of the District or of the whole or any substantial part of its property.
- (d) The occurrence of any event defined to be an event of default under any Parity Obligations Documents.
- (e) Any statement, representation or warranty made by the District in or pursuant to this Agreement or its execution, delivery or performance shall prove to have been false, incorrect, misleading or breached in any material respect on the date when made.

SECTION 6.2. *Remedies on Default.* Whenever any Event of Default has happened and is continuing, the Bank shall have the right, at its option and without any further demand or notice, to:

- (a) declare all principal components of the unpaid Installment Payments, together with accrued interest thereon to be immediately due and payable, whereupon the same shall become due and payable; and
- (b) apply to and obtain from any court of competent jurisdiction such decree or order as may be necessary to require officials of the District to charge and collect rates for services provided by the District and the Water System sufficient to meet all requirements of this Agreement; and
- (c) take whatever action at law or in equity, including specific enforcement, mandamus, or any equitable remedies available, as may be desirable and permitted by law to collect the Installment Payments then due or thereafter to become due during the Term of this Agreement, or enforce performance and observance of any obligation, agreement or covenant of the District under this Agreement.

In addition, the District is liable for, and hereby agrees to pay, all legal costs and expenses, including court costs, incurred by the Bank in the enforcement of any of the remedies listed above or any other remedy available to the Bank.

So long as there has occurred and is continuing an Event of Default, the interest under this Agreement shall accrue, at the option of the Bank, at the Default Rate.

SECTION 6.3. *No Remedy Exclusive.* No remedy herein conferred upon or reserved to the Bank is intended to be exclusive and every such remedy shall be cumulative and shall be in addition to every other remedy given under this Agreement or now or hereafter existing at law or in equity. No delay or omission to exercise any right or power accruing upon any default shall impair any such right or power or shall be construed to be a waiver thereof, but any such right and power may be exercised from time to time and as often as may be deemed expedient. In order to entitle the Bank to exercise any remedy reserved to it in this Article VI it shall not be necessary to give any notice, other than such notice as may be required in this Article VI or by law.

SECTION 6.4. *Prosecution and Defense of Suits.* The District shall promptly, upon request of the Bank, from time to time take or cause to be taken such action as may be necessary or proper to remedy or cure any defect in or cloud upon the title to the Water System whether now existing or hereafter developing and shall prosecute all such suits, actions and other proceedings as may be appropriate for such purpose.

SECTION 6.5. *No Additional Waiver Implied by One Waiver.* If any agreement contained in this Agreement is breached by either party and thereafter waived by the other party, such waiver is limited to the particular breach so waived and will not be deemed to waive any other breach hereunder.

SECTION 6.6. *Liability Limited to Net Revenues and Taxes.* Notwithstanding any provision of this Agreement, the District's liability to pay the Installment Payments and other amounts hereunder is limited solely to Net Revenues and Taxes as provided in Article IV. If the Net Revenues and Taxes are insufficient at any time to pay an Installment

Payment in full, the District is not liable to pay or prepay such Installment Payment other than from Net Revenues and Taxes.

SECTION 6.7. *Rights of Bank.* Such rights and remedies as are granted to the Bank under this Article VI or under this Agreement shall be exercised by the Bank, as Bank of the rights of the Bank hereunder, in accordance with the provisions of the Assignment Agreement.

ARTICLE VII PREPAYMENT OF INSTALLMENT PAYMENTS

SECTION 7.1. *Prepayment.* The District has the right to prepay the Installment Payments, but only in the manner, at the times and in all respects in accordance with the provisions of this Article VII.

SECTION 7.2. *Optional Prepayment.* The District has the right at its option to prepay the Installment Payments in whole or in part, on any date commencing August 1, ____, at a prepayment price equal to the principal amount of Installment Payments prepaid, together with accrued interest thereon to the date of prepayment, without premium. Prepayments of Installment Payments in part shall be in a minimum amount of \$____. Bank may charge a \$____ administrative fee for any partial prepayment.

Notice of prepayment, which may be conditioned upon receipt of funds, shall be given by the District not less than 30 days prior to the prepayment date, to the Bank and the Bank at their respective addresses set forth in Section 8.1 or at such other address as is furnished to the District in writing by the Bank or the Bank. Any notice mailed as provided in this Section shall be conclusively presumed to have been duly given, whether or not the Bank or the Bank receives such notice.

SECTION 7.3. *Prepayment From Net Proceeds of Insurance or Eminent Domain.* The District may prepay the unpaid principal balance of the Installment Payments in whole or in part, on any date, if and to the extent the District determines to apply any proceeds of insurance award or condemnation award with respect to the Water System for such purpose in accordance with Sections 5.3 or 5.4, at a prepayment price equal to 100% of the principal amount to be prepaid plus accrued interest to the prepayment date, without premium.

SECTION 7.4. *No Surrender of Agreement Required.* No surrender of this Agreement shall ever be required as a condition for payment or otherwise. The District and the Bank agree that this Agreement shall terminate, excepting those provisions expressly surviving termination of this Agreement, at the earliest of as provided in Section 4.3 or as provided in Article VII.

ARTICLE VIII MISCELLANEOUS

SECTION 8.1. *Notices.* All notices, certificates or other communications hereunder shall be in writing and shall be deemed to have been properly given on the earlier of (i)

when delivered in person, (ii) the third Business Day following deposit in the United States Mail, with adequate postage, and sent by registered or certified mail, with return receipt requested to the appropriate party at the address set forth below, or (iii) the first Business Day following deposit with Federal Express, Express Mail or other overnight delivery service for next day delivery, addressed to the appropriate party at the address set out below.

If to the District: Casitas Municipal Water District
1055 Ventura Avenue
Oak View, CA 93022
Attention: General Manager

If to the Bank: Banner Bank

Attention: _____

The Bank, the District and the Bank, by notice given hereunder, may designate different addresses to which subsequent notices, certificates or other communications will be sent.

SECTION 8.2. *Binding Effect.* This Agreement inures to the benefit of and is binding upon the the District and the Bank, and their respective successors and assigns.

SECTION 8.3. *Severability.* If any provision of this Agreement is held invalid or unenforceable by any court of competent jurisdiction, such holding will not invalidate or render unenforceable any other provision hereof.

SECTION 8.4. *Amendments Changes and Modifications.* This Agreement may be amended or any of its terms modified with the written consent of the District and the Bank.

SECTION 8.5. *Net Contract.* This Agreement shall be deemed and construed to be a "net contract" and the District hereby agrees that the Installment Payments shall be an absolute net return to the Bank, free and clear of any expenses, charges or set-offs whatsoever.

SECTION 8.6. *Further Assurances and Corrective Instruments.* The Bank and the District agree that they will, from time to time, execute, acknowledge and deliver, or cause to be executed, acknowledged and delivered, such supplements hereto and such further instruments as may reasonably be required for correcting any inadequate or incorrect description of the Project hereby sold or intended so to be or for carrying out the expressed intention of this Agreement.

SECTION 8.7. *Execution in Counterparts; Electronic Signatures.* This Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument. Electronic or PDF signatures shall be fully binding, to the same extent as manual signatures.

SECTION 8.8. *Applicable Law.* This Agreement shall be governed by and construed in accordance with the laws of the State of California.

SECTION 8.9. *District and Bank Representatives.* Whenever under the provisions of this Agreement the approval of the Bank or the District is required, or the Bank or the District is required to take some action at the request of the other, such approval or such request shall be given for the Bank by an Authorized Representative of the Bank and for the District by an Authorized Representative of the District, and any party hereto shall be authorized to rely upon any such approval or request.

SECTION 8.10. *Defeasance.* If and when all of the Installment Payments shall be paid in any one or more of the following ways:

- (a) by paying or causing to be paid the principal of and interest and prepayment premium (if any) with respect to the Installment Payments as and when the same become due and payable in good and indefeasible funds via check or wire transfer as may from time to time be directed by the Bank or any subsequent Bank;
- (b) by depositing with an escrow agent or other fiduciary, in trust, at or before the final stated Installment Payment Date, money which is fully sufficient to pay and discharge the Installment Payments, including all principal and interest and prepayment premium, (if any) at or before their respective Installment Payment Dates; or
- (c) by depositing with an escrow agent or other fiduciary, in trust, Federal Securities in such amount as an independent certified public accountant shall determine in writing will, together with the interest to accrue thereon and without reinvestment, be fully sufficient to pay and discharge the Installment Payments, including all principal and interest and prepayment premium, (if any), at or before their respective Installment Payment Dates;

all obligations of the District with respect to this Agreement shall cease and terminate and this Agreement shall be discharged, except for any provision herein which expressly states that it survives termination. The District shall provide to the Bank and the Bank 30 days' prior written notice of its intent to discharge its obligations with respect to this Agreement by satisfying the conditions of this Section, and shall provide the Bank and the Bank with an opinion of Bond Counsel stating that (i) the deposit and application of funds under this Section does not, of itself, cause the interest components of the Installment Payments to be includable in gross income for federal tax purposes, and (ii) as a result of the deposit and application of funds under this Section, all obligations of the District with respect to this Agreement have ceased and terminated and this Agreement has been discharged.

SECTION 8.12. *Captions.* The captions or headings in this Agreement are for convenience only and in no way define, limit or describe the scope or intent of any provision, Article or Section of this Agreement.

SECTION 8.13. *Dispute Resolution.* Prior to the initiation of any action, proceeding or hearing (hereinafter, a "Claim") based upon or arising out of, directly or indirectly, this Agreement or any of the related documents, any dealings between the District or the Bank

relating to the subject matter of the transactions contemplated by this Agreement or any related transactions, and/or the relationship that is being established between the District and the Bank, the District and the Bank hereby agree to participate in nonbinding mediation of the Claim in Ventura County before a retired state or federal judge mutually agreed to by the parties. The mediation proceeding shall be conducted within thirty (30) days or any mutually agreed upon longer time after referral by District or Bank, and shall continue until such times as (1) the dispute is resolved; or (2) the date either party concludes, in good faith, that mediation is no longer a satisfactory remedy. All costs of mediation shall be shared equally by both parties involved. Each party shall bear its own attorney fees and costs related to the mediation. In the event the parties are unable to resolve the dispute through mediation, then in addition to any other remedies, either party may initiate a legal action.

DRAFT

IN WITNESS WHEREOF, each of the District and the Bank has caused this Agreement to be executed in its name by one of its duly authorized officers, as of the date first above written.

_____, *as Seller*

By: _____

Authorized Officer

CASITAS MUNICIPAL WATER DISTRICT,
as Purchaser

By: _____

Michael Flood
General Manager

**APPENDIX A
INSTALLMENT PAYMENT SCHEDULE**

Payment Date	Principal Component	Interest Component	Aggregate Installment Payments
-----------------	------------------------	-----------------------	-----------------------------------

APPENDIX B

DESCRIPTION OF PROJECT

The Project consists of the following improvements to the Water System, subject to the right of the District to modify this list as provided in the Agreement:

**CASITAS MUNICIPAL WATER DISTRICT
MEMORANDUM**

TO: BOARD OF DIRECTORS
FROM: MICHAEL FLOOD, GENERAL MANAGER
SUBJECT: EMERGENCY GENERATOR AT RINCON PUMP PLANT, SPECIFICATION NO. 21-447
DATE: 06/22/2022

RECOMMENDATION:

- Approve and file the Notice of Exemption for the Backup Diesel Generators Project
- Award a contract to Taft Electric Company in the amount of \$1,551,500.00 for Emergency Generator at Rincon Pump Plant, Specification No. 21-447.

BACKGROUND:

The Emergency Generator at Rincon Pump Plant, Specification No. 21-447, includes installation of an emergency generator to mitigate power loss during natural disasters or power outages. The District has received approval for a grant from the Federal Emergency Management Agency (FEMA) as a subapplicant to the California Office of Emergency Services (CalOES) through the Hazard Mitigation Grant Program (HMGP) to install emergency generators at three of the District's critical pump plants. Emergency generators at Avenue 1 Pump Plant and Avenue 2 Pump Plant are also included in the FEMA grant and will be constructed in future fiscal years.

To comply with the California Environmental Quality Act (CEQA) and FEMA requirements, an Environmental Impact Analysis (attached) was performed for the three sites. A memorandum prepared by Rincon Consultants is also attached which details the justification for a Categorical Exemption for the overall project. A Notice of Exemption is also attached.

The Emergency Generator at Rincon Pump Plant project, Specification No. 21-447, was released for bidding on May 9, 2022. One addendum was issued during the bid period. The District held a mandatory job walk on May 24, 2022, attended by eight potential bidders. Bids were opened on June 14, 2022 via Google Meet. Three bids were received as summarized in Table 1. A detailed bid analysis is provided as an attachment. The Engineer's estimate was \$1,715,800.

Table 1 – Bid Summary

Bidder	Total Bid
Taft Electric Company	\$1,551,500.00
Venco Electric, Inc.	\$1,806,800.00
NoHo Constructors	\$1,840,000.00

FUNDING SOURCE:

The budget for fiscal year 2021-22 includes \$1,500,000 for the project. FEMA reimbursement for 75 percent of project costs is requested on a quarterly basis. The project will be phased to install one generator per fiscal year.

Attachments:

- CEQA Environmental Analysis prepared by Rincon Consultants, dated June 14, 2022
- CEQA Categorical Exemption Memo prepared by Rincon Consultants, dated June 14, 2022
- CEQA Notice of Exemption
- Bid Summary



Rincon Consultants, Inc.

180 North Ashwood Avenue
Ventura, California 93003

805 644 4455

info@rinconconsultants.com
www.rinconconsultants.com

June 14, 2022
Project No: 21-11714

Julia Aranda, PE
Engineering Manager
Casitas Municipal Water District
1055 Ventura Avenue
Oak View, California 93022
Via email: jaranda@casitaswater.com

**Subject: Casitas Municipal Water District’s Backup Diesel Generators Project CEQA
Environmental Impact Analysis, Ventura County, California**

Dear Ms. Aranda:

This memorandum discusses the potential for the Casitas Municipal Water District’s (Casitas) proposed Backup Diesel Generators Project (herein referred to as “proposed project” or “project”) to result in significant impacts in each of the areas identified in the California Environmental Quality Act (CEQA) Guidelines Appendix G Environmental Checklist Form.

Project Background

Casitas is a municipal water district established in 1952, providing wholesale and retail potable water to western Ventura County, including approximately 6,000 agricultural, commercial, and residential customers. Casitas’ boundaries encompass the City of Ojai, Upper Ojai, the Ventura River Valley area, the City of Ventura (west of Mills Road), and the unincorporated beach communities of Solimar, La Conchita, and Rincon. Casitas operates the Robles Diversion Facility, Robles Canal, Lake Casitas, Casitas Dam (owned by the U.S. Bureau of Reclamation), Lake Casitas Recreation Area, Casitas Water Treatment Plant, as well as 14 steel tanks totaling 30 million gallons of storage, nine pump stations, and approximately 160 miles of pipelines.

In 2017, Casitas acquired the Ojai Water System, which includes 32 miles of pipelines, five tanks totaling 1.544 million gallons of storage, five booster pump stations, five active groundwater wells, and an iron and manganese treatment facility. Current water supply sources include:

- Surface water into Lake Casitas from the surrounding watershed, including Coyote Creek and San Antonio Creek
- Surface water from the Ventura River to Lake Casitas via the Robles Diversion and Robles Canal; the diversion is subject to the requirements of the Biological Opinion of the National Marine Fisheries Service (2003)
- Groundwater wells in the Ojai Valley Groundwater Basin

To improve the reliability of its water system during planned and unplanned outages, Casitas proposes to install stationary generators at the Rincon, Avenue 1, and Avenue 2 Pump Plants. The Rincon Pump Plant serves the beach communities within the Casitas service area. Avenue 1 serves those customers



not within the Rincon or gravity system service areas. Avenue 2 serves customers in the pumping zones above the Avenue 1 zone. Figure 1 shows the locations of the three project sites on a regional level and **Error! Reference source not found.** provides information about the project sites. The project sites are located in areas with different features. Rincon Pump Plant is located adjacent to Casitas' Water Treatment Plant at the base of Casitas Dam. The area is surrounded by undeveloped open space. Avenue 1 Pump Plant is located on the western side of State Route 33 (SR 33) at Old Creek Road, adjacent to a horse stable/boarding facility. Avenue 2 Pump Plant is located west of SR 33 and east of a residential neighborhood, to the immediate north and south are open common areas. **Error! Reference source not found.** shows the capacity of each pump plant and estimated population served.

Table 1 Information on Project Sites

Pump Plant	Site Address	Assessor's Parcel Number	Surrounding Land Use
Rincon	1892 Casitas Vista Road, Ventura	060022001	Open Space/Rural
Avenue 1	SR 33 at Old Creek Road, Oak View	061015011	Open Space/Rural
Avenue 2	10851 Ventura Avenue, Mira Monte	032024303	Residential/Commercial

Table 2 Pump Plant Capacity and Estimated Population Served

Pump Plant	Capacity (gallons per minute)	Estimated Population Served Based on 2015 Data
Rincon	5,150	830
Avenue 1	17,950	25,410
Avenue 2	18,800	16,620

Project Description

The proposed project includes the installation and operation of stationary electrical generators at three pumping plants in the Casitas water system: Rincon Pump Plant, Avenue 1 Pump Plant, and Avenue 2 Pump Plant. The generators would be located on concrete pads in generally flat areas requiring minimal grading. Each generator would have integrated diesel fuel storage. Each generator would comply with the United States Environmental Protection Agency's (USEPA) New Source Performance Standards for stationary emergency engines. Generators under consideration are Cummins QSK50 series. Underground conduit would be installed to connect to proposed switchgear sections in the existing pump buildings. At Avenue 1, a 6-foot-high retaining wall would be constructed with minimal drainage improvements. Project characteristics are listed in **Error! Reference source not found.**. Figure 2, Figure 3, and Figure 4 show the conceptual site plans at the Rincon, Avenue 1, and Avenue 2 Pump Plants, respectively.

Table 3 Project Characteristics

Pump Plant	Generator Size (kilowatts)	Diesel Fuel Storage (gallons)	Concrete Pad Dimensions (feet X feet)
Rincon	1,000	2,000	28 X 12
Avenue 1	1,500	2,500	36 X 12



Construction

Construction would be limited to Casitas' normal working hours of 8:00 a.m. to 4:30 p.m., Monday through Friday, except on Casitas holidays. Occasional work may be conducted outside of normal working hours to minimize disruptions to water service.

Construction is anticipated to occur in three phases: one generator installed each of the next three fiscal years. Rincon Pump Plant would be the first site, to be initiated in Summer 2022, followed by Avenue 1 Pump Plant and then Avenue 2 Pump Plant. Construction is anticipated to require approximately three months at each of the three project sites. Ground disturbance would occur in previously disturbed areas. No vegetation would be affected by the project. Existing access roads would be used for construction. The Contractor's laydown area for equipment and employee parking would be fully contained within the existing fenced sites. The construction sequence includes the following activities at each site:

- Minimal site grading to accommodate a concrete pad
- Construction of a retaining wall at Avenue 1 Pump Plant and minimal drainage improvements
- Installation of below-grade electrical conduit
- Installation of stationary electrical generators and associated switchgear
- Connection to existing electrical facilities
- Acceptance testing and startup
- Site cleanup

Operation

The backup generators would be operated periodically for testing and maintenance to ensure all components are functioning properly. Testing and maintenance is expected to occur monthly and would last approximately three hours per generator.

During planned and unplanned electrical outages, the backup generators would operate to provide potable water service to customers. Planned outages may occur when the electrical service provider, Southern California Edison (SCE) must perform maintenance on its facilities or when SCE implements its Power Safety Power Shutoff program during high winds. Casitas staff would monitor tank levels during planned outages and only operate the generators if necessary. Unplanned outages include natural disasters such as earthquakes, wildfires, or severe winds. Under these conditions, the proposed generator(s) would operate until electrical service is restored.

Operation of the generators during an emergency meets the definition of Section 21060.3 of the Public Resources Code in that it would mitigate the loss of essential public services (water). Operation of the generators is exempt from CEQA under Section 21080 of the Public Resources Code in that it is a specific action necessary to mitigate an emergency (loss of potable water supply).

Avoidance and Minimization Measures



The following avoidance and minimization measures would be implemented during project construction and operation.

Cultural Resources. The following standard impact avoidance measures would be incorporated into the project to ensure archaeological impacts would not be significant:

1. In the event archaeological resources are encountered during project construction, work would be stopped immediately or redirected away from the find until a qualified archaeologist is retained to evaluate its significance. If resources are found to be significant, they would be subject to a subsurface documentation and mitigation program.
2. If human remains are found, State of California Health and Safety Code Section 7050.5 states that no further disturbance should occur until the County Coroner has made a determination of origin and disposition pursuant to California Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner would notify the Native American Heritage Commission, which would determine and notify a most likely descendant. The most likely descendant should complete the inspection of the site(s) within 48 hours of being granted access and provide recommendations for the treatment of the remains.

Air Quality – Construction. Air pollutant emissions reduction measures recommended by the Ventura County Air Pollution Control District (VCAPCD) would be fully implemented including:

1. Ground disturbance would be limited to the minimum area necessary to complete project construction activities.
2. Grading activities would cease during periods of high winds (greater than 20 miles per hour), averaged over one hour).
3. Silt containing material excavated, stockpiled, or transported during construction would be wetted regularly.
4. On-site construction vehicle speed would be limited to 15 miles per hour in unpaved areas.
5. Trucks transporting backfill material to the project site(s) would be covered or maintain a minimum two-foot freeboard.
6. Roadways in the vicinity of the project site(s) access points would be swept as necessary to prevent the accumulation of silt.
7. Truck idling time would be minimized.
8. Engines would be maintained in good condition and proper tune.

Air Quality – Operation. The generator engines would comply with federal air pollutant standards for stationary diesel engines (40 Code of Federal Regulations 60 Subpart III) as documented by a certificate of conformity issued by the USEPA to the engine manufacturer as required by 40 Code of Federal Regulations 1039. The generator engines would also comply with California Air Toxics Control Board measures for stationary diesel engines (17 California Code of Regulations 93115). Testing and maintenance operation of the engines would be limited to the permit conditions in the Authority to Operate issued by the VCAPCD.



Environmental Factors

Aesthetics

The proposed project would install backup generators to ensure continued water supply during planned and unplanned power outages and blackouts. Construction activities and equipment staging would occur on previously developed land owned by Casitas. The addition of a single generator at a pump station would not alter the original visual conditions at the project sites in such a way that would be noticeable outside the construction period.

The County of Ventura (County) General Plan states viewsheds of lakes, State or County-designated Scenic Highways, and Scenic Resource Areas of significant importance identified in the County's Area Plans are worthy of special protection.¹ The project sites are located within the boundaries of the Ojai Valley Area Plan, and in a designated Scenic Resource Protection Overlay Zone for lakes or ridgelines.² The proposed project would be consistent with requirements outlined within the Scenic Resource policies within the Ojai Valley Area Plan (Section 1.6.2), and therefore would cause no significant impacts to visual resources.

According to the California Department of Transportation, the nearest eligible State Scenic Highway is SR 33, located approximately 125 feet east of the nearest project site (Avenue 2 Pump Plant), and approximately 1.3 miles east of the furthest project site (Rincon Pump Plant).³ The proposed generators would be placed within existing Casitas-owned properties, which have been previously developed. Additionally, the proposed generator at the Avenue 2 Pump Plant would be screened from the adjacent residences by the existing fence and landscaping surrounding the project site. The proposed project would not result in damage to trees, historic buildings, rock outcroppings, or similar scenic resources within the SR 33 viewshed, and therefore would not result in significant impacts to such resources.

No exterior light sources would be installed as part of the project, and project construction would only occur during daylight hours. Therefore, the project would not result in a substantial new source of light or glare that would adversely affect day or nighttime views in the area. No impacts related to light or glare would occur.

Agriculture and Forestry Resources

The Rincon Pump Plant and Avenue 1 Pump Plant are both zoned OS, "Open Space," and the Avenue 2 Pump Plant is zoned RPD, "Residential Planned Development." As shown on the California Department of Conservation Important Farmland Finder map, the project sites are not located in an area designated as Prime Farmland, Farmland of Statewide or Local Importance, or Unique Farmland (Farmland).⁴ Although the Avenue 1 Pump Plant site is adjacent to land under a Williamson Act contract, the project site itself is located on Casitas-owned property, which is not under a Williamson Act contract. Similarly,

¹ County of Ventura. 2019. General Plan Goals, Policies & Programs Section. Last amended March 19, 2019. <https://docs.vcrma.org/images/pdf/planning/plans/Goals-Policies-and-Programs.pdf> (accessed September 2021).

² County of Ventura. 2015. *Ojai Valley Area Plan*. Last amended March 24, 2015. https://docs.vcrma.org/images/pdf/planning/plans/Ojai_Valley_Area_Plan.pdf (accessed September 2021).

³ California Department of Transportation. 2018. Scenic Highways. <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways> (accessed September 2021).

⁴ California Department of Conservation. 2021. California Important Farmland Finder. <https://maps.conservation.ca.gov/dlrf/ciff/> (accessed September 2021).



the other two project sites are not located on land covered by a Williamson Act contract.⁵ Therefore, the project would not convert Farmland to non-agricultural use or conflict with agricultural zoning or a Williamson Act contract. In addition, the project would not conflict with forest land or timberland zoning, or result in the loss of forest land, as none occur in or adjacent to the project sites. The proposed project would not involve changes to the existing environment that could result in the conversion of farmland to non-agricultural use or forest land to non-forest use. Therefore, no impact to agriculture or forestry resources would occur.

Air Quality

The project sites lie within the South Central Coast Air Basin. The VCAPCD has not identified significance thresholds for temporary construction emissions, but has identified significance thresholds for operational emissions of 25 pounds per day for reactive organic compounds (ROC)⁶ and nitrogen oxides (NO_x).⁷

Emissions from the project would include temporary emissions from heavy-duty vehicles and worker vehicle trips during the month-long construction period at each project site. Upon completion of generator installation, ongoing operational maintenance activities of the pump plants would resume at the same rate as existing conditions. During operation of the generators, air emissions are regulated by VCAPCD and the limits imposed for Air Toxic Control Measure on the permit issued for each generator. Documentation from the manufacturer certifying the generator emission rates for non-methane organics, nitrogen oxides, particulate matter, and carbon monoxide would also be provided. The proposed generators would meet USEPA Tier 2 standards. Therefore, the project would not substantially increase operational emissions over existing conditions at the project sites. Consequently, construction and operational emissions would be nominal and would neither exceed criteria pollutant thresholds identified by the VCAPCD nor result in a cumulatively considerable net increase in criteria pollutant emissions. The project would not directly or indirectly generate population growth in Ventura County and therefore would not conflict with the VCAPCD's 2016 Air Quality Management Plan.⁸ Therefore, no significant air quality impacts would occur.

Biological Resources

Based on the project-specific *ESA Review Form for FEMA Funded Projects to be Covered Under the PBO from the Ventura FWO Jurisdiction in California* (see Attachment A), there is potential for four federally listed species to occur within the Rincon Pump Plant and Avenue 1 Pump Plant sites, including California red-legged frog (CLRF; *Rana draytonii*; federally listed as threatened), southwestern willow flycatcher (*Empidonax traillii extimus*; federally listed as endangered), least Bell's vireo (*Vireo bellii pusillus*; federally and state listed as endangered), and yellow-billed cuckoo (Western U.S. Distinct Population Segment [DPS]; *Coccyzus americanus*; federally listed as threatened).

Suitable habitat for CLRF occurs within or near the project sites. The closest recorded occurrences of CLRF to the project sites include 0.1 mile west of the Avenue 1 Pump Plant site and 1.1 miles southeast

⁵ County of Ventura. 2018. 2018 Land Conservation Act Contracts. <https://docs.vcrma.org/images/pdf/planning/programs/lca/2018-LCA-Map.pdf> (accessed September 2021).

⁶ Also referred to as reactive organic gases (ROG) or volatile organic compounds (VOC).

⁷ VCAPCD. 2003. Ventura County Air Quality Assessment Guidelines. October 2003. <http://www.vcapcd.org/pubs/Planning/VCAQGuidelines.pdf> (accessed September 2021).

⁸ VCAPCD. 2016. 2016 Ventura County Air Quality Management Plan. February 14, 2017.

<http://www.vcapcd.org/pubs/Planning/AQMP/2016/Final/Final-2016-Ventura-County-AQMP.pdf> (accessed September 2021).



of the Rincon Pump Plant site. Additionally, designated Critical Habitat for CRLF is located within 500 feet of the Avenue 1 site overlaps. Although no suitable habitat for CRLF exists within areas where ground-disturbing activities are proposed, CRLF may move through these areas during periods of rain to access nearby water features; however, movement of CRLF through the project sites is unlikely due to physical barriers separating the project sites from riparian corridors, which CRLF require for movement. The project could impact CRLF because of the potential for individuals to occur in the Avenue 1 Pump Plant and Rincon Pump Plant sites, if CRLF are present during construction. However, the August 5, 2019 *Programmatic Biological Opinion for the Federal Emergency Management Agency's Disaster, Mitigation, and Preparedness Programs within the Ventura Fish and Wildlife Office's Jurisdiction* includes measures to avoid and minimize potential significant impacts to CRLF, including relocation of individuals by a qualified biologist if CRLF are present on site. Relocation of the individuals to outside the construction areas would ensure avoidance of injury and death to CRLF. Therefore, no significant impacts to CRLF would occur.

Suitable habitat for southwestern willow flycatcher, least Bell's vireo, and yellow-billed cuckoo occur within or near the project sites; however, no designated critical habitat for the three species is present within or near the project sites. Potential project impacts to southwestern willow flycatcher, least Bell's vireo, and yellow-billed cuckoo would be limited to temporary and localized construction noise and dust that could disturb these bird species during nesting and foraging activities. Nonetheless, the project would not significantly impact the three species due to implementation of general avoidance and minimization measures and species-specific conservation measures pursuant to the August 5, 2019 *Programmatic Biological Opinion for the Federal Emergency Management Agency's Disaster, Mitigation, and Preparedness Programs within the Ventura Fish and Wildlife Office's Jurisdiction*, including pre-construction surveys.

The project sites currently contain pump plants and are devoid of vegetation communities that could support other special-status species. Additionally, no federal or state wetlands or waters are located on or adjacent to the project sites.

The proposed project would not hinder wildlife movement in the region or locally, as none of the project components are designed in such a way as to create a barrier to wildlife movement. Although Avenue 1 Pump Plant is located within the County of Ventura's Habitat Connectivity and Wildlife Corridor,⁹ the proposed project would not hinder wildlife movement in the project area because the approximately 1.06-acre Avenue 1 Pump Plant site is currently fenced off and developed with a pump station. Additionally, the area surrounding the Avenue 1 Pump Plant site would remain as open space and continue to be available to wildlife traversing the project area. Operational activities would remain similar to existing conditions. Finally, the project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plans. Therefore, no significant impacts to biological resources would occur.

Cultural Resources

As the project sites do not contain historical resources, the proposed project would not result in an adverse impact to such resource as defined in Section 15064.5 of the *CEQA Guidelines*. Ground

⁹ County of Ventura. 2021. Habitat Connectivity and Wildlife Corridors Map [interactive map]. <https://rma.maps.arcgis.com/apps/webappviewer/index.html?id=92c5352af22a44a3a99dd41aa1b8d567> (accessed September 2021).



disturbance would occur to install pads for the proposed generators. In addition, minimal trenching would occur for placement of the conduits. Implementation of the avoidance and minimization measures presented under “Project Description” would ensure potential impacts to unknown buried archaeological resources and human remains would not be significant.

Geology and Soils

Several major fault systems transect Ventura County, including the Malibu Coast Fault System, Simi-Santa Rosa Fault System, Oak Ridge Fault System, San Cayetano-Red Mountain-Santa Susana Fault System, Lion Mountain-Big Canyon-Sisar Fault System, and Mission Ridge-Arroyo Parida-Santa Ana Fault System.¹⁰ Although the project sites are located in a seismically active area, the proposed project would not expose people or structures to seismically induced risk beyond which the pump plants are currently exposed. The proposed concrete foundations and connections to the generator would be designed by a Structural Engineer to take into account the seismic forces anticipated for the area. The project-specific Geotechnical Report (see Attachment B) identified the potential for fault rupture at the sites as low probability. The report also described the potential for liquefaction as low because subsurface materials are hard or very dense. The report for Rincon Pump Plant identified subsurface materials as artificial fill, alluvium, and bedrock. Geotechnical borings at Avenue 1 Pump Plant identified sand, gravel, and silt at depths to 25 feet, with shale below that depth. At Avenue 2 Pump Plant, sand, and gravel were found to depths of 8 feet, with bedrock below this depth. Therefore, the project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground-shaking, seismic-related ground failure, or landslides. Additionally, grading for the proposed project would be minimal and limited to the small concrete pad areas for the proposed generators and trenches to install conduit to connect the generators to the existing pump station. No significant impact related to geology or soils would occur.

The proposed project would install backup generators on previously disturbed land owned by Casitas. Due to the minimal required grading, the project would not result in significant impacts to paleontological resources.

Greenhouse Gas Emissions

Greenhouse gas (GHG) emissions from the project would include temporary emissions from heavy-duty vehicles and worker vehicle trips during the month-long construction activities at each project site. Operation of the project would be limited to use of the backup diesel generators during planned and unplanned power outages to ensure continued water supply to Casitas customers, as well as maintenance activities related to the backup generators. Upon completion of these activities, ongoing operational activities would resume, similar to existing conditions. Use of generators would not substantially change the amount of GHG emissions emitted at the project sites, as current site conditions include continuous use of electricity from SCE. Therefore, the project would not substantially increase operational GHG emissions from existing conditions. Impacts related to GHG emissions would not be significant.

¹⁰ County of Ventura. 2020. Ventura County 2040 General Plan Background Report: Chapter 11 Hazards and Safety. https://docs.vcrma.org/images/pdf/planning/plans/VCGPU_11_Adopted_Hazards_Safety_September_2020.pdf (accessed September 2021).



Energy

Energy consumption associated with project construction would be limited to the use of minor construction equipment and worker vehicle trips during the approximately month-long construction period at each project site. Operation of the project would be limited use of the backup diesel generators during planned and unplanned power outages to ensure continued water supply to Casitas customers, as well as maintenance activities related to the backup generators. Use of generators would not substantially change the amount of energy consumed at the project sites, as current site conditions include continuous use of electricity from SCE. Therefore, the project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. The project also would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Accordingly, no impact would occur.

Hazards and Hazardous Materials

Hazardous materials are transported and stored throughout Ventura County. Activities associated with the installation of the backup generators would temporarily increase the transport and use of hazardous materials in the project area through the operation of heavy-duty vehicles and equipment needed to construct the proposed project. Such substances include diesel fuel, oil, solvents, and other similar materials which may be brought onto the project sites for temporary use and storage. In addition, each project site would be equipped with a diesel tank to store fuel for the backup generators. Hazardous materials used during the construction and operation of the project would be properly handled and disposed of in accordance with all applicable laws and regulations. Therefore, the project would not result in significant impacts related to the use, transport, and disposal of hazardous materials.

According to a search of the California Department of Toxic Substances Control's EnviroStor database and the State Water Resources Control Board's GeoTracker database conducted in September 2021, the project sites are not on or within 0.25 mile of any hazardous waste sites.^{11, 12} No impacts related to hazardous waste sites would occur.

The project would not be located within an airport land use plan area or within 0.25 mile of a school, and would not interfere with an adopted emergency response plan. No related impact would occur.

The Rincon Pump Plant and the Avenue 2 Pump Plant are not within a Fire Hazard Severity Zone. However, the Avenue 1 Pump Plant is within a Moderate Fire Hazard Severity Zone, but not within a High Fire Hazard Severity Zone or Very High Fire Hazard Severity Zone.¹³ The proposed project would install backup generators on previously disturbed land owned by Casitas. After the month-long construction period at each project site, operational activities on the pump plants would resume and would not increase the risk of fire beyond existing conditions. The project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, and, in fact, would ensure water supplies remain available in the event that a wildland fire occurs and causes electricity outages. No impact related to wildland fires would occur.

¹¹ California Department of Toxic Substances Control. 2021. EnviroStor Database. <https://www.envirostor.dtsc.ca.gov/public/> (accessed September 2021).

¹² State Water Resources Control Board. 2021. GeoTracker Database. <https://geotracker.waterboards.ca.gov/> (accessed September 2021).

¹³ California Department of Forestry and Fire Protection. 2021. Fire Hazard Severity Zones Viewer. <https://egis.fire.ca.gov/FHSZ/> (accessed September 2021).



Hydrology and Water Quality

The project sites are located adjacent to Lake Casitas (Rincon Pump Plant), and along SR 33 approximately 1.3 miles east and northeast of Lake Casitas (Avenue 1 and Avenue 2 Pump Plant, respectively). The Los Angeles Regional Water Quality Control Board protects ground and surface water quality in the Los Angeles Region, including the coastal watersheds of Los Angeles and Ventura counties, along with very small portions of Kern and Santa Barbara counties. The project sites are located within the Ventura River Valley Groundwater Basin.

Normal operation of the pump stations involves supplying water to Casitas customers as a water utility company. The proposed project would install backup generators at the three pump stations to ensure continuous operation during planned and unplanned power outages. The installation of these generators would result in the addition of impervious surfaces to the project sites. However, this would be minimal given the total surface area of the project sites. Therefore, the proposed project would not substantially alter the existing drainage pattern of the project sites. No significant impact would occur.

The proposed project would not substantially degrade water quality. Best management practices required by the County of Ventura would be used by construction equipment necessary for the installation of the backup generators, and would prevent and minimize potential leaks and spills from such equipment. Operational activities at the project sites would be similar to existing conditions. As construction activities would be minimal, and best management practices would be used, impacts to water quality would not be significant.

The proposed project would not involve groundwater pumping, nor would it result in a depletion of groundwater supplies. The project would help continue to provide water to Casitas customers during planned and unplanned electrical outages and would not result in the use of additional water supply. No impacts related to groundwater would occur.

The proposed project would not place housing or structures in a 100-year flood hazard area which would impede or redirect flows.¹⁴ Therefore, the project would not be subject to flooding hazards and no flooding impacts would occur.

Land Use and Planning

The project sites are located in areas with different features. Rincon Pump Plant is located adjacent to Casitas' Water Treatment Plant at the base of Casitas Dam, and is surrounded by undeveloped open space. Avenue 1 Pump Plant is located on the western side of SR 33 at Old Creek Road, adjacent to a horse stable/boarding facility. Avenue 2 Pump Plant is located west of SR 33 and east of a residential neighborhood, to the immediate north and south of open areas. The proposed project involves construction activities and equipment staging areas within the boundaries of the existing pump plant sites. Worker vehicle trips would occur on existing access roads.

The project sites are designated as Open Space (OS) and Residential/Commercial (RPD) by the County General Plan.¹⁵ The proposed project would involve construction activities that occur within previously developed Casitas-owned property, and operational activities would be similar to existing conditions.

¹⁴ County of Ventura. 2020. Ventura County 2040 General Plan Background Report: Chapter 11 Hazards and Safety. https://docs.vcrma.org/images/pdf/planning/plans/VCGPU_11_Adopted_Hazards_Safety_September_2020.pdf (accessed September 2021).

¹⁵ County of Ventura. 2020. Ventura County 2040 General Plan Background Report: Chapter 3 Land Use. https://docs.vcrma.org/images/pdf/planning/plans/VCGPU_03_Adopted_Land_Use_September_2020.pdf (accessed September 2021).



The proposed project would not conflict with applicable goals, objectives, and policies of the County General Plan. Therefore, no impact related to land use and planning would occur.

Mineral Resources

The project sites are located in Mineral Resource Zone 3 (MRZ-3), which indicates an area containing mineral deposits, the significance of which cannot be evaluated from available data.¹⁶ No mineral resource extraction is currently occurring on the project sites. The project sites are currently developed and are not zoned for mineral extraction. Therefore, no impact to mineral resources would occur.

Noise

The nearest sensitive receptors to the project sites are residences located approximately 80 feet to the west of the Avenue 2 Pump Plant, and approximately 487 feet north of the Avenue 1 Pump Plant. Heavy equipment (e.g., clamshell and/or bobcat, front end loader, or similar equipment) would operate and would cause generalized noise and disturbance within the project sites.

The County's Construction Noise Threshold Criteria and Control Plan establishes thresholds for temporary construction-generated noise at sensitive receptors. Construction noise thresholds are divided into daytime hours (7:00 a.m. to 7:00 p.m.), evening hours (7:00 p.m. to 10:00 p.m.), and nighttime hours (10:00 p.m. to 7:00 a.m.). Per the Construction Noise Threshold Criteria and Control Plan, hospitals and nursing homes are sensitive receptors at all hours, single- and multi-family residences as well as hotels/motels are sensitive receptors during evening and nighttime hours, and schools, churches, and libraries are sensitive receptors during daytime and evening hours when in use.

Noise threshold criteria for daytime construction apply only to receptors which are sensitive to noise impacts during the daytime (i.e., hospitals, nursing homes, schools, churches, and libraries). No daytime noise-sensitive receptors are located in the vicinity of the project sites. As such, construction of the project would not result in significant noise impacts.

Operation of the project would be limited use of the backup diesel generators during planned and unplanned power outages to ensure continued water supply to Casitas customers, as well as maintenance activities related to the backup generators. Use of generators would not substantially change the noise levels emitted from the project sites, as current site conditions include continuous use of the existing pump stations. Therefore, operation of the proposed project would not result in a significant noise impact.

Population and Housing

The proposed project would not involve construction of new housing, would not require additional Casitas staff for operation, and would not increase available water supplies. Therefore, the project would not induce population growth directly or indirectly, or conflict with growth projections in the area. The project would not displace people or existing housing, and would not necessitate construction of housing elsewhere. No impact to population and housing would occur.

¹⁶ County of Ventura. 2020. Ventura County 2040 General Plan Background Report: Chapter 8 Natural Resources. https://docs.vcrma.org/images/pdf/planning/plans/VCGPU_08_Adopted_Natural_Resources_September_2020.pdf (accessed September 2021).



Public Services

The project sites are served by the Ventura County Fire Department and Ventura County Police Department. Implementation of the proposed project would be required to comply with Fire Code standards, including provision of adequate emergency access to the sites. Operation of the project would not introduce a need for additional fire protection, nor would it require additional law enforcement services. As discussed under *Population and Housing*, the proposed project would not directly or indirectly induce population growth. Therefore, the project would not increase the Ventura County Fire Department or the Ventura County Police Department service populations. Furthermore, the proposed project would not increase demand for schools, parks, recreational facilities, or other public services, including libraries. The project would not necessitate the provision of new or physically altered fire or police protection facilities, schools, parks, recreational facilities, or other public facilities, including libraries. No impact to public services would occur.

Recreation

The project would not involve residential development or development that would increase the use of existing park or recreational facilities. The project would not include the development of any recreational facilities, and the project sites do not currently support recreational activities. No impact to recreation would occur.

Transportation

Traffic associated with the proposed project construction and operational activities would be temporary and would not result in a substantial increase in traffic on area roadways. No change in operational traffic would occur as a result of the proposed project. No reconfigurations of roadways would be required, and emergency access within the area would not be affected. Additionally, the project would not affect existing public transit, bicycle, or pedestrian facilities. Impacts associated with transportation would not be significant.

Tribal Cultural Resources

The project site lies within Chumash ethnographic territory, which extends along the coast of southern and central California, as well as interior regions and the northern Channel Islands. No tribal cultural resources are known to occur on the project sites. Ground disturbance would occur to install pads for the proposed generators. In addition, minimal trenching would occur for placement of the conduits. Implementation of the avoidance and minimization measures presented under "Project Description" would ensure not potential significant impacts to potential unknown buried tribal cultural resources would occur.

Utilities and Service Systems

The purpose of the proposed project is to install backup generators at three Casitas pump plants to ensure continued water supply to customers during planned and unplanned blackouts and power outages. The proposed project would not generate sanitary wastewater or otherwise contribute to an increase in wastewater treatment. No new or expanded water supply entitlements would be necessary. No impacts to water and wastewater treatment infrastructure would occur.



No solid waste would be generated during operation of the proposed project, and solid waste generated during construction of the project would be minimal. Impacts related to solid waste would not be significant.

The proposed project would minimally alter drainage patterns at the project sites through installation of the backup generators. However, given the size of the generators, this would not alter a significant amount of surface area within the project sites. Consequently, the project would not require or result in the need for new stormwater drainage facilities or the expansion of existing facilities. Impact would not be significant.

Wildfires

The Rincon Pump Plant and the Avenue 2 Pump Plant are not within a Fire Hazard Severity Zone. However, the Avenue 1 Pump Plant is within a Moderate Fire Hazard Severity Zone, but not within a High Fire Hazard Severity Zone or Very High Fire Hazard Severity Zone.¹⁷ The proposed project would install backup generators on previously disturbed land owned by Casitas. After the month-long construction period at each project site, operational activities on the pump plants would resume and would not increase the risk of fire beyond existing conditions. The project would not require roadway/lane closures or detours during construction activities and would not alter emergency access to the project sites. Therefore, the project would not interfere with an adopted emergency response plan or emergency evacuation plan. The project would not require the installation or maintenance of associated infrastructure such as roads, fuel breaks, emergency water sources, or aboveground power lines that would exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. The project would be located on relatively flat sites and would not exacerbate the risk of downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes. Therefore, no impacts related to wildfire would occur.

Conclusion

In summary, given compliance with existing regulations and implementation of the recommended avoidance and minimization measures for cultural resources and air quality, the proposed project would not have the potential to result in significant environmental impacts due to unusual circumstances to any of the areas identified in the *CEQA Guidelines* Appendix G Environmental Checklist Form.

Sincerely,

Rincon Consultants, Inc.

Melissa J. Whittemore
Supervising Environmental Planner

Jennifer Haddow, PhD
Vice President/Principal Environmental Scientist

¹⁷ California Department of Forestry and Fire Protection. 2021. Fire Hazard Severity Zones Viewer. <https://egis.fire.ca.gov/FHSZ/> (accessed September 2021).



Attachments

- Figure 1 Vicinity Map
- Figure 2 Conceptual Site Plan – Rincon Pump Plant
- Figure 3 Conceptual Site Plan – Avenue 1 Pump Plant
- Figure 4 Conceptual Site Plan – Avenue 2 Pump Plant
- Attachment A ESA Review Form for FEMA Funded Projects to be Covered Under the PBO from the Ventura FWO Jurisdiction in California
- Attachment B Geotechnical Report for Casitas Municipal Water District – Emergency Generators at Rincon, Avenue 1 and Avenue 2 Pump Plants, Oak View and Ojai, California

Figure 1 Vicinity Map

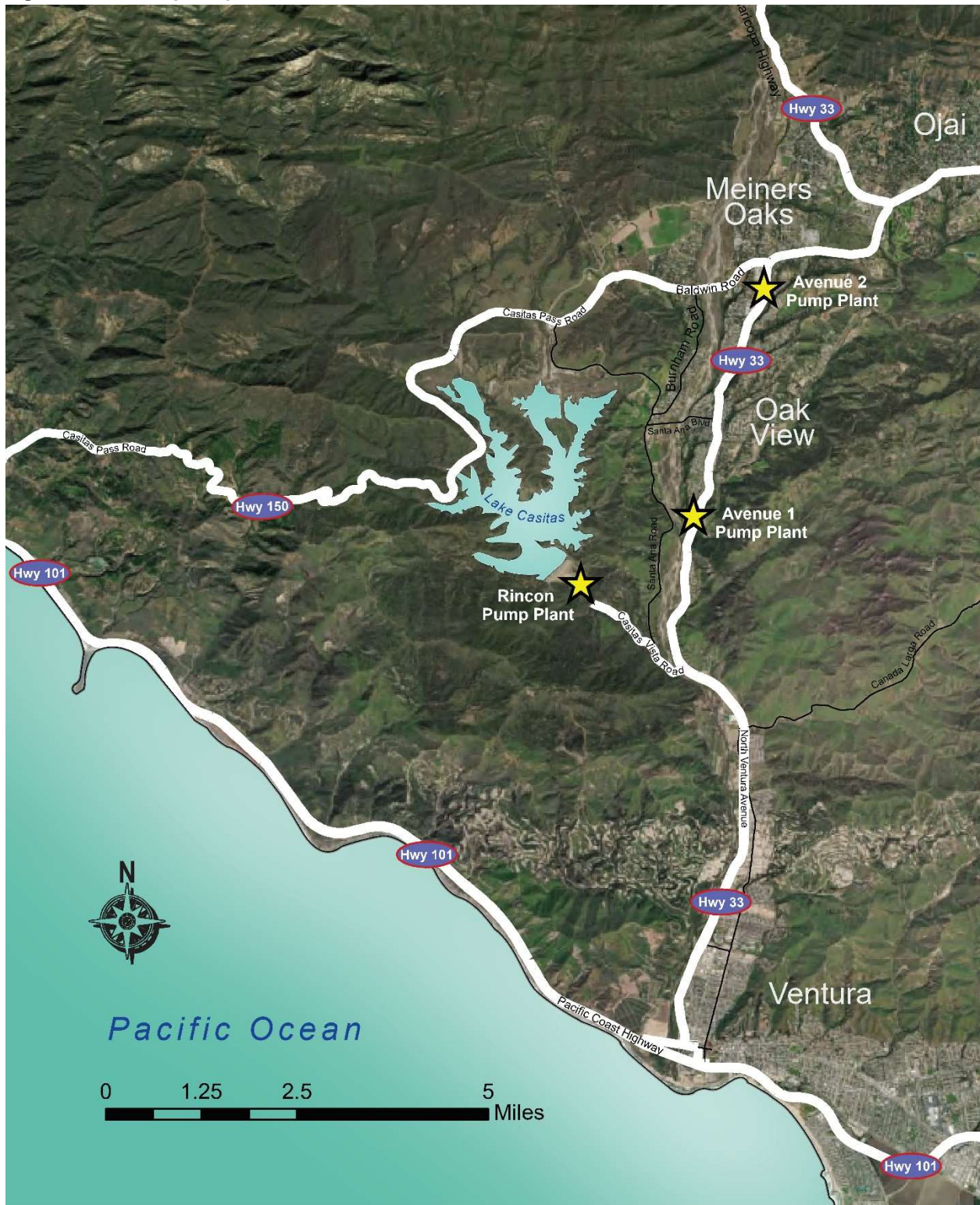


Figure 2 Conceptual Site Plan – Rincon Pump Plant

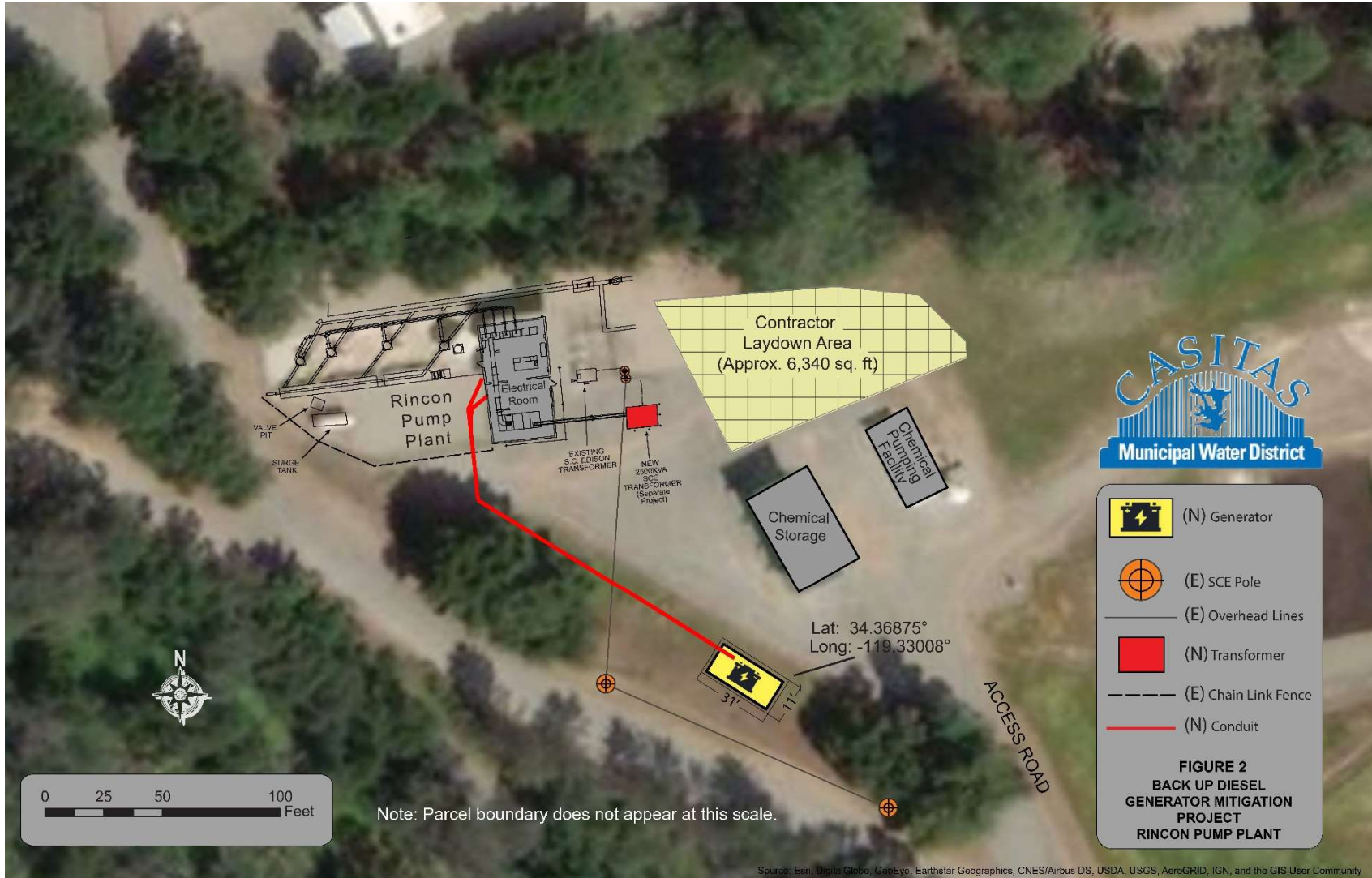


Figure 3 Conceptual Site Plan – Avenue 1 Pump Plant

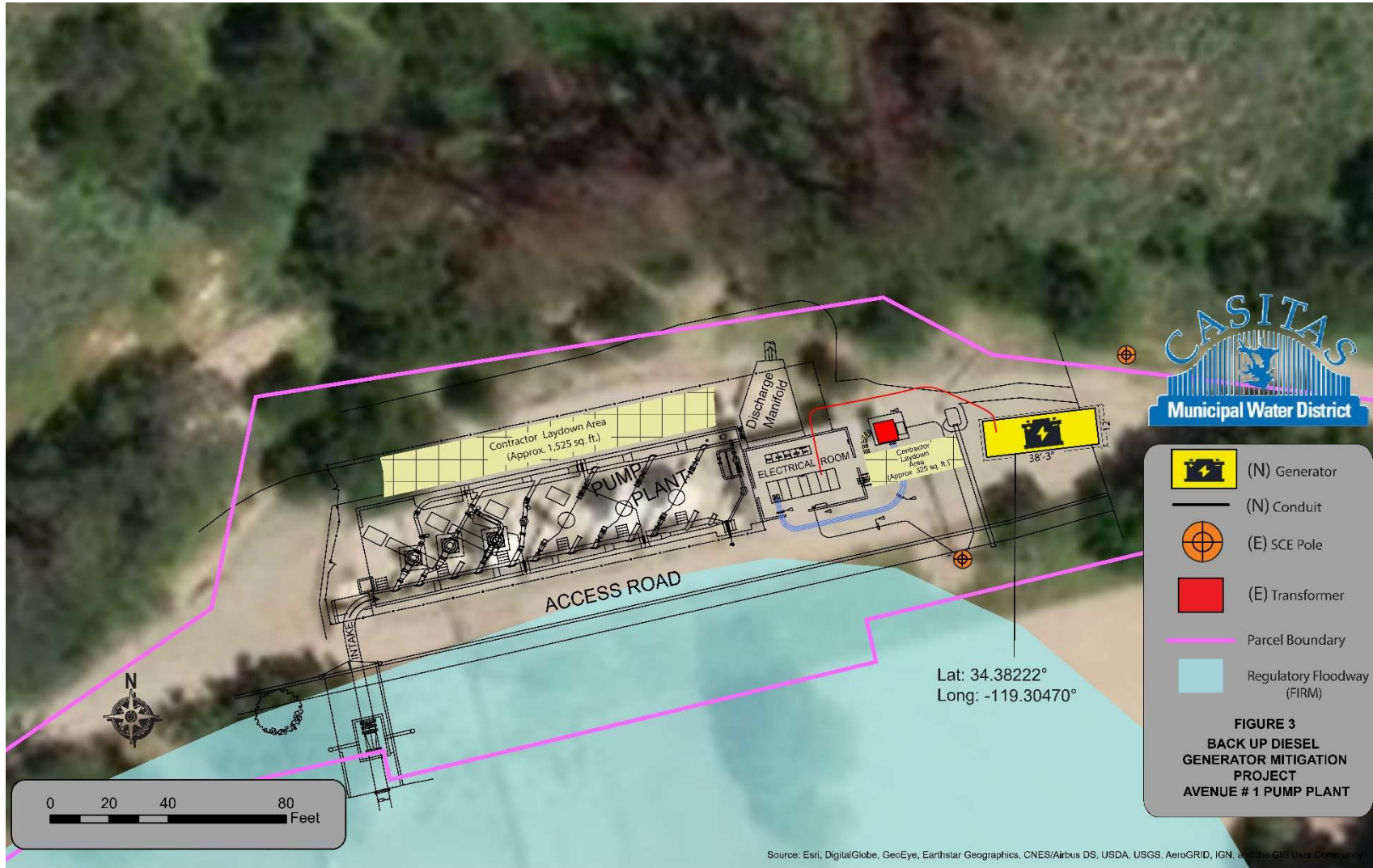
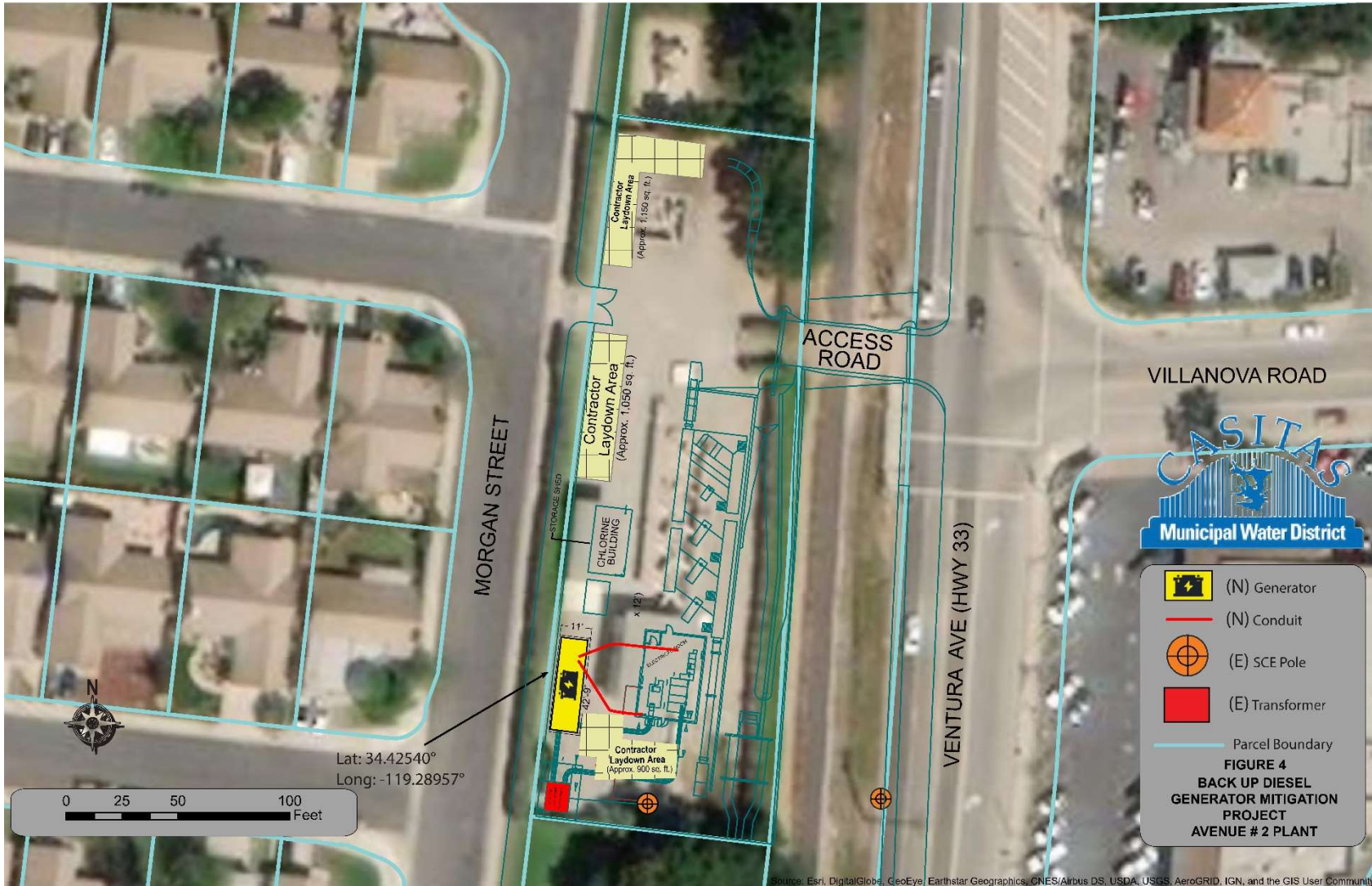


Figure 4 Conceptual Site Plan – Avenue 2 Pump Plant



Attachment A

ESA Review Form for FEMA Funded Projects to be Covered Under the PBO from the Ventura FWO Jurisdiction in California



United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE

Ecological Services
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003



IN REPLY REFER TO:
08EVEN00-2018-F-0700

August 5, 2019

Alessandro Amaglio
Federal Emergency Management Agency
1111 Broadway, Suite 1200
Oakland, California 94607

Subject: Programmatic Biological Opinion for the Federal Emergency Management Agency's Disaster, Mitigation, and Preparedness Programs within the Ventura Fish and Wildlife Office's Jurisdiction

Dear Mr. Amaglio:

This document transmits the U.S. Fish and Wildlife Service's (Service) programmatic biological opinion (PBO) based on our review of the Federal Emergency Management Agency's (FEMA) Disaster, Mitigation, and Preparedness Programs in California (Program) within the Ventura Fish and Wildlife Office (VFWO) and its effects on federally listed species and critical habitats, in accordance with section 7 of the Endangered Species Act (ESA) of 1973, as amended (Act) (16 U.S.C. 1531 et seq.). We received your request to initiate consultation on June 21, 2018, and a letter clarifying effects determinations on September 14, 2018. At issue are the effects of FEMA's grant programs that assist with the preparedness, response, recovery, and mitigation for natural and human-caused disasters (Program) on federally-listed species and their designated critical habitats within the VFWO's jurisdiction (Table 1).

The intent of this programmatic consultation is to provide flexibility for the dynamic nature of FEMA's Program, while at the same time ensuring the necessary regulatory compliance with section 7 and ensuring projects completed under this Program are designed and implemented with trust resource conservation in mind. FEMA and the Service collaborated extensively on the Programmatic Biological Assessment (PBA), which led to FEMA's incorporation of Service feedback into development of general avoidance and minimization measures and species-specific conservation measures. This document includes: (1) a program-wide concurrence for species and critical habitats that FEMA determined are not likely to be adversely affected by any aspect of the Program, which concludes section 7 consultation for this subset of species and critical habitat; and (2) a PBO for species or critical habitats that may be affected by one or more of the specific projects within FEMA's Program.

Table 1. Federally listed species and critical habitat covered under the programmatic concurrence or the PBO.

Listed Species and Critical Habitat in VFWO Jurisdiction	Status	FEMA Determination	Service Response
¹ California least tern (<i>Sterna antillarum browni</i>)	E	May affect, not likely to adversely affect	Programmatic Concurrence
² Contra Costa goldfields (<i>Lasthenia conjugens</i>)	E, CH		
¹ Light-footed Ridgway's rail (<i>Rallus longirostris levipes</i>)	E		
³ Marbled murrelet (<i>Brachyramphus marmoratus</i>)	T		
¹ Riverside fairy shrimp (<i>Streptocephalus woottoni</i>)	E, CH		
³ Western snowy plover (<i>Charadrius nivosus</i> ssp. <i>Nivosus</i>)	T, CH		
⁴ Arroyo toad (<i>Anaxyrus californicus</i>)	E, CH	May affect, likely to adversely affect	Programmatic Biological Opinion
² California red-legged frog (<i>Rana draytonii</i>)	T, CH		
² California tiger salamander (<i>Ambystoma californiense</i>) - Central California Distinct Population Segment (DPS)	T, CH		
² California tiger salamander (<i>Ambystoma californiense</i>) - Santa Barbara DPS	E, CH		
² Conservancy fairy shrimp (<i>Branchinecta conservatio</i>)	E, CH		
² Vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	T, CH		
⁴ Tidewater goby (<i>Eucyclogobius newberryi</i>)	E, CH		
¹ Coastal California gnatcatcher (<i>Polioptila californica californica</i>)	T, CH		
¹ Least Bell's vireo (<i>Vireo bellii pusillus</i>)	E, CH		
⁴ Smith's blue butterfly (<i>Euphilotes enoptes smithi</i>)	E		
¹ Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	E, CH		
⁵ Yellow-billed cuckoo (<i>Coccyzus americanus</i>), Western U.S. DPS	T		
⁴ Smith's blue butterfly (<i>Euphilotes enoptes smithi</i>)	E		

E = Endangered; T = Threatened; CH = Designated Critical Habitat,

¹Carlsbad Fish and Wildlife Office is the species lead for this species

²Sacramento Fish and Wildlife Office is the species lead for this species

³Arcata Fish and Wildlife Office is the species lead for this species

⁴VFWO is the species lead for this species

⁵Arizona Ecological Services Field Office is the species lead for this species

Your agency determined that the proposed action was not likely to adversely affect the federally Endangered California least tern, Contra Costa goldfields, light-footed Ridgway's rail, and the federally threatened marbled murrelet and western snowy plover. Based on our review of the

information provided in the PBA, we concur with FEMA's *may affect, but not likely to adversely affect* determination for those species and their respective designated critical habitat (if applicable) within the jurisdiction of the VFWO (see Appendix A for justification and Appendix B for conservation measures). Also, while you requested formal consultation for the federally Endangered Riverside fairy shrimp we have determined that the proposed action is not likely to adversely affect these species, and the basis for this determination is also documented in Appendix A. Thus, these species are not addressed further in this document.

This document is based on information provided in the following: (1) *Programmatic Biological Assessment for Disaster, Mitigation and Preparedness Programs in California*, (FEMA 2018); (2) Correspondence regarding effects determinations for the species within this consultation; (3) conversations and electronic mail correspondence between the VFWO and FEMA staff or their contracted agents; (4) conversations between FEMA and other Service biologists from the Arcata, Carlsbad, Sacramento, Ventura, and Yreka Fish and Wildlife Offices; and (5) information contained in Service files. These documents, and other information relating to the consultation, are located at the VFWO.

Consultation History

March, 2017 - May, 2018	Extensive coordination calls, correspondence exchange and meetings between FEMA and the Service.
June 21, 2018	FEMA provided a Programmatic Biological Assessment and initiated formal consultation.
June 2018 - July 2019	Continued coordination and correspondence exchange regarding effects determinations and development of the PBO.

More details regarding the history of this consultation can be found in section 1.4 of the PBA (FEMA 2018).

PROGRAMMATIC BIOLOGICAL OPINION

DESCRIPTION OF THE PROPOSED ACTION

Scope of Consultation

This PBO addresses FEMA's disaster, mitigation and preparedness Program (proposed action) in California. By ensuring trusted resource conservation is an integral component of their Program and fulfilling the obligations within this PBO, FEMA is complying with its responsibilities under both sections 7(a)(1) and 7(a)(2) of the Act for projects that result from emergencies and are likely to adversely affect 12 federally-listed species and their respective designated critical habitat within the jurisdiction of the VFWO. However, this consultation does not cover FEMA's implementation of the National Flood Insurance Program.

This PBO will remain in effect for five years from the date it is signed. When the 5-year period has expired or if incidental take coverage under this PBO is exceeded, FEMA may reinitiate consultation under section 7 of the Act to extend or amend the coverage provided.

This PBO is intended to be adaptive in nature. The general avoidance and minimization measures and species-specific conservation measures included herein are intended to be comprehensive and designed to minimize adverse effects to the species and designated critical habitat addressed herein. We encourage feedback on any conservation measures that are not feasible or effective. If either FEMA or the VFWO wish to make changes to the conservation measures, we will work together to update them as appropriate. The VFWO will coordinate any changes to conservation measures with other Service offices as needed.

This PBO only applies to FEMA Subapplicants' proposed projects for which FEMA is the Lead Federal Agency for compliance under section 7 of the Act. When FEMA and the U.S. Army Corps of Engineers (USACE) are both involved with a Subapplicant's proposed project, the process described in the 2015 Memorandum of Understanding (MOU) (executed in 2015, updated in 2018, and subsequent annual updates) between FEMA, USACE, Service, and the National Marine Fisheries Service will be followed to determine whether FEMA or the USACE is the Lead Federal Agency for compliance with the Act.

Emergency Consultations

Actions completed by FEMA's Subapplicants as emergencies, as defined by the Service in 50 CFR 402.05 and by FEMA in 44 CFR 206.201, prior to environmental review may be covered by this PBO at FEMA's discretion, provided that the actions were consistent with the guidelines, criteria, assumptions, and intent of FEMA's June 20, 2018 PBA (FEMA 2018), as amended, and did not: (1) result in jeopardy to a species; (2) result in the destruction or adverse modification of designated critical habitat; (3) exceed the maximum allowable take authorized in the Incidental Take Statement in this PBO; or (4) was otherwise not eligible for inclusion in this PBO.

In order for FEMA to include a project categorized as an emergency under this PBO, FEMA will notify the Service of the emergency as soon as possible, either by phone or electronic mail and request the emergency action be considered for inclusion in this PBO. Within 24 hours of the notification or as soon as possible, the VFWO will provide FEMA any additional site specific conservation measures that may be needed. FEMA will provide Subapplicants all applicable general avoidance and minimization measures and species specific conservation measures listed in this PBO and any additional measures the VFWO warrants appropriate for the specific emergency. FEMA will advise Subapplicants to adhere to the measures when possible. However, if an imminent threat exists to life and/or property, under no circumstances should any measures be implemented if doing so will interfere with alleviating the emergency or placing any individual at risk of injury.

After the emergency, FEMA and the Service will follow the consultation procedures outlined below. Emergency actions conducted prior to environmental review that are subsequently

covered by this programmatic consultation will be counted towards the cumulative amount of take authorized in the Incidental Take Statement of this PBO.

Procedure to Cover Individual Projects Under this PBO

The extensive coordination between FEMA and the Service as well as FEMA's commitment to prioritize species conservation within their jurisdictional capacity while operating their disaster, mitigation, and preparedness programs in California, has resulted in a process designed to expedite project specific section 7 consultation, while at the same time, considering the landscape level needs of the species within the VFWO's jurisdiction.

To determine eligibility for coverage under this PBO, FEMA will determine if a Subapplicant's proposed project meets the suitability criteria established under the PBA (FEMA 2018). If the project meets suitability criteria, FEMA will submit a completed ESA Review Form to the Service (see Appendix C). The ESA Review Form will include a project-specific effects analysis, the applicable general and species specific conservation measures, a summary of the potential direct and indirect effects associated with the proposed project, and the anticipated take.

Upon submittal of the ESA Review Form, FEMA will request confirmation that the project meets the criteria for coverage under the PBO. The Service will notify FEMA by electronic mail whether we agree with the proposed project's coverage under the PBO or not. VFWO's intention is to process FEMA projects that meet eligibility criteria under this PBO as expeditiously as possible, striving to respond within 30 days of receipt. If this is not possible, we will notify FEMA and request more time.

FEMA will submit annual reports that summarize the projects covered under the PBO each year. This report will include a summary of incidental take that occurred and identify any issues with PBO implementation.

7(a)(1)

To meet FEMA's Section 7(a)(1) responsibility, FEMA has committed to the actions below. Additional details are discussed in Section 8 of the PBA (FEMA 2018).

- Developing procedures for implementing its disaster, mitigation, and preparedness programs within the context of listed resource conservation.
- Educating Subapplicants about species conservation and encouraging them to proactively implement conservation measures.
- Educating Subapplicants on conservation efforts at the project design and project planning levels.
- Incorporate an ecosystem services approach into FEMA's decision-making process.

Description of Proposed Programmatic Action

The proposed action is FEMA's funding of grant programs related to its disaster, mitigation, and preparedness program in California. While FEMA doesn't know exactly when or where the next emergency will occur, they have determined that most on-the-ground actions that occur under this Program are categorized as follows [additional details of the actions can be found in Section 3 of the PBA (FEMA 2018)]:

Non-Emergency Debris Removal

For purposes of this document, debris removal performed in non-emergency situations includes:

- Removing rock, silt, sediment, or woody debris that floodwaters have deposited in harbors and ports, stream channels, bridge and culvert openings, canals, sedimentation basins, sewage treatment ponds, ditches, and other facilities in such a manner as to disrupt normal flows, navigation, recreation, or municipal services;
- Removing woody debris and other vegetation following events that damage or destroy trees;
- Removing rubble after earthquakes;
- Removing rock and earth from landslides caused by events such as earthquakes or heavy rains; and
- Hauling and disposing of debris.

All removed debris will be disposed of at approved and licensed disposal sites, in compliance with existing laws and regulations. Any hazardous materials or other contaminants will be removed and disposed of in an appropriate manner. If possible, woody debris and construction materials will be recycled.

Constructing, Modifying or Relocating Facilities

FEMA is authorized to provide funds for constructing, modifying, or relocating facilities. Relevant actions include:

Airport Runway Construction

- Repairing or realigning airport runways and associated facilities;
- Constructing of new airport runways and associated facilities; and
- Managing and/or removing wildlife.

Road and Trail Construction

- Constructing or realigning new roads, trails, or boardwalks;
- Repairing or replacing damaged roads and trails, includes retaining walls, subsurface, and pavement;
- Regrading or improving gravel or dirt roads and trails; and

- Repairing, replacing, or realigning of an existing, or construction of new low-water road crossing.

Utility Construction

- Constructing, repairing, or relocating utility pipelines (e.g., potable water, sewer pipelines, natural gas, petroleum), leach fields, wastewater hookups, electrical lines (including street lighting), and telephone lines that have been damaged in floods or fires;
- Constructing, repairing, or relocating substations or other facilities needed to support utility infrastructure;
- Constructing or installing temporary utilities including associated infrastructure and facilities; and
- Installing electrical boxes for electrical transformers and switches and secondary utility boxes for telephone and cable.

Rail Line Construction

- Acquiring or decommissioning of an existing rail line;
- Realigning or modifying an existing rail line;
- Repairing or replacing ballast and track;
- Stabilizing embankments along a rail line corridor;
- Repairing or replacing fill using rock, grout, timber walls, or steel sheet piling; and
- Repairing or replacing earthen material lost during disasters.

Facility Disaster Mitigation Activities

FEMA may provide funds to implement changes required by current building codes and standards, or otherwise modify existing structures. Often, these changes make the structure more resistant to damage in future events. Typical activities include:

- Modifying structures to reduce the risk of damage during floods by elevating structures above the expected flood level or by flood-proofing;
- Making structures more fire-resistant by replacing roofs, doors, and other building components with fire-resistant materials; and
- Installing bracing, shear panels, shear walls, anchors, or other features so that structures are better able to withstand disaster events such as those associated with seismic, high wind events, or snow loads.

Building and Facility Construction

- Installing prefabricated manufactured structures (or temporary structures) including dwelling pads. Temporary facilities would be removed when no longer needed and land would be restored to original use;
- Constructing safe rooms;
- Modifying existing facilities to serve as temporary housing;
- Acquiring and demolishing existing facilities (e.g., structures and buildings) located in high-hazard areas; and

- Constructing, repairing, or relocating new facilities (e.g., wastewater treatment plants, public buildings, and certain utilities).

Actions Involving Watercourses and Coastal Features

Many FEMA funded activities pertain to inland water sources, such as streams, rivers, and lakes, as well as coastal features such as harbors and beaches. Inland water sources may be perennial or dry during the summer months. During construction, general avoidance and minimization measures and species-specific conservation measures typically will be used and incorporated as part of the action. Relevant categories of activities include the following:

Channelization

- Creating, repairing, modifying, or dredging of a waterway for non-flood control purposes.

Stormwater Management

- Constructing, repairing, replacing, or modifying a stormwater management facility and associated infrastructure, including storm drains, pipelines, and outfalls.

Flood Control Activities

- Channelizing and rechannelizing for flood control purposes;
- Dredging of sediment and debris;
- Removing vegetation, rock, silt, or woody debris. Vegetation may be removed by hand, mechanical means, or herbicides. Sediment and debris would be removed by dredging, heavy equipment, or by hand;
- Constructing, repairing, and realigning drainage swales, earthen channels, concrete channels, or subsurface concrete pipelines;
- Constructing, repairing, or replacing earthen banks or channel; and
- Constructing, repairing, or modifying levees and floodwalls.

Culvert Construction

- Increasing the size of an existing culvert or adding culvert barrels;
- Constructing, repairing, replacing, or realigning a culvert or associated structure;
- Constructing box culverts;
- Modifying the type of culvert; and
- Adding features, such as a headwall, discharge apron, or riprap, to reduce the risk of erosion or damage to a culvert.

Bridge Construction

Bridges may be modified to increase capacity to reduce the risk of flooding or to reduce the risk of damage to the crossing. Typical activities include:

- Increasing capacity to reduce the risk of flooding or to reduce the risk of damage to the crossing;

- Widening existing openings or constructing new openings;
- Reconfiguring bracing to reduce the risk that debris would be trapped;
- Repairing an existing bridge structure, including from large bridges to pedestrian bridges;
- Installing protective features, such as concrete abutments or riprap, to reduce the risk of damage due to erosion and scour; and
- Replacing a multi-span structure with a clear-span structure.

Bank Protection, Stabilization, and Erosion Control Activities

- Repairing or replacing existing or placing new rock riprap within stream channels, banks, or hillsides;
- Repairing or replacing existing or hardening new areas with concrete or soil cement;
- Repairing or replacing existing or installing new retaining walls, gabions, or geotextile fabrics;
- Constructing, repairing, or replacing bank protection, stabilization, and erosion control by using bioengineering techniques (e.g., planting vegetation, placing root wads, or placing willow bundles); and
- Temporarily diverting water during construction activities may be necessary.

Dam Construction

- Decommissioning an existing earthen or concrete dam;
- Constructing or repairing earthen or concrete dams;
- Constructing or repairing spillways;
- Constructing or repairing water diversion structures; and
- Enlarging water storage reservoirs.

Detention/Retention, or Basin Water Storage Facility Construction

- Repairing or replacing existing detention/retention basins, or sediment ponds; and
- Constructing new detention/retention basins or sediment ponds.

Linear Water Conveyance Facility Construction

- Constructing, repairing, replacing, or modifying irrigation ditches, canals, or flumes, and associated infrastructure and facilities.

Shoreline Facilities – Recreation or Maritime Use

- Constructing, repairing, replacing, or modifying boardwalks, piers, boat ramps, docks, and slips.

Shoreline Facilities – Protection

- Constructing, repairing, replacing, or modifying seawalls, groins, jetties, revetments, levees, dikes, and floodwalls;
- Repairing, modifying, or installing interior drainage systems to reduce the risk of damage behind levees and floodwalls during heavy rains or flooding events on streams;
- Repairing, modifying, or installing bank protection of a shoreline facility;

- Repairing damaged shoreline facilities;
- Constructing new facilities to protect flood-prone areas from damage during future floods;
- Raising the height of existing facilities to prevent overtopping in future floods; and
- Construction activities would occur in water and involve driving piles, placing rock or soil, or dredging sediment.

Wildfire Risk Reduction

Vegetation management is intended to reduce the risk of loss and damage due to wildfire and increase the ability of channels to convey flows, thus reducing the risk of flood damage. Some activities may include a combination of these methods. During implementation, avoidance and minimization measures will be used and incorporated as part of the action.

Defensible Space Creation and Hazardous Fuels Reduction

- Mechanical or hand-clearing of vegetation to reduce the amount of vegetative fuels in an area;
- Removing vegetation to create defensible space around buildings and structures;
- Removing of targeted exotic invasive species within specific areas with U.S. Environmental Protection Agency-approved herbicides;
- Preventing re-growth and re-sprouting of undesirable vegetation once an area has been cleared of excessive vegetation by mechanical means, herbicide treatment, and/or hand removal; and
- Some areas may be revegetated with fire resistant native vegetation.

Biological Control

In biological control, cattle, horses, goats, sheep, or other livestock are allowed to graze on grasses and other vegetation as a means of control. Any area proposed for grazing will be fenced. The type of animals, timing, duration, and stocking rate will be selected based on the targets of the vegetation management plan (i.e., the quantity and quality of residue to remain).

Proposed General Avoidance and Minimization Measures and Species-Specific Conservation Measures

The following measures will be implemented, as appropriate, to reduce potential adverse effects from a subapplicant's proposed project. The subapplicant will be responsible for implementation of any avoidance and minimization measures FEMA identifies as necessary for the proposed project. The measures listed below are intended to address a wide range of projects that could be covered by this consultation. Not all measures may be necessary for each project covered under this consultation; rather FEMA should identify the measures that are applicable to minimize the specific impacts anticipated from a particular project and require those measures to be implemented by the subapplicant.

General Avoidance and Minimization Measures

GEN AMM-1 Erosion and Sedimentation Prevention Measures: The Subapplicant will prepare an Erosion Control Plan, as needed. The Erosion Control Plan will detail the erosion and sedimentation prevention measures required. As part of this plan, the Subapplicant will ensure that sediment-control devices are installed and maintained correctly. For example, sediment will be removed from engineering controls once the sediment has reached one-third of the exposed height of the control. The devices will be inspected frequently (i.e., daily or weekly, as necessary) to ensure that they are functioning properly; controls will be immediately repaired or replaced or additional controls will be installed as necessary. Sediment that is captured in these controls may be disposed of onsite in an appropriate, safe, approved area or offsite at an approved disposal site.

Areas of soil disturbance, including temporarily disturbed areas, will be seeded with a regionally appropriate erosion control seed mixture. On soil slopes with an angle greater than 30 percent, erosion control blankets will be installed or a suitable and approved binding agent will be applied. Runoff will be diverted away from steep or denuded slopes.

Where habitat for covered species is identified within, or adjacent to, the project footprint, all disturbed soils at the site will undergo erosion control treatment before the rainy season starts and after construction is terminated. Treatment may include temporary seeding and sterile straw mulch.

GEN AMM-2 Bank Stabilization: If bank stabilization activities are necessary, then such stabilization will be constructed to minimize erosion potential and will contain design elements suitable for supporting riparian vegetation, if feasible.

GEN AMM-3 Dust Control Measures: To reduce dust, all traffic associated with the Subapplicant's construction activities will be restricted to a speed limit of 15 miles per hour when traveling off of highways or county roads.

Stockpiles of material that are susceptible to wind-blown dispersal will be covered with plastic sheeting or other suitable material to prevent movement of the material.

During construction, water or other binding materials will be applied to disturbed ground that may become windborne. If binding agents are used, all manufacturers' recommendations for use will be followed.

GEN AMM-4 Spill Control Planning: The Subapplicant will prepare a Spill Prevention and Pollution Control Plan to address the storage of hazardous materials and emergency cleanup of any hazardous material and will be available onsite, if applicable. The plan will incorporate hazardous waste, storm water, and other emergency planning requirements.

GEN AMM-5 Spill Prevention and Pollution Control Measures: The Subapplicant will exercise every reasonable precaution to protect covered species and their habitats from pollution due to fuels, oils, lubricants, construction by-products, and pollutants such as construction chemicals, fresh cement, saw-water, or other harmful materials. Water containing mud, silt, concrete, or other by-products or pollutants from construction activities will be treated by filtration, retention in a settling pond, or similar measures. Fresh cement or concrete will not be allowed to enter the flowing water of streams and curing concrete will not come into direct contact with waters supporting covered species. Construction pollutants will be collected and transported to an authorized disposal area, as appropriate, per all Federal, State, and local laws and regulations.

To reduce bottom substrate disturbance and excessive turbidity, removal of existing piles by cutting at the substrate surface or reverse pile driving with a sand collar at the base to minimize resuspension of any toxic substances is preferable; hydraulic jetting will not be used.

No petroleum product chemicals, silt, fine soils, or any substance or material deleterious to covered species will be allowed to pass into or be placed where it can pass into a stream channel. There will be no side-casting of material into any waterway.

All concrete or other similar rubble will be free of trash and reinforcement steel. No petroleum-based products (e.g., asphalt) will be used as a stabilizing material.

The Subapplicant will store all hazardous materials in properly designated containers in a storage area with an impermeable membrane between the ground and the hazardous materials. The storage area will be encircled by a berm to prevent the discharge of pollutants to ground water or runoff into the habitats of covered species. A plan for the emergency cleanup of any hazardous material will be available onsite, and adequate materials for spill cleanup will be maintained onsite.

GEN AMM-6 Equipment Inspection and Maintenance: Well-maintained equipment will be used to perform the work and, except in the case of a failure or breakdown, equipment maintenance will be performed offsite. Equipment will be inspected daily by the operator for leaks or spills. If leaks or spills are encountered, the source of the leak will be identified, leaked material will be cleaned up, and the cleaning materials will be collected and properly disposed. Fueling of land- and marine-based equipment will be conducted in accordance with procedures to be developed in the Spill Prevention and Pollution Control Plan.

Vehicles and equipment that are used during the course of a project will be fueled and serviced in a “safe” area (i.e., outside of sensitive habitats) in a manner that will not affect covered species or their habitats. Spills, leaks, and other problems of a similar nature will be resolved immediately to prevent unnecessary effects on covered species and their habitats. A plan for the emergency cleanup of any spills of fuel or other material will be available onsite, and adequate materials for spill cleanup will be maintained onsite.

GEN AMM-7 Fueling Activities: Avoidance and minimization measures will be applied to protect covered species and their habitats from pollution due to fuels, oils, lubricants, and other harmful materials. Vehicles and equipment that are used during project implementation will be fueled and serviced in a manner that will not affect covered species or their habitats. Machinery and equipment used during work will be serviced, fueled, and maintained on uplands to prevent contamination to surface waters. Fueling equipment and vehicles will be kept more than 200 feet away from waters of the United States. Exceptions to this distance requirement may be allowed for large cranes, pile drivers, and drill rigs if they cannot be easily moved.

GEN AMM-8 Equipment Staging: No staging of construction materials, equipment, tools, buildings, trailers, or restroom facilities will occur in a floodplain during flood season at the proposed project location, even if staging is only temporary.

GEN AMM-9 Materials Storage and Disposal: Stockpiled soils will be adequately covered to prevent sedimentation from runoff and wind. All hazardous materials will be stored in upland areas in storage trailers and/or shipping containers designed to provide adequate containment. Short-term laydown of hazardous materials for immediate use will be permitted provided the same containment precautions are taken as described for hazardous materials storage. All construction materials, wastes, debris, sediment, rubbish, trash, and fencing will be removed from the site once project construction is complete and transported to an authorized disposal area, as appropriate, in compliance with applicable Federal, State, and local laws and regulations. No disposal of construction materials or debris will occur in a floodplain. No storage of construction materials or debris will occur in a floodplain during flood season.

GEN AMM-10 Fire Prevention: With the exception of vegetation-clearing equipment, no vehicles or construction equipment will be operated in areas of tall, dry vegetation.

The Subapplicant will develop and implement a fire prevention and suppression plan for all maintenance and repair activities that require welding or otherwise have a risk of starting a wildfire.

GEN AMM-11 Waste Management: The work area will be kept free of loose trash, including small pieces of residual construction material, such as metal cuttings, broken glass, and hardware.

All food waste will be removed from the site on a daily basis.

All construction material, wastes, debris, sediment, rubbish, vegetation, trash, and fencing will be removed from the site once the project is completed and will be transported to an authorized disposal area, as appropriate, per all Federal, State, and local laws and regulations.

GEN AMM-12 Work Involving Boats and Barges: For projects that involve in-water work for which boats and/or temporary floating work platforms are necessary, buoys will be installed so moored vessels will not beach on the shoreline, anchor lines will not drag, and moored vessels

and buoys are not located within 25 feet of vegetated shallow waters. Temporary floating work platforms will not anchor or ground in fish spawning areas in freshwater or in eelgrass, kelp, or macro algae. To reduce the likelihood of introducing aquatic invasive species, vessels will use the State's Marine Invasive Species Program. Drip pans and other spill control measures will be used so that oil or fuel from barge-mounted equipment is properly contained.

GEN AMM-13 Work Area Designation to Minimize Disturbance: The Subapplicant will reduce, to the maximum extent practicable, the amount of disturbance at a site to the absolute minimum necessary to accomplish the project. Wherever possible, existing vegetation will be salvaged from the project area and stored for replanting after earthmoving activities are completed. Topsoil will be removed, stockpiled, covered, and encircled with silt fencing to prevent loss or movement of the soil into covered species habitats. All topsoil will be replaced in a manner to recreate pre-disturbance conditions as closely as possible.

Project planning must consider not only the effects of the action itself, but also all ancillary activities associated with the actions, such as equipment staging and refueling areas, topsoil or spoils stockpiling areas, material storage areas, disposal sites, routes of ingress and egress to the project site, and all other related activities necessary to complete the project.

GEN AMM-14 Access Routes and Staging Areas: When working on stream banks or floodplains, disturbance to existing grades and vegetation will be limited to the actual site of the project and necessary access routes. Placement of all roads, staging areas, and other facilities will avoid and limit disturbance to sensitive habitats (e.g., stream banks, stream channel, and riparian habitat) as much as possible. When possible, existing ingress or egress points will be used and/or work will be performed from the top of the stream banks. After completion of the work, the contours of the streambed, vegetation, and stream flows will be returned to their pre-construction condition or better.

All staging and material storage areas, including the locations where equipment and vehicles are parked overnight, will be placed outside of the flood zone of a watercourse, above areas of tidal inundation, away from riparian habitat or wetland habitat, and away from any other sensitive habitats. When possible, staging and access areas will be situated in areas that are previously disturbed, such as developed areas, paved areas, parking lots, areas with bare ground or gravel, and areas clear of vegetation.

GEN AMM-15 Environmental Awareness Training for Construction Personnel: All construction personnel will be given environmental awareness training by the project's environmental inspector or biological monitor before the start of construction. The training will familiarize all construction personnel with the covered species that may occur onsite, their habitats, general provisions and protections afforded by the Act, measures to be implemented to protect these species, and the project boundaries. This training will be provided within three days of the arrival of any new worker.

As part of the environmental awareness training, construction personnel will be notified that no dogs or any other pets under control of construction personnel will be allowed in the construction area, and that no firearms will be permitted in the construction area, unless carried by authorized security personnel or law enforcement.

GEN AMM-17¹ Daily Work Hours: Construction activities that may affect suitable habitat for covered species will be limited to daylight hours during weekdays, leaving a nighttime and weekend period for the species. Work will be allowed on weekends if the proposed construction is 14 days or less in length.

GEN AMM-18 Entrapment Prevention: To prevent entrapment of covered species, all vertically sided holes or trenches will be covered at the end of the workday, or have escape ramps built into the walls of the excavation. If pipes are stored onsite or in associated staging areas, they will be capped when not in use.

Construction materials that have the potential to entangle or entrap wildlife will be properly contained so that wildlife cannot interact with the materials.

If a covered species is identified onsite, crews will immediately stop work within 50 feet of the individual, and inform the construction supervisor and the VFWO-approved biologist. Work will not continue within 50 feet of the individual until it has traveled off the project site of its own volition. For covered species, please refer to the species-specific Conservation Measures section of the PBO.

GEN AMM-19 Water Quality Protection: Contractors will exercise every reasonable precaution to protect covered species and their critical habitats from construction byproducts and pollutants, such as construction chemicals, fresh cement, saw-water, or other deleterious materials. Fresh cement or uncured concrete will not be allowed to come into contact with any waterway. Construction waste will be collected and transported to an authorized upland disposal area, as appropriate, and per Federal, State, and local laws and regulations.

The Subapplicant will follow the best management practices described in *The Use of Treated Wood Products in Aquatic Environments* guidelines (NOAA Fisheries 2009). Although this guidance focuses on the effects of the contaminants on Pacific salmonids protected under the Act, this guidance may still apply for general water quality protection and other federally-protected species. This guidance will be used in conjunction with site-specific evaluations of other potential impacts. Riprap will be clean and durable, free from dirt, sand, clay, and rock fines and will be installed to withstand the 100-year flood event. If applicable, appropriate measures will be taken to minimize disturbance to potentially contaminated sediments.

¹ The general avoidance and minimization measures for this PBO are consistent with other programmatic biological opinions for FEMA's Program within the state of California, but whose actions fall within other Service field office jurisdiction. For consistency in numbering with other field offices, when the VFWO needed to modify a general avoidance or minimization measure, the measure was given a new number. This may create an appearance of mis-numbering within these measures.

GEN AMM-20 Revegetation of Stream Banks: For projects that require revegetation of stream and river banks as a result of riparian vegetation removal during project activities, the Subapplicant will implement revegetation techniques. Where such revegetation is needed, the Subapplicant will prepare and implement a revegetation plan that includes information regarding monitoring for success. Revegetation plantings will be replaced at a 3:1 ratio with an 80 percent planting survival within 5 years of the plantings.

GEN AMM-21 Restoration of Upland Areas to Pre-Project Conditions: For projects that require restoration of upland areas to pre-project conditions as a result of ground disturbance during project activities, the Subapplicant will use native plants to the maximum extent practicable. Similarly, when hydroseeding, only native seed mix will be used.

GEN AMM-22 Invasive Aquatic Species: The Subapplicant will follow the guidelines in the California Department of Fish and Wildlife's (CDFW's) *California Aquatic Invasive Species Management Plan* to prevent the spread of invasive aquatic plant and animal species (CDFW 2008).

Construction equipment will be clean of debris or material that may harbor seeds or invasive pests before entering the work area. This debris or material includes dirt on construction equipment, tools, boots, pieces of vegetation, and water in the bilge of boats. All aquatic sampling equipment will be sterilized using appropriate guidelines before its use in aquatic habitats.

GEN AMM-23 Work below Mean Higher High Water: In freshwater, estuarine, and marine areas that support covered species, disturbance to habitat below mean higher high water will be limited to the maximum extent possible.

GEN AMM-24 Avoidance of Submerged Vegetation: The removal of submerged vegetation (such as eelgrass and kelp estuarine or marine areas, or submerged aquatic vegetation in freshwater areas) will be avoided to the maximum extent possible.

GEN AMM-25 Minimization of Shading by Overwater Structures: To reduce shading effects, new and replacement structures placed over freshwater, estuarine, and marine waters (such as bridges, piers, floating docks, and gangways) will incorporate design elements (such as metal grating or glass paver blocks) that allow light transmission when feasible.

GEN AMM-26 Water Diversion and Dewatering: In-channel work and channel diversion of live flow during project construction will be conducted in a manner to reduce impacts to covered species. Dewatering will be used to create a dry work area and will be conducted in a manner that minimizes turbidity into nearby waters. Water diversion and dewatering will include the following measures:

- a. Heavy equipment will avoid flowing water other than temporary crossing or diverting activities.

- b. If covered species may be present in the areas to be dewatered, relocation will be conducted by a VFWO-approved biologist in accordance with applicable species-specific Conservation Measures. Because this measure involves take of a species, it is only applicable to covered species for which an Incidental Take Statement is provided.
- c. Water pumped or removed from dewatered areas will be treated before its release so that it does not contribute to turbidity in nearby waters.
- d. Temporary culverts to convey live flow during construction activities will be placed at stream grade and be of an adequate size as to not increase stream velocity.
- e. Silt fences or mechanisms to avoid sediment input to the flowing channel will be erected adjacent to flowing water if sediment input to the stream may occur.

GEN AMM-27 Biological Monitor: If a project involves activities that are likely to result in adverse effects of a species or critical habitat addressed in this PBO, a VFWO-approved biologist will be present onsite for all site preparation (e.g. vegetation removal, soil disturbance) and construction activities that occur within 100 feet of habitat for those species. If a VFWO-approved biologist is needed, the Subapplicant will submit biologist qualifications to us for approval 30 days prior to the initiation of activities that require biologist presence.

Approval requests will include, at a minimum, the following:

- a. Relevant education;
- b. Training received from a permitted biologist or recognized species expert concerning the listed species for which approval is requested. This training should include species identification, survey techniques, and handling protocols for individuals of different lifestages;
- c. A description of field experience with the species for which approval is requested conducting requested activities (to include project/research information);
- d. Any previous biological opinions or authorizations under which they were approved to work with the requested species. For any such projects, include the following:
 - i. The type of activities were performed (e.g., construction monitoring, handling);
 - ii. The names and qualification of supervising biologist under which the work was completed, and;
 - iii. The amount of work experience on the actual project.
- e. A list of Federal section 10(a)1(A) recovery permits held or under which they are authorized to work with the requested species requested (to include the permit number, authorized activities and name of permit holder); and
- f. At least two professional references with contact information.

This biologist will ensure that all applicable general avoidance and minimization measures and species-specific conservation measures in the PBO are implemented. S/he will also ensure that all vehicles entering the site are free of debris that may harbor organisms that could be introduced to the site, such as vegetation or mud from other aquatic areas. The VFWO-approved

biologist will also ensure that turbidity, sedimentation, and the release of materials such as dust or construction runoff are controlled, and that spill control measures are enacted properly.

The VFWO-approved biologist will oversee construction activities to ensure that no covered species and/or their habitats are adversely affected. The VFWO-approved biologist will have the authority to stop any work activities that may result in potential adverse effects to covered species and/or their habitats.

GEN AMM-28 Landscape level conservation planning: When the VFWO has an existing landscape level plan or conservation strategy in use for a specific species, FEMA and Subapplicants will ensure projects activities are carried out in a manner consistent with such plans. The VFWO will ensure any project-specific recommendations are communicated in a timely manner.

Species-specific Conservation Measures

In cases where the species-specific conservation measures are duplicative of the General Conservation Measures, the most comprehensive measure (i.e., the measure providing the most protections for listed species and critical habitat) will apply.

Conservation Measures for Arroyo Toad

ARTO-1 Habitat Assessment: A habitat assessment will be conducted by a VFWO-approved biologist to determine whether suitable habitat for the arroyo toad occurs in the Action Area. If suitable habitat for this species is identified in the Action Area and the proposed project may affect suitable habitat that is not known to be occupied by the arroyo toad, the VFWO will be contacted regarding the need for surveys according to Service protocol and those surveys will be conducted, as appropriate. With VFWO concurrence, FEMA may also forgo surveys by making a determination that suitable habitat is occupied for the purposes of section 7 consultation.

ARTO-2 Amphibian Protection Guidelines: A capture and relocation plan for arroyo toads will be implemented during activities in occupied habitat using a VFWO-approved biologist(s). Biologists must follow the Declining Amphibian Task Force's Fieldwork Code of Practice to prevent the spread of pathogens.

ARTO-3 Seasonal Avoidance: To minimize direct effects to breeding arroyo toads, all project activities within designated critical habitat, occupied habitat, or potential suitable habitat will occur outside the breeding season (i.e., the breeding season is March 15 - July 15 for arroyo toad). If the breeding season cannot be avoided and arroyo toads are found to occur within the Action Area, a VFWO-approved biologist will conduct daily surveys prior to project work within the Action Area until the beginning of the non-breeding season or project activities have ceased. If the breeding season cannot be avoided, a VFWO-approved biologist will conduct surveys no more than 48 hours prior to project work, if no arroyo toads of any life stages or clutches are found to occur within the Action Area, project activities may proceed.

ARTO-4 Preconstruction Surveys: If a project is located in designated critical habitat, occupied, or potential suitable habitat for the arroyo toad, a VFWO-approved biologist must conduct preconstruction surveys no more than 48 hours prior to project work to determine if arroyo toads are present in the Action Area.

ARTO-5 Heavy Machinery Limitations: If a project is located in an occupied area, use of heavy machinery will be avoided when juvenile arroyo toads are known to occupy the bordering banks of suitable water features (i.e. April 15 - October 1).

ARTO-6 Biological Monitor: A VFWO-approved biological monitor with the authority to stop work will monitor project activities within areas occupied habitat. The biological monitor will search the Action Area daily for arroyo toads.

ARTO-7 Capture and Relocation: Implement a capture and relocation plan for arroyo toads on the project site using a VFWO-approved biologist(s). Biologists must follow the Declining Amphibian Task Force's Fieldwork Code of Practice to prevent the spread of pathogens.

ARTO-8 Avoidance of Occupied Habitat: No permanent impacts will occur to arroyo toad occupied habitat, habitat determined to be occupied through surveys or otherwise by FEMA, or designated critical habitat unless the impacts to habitat are determined to be insignificant via project-level consultation with the VFWO (i.e., small permanent impacts that will have a negligible effect on habitat quality for arroyo toad). Temporary impacts to arroyo toad habitat are restricted to 1 acre per project and 10 acres overall.

ARTO-9 Environmental Awareness Training: Conduct environmental awareness training for all workers regarding the arroyo toad and other listed species in the Action Area. This training may be conducted by the biological monitor or VFWO-approved biologist, if present.

ARTO-10 Site Restrictions: The following site restrictions will be implemented to avoid or minimize effects on the listed species and its habitat:

- a. A speed limit of 15 miles per hour (mph) in the project footprint in unpaved areas will be enforced to reduce dust and excessive soil disturbance;
- b. Construction and ground disturbance will occur only during daytime hours, and will cease no less than 30 minutes before sunset and may not begin again earlier than 30 minutes after sunrise.;
- c. Except when necessary for driver or pedestrian safety, to the maximum extent practicable, artificial lighting at a project site will be prohibited during the hours of darkness;
- d. Routes and boundaries of roadwork will be clearly marked prior to initiating construction or grading;
- e. To the maximum extent practicable, any borrow material will be certified to be non-toxic and weed free;

- f. Remove all external oil, grease, dirt, plant parts, and mud from equipment prior to arriving at the Action Area and inspect all equipment before unloading at the Action Area;
- g. All food and food-related trash items will be enclosed in sealed trash containers and properly disposed of offsite; and
- h. No pets will be allowed anywhere in the Action Area during construction.

ARTO-11 Rain Event Limitations: To the maximum extent practicable, no construction activities will occur during rain events or within 24 hours following a rain event. Prior to construction activities resuming, a VFWO-approved biologist will inspect the Action Area and all equipment/materials for the presence of arroyo toads. Construction may continue 24 hours after the rain ceases if no precipitation is forecasted within 24-hours. If rain exceeds 0.25 inches during a 24-hour period, work will cease until no further rain is forecasted. The Service may approve modifications to this timing on a case-by-case basis.

ARTO-12 Designated staging areas: Use designated staging areas more than 100 feet from riparian areas to perform vehicle maintenance and refueling. Conduct daily checks of equipment for leaks and correct problems before entering aquatic or riparian areas. Infiltrate as much runoff from these areas using permeable surfaces and infiltration ditches or basins in areas where groundwater contamination risk is low. Restore staging areas immediately following use. Effectively prevent access to the area once site restoration activities have been completed.

ARTO-13 Delineate work areas: Clearly delineate work areas and access routes to reduce impacts to the surrounding area and use only existing transportation routes, as feasible.

ARTO-14 Erosion and Sedimentation Control: Implement Best Management Practices to control erosion and sedimentation such as:

- a. Use temporary filters, berms, barriers, conveyances, or other materials to collect sediment and prevent it from entering surface waters.
- b. Accurately establish and preserve horizontal alignment for each stream-crossing structure, to assure that flows do not erode stream banks or shoreline. For project activities conducted within stream banks, ensure the stream channel alignment and depth is preserved in such a manner as to not cause the streambank or channel to erode.
- c. Restore the original surface of the streambed upon decommissioning the concrete crossing, when applicable.
- d. Keep excavated materials out of channels, floodplains, wetlands, and lakes.
- e. Install silt fences or other sediment –and–debris–retention barriers between the water body and construction material stockpiles and wastes.
- f. Remove all project debris from the creek and do not stockpile materials within the creek.
- g. Dispose of unsuitable material in approved waste areas. Ensure that project debris will not enter any waterway, and construction materials will not be stockpiled within 50 feet of the waterway.

- h. Stabilize decommissioned surfaces and other disturbed soil surfaces by retaining or reestablishing soil cover to 60 to 70 percent. Use certified weed-free straw where existing soil cover is insufficient. Stabilize work areas in an identical manner when the National Weather Service predicts a 30 percent or greater chance of precipitation (predicted precipitation greater than 0.25 inches within a 24-hour period).

ARTO-15 Maintain Vegetation: Native woody riparian vegetation will not be cut or removed, except where needed to facilitate project implementation. Maintain vegetation where practicable to provide adequate shade for riparian habitat.

ARTO-16 Containment of spills: Implement procedures for containment and removal of any chemical spills (for example a Water Pollution Control and Prevention Plan). Use liners as needed to prevent seepage to groundwater. Remove residues, waste oil, and other materials from the site and properly dispose of them. Hazardous materials must be stored at safe distances from riparian or aquatic areas within a designated location designed to contain spills. Report spills and initiate appropriate clean-up action in accordance with applicable State and Federal laws, rules, and regulation.

ARTO-17 Restoration to Pre-Disturbance Conditions: Restore all temporarily disturbed areas within the Action Area to pre-disturbance or better conditions immediately following completion of project activities. Effectively prevent access to the restored area once site restoration activities have been completed.

Conservation Measures for California Red-Legged Frog and California Tiger Salamander, Central California and Santa Barbara DPS

CRLF-CTS-1 Biological Monitor: A VFWO-approved biologist(s) will be onsite during all activities that may result in take of California red-legged frogs or California tiger salamanders.

CRLF-CTS-2 Seasonal Avoidance: Project activities will be scheduled to minimize adverse effects to the California red-legged frog and California tiger salamander and their habitat. Disturbance to upland habitat will be confined to the dry season, generally May 1 through October 15 (or the first measurable fall rain of 1" or greater) because that is the time period when California red-legged frogs and California tiger salamanders are less likely to be moving through upland areas. However, if seasonal avoidance is not possible, conduct grading and other disturbance in pools and ponds only when they are dry, typically between July 15 and October 15. Work within a pool or wetland may begin prior to July 15 if the pool or wetland has been dry for a minimum of 30 days prior to initiating work.

CRLF-CTS-3 Rain Event Limitations: To the maximum extent practicable, no construction activities will occur during rain events or within 24 hours following a rain event. Prior to construction activities resuming, a VFWO-approved biologist will inspect the Action Area and all equipment/materials for the presence of California red-legged frogs and California tiger salamanders. Construction may continue 24 hours after the rain ceases if no precipitation is

forecasted within 24-hours. If rain exceeds 0.5 inches during a 24-hour period, work will cease until no further rain is forecasted. The Service may approve modifications to this timing on a case-by-case basis.

CRLF-CTS-4 Pre-construction Survey: No more than 24 hours prior to the date of initial ground disturbance and vegetation clearing, a VFWO-approved biologist with experience in the identification of all life stages of the California red-legged frog and California tiger salamander and designated critical habitat will conduct a pre-construction survey at the project site. The survey will consist of walking the project limits and within the project site to determine possible presence of the species. The VFWO-approved biologist will investigate all areas that could be used by California red-legged frogs and California tiger salamanders for feeding, breeding, sheltering, movement, and other essential behaviors, such as small woody debris, refuse, burrows, etc.

CRLF-CTS-5 Daily Clearance Surveys: The VFWO-approved biologist will conduct clearance surveys at the beginning of each day and regularly throughout the workday when construction activities are occurring that may result in take of California red-legged frogs and California tiger salamanders.

CRLF-CTS-6 Environmentally Sensitive Areas: Prior to the start of construction, Environmentally Sensitive Areas (ESAs) – defined as areas containing sensitive habitats adjacent to or within construction work areas for which physical disturbance is not allowed – will be clearly delineated using high visibility orange fencing. The ESA fencing will remain in place throughout the duration of the proposed action, while construction activities are ongoing, and will be regularly inspected and fully maintained at all times. The final project plans will depict all locations where ESA fencing will be installed and will provide installation specifications. The bid solicitation package special provisions will clearly describe acceptable fencing material and prohibited construction-related activities including vehicle operation, material and equipment storage, access roads and other surface-disturbing activities within ESAs. With prior approval from the Service, a hybrid ESA/Wildlife Exclusion Fencing (WEF)² fencing material that is both hi-visibility and impermeable to wildlife movement may be used in place of paired ESA fencing and WEF fencing. Also with prior approval from the Service, an exception to the foregoing fencing measures may apply on a case-by-case basis during the following situations: (1) at work sites where the duration of work activities is very short (e.g., 3 days or less), the work activities occur during the dry season, and the installation of ESA fencing will result in more ground disturbance than from project activities; or (2) at work sites where the substrate (i.e., rock, shale, etc.) or topography (i.e., slopes > 30 degrees) inhibit the safe and proper installation of fencing materials. In these cases, biological monitoring will occur during all project activities at that site.

CRLF-CTS-7 Wildlife Exclusion Fencing: Prior to the start of construction, Wildlife Exclusion Fencing (WEF) will be installed at the edge of the project footprint in all areas where California red-legged frogs and California tiger salamanders could enter the construction area. The onsite

² See CRLF-CTS-7 for information regarding WEF.

Project Manager and the VFWO-approved biologist will determine location of the fencing prior to the start of staging or surface disturbing activities.

- a. Exclusion fencing will be at least 3 feet high and the lower 6 inches of the fence will be buried in the ground to prevent animals from crawling under. The remaining 2.5 feet will be left above ground to serve as a barrier for animals moving on the ground surface.
- b. Such fencing will be inspected and maintained daily by the VFWO-approved biologist until completion of the project and removed only when all construction equipment is removed from the site.
- c. The WEF specifications will be included in the final project plans and in the bid solicitation package (special provisions) and will include the WEF specifications including installation and maintenance criteria.
- d. The WEF will remain in place throughout the duration of the project and will be regularly inspected and fully maintained. Repairs to the WEF will be made within 24 hours of discovery.
- e. Upon project completion the WEF will be completely removed, the area cleared of debris and trash, and returned to natural conditions.
- f. With prior approval from the Service, an exception to the foregoing fencing measures may apply on a case-by-case basis during the following situations: 1) at work sites where the duration of work activities are very short (e.g., 3 days or less), the work activities occur during the dry season, and the installation of exclusion fencing will result in more ground disturbance than from project activities; or (2) at work sites where the substrate (i.e., rock, shale, etc.) or topography (i.e., slopes > 30 degrees) inhibit the safe and proper installation of fencing materials. In these cases, species monitoring will occur during all project activities at that site. Modifications to this fencing measure may be made on a case-by-case basis with approval from the Service.

CRLF-CTS-8 Entrapment Prevention: To prevent inadvertent entrapment of animals during construction, all excavated, steep-walled holes or trenches more than 6 inches deep will be covered with plywood or similar materials at the close of each working day or provided with one or more escape ramps constructed of earth fill or wooden planks. The VFWO-approved biologist will inspect all holes and trenches at the beginning of each workday and before such holes or trenches are filled. All replacement pipes, culverts, or similar structures stored in the Action Area overnight will be inspected before they are subsequently moved, capped, and/or buried. If at any time a California red-legged frog or California tiger salamander is discovered, the onsite Project Manager and VFWO-approved biologist will be notified immediately and the VFWO-approved biologist will implement the species observation and handling protocol. If handling is necessary, work will be suspended until the appropriate level of coordination is complete.

CRLF-CTS-9 Encounters with Species: Each encounter with a California red-legged frog or California tiger salamander will be treated on a case-by-case basis. If any life stage of the California red-legged frog or California tiger salamander is found and these individuals may be killed or injured by work activities, the following will apply:

- a. If California red-legged frogs or California tiger salamanders are detected in the Action Area, work activities within 50 feet of the individual that may result in the harm, injury, or death to the animal will cease immediately and the onsite Project Manager and VFWO-approved biologist will be notified. Based on the professional judgment of the VFWO-approved biologist, if project activities can be conducted without harming or injuring the California red-legged frog and California tiger salamander, it may be left at the location of discovery and monitored by the VFWO-approved biologist. All project personnel will be notified of the finding and at no time will work occur within 50 feet of a California red-legged frog or California tiger salamander without a VFWO-approved biologist present.
- b. To the maximum extent possible, contact with the individual frog or salamander will be avoided and it will be allowed to move out of the hazardous situation of its own volition. This procedure applies to situations where a California red-legged frog or California tiger salamander is encountered while it is moving to another location. It does not apply to animals that are uncovered or otherwise exposed or in areas where there is not sufficient adjacent habitat to support the species if the individual moves away from the hazardous location. Such individuals must be relocated per Conservation Measure CRLF-CTS-10.

CRLF-CTS-10 Species Observations and Handling Protocol: If a California red-legged frog or California tiger salamander does not leave the work area, the VFWO-approved biologist will implement the species observation and handling protocol outlined below. Only VFWO-approved biologists will participate in activities associated with the capture, handling, relocation, and monitoring of California red-legged frogs and California tiger salamanders.

- a. Prior to handling and relocation, the VFWO-approved biologist will take precautions to prevent introduction of amphibian diseases in accordance with the Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander (Service and CDFW 2003). Disinfecting equipment and clothing is especially important when biologists are coming to the Action Area to handle amphibians after working in other aquatic habitats. California red-legged frogs and California tiger salamanders will also be handled and assessed according to the Restraint and Handling of Live Amphibians (USGS National Wildlife Health Center 2001).
- b. California red-legged frogs and California tiger salamanders will be captured by hand, dip net, or other VFWO-approved methodology, transported and relocated to nearby suitable habitat outside of the work area and released as soon as practicable the same day of capture. CTS individuals will be relocated no greater than 300 feet outside of the project site to areas with an active rodent burrow or burrow system (unless otherwise approved by the Service and with written landowner permission). CRLF individuals will be relocated to the nearest area of dense riparian cover outside the project site. Holding/transporting containers and dip nets will be thoroughly cleaned, disinfected, and rinsed with freshwater prior to use within the Action Area and between project sites within the Action Area. The Service will be notified within 24 hours of all capture, handling, and relocation efforts.

- c. If an injured California red-legged frog or California tiger salamander is encountered and the VFWO-approved biologist determines the injury is minor or healing and the animal is likely to survive, it will be released immediately, consistent with measure b, above. Any injured California red-legged frogs and California tiger salamanders will be monitored until it is determined that they are not imperiled by predators or other dangers.
- d. If the VFWO-approved biologist determines that a California red-legged frog or California tiger salamander has major or serious injuries as a result of project-related activities the VFWO-approved biologist, or designee, will immediately take it to a VFWO-approved facility. If taken into captivity the individual will remain in captivity and not be released into the wild unless it has been kept in quarantine and the release is authorized by the Service. The Subapplicant will bear any costs associated with the care or treatment of such injured California red-legged frogs or California tiger salamanders. The circumstances of the injury, the procedure followed and the final disposition of the injured animal will be documented in a written incident report to the Service as described below.
- e. Notification to the Service of an injured or dead California red-legged frog or California tiger salamander in the Action Area will be made and reported whether or not its condition resulted from project-related activities. In addition, the VFWO-approved biologist will follow up with the Service in writing within 2 calendar days of the finding. Written notification to the Service will include the following information: the species, number of animals taken or injured, sex (if known), date, time, location of the incident or of the finding of a dead or injured animal, how the individual was taken, photographs of the specific animal, the names of the persons who observed the take and/or found the animal, and any other pertinent information. Dead specimens will be preserved, as appropriate, and will be bagged and labeled (i.e. species type; who found or reported the incident; when the report was made; when and where the incident occurred; and if possible, the cause of death). Specimens will be held in a secure location until instructions are received from the Service regarding the disposition of the specimen.

CRLF-CTS-11 Environmental Awareness Training: Prior to the start of construction, a VFWO-approved biologist with experience in the ecology of the California red-legged frog and California tiger salamander as well as the identification of all its life stages will conduct a training program for all construction personnel including contractors and subcontractors. Interpretation for non-English speaking workers will be provided. All construction personnel will be provided a fact sheet conveying this information. The same instruction will be provided to any new workers before they are authorized to perform project work. The training will include, at a minimum:

- a. habitat within the Action Area;
- b. an explanation of the species status and protection under state and Federal laws;
- c. the avoidance and minimization measures to be implemented to reduce take of this species;

- d. communication and work stoppage procedures in case a listed species is observed within the Action Area; and
- e. an explanation of the importance of the ESAs and WEF.

CRLF-CTS-12 Disease Prevention and Decontamination Procedures: To ensure that diseases are not conveyed between work sites by the VFWO-approved biologist, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force will be followed at all times.

CRLF-CTS-13 Pump Screens: If a water body is to be temporarily dewatered by pumping, intakes will be completely screened with wire mesh not larger than 5 millimeters and the intake will be placed within a perforated bucket or other method to attenuate suction to prevent California red-legged frogs and California tiger salamanders from entering the pump system. Pumped water will be managed in a manner that does not degrade water quality and upon completion be released back into the water body, or at an appropriate location in a manner that does not cause erosion. No re-watering of the water body is necessary if sufficient surface or subsurface flow exists to fill it within a few days, or if work is completed during the time of year the water body will have dried naturally. To avoid effects to eggs and larvae, work within seasonal ponds will be conducted when the pond has been dry naturally for at least 30 days

CRLF-CTS-14 Hand Clear Vegetation: Hand clear vegetation in areas where California red-legged frogs and California tiger salamanders are suspected to occur. All cleared vegetation will be removed from the project footprint to prevent attracting animals to the project site. A VFWO-approved biologist will be present during all vegetation clearing and grubbing activities. Prior to vegetation removal, the VFWO-approved biologist will thoroughly survey the area for California red-legged frogs and California tiger salamanders. Once the VFWO-approved biologist has thoroughly surveyed the area, clearing and grubbing may continue without further restrictions on equipment; however, the VFWO-approved biologist will remain onsite to monitor for California red-legged frogs and California tiger salamanders until all clearing and grubbing activities are complete. The Service may approve modifications to this conservation measure on a case-by-case basis.

CRLF-CTS-15 Wildlife Passage for Road Improvement: When constructing a road improvement, wherever possible, enhance or establish wildlife passage for the California red-legged frog and California tiger salamander across roads, highways, or other anthropogenic barriers. This includes upland culverts, tunnels, and other crossings designed specifically for wildlife movement, as well as making accommodations in curbs, median barriers, and other impediments to terrestrial wildlife movement at locations most likely beneficial to the California red-legged frog and California tiger salamander.

CRLF-CTS-16 Accidental Spills, SWPPP, Erosion Control, and BMPs: Prior to the onset of work, a plan will be in place for prompt and effective response to any accidental spills. All workers will be informed of the importance of preventing spills and of the appropriate measures to implement if a spill occurs. Storm-water pollution prevention plans and erosion control BMPs

will be developed and implemented to minimize any wind- or water-related erosion. These provisions will be included in construction contracts for measures to protect sensitive areas and prevent and minimize storm-water and non-storm-water discharges. Protective measures will include, at a minimum:

- a. No discharge of pollutants from vehicle and equipment cleaning is allowed into any storm drains or watercourses.
- b. Vehicle and equipment fueling and maintenance operations must be at least 50 feet away from aquatic or riparian habitat and not in a location where a spill may drain directly toward aquatic habitat, except at established commercial gas stations or at an established vehicle maintenance facility. The monitor will implement the spill response plan to ensure contamination of aquatic or riparian habitat does not occur during such operations.
- c. Concrete wastes will be collected in washouts and water from curing operations is to be collected and disposed of properly. Neither will be allowed into watercourses.
- d. Spill containment kits will be maintained onsite at all times during construction operations and/or staging or fueling of equipment.
- e. Dust control will be implemented, and may include the use of water trucks and non-toxic tackifiers (binding agents) to control dust in excavation and fill areas, rocking temporary access road entrances and exits, and covering of temporary stockpiles when weather conditions require.
- f. Graded areas will be protected from erosion using a combination of silt fences, fiber rolls, etc. along toes of slopes or along edges of designated staging areas, and erosion control netting (such as jute or coir) as appropriate on sloped areas.
- g. Permanent erosion control measures such as bio-filtration strips and swales to receive storm water discharges from paved roads or other impervious surfaces will be incorporated to the maximum extent practicable.
- h. All grindings and asphaltic-concrete waste will be stored within previously disturbed areas absent of habitat and at a minimum of 50 feet from any aquatic habitat, culvert, or drainage feature.

CRLF-CTS-17 Site Restrictions: The following site restrictions will be implemented to avoid or minimize effects on the listed species and its habitat:

- a. A speed limit of 15 miles per hour (mph) in the project footprint in unpaved areas will be enforced to reduce dust and excessive soil disturbance.
- b. Construction and ground disturbance will occur only during daytime hours, and will cease no less than 30 minutes before sunset and may not begin again earlier than 30 minutes after sunrise.
- c. Except when necessary for driver or pedestrian safety, to the maximum extent practicable, artificial lighting at a project site will be prohibited during the hours of darkness.
- d. Routes and boundaries of roadwork will be clearly marked prior to initiating construction or grading.

- e. To the maximum extent practicable, any borrow material will be certified to be non-toxic and weed free.
- f. All food and food-related trash items will be enclosed in sealed trash containers and properly disposed of offsite.
- g. No pets will be allowed anywhere in the Action Area during construction.

CRLF-CTS-18 Suitable Erosion Control Materials: To prevent California red-legged frogs and California tiger salamanders from becoming entangled, trapped, or injured, erosion control materials that use plastic or synthetic monofilament netting will not be used within the Action Area. This includes products that use photodegradable or biodegradable synthetic netting, which can take several months to decompose. Acceptable materials include natural fibers such as jute, coconut, twine or other similar fibers. Following site restoration, erosion control materials, such as straw wattles, will not block movement of the California red-legged frog and California tiger salamander.

CRLF-CTS-19 Limitation on Insecticide/Herbicide Use: Insecticides or herbicides will not be applied at the project site during construction where there is the potential for these chemical agents to enter creeks, streams, waterbodies, or uplands that contain habitat for the California red-legged frog and California tiger salamander.

CRLF-CTS-20 Limitation on Rodenticide Use: No rodenticides will be used at the project site during construction or long-term operational maintenance in areas that support suitable upland habitat for the California red-legged frog and California tiger salamander.

CRLF-CTS-21 Invasive Non-Native Plant Species Prevention: The VFWO-approved biologist will ensure that the spread or introduction of invasive non-native plant species, via introduction by arriving vehicles, equipment, imported gravel, and other materials, will be avoided to the maximum extent possible. When practicable, invasive non-native plants in the Action Area will be removed and properly disposed of in a manner that will not promote their spread. Areas subject to invasive non-native weed removal or disturbance will be replanted with appropriate mix of fast-growing native species. Invasive non-native plant species include those identified in the California Invasive Plant Council's (Cal-IPC) Inventory Database, accessible at: www.cal-ipc.org/ip/inventory/index.php.

CRLF-CTS-22 Removal of Diversion and Barriers to Flow: Upon completion of construction activities, any diversions or barriers to flow will be removed in a manner that will allow flow to resume with the least disturbance to the substrate. Alteration of creek beds will be minimized to the maximum extent possible; any imported material will be removed from stream beds upon completion of the project.

CRLF-CTS-23 Removal of Non-Native Species: A VFWO-approved individual will permanently remove, from within the Action Area, any individuals of non-native species, such as bullfrogs, crayfish, and centrarchid fishes, to the maximum extent possible. The Subapplicant is responsible for ensuring that these activities are in compliance with the California Fish and

Game Code. No conversion of seasonal breeding aquatic habitat to perennial aquatic breeding habitat is allowed under this PBO. Creating new perennial water bodies in the vicinity of California red-legged frog or California tiger salamander populations where the ponds could be colonized by predators will also be avoided. Larval mosquito abatement efforts will be avoided in occupied breeding habitat for the California red-legged frog and California tiger salamander.

CRLF-CTS-24 Restore Contours of Temporarily Disturbed Areas: Habitat contours will be returned to their original configuration at the end of project activities in all areas that have been temporarily disturbed by activities associated with the project, unless the Subapplicant and the Service determine that it is not feasible or modification of original contours will benefit the California red-legged frog and California tiger salamander.

CRLF-CTS-25 Use of Native Plants for Revegetation: Plants used in revegetation will consist of native riparian, wetland, and upland vegetation suitable for the area. Locally collected plant materials will be used to the extent practicable. This measure will be implemented in all areas disturbed by activities associated with the project, unless the Subapplicant and the Service determine that it is not feasible or practical.

CRLF-CTS-26 Practices to Prevent Pathogen Contamination in Revegetation and Restoration: The Subapplicant will refer to the following restoration design considerations and practices to help prevent pathogen contamination in revegetation and restoration as published by the Working Group for *Phytophthora* in Native Habitats in order to address the risk of introduction and spread of *Phytophthora* and other plant pathogens in site plantings:

- a. Design restoration with lower initial plant density. Planting large quantities of nursery plants increases the likelihood that some of those plants may be infested with *Phytophthora* or other plant pathogens. The greater the number of plants installed the higher the risk for pathogen introduction. The closer the plants are to one another the higher the likelihood of pathogen spread.
- b. To the extent possible, use direct seeding of native plant seeds or cuttings instead of container stock. Planting locally-collected seeds or cuttings rather than installing container stock can minimize the risk of introducing pathogens to a site.
- c. Ensure the use of clean nursery stock. To prevent and manage the introduction and spread of *Phytophthora* and other plant pathogens during revegetation and restoration activities, it is essential that projects use clean nursery stock grown with comprehensive best management practices.
- d. Prevent contamination in site preparation, installation, and maintenance. Implementing best management practices to prevent pathogen introduction and spread is also critical during all other phases of revegetation and restoration to reduce contamination risk. For detailed guidance on how to prevent and manage *Phytophthora* during various aspects of restoration, including nursery plant production, see The *Phytophthora* in Native Habitats Work Group “Restoration Guidance” at www.calphytos.org.
- e. Reduce the potential for pathogen spread and introduction due to movement or use of non-sanitized vehicles, tools, footwear or inadvertent use of contaminated materials (e.g.

soil erosion protection wattles and mulch, or non-sanitized materials recycled from other projects such as rebar, fencing materials, etc.). Fundamental principles include:

- i. Minimize project footprint and soil disturbance. Keep the number of vehicle pass-throughs and other disturbances during site activities to the least necessary. Avoid visits when conditions are wet, and areas are muddy. Park vehicles in designated staging areas.
- ii. Follow sanitation practices. *Phytophthora* and many other pathogens move when contaminated soil is transferred on vehicle tires, footwear, on contaminated tools or infested plant materials. Follow sanitation best management practices: tools, boots, and vehicles will be visibly free of soil before and after use.
- iii. Promote prevention through education. Ensure that onsite personnel are aware of the risk of inadvertent pathogen introductions and understand how to prevent pathogen introduction and spread. A pre-project meeting that provides appropriate BMP training to all workers and oversight managers who will be onsite during the project will help avoid confusion and delays in the field and will ensure in advance that everyone understands the project goals related to pathogen prevention.

CRLF-CTS-27 Burrow excavation: Rodent burrows will be avoided to the maximum extent possible. Burrows that cannot be avoided and fall within the project right-of-way, but not subject to ground disturbing activities (e.g., grading, disking, excavating, etc.) should be protected using steel plates or plywood to avoid collapsing the burrows. Plates and plywood should only be used on burrows that may be run over by equipment. Plywood should only be used for lighter equipment such as pickup trucks; plates should be used for all heavier construction equipment. Plates and plywood will not be left in place for: (1) more than 48 hours; (2) when a significant rain event is forecasted within 24 hours; or (3) if work is scheduled to cease for consecutive days.

Burrow excavation should only occur on burrows that are located within areas that are subject to ground disturbing activities. The applicant will retain VFWO-approved biologist(s) to conduct burrow excavation. The biologist(s) will be allowed sufficient time to excavate burrows and relocate California tiger salamander to a suitable relocation site. The biologist will scope and excavate small mammal burrows within the impact area prior to the initiation of ground disturbing activities. The biologist(s) will utilize a fiber optic scope or similar device to scope the burrows to determine if California tiger salamander are present; burrow excavation will proceed after the burrow has been scoped. If the biologist is unable to scope the entire length of the burrow, the burrow will be scoped and excavated in sections. For example, if the scope can only reach the first 3 feet of a burrow, excavation will only occur along those 3 feet. The biologist will then scope the next 3 feet before that is excavated and so on and so forth until the end of the burrow is reached or the burrow leaves the area subject to ground disturbance. Burrow excavation may be performed using hand tools or via gentle excavation using construction equipment, under the direct supervision of a VFWO-approved biologist, until it is certain that the burrows are unoccupied or the burrow navigates to areas that are not subject to ground disturbing activities.

CRLF-CTS-28 Species Specific Conservation Strategies: The VFWO has an existing conservation strategy for Santa Barbara Distinct Population Segment of the California tiger salamander. FEMA will ensure Subapplicant project activities are consistent with the conservation strategies before submitting projects to the VFWO for inclusion in this PBO (see Appendix D).

Conservations Measures for Conservancy Fairy Shrimp and Vernal Pool Fairy Shrimp

The following conservation measures apply to any suitable fairy shrimp habitat within the VFWO's jurisdiction. For the purposes of this PBO, suitable fairy shrimp habitat includes the basin/inundation feature where fairy shrimp and/or resting eggs would be found, and the area of the watershed needed to support the feature(s).

LLBR-1 Pre-activity Surveys: Prior to any site disturbance (e.g., vegetation removal, soil disturbance) in suitable fairy shrimp habitat or initiation of construction activities, a VFWO-approved biologist with demonstrable experience with the diversity of habitat types in which listed branchiopod species can occur will conduct a habitat assessment survey. The intent of this survey is to provide information regarding the likelihood that potential habitat for one or more of the listed branchiopod species is present within, or immediately adjacent to, the project footprint. As part of this assessment, if inundated features are present, their quality and suitability for occupation by one or more of these species will be included. If, based on the results of the habitat assessment, species presence is likely, FEMA or the project applicant will contact the VFWO regarding the need for surveys according to current Service guidance. Modification to this guidance may be allowed if pre-approved by the VFWO. If it is not feasible to conduct surveys, the species presence will be assumed for all suitable habitat in the project area.

LLBR-2 Designated Critical Habitat: A maximum of five (5) percent of habitat containing Physical and Biological Features (PBFs) within designated critical habitat for vernal pool fairy and/or Conservancy fairy shrimp will be affected within the action area during the five year duration of this PBO, with a maximum of one (1) acres to be affected by activities associated with an individual project. Affected areas will be restored to pre-disturbance or improved topographic conditions and upland areas revegetated with native plant species consistent with the surrounding habitat.

LLBR-3 Occupied/Inundation Area Habitat Avoidance: Impacts to basin/inundation areas known or presumed occupied by one or more of the species and likely to contain resting eggs will be avoided.

LLBR-4 Habitat Supporting Occupied Habitat: Impacts to watershed areas that support occupied or presumed occupied basin/inundation features will be avoided to the maximum extent possible. If avoidance is not possible, the remaining conservation measures will be implemented as applicable.

LLBR-5: Exclusion Zones: Disturbance exclusion zones will be established, maintained, and monitored by the VFWO-approved biologist to ensure that impacts to basin/inundation features watershed, and/or critical habitat do not extend beyond the identified project footprint.

LLBR-6 Monitoring: A VFWO-approved biologist will monitor all site preparation (e.g., soil disturbance, vegetation removal) and/or construction activities within 250 feet of fairy shrimp habitat to ensure that there are no impacts to either inundation feature/basin. No permanent impacts to fairy shrimp habitat will occur. Actions that result in permanent alteration of the hydrology that supports inundation/basin features (e.g., construction of culverts, v-ditches, berms, roads, will could divert flows) must be avoided as they have not been analyzed and are not addressed in this programmatic consultation.

LLBR-7 Buffer Areas: All equipment storage, fueling, cleaning, maintenance, and mixing of pesticides, herbicides, or other potentially toxic chemicals is restricted to an area at least 300 feet from any basin/inundation features. Hazardous material absorbent pads must be present onsite and made easily accessible in the event of a spill.

LLBR-8: Work Restrictions – Dry Season: To the maximum extent possible, site preparation and construction activities will be restricted to the dry season (generally considered to be between June 1 and October 15) and occur only under conditions when soil is dry to the touch at the surface and to a depth of 2.5 cm (1 in.). The Service may approve modifications to this timing on a case-by-case basis. The following measures will be established and enforced:

- There will be no soil disturbing activities or herbicide application in a basin/inundation feature or within 25 feet of such a feature;
- There will be no held herbicide application within 50 feet of a basin/inundation feature;
- There will be no power spray herbicide application within 100 feet of a basin/inundation feature; and
- There will be no broadcast herbicide application within 150 feet of a basin/inundation feature.

LLBR-9 Work Restrictions -- Wet Season: If it is not possible to restrict site preparation and/or construction activities to the dry season, the following measures will be established and enforced:

- A VFWO-approved biologist will monitor all site preparation, construction, and/or maintenance activities to occur within 150 feet of a basin/inundation feature;
- Exclusion fencing and erosion control materials will be installed under the supervision of a VFWO-approved biologist to prevent the discharge of sediment into basin/inundation features;
- There will be no soil disturbing activities or manual clearing of vegetation in or within 50 feet of a basin/inundation feature;
- There will be no mechanical clearing of vegetation within 100 feet of a basin/inundation feature;
- There will be no hand-held herbicide application within 25 feet of the edge of a basin/inundation feature; and

- There will be no power spray or broadcast herbicide application within 150 feet of a basin/inundation feature.

LLBR-10 Best Management Practices: The following practices will be implemented within or immediately adjacent to fairy shrimp habitat:

- Implementation of erosion control measures that will protect basin/inundation features from siltation and contaminant runoff. Erosion-control materials will be composed of a tightly woven natural fiber netting or similar material that will not entrap other wildlife species.
- Erosion control materials cannot be comprised of plastic or microfilament netting and all fiber rolls and hay bales used for erosion control must be certified as free of noxious weed seed.
- There will be no application of water (e.g., for dust suppression) within 100 feet of a basin/inundation feature without the use of additional protective measures (e.g., barriers and/or use of low flow water truck nozzles) to keep this type of water out of these features.
- All refueling, maintenance, and staging of equipment and vehicles is restricted to those areas specifically designed to contain any spills. These activities will not occur in any location where spill materials could drain towards a basin/inundation feature.
- Vehicles will be inspected daily for fluid leaks before leaving a staging area.

LLBR-11 Invasive Nonnative Plant Species Prevention: The VFWO-approved biologist will ensure that the spread or introduction of invasive nonnative plant species, via introduction by arriving vehicles, equipment, imported gravel, and other materials, is avoided to the maximum extent possible. Construction vehicles will be certified clean prior to any work within 150 feet of fairy shrimp habitat to minimize the introduction of invasive nonnative plant species. As practicable, nonnative plant species present within the project area will be removed from the site. Disposal will be in a manner that will not promote their spread to other areas. Invasive nonnative species are those identified in the California Invasive Plant Council's (Cal-IPC) Inventory Database, accessible at: www.cal-ipc.org/ip/inventory/index.php.

LLBR-12 Habitat Restoration/Revegetation: Restoration of temporary impacts to topography and vegetation will occur in accordance with a restoration plan reviewed and approved by the VFWO prior to the initiation of project activities. Plant species used in revegetation efforts will consist of native species suitable for the area. Locally collected plant materials will be used to the extent practicable.

Conservation Measures for Tidewater Goby

TWG-1 Block Netting: Prior to initiation of dewatering or sediment removal work, a qualified biologist will install 1/8 inch block nets outside the impact areas and across the stream a minimum of 20 feet above and below the locations proposed for excavation. If widely separated sites are involved, more than one set of block nets will be placed to protect the work area. The

nets will be installed on the first day of work and monitored thereafter for the duration of the work.

TWG-2 Environmental Awareness Training: Prior to initiation of dewatering or sediment removal work, hold an environmental awareness training to inform maintenance and management personnel about tidewater gobies, including tidewater goby protected status, proximity to the project site, avoidance/minimization measures to be implemented during the particular project, and the implications of violating the Act and FEMA funding conditions.

TWG-3 Capture and Relocation: Once the block nets are secured, a VFWO-approved biologist(s) will remove all tidewater gobies found between the block nets using a 1/8 inch seine and dip nets, and relocate tidewater gobies to suitable habitat downstream of the Action Area.

TWG-4 Flagging Construction Areas: Clearly flag the limits of construction areas to avoid or minimize impacts to adjacent riparian and upland habitat. Flagging will be no more than 50 feet apart and will be clearly visible to construction workers on the ground and to operators on heavy equipment.

TWG-5 Erosion and Sedimentation Control: Implement erosion and sedimentation control measures (e.g., silt fences, straw bales or wattles) in all areas where disturbed substrate may potentially wash into waters via rainfall or runoff, particularly around stockpiled material and at the downstream end of each project reach. Such measures will remain in place and be inspected periodically until the project is complete and exposed soils are stabilized. Diversion structures, sediment traps/basins and associated equipment (e.g., pumps, lines) will be maintained in optimal working condition for the entire duration of the preparation and construction periods.

TWG-6 Biological Monitoring: A VFWO-approved biological monitor will remain onsite and search for tidewater gobies and assess turbidity levels within the work areas during all dewatering activities, and will capture and relocate tidewater gobies to suitable habitat as necessary.

TWG-7 Daily Netting, Surveying, and Capture/Relocation: If excavation of a given extent of a basin cannot be completed in one day, a new set or successive sets of block nets will be deployed each day, and subsequent surveys and capture/relocation performed accordingly. Fish released from one day's work will not be released into areas projected to be excavated on successive days.

TWG-8 Reporting: Provide a written summary of work performed (including biological survey and monitoring results), best management practices implemented (i.e., use of biological monitor, flagging of work areas, erosion and sedimentation controls) and supporting photographs of each stage. Furthermore, the documentation describing listed species surveys and re-location efforts (if appropriate) will include name of biologist(s), location and description of area surveyed, time and date of survey, all survey methods used, a list and tally of all sensitive animal species observed during the survey, a description of the instructions/recommendations given to the

applicant during the project, and a detailed discussion of capture and relocation efforts (if appropriate).

Conservation Measures for Coastal California Gnatcatcher

CAGN-1 Habitat Assessment: A habitat assessment will be conducted by a VFWO-approved biologist to determine whether suitable habitat (including foraging, nesting, and dispersal) for the gnatcatcher occurs in the action area. If suitable habitat for this species is identified in the action area and the proposed project may affect suitable habitat that is not known to be occupied by the gnatcatcher, the VFWO will be contacted regarding the need for surveys according to the Service protocol and those surveys will be conducted, as appropriate. With VFWO concurrence, FEMA may also forgo surveys by making a determination that suitable habitat is occupied for the purposes of this PBO.

CAGN-2 Seasonal Avoidance: To minimize direct effects to nesting gnatcatchers, all clearing of vegetation within occupied or designated critical habitat (gnatcatcher habitat) will occur outside the breeding season (February 15-August 30) to the maximum extent practicable. If the breeding season cannot be avoided, a VFWO-approved biologist will conduct preconstruction nesting bird surveys prior to vegetation removal. If no active nests are found to occur within 300 feet of the area of disturbance, project activities may proceed.

CAGN-3 Work Restrictions Near Active Nests: If an active nest is detected during the survey, either work will be suspended until the young have fledged/beginning of the non-breeding season or the following will apply:

- a. An exclusionary buffer will be established around the nest. The buffer distance will be determined by the VFWO-approved biologist considering several factors: presence of natural buffers (vegetation/topography), nest height, location of foraging territory, nature of the proposed activities, and baseline levels of noise and human activity. The buffer may range from 50 feet to over 300 feet in width; AND
- b. If an exclusion zone is established, a VFWO-approved biologist will monitor the nest during construction for signs of adverse effects including distress/disturbance. If adverse effects are detected, then the VFWO-approved biologist will have the authority to stop all construction activating in the vicinity of the nest and coordinate with the VFWO to determine whether additional conservation measures can avoid or minimize effects on the nesting birds. Construction may resume only with approval from the VFWO; OR
- c. The biologist will continue to monitor the nest and will determine when young have fledged. Once young have left the nest the buffer and exclusion zone may be removed and construction activities within these areas may resume.

CAGN-4 Habitat Avoidance: Project impacts will be avoided or minimized in coastal sage scrub, alluvial fan scrub, and other vegetation communities known to be occupied by the gnatcatcher. Staging and temporary construction areas will be located outside of suitable habitat and will use existing roads and developed areas to the maximum extent possible. If impacts to

these habitats cannot be avoided, effects to gnatcatcher individuals will be avoided or minimized through implementation of the measures listed above.

CAGN-5 Habitat Restoration Plan: Prior to construction, a Restoration Plan will be prepared that describes the efforts to restore all the areas that had temporary impacts on suitable habitat for the gnatcatcher. Restoration of temporary impacts will occur in accordance with a VFWO-approved restoration.

CAGN-6 Limits on Habitat Disturbance: For any specific project, temporary impacts on occupied or designated critical habitat for the gnatcatcher will be limited to a maximum of 1 acre. Temporary impacts from all the projects covered under this programmatic consultation will also be limited to a maximum of 20 acres of gnatcatcher occupied or designated critical habitat. In addition, impacts will be limited to 10 gnatcatcher territories.

CAGN-7 No Permanent Loss of Habitat: No permanent loss of occupied or designated critical habitat for the gnatcatcher will occur.

Conservation Measure for Riparian birds: Least Bell's vireo, southwestern willow flycatcher, and yellow-billed cuckoo

RB – 1 Habitat Assessment and Seasonal Avoidance: A habitat assessment will be conducted by a VFWO-approved biologist to determine whether suitable habitat (including foraging, nesting, and dispersal) for listed riparian birds occurs in the action area. If suitable habitat for these species is present within 500 feet of the action area, project activities will be scheduled to avoid the breeding season (March 15 to September 15) to the maximum extent possible.

RB – 2 Pre-activity surveys: In the event that project activities in suitable habitat for least Bell's vireos, southwestern willow flycatchers, and/or yellow-billed cuckoo (riparian birds) cannot be scheduled outside of the breeding season surveys will be conducted according to Service guidance to determine presence or absence of the covered riparian birds. A modified survey protocol may be appropriate on a case-by-case basis and must be approved by VFWO.

RB – 3 Biological Monitor: A VFWO-approved biologist(s) will be onsite during all activities that may result in take of covered riparian birds.

RB – 4 Establishment of Buffer: If a nesting riparian bird is detected within the project area during pre-project surveys, a VFWO-approved biologist will establish a buffer zone around the nest that they deem sufficient to avoid the abandonment of the nest by the adults. The Service generally recommends a minimum 500 foot buffer around nests where no work is to occur; however, a smaller buffer can be established for least Bell's vireos if deemed protective by the VFWO-approved biologist and approved by the Service. Southwestern willow flycatchers and yellow-billed cuckoos are more sensitive to disturbance than least Bell's vireos, and therefore a greater buffer may be required. The VFWO-approved biologist must monitor the nests during all project activities immediately adjacent to buffer zones to determine the effects of project

activities on the nesting riparian birds. The VFWO-approved biologist will have the authority to stop work if deemed necessary to protect the nesting birds.

RB – 4 Native Vegetation Remains in Place: For projects where non-native plant species are targeted for removal within suitable habitat for riparian birds, native vegetation will be left in place to the maximum extent practical; willows (*Salix* sp.) and cottonwoods (*Populus* sp.) with a diameter at breast height of 6 inches or greater may be trimmed, but will be left in place where possible.

RB - 5 Establishment of A VFWO-Approved Restoration Plan: Prior to construction, a Restoration Plan will be prepared that describes the efforts to restore all the areas of suitable habitat for the vireo that were temporarily impacted. The Restoration Plan will be reviewed and approved by the VFWO.

RB - 6 Acreage Restriction: For any specific project, temporary impacts on occupied or designated critical habitat for listed riparian birds will be limited to a maximum of 1 acre.

RB - 7 No Permanent Habitat Loss: No permanent loss of occupied or designated critical habitat for listed riparian birds will occur unless the impacts to habitat are determined to be insignificant via project-level consultation, or are mitigated as approved by the VFWO.

Conservation Measures for Smith's Blue Butterfly

SBB-1 Habitat Avoidance: If possible, avoid damage or removal of seacliff buckwheat (*Eriogonum parvifolium*) or coast buckwheat (*Eriogonum latifolium*) plants, which are essential components of Smith's blue butterfly habitat.

SBB-2 Seasonal Restrictions: If possible, avoid work between June 15 and September 15, when Smith's blue butterfly adults, eggs, and larvae may be present. Pupae may be present throughout the year, but are immobile and unlikely to be present far from seacliff buckwheat or coast buckwheat plants.

SBB-3 Minimize Ground Disturbance: Ensure that ground disturbance for maintenance or project activities will not occur within stands of buckwheat unless a VFWO-approved biologist is on site.

SBB-4 Pre-Activity Surveys: For maintenance work or project activity within stands of buckwheat, a VFWO-approved biologist will survey the work site no more than 30 days before the onset of ground disturbance. If any life stage of the Smith's blue butterfly or its host plants, seacliff or coast buckwheat, is found and is likely to be killed or injured by work activities, the approved biologist will be allowed sufficient time to relocate seacliff or coast buckwheat plants, duff, and/or soil, from the site before work activities begin. The seacliff or coast buckwheat plants, duff, and/or soil will be hand removed and placed as close as possible to, but not on, living seacliff or coast buckwheat plants. The VFWO-approved biologist will relocate the

seacliff or coast buckwheat plants, duff, and/or soil the shortest distance possible to a location that contains suitable habitat and will not be affected by activities associated with the proposed project. The VFWO-approved biologist will maintain detailed records of the number of seacliff or coast buckwheat plants that are moved and submit with project reporting.

SSB-5 Biological Monitoring: A VFWO-approved biologist will be present at the work site for maintenance or project activity within stands of buckwheat until all Smith's blue butterflies and seacliff or coast buckwheat plants that are at risk due to project activities have been removed, workers have been instructed, and disturbance to habitat has been completed. After this time, a biological monitor on-site will ensure compliance with all protective measures. The VFWO-approved biologist will ensure that this monitor receives the training outlined in measure 7 and in the identification of the Smith's blue butterfly and its host plant, seacliff or coast buckwheat. If the biological monitor or the VFWO-approved biologist recommends that work be stopped because the Smith's blue butterfly, or seacliff or coast buckwheat would be affected to a degree that exceeds the levels anticipated by the Service during review of the proposed action, they will notify the resident engineer (the engineer that is directly overseeing and in command of construction activities) immediately. The resident engineer will either resolve the situation by eliminating the unanticipated effect(s) immediately, or require that all actions causing these effects be halted. If work is stopped, the Service will be notified as soon as is reasonably possible.

SSB-6 Capture and Relocation: If suitable habitat has been identified in the Action Area, ensure that only VFWO-approved biologists will participate in capture, handling, and monitoring of the Smith's blue butterfly, in all of its life stages, and the handling of buckwheat plants.

SSB-7 Environmental Awareness Training: Before any maintenance or project activity work begins within stands of buckwheat, VFWO-approved biologist will provide construction awareness training to all field personnel. At a minimum, the training will include a description of the Smith's blue butterfly and its habitat, the specific measures that are being implemented to conserve the Smith's blue butterfly, and boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

SSB-8 Minimize Disturbing Activities: The number of access routes, size of staging areas, and the total area of the activity will be limited to the minimum necessary to achieve the project goal. Environmentally Sensitive Areas will be established to confine access routes and construction areas to the minimum area necessary to complete construction, and minimize the impact to Smith's blue butterfly and seacliff or coast buckwheat.

SSB-9 Revegetation: An assemblage of native species will be used for revegetation of project sites. Seacliff or coast buckwheat seed or plants will only be placed outside the vegetation control areas. The spread of invasive weeds during revegetation efforts will be controlled.

SBB-10 Erosion and Sedimentation Control: Ensure that best management practices are implemented according to the most current approved guidelines to control erosion and sedimentation during and after project implementation. Under the California Interagency Noxious Weed Free Forage and Mulch Program (<http://pi.cdfa.gov/weed/wff>), California is taking steps to make noxious weedfree hay and straw widely available. Under this program, weed-free hay and straw bales will be used for erosion control measures when they become available.

ANALYTICAL FRAMEWORK FOR THE JEOPARDY AND ADVERSE MODIFICATION DETERMINATIONS

Jeopardy Determination

Section 7(a)(2) of the Act requires that Federal agencies ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of listed species. “Jeopardize the continued existence of” means “to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species” (50 CFR 402.02).

The jeopardy analysis in this biological opinion relies on four components: (1) the Status of the Species, which describes the range-wide condition of the 12 covered species, the factors responsible for that condition, and its survival and recovery needs; (2) the Environmental Baseline, which analyzes the condition of the covered species in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of the covered species; (3) the Effects of the Action, which determines the direct and indirect impacts of the proposed Federal action and the effects of any interrelated or interdependent activities on the covered species; and (4) the Cumulative Effects, which evaluates the effects of future, non-Federal activities, that are reasonably certain to occur in the action area, on the covered species.

In accordance with policy and regulation, the jeopardy determination is made by evaluating the effects of the proposed Federal action in the context of the current status of the covered species, taking into account any cumulative effects, to determine if implementation of the proposed action is likely to reduce appreciably the likelihood of both the survival and recovery of the covered species in the wild by reducing the reproduction, numbers, and distribution of that species.

Adverse Modification Determination

Section 7(a)(2) of the Act requires that Federal agencies ensure that any action they authorize, fund, or carry out is not likely to destroy or to adversely modify designated critical habitat. A

final rule revising the regulatory definition of “destruction or adverse modification” was published on February 11, 2016 (81 FR 7214). The final rule became effective on March 14, 2016. The revised definition states:

“Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.”

The “destruction or adverse modification” analysis in this biological opinion relies on four components: (1) the Status of Critical Habitat, which describes the range-wide condition of the critical habitat in terms of the key components (i.e., essential habitat features, primary constituent elements, or physical and biological features) that provide for the conservation of the listed species, the factors responsible for that condition, and the intended value of the critical habitat overall for the conservation/recovery of the listed species; (2) the Environmental Baseline, which analyzes the condition of the critical habitat in the action area, the factors responsible for that condition, and the value of the critical habitat in the action area for the conservation/recovery of the listed species; (3) the Effects of the Action, which determines the direct and indirect impacts of the proposed Federal action and the effects of any interrelated and interdependent activities on the key components of critical habitat that provide for the conservation of the listed species, and how those impacts are likely to influence the conservation value of the affected critical habitat; and (4) Cumulative Effects, which evaluate the effects of future non-Federal activities that are reasonably certain to occur in the action area on the key components of critical habitat that provide for the conservation of the listed species and how those impacts are likely to influence the conservation value of the affected critical habitat. For purposes of making the “destruction or adverse modification” determination, the Service evaluates if the effects of the proposed Federal action, taken together with cumulative effects, are likely to impair or preclude the capacity of critical habitat in the action area to serve its intended conservation function to an extent that appreciably diminishes the rangewide value of critical habitat for the conservation of the listed species. The key to making that finding is understanding the value (i.e., the role) of the critical habitat in the action area for the conservation/recovery of the listed species based on the Environmental Baseline analysis.

STATUS OF THE SPECIES AND CRITICAL HABITAT

A final rule published on February 11, 2016 (81 FR 7414), removed the phrase “primary constituent elements” (PCEs) from the regulations for designating critical habitat (50 CFR 424.12). Instead, new designations will focus on “physical and biological features” (PBFs). Existing critical habitat rules may still define PCEs; however, the two terms (PBFs and PCEs) may be used interchangeably as they are considered synonymous.

Arroyo Toad

Legal Status

The arroyo toad was listed as endangered on December 16, 1994 (Service 1994a). The recovery plan for the arroyo toad was published in 1999 (Service 1999). The final rule for revised critical habitat for the arroyo toad was published on February 9, 2011 (Service 2011a). The Service received a petition to downlist the arroyo toad from endangered to threatened on December 19, 2011. After reviewing the available information, the Service determined the petitioned action was not warranted (Service 2015b). Furthermore, we found that the species had not yet responded to conservation efforts to an extent that would allow a change in listing status, therefore, the species remains listed as endangered.

Natural History

The arroyo toad is a small, stocky, warty toad that is about 2 to 3.5 inches (4.6 to 8.6 centimeters) in length (Stebbins 2003). The arroyo toad is a dark-spotted toad of the family *Bufo* that is found along medium-to-large streams in coastal and desert drainages in central and southern California, and Baja California, Mexico (Service 2015a). It occupies aquatic, riparian, and upland habitats in a number of the remaining suitable drainages within its range. Suitable habitat for the arroyo toad is created and maintained by the fluctuating hydrological, geological, and ecological processes that naturally occur in riparian ecosystems and adjacent uplands. Campbell et al. (1996) describes that a stream must be large enough for channel scouring processes to operate, but not so large that habitat structure is lost after floods. Arroyo toads require habitat produced and maintained by narrow drainages of intermediate size; in larger systems, suitable microhabitats may be too widely dispersed, if present at all, while stream channels are too unstable in smaller systems (Campbell et al. 1996; Sweet 1992). Arroyo toads tend to be located in areas where the stream is still bordered by low hills and the stream gradient is low due to accumulated bed load (Campbell et al. 1996). Periodic flooding that modifies stream channels, redistributes channel sediments, and alters pool location and form, coupled with upper terrace stabilization by vegetation, is required to keep a stream segment suitable for arroyo toads.

The substrate in habitats preferred by arroyo toads consists primarily of sand, fine gravel, or pliable soil, with varying amounts of large gravel, cobble, and boulders. Areas that are damp and have less than 10 percent vegetation cover provide the best conditions for juvenile survival and rapid growth of the arroyo toad (Campbell et al. 1996). During the breeding season, from late March to June, arroyo toads strongly favor shallow, sand- or gravel- based pools with a minimum of vegetation along one or both margins (Sweet 1992). Larvae occupy shallow areas of open streambeds on substrates ranging from silt to cobble, with preferences for sand or gravel. Newly metamorphosed arroyo toads and juveniles remain on sparsely vegetated sand and gravel bars bordering the natal pool to feed until the pool dries out, usually from 8 to 12 weeks, but up to 4 months depending on the pool site and rainfall conditions (Service 2015a).

Arroyo toads must be able to move between the stream and upland foraging sites, as well as up and down the stream corridor. Juveniles and adult arroyo toads require and spend much of their lives in riparian and upland habitats adjacent to breeding locations (Campbell et al. 1996). Riparian habitats used for foraging and burrowing include sand bars, alluvial terraces, and streamside benches that lack vegetation, or are sparsely to moderately vegetated. Upland habitats used by arroyo toads during both the breeding and non-breeding seasons include alluvial scrub, coastal sage scrub, chaparral, grassland, and oak woodland (Holland 1995; Griffin et al. 1999).

Arroyo toad tadpoles eat microscopic algae, bacteria, and protozoans, which live in the interstices of the substrate such as the spaces among pebbles, gravel, and sand, or abraded from stones (Sweet 1992). Small toads feed almost exclusively on ants. Toads in the size range of 17-23 millimeters feed on fewer ants and an increasing proportion of small beetles, particularly ladybugs (*Coccinellidae*; Sweet 1992). When foraging, arroyo toads are often found around the drip lines of oak trees. These areas often lack vegetation, yet have levels of prey that will support arroyo toads. Toads in the size range of 17-23 millimeters are mostly diurnal, but also begin to be active after dark (Sweet 1992). Mid July to early August, when toads typically reach 22-23 millimeters (in 4-5 weeks), many of the breeding pools and surfaces of the sand bars become dry and cemented by minerals deposited in the surface layer. Toads of this size seem to be largely nocturnal at most sites, though some individuals are active diurnally on sand bars that remain damp (Sweet 1992). Nocturnal activity peaks soon after dark, and consists mostly of toads traveling to the edges of the sand bar where they soak up water before returning to their burrows (Sweet 1992). Additionally, arroyo toads may seek temporary shelter under rocks or debris and have been found in mammal burrows on occasion. Adult arroyo toads are known to burrow between 2-4 inches deep in the substrate (Sweet 1992), while juveniles burrow about 1-2 inches (Sweet 1992).

The arroyo toad has specialized breeding habitat requirements. When warm, rainy conditions occur in January, February and March, arroyo toads become active and begin to forage on stream terraces and in channel margins. Male toads sit on the substrate in shallow water to call and their throats must be above the water's surface. Female arroyo toads lay their eggs in water less than four inches deep (Sweet 1992), but not greater than seven inches deep, over substrates of sand, gravel, or cobble in open sites such as overflow pools, old flood channels, and shallow pools along streams. Breeding usually begins in late March at lower elevations, but male calling peaks in early- to mid-April and extends through late-May, sometimes even into late-June (Sweet 1992). Streams where arroyo toads breed can be either intermittent or perennial streams that typically have periodic flooding events to scour vegetation and replenish fine sediments. Such habitats rarely have closed canopies over the lower banks of the stream channel due to periodic flood events. Heavily shaded pools are generally unsuitable for larval and juvenile arroyo toads because of lower water and soil temperatures and poor algal mat development (Service 2015b).

Female arroyo toads release their entire clutch of eggs as a single breeding effort and it is very doubtful that any produce two clutches in a single mating season (Sweet 1992; Campbell et al. 1996). Larvae usually hatch in four to six days (Sweet 1992) and tadpoles disperse from the pool margin into the surrounding shallow water, where they spend an average of ten weeks (Sweet

1992). Metamorphosis from tadpole to juvenile typically occurs in June or July. After metamorphosis, the juvenile arroyo toads remain on the bordering gravel bars until the pool dries out, which can take from eight to twelve weeks, depending on whether the site remains wet and the surrounding sand or gravel bars do not become cemented by evaporate deposits (Sweet 1992). Most males become sexually mature by the following spring, but females generally do not become sexually mature until at least two years of age (Service 2015a; Sweet 1992). Longevity may vary with local conditions; comparative size data from the Santa Ynez population suggested that few adults survive even to age 5 (Sweet 1992).

Rangewide Status

The species was once relatively abundant across its range, but populations have declined by approximately 76 percent from its historical distribution (Jennings and Hayes 1994). The primary threats to the arroyo toad at the time of listing were habitat destruction and alteration from water storage reservoirs, flood control structures, roads, agriculture, urban development, recreational facilities, and mining activities. Non-native plants, such as tamarisk (*Tamarix* spp.) and giant reed (*Arundo donax*), have also altered arroyo toad habitat. In addition to habitat threats, introduced non-native predators (e.g., bullfrogs (*Rana catesbeiana*), green sunfish (*Lepomis cyanellus*), and African clawed frogs (*Xenopus laevis*)) and fire are substantial threats to the arroyo toad. Threats to the arroyo toad identified subsequent to listing are the chytrid fungus disease (*Batrachochytrium dendrobatidis*), climate change, and wildfire suppression activities (e.g., fire line construction, bulldozing, and water withdrawals by helicopters).

Critical Habitat

The final rule for revised critical habitat for the arroyo toad was published on February 9, 2011 (Service 2011a). Approximately 98,366 acres of habitat, distributed into 21 units are located throughout Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, Orange and San Diego Counties, California. This final revised designation constitutes an increase of approximately 86,671 acres from the 2005 designation of critical habitat for the arroyo toad (Service 2005a). The Service (2011) used current knowledge of the biology and ecology of the species, and the habitat requirements for sustaining the essential life-history functions of the species, to determine that the arroyo toad's PBFs are:

- 1) Rivers or streams with hydrologic regimes that supply water to provide space, food, and cover needed to sustain eggs, tadpoles, metamorphosing juveniles, and adult breeding toads.
- 2) Riparian and adjacent upland habitats, particularly low-gradient (typically less than 6 percent) stream segments and alluvial streamside terraces with sandy or fine gravel substrates that support the formation of shallow pools and sparsely vegetated sand and gravel bars for breeding and rearing of tadpoles and juveniles; and adjacent valley bottomlands that include areas of loose soil where toads can burrow underground, to provide foraging and living areas for juvenile and adult arroyo toads.

- 3) A natural flooding regime, or one sufficiently corresponding to natural, that: (1) is characterized by intermittent or near-perennial flow that contributes to the persistence of shallow pools into at least mid-summer; (2) maintains areas of open, sparsely vegetated, sandy stream channels and terraces by periodically souring riparian vegetation; and (3) also modifies stream channels and terraces and redistributes sand and sediment, such that breeding pools and terrace habitats with scattered vegetation are maintained.
- 4) Stream channels and adjacent uplands habitats that allow for movement to breeding pools, foraging areas, overwintering sites, upstream and downstream dispersal, and connectivity to areas that contain suitable habitat.

In summary, the need for space for individual and population growth and normal behavior is met by PBFs 1 and 4; the need for food, water, and physiological requirements is met by PBF 1; cover and shelter requirements are met by PBF 2; areas for breeding, reproduction, and rearing of offspring are met by PBFs 1, 2, and 3; and habitats representative of the historical, geographical, and ecological distributions of a species are met by PBF 4.

Recovery

The primary goal identified in the recovery plan for the arroyo toad is to reclassify the species from endangered to threatened and, ultimately, to delist the species (Service 1999). Reclassification to threatened status may be considered when management plans have been approved and implemented on federally-managed lands to provide for conserving, maintaining, and restoring the riparian and upland habitats used by arroyo toads for breeding, foraging, and wintering habitat.

The recovery strategy for the arroyo toad includes the following actions: (1) stabilize and maintain populations throughout the range of the arroyo toad in California by protecting sufficient breeding and nonbreeding habitat; (2) monitor the status of existing populations to ensure recovery actions are successful; (3) identify and secure additional suitable arroyo toad habitat and populations; (4) conduct research to obtain data to guide management efforts and determine the best methods for reducing threats; and (5) develop and implement an outreach program (Service 1999).

In addition, at least 20 self-sustaining metapopulations or subpopulations of arroyo toads must be maintained. Self-sustaining populations or metapopulations are those documented as having successful recruitment (i.e., inclusion of newly matured individuals into the breeding adult cohort in 7 of 10 years of average to above average rainfall amounts with normal rainfall patterns). Self-sustaining populations or metapopulations require little or no direct human assistance such as captive breeding or rearing, or translocation of arroyo toads between sites. These populations must have adequate genetic and phenotypic variation, as described in the recovery plan.

California Red-legged Frog

Legal Status

The California red-legged frog was federally listed as threatened on May 23, 1996 (Service 1996). Revised critical habitat for the California red-legged frog was designated on March 17, 2010 (Service 2010a). The Service issued a recovery plan for the species on May 28, 2002 (Service 2002a).

Natural History

The California red-legged frog uses a variety of habitat types, including various aquatic systems, riparian, and upland habitats. They have been found at elevations ranging from sea level to approximately 5,000 feet. California red-legged frogs use the environment in a variety of ways, and in many cases, they may complete their entire life cycle in a particular area without using other components (i.e., a pond is suitable for each life stage and use of upland habitat or a riparian corridor is not necessary). Populations appear to persist where a mosaic of habitat elements exists, embedded within a matrix of dispersal habitat. Adults are often associated with dense, shrubby riparian or emergent vegetation and areas with deep (greater than 1.6 feet) still or slow-moving water; the largest summer densities of California red-legged frogs are associated with deep-water pools with dense stands of overhanging willows (*Salix* spp.) and an intermixed fringe of cattails (*Typha latifolia*; Hayes and Jennings 1988). Hayes and Tennant (1985) found juveniles to seek prey diurnally and nocturnally, whereas adults were largely nocturnal.

California red-legged frogs breed in aquatic habitats; larvae, juveniles, and adult frogs have been collected from streams, creeks, ponds, marshes, deep pools and backwaters within streams and creeks, dune ponds, lagoons, and estuaries. They frequently breed in artificial impoundments such as stock ponds, given the proper management of hydro-period, pond structure, vegetative cover, and control of exotic predators. While frogs successfully breed in streams and riparian systems, high spring flows and cold temperatures in streams often make these sites risky egg and tadpole environments. An important factor influencing the suitability of aquatic breeding sites is the general lack of introduced aquatic predators. Accessibility to sheltering habitat is essential for the survival of California red-legged frogs within a watershed and can be a factor limiting population numbers and distribution.

During periods of wet weather, starting with the first rains of fall, some individual California red-legged frogs may make long-distance overland excursions through upland habitats to reach breeding sites. In Santa Cruz County, Bulger et al. (2003) found marked California red-legged frogs moving up to 1.7 miles through upland habitats, via point-to-point, straight-line migrations without regard to topography, rather than following riparian corridors. Most of these overland movements occurred at night and took up to 2 months. Similarly, in San Luis Obispo County, Rathbun and Schneider (2001) documented the movement of a male California red-legged frog between two ponds that were 1.78 miles apart in less than 32 days; however, most California red-legged frogs in the Bulger et al. (2003) study were non-migrating frogs and always remained

within 426 feet of their aquatic site of residence (half of the frogs always stayed within 82 feet of water). Rathbun et al. (1993) radio-tracked three California red-legged frogs near the coast in San Luis Obispo County at various times between July and January; these frogs also stayed close to water and never strayed more than 85 feet into upland vegetation. Scott (2002) radio-tracked nine California red-legged frogs in East Las Virgenes Creek in Ventura County from January to June 2001, which remained relatively sedentary as well; the longest within-channel movement was 280 feet and the farthest movement away from the stream was 30 feet.

After breeding, California red-legged frogs often disperse from their breeding habitat to forage and seek suitable dry-season habitat. Cover within dry-season aquatic habitat could include boulders, downed trees, and logs; agricultural features such as drains, watering troughs, spring boxes, abandoned sheds, or hay-ricks, and industrial debris. California red-legged frogs use small mammal burrows and moist leaf litter (Rathbun et al. 1993; Jennings and Hayes 1994); incised stream channels with portions narrower and deeper than 18 inches may also provide habitat (Service 1996). This type of dispersal and habitat use, however, is not observed in all California red-legged frogs and is most likely dependent on the year-to-year variations in climate and habitat suitability and varying requisites per life stage.

Although the presence of California red-legged frogs is correlated with still water deeper than approximately 1.6 feet, riparian shrubbery, and emergent vegetation (Jennings and Hayes 1994), California red-legged frogs appear to be absent from numerous locations in its historical range where these elements are well represented. The cause of local extirpations does not appear to be restricted solely to loss of aquatic habitat. The most likely causes of local extirpation are thought to be changes in faunal composition of aquatic ecosystems (i.e., the introduction of non-native predators and competitors) and landscape-scale disturbances that disrupt California red-legged frog population processes, such as dispersal and colonization. The introduction of contaminants or changes in water temperature may also play a role in local extirpations. These changes may also promote the spread of predators, competitors, parasites, and diseases.

Rangewide Status

The historical range of the California red-legged frog extended coastally from southern Mendocino County and inland from the vicinity of Redding, California, southward to northwestern Baja California, Mexico (Storer 1925; Jennings and Hayes 1985; Shaffer et al. 2004). The California red-legged frog has sustained a 70 percent reduction in its geographic range because of several factors acting singly or in combination (Davidson et al. 2001).

Over-harvesting, habitat loss, non-native species introduction, and urban encroachment are the primary factors that have negatively affected the California red-legged frog throughout its range (Jennings and Hayes 1985; Hayes and Jennings 1988). Habitat loss and degradation, combined with over-exploitation and introduction of exotic predators, were important factors in the decline of the California red-legged frog in the early to mid-1900s. Continuing threats to the California red-legged frog include direct habitat loss due to stream alteration and loss of aquatic habitat, indirect effects of expanding urbanization, competition or predation from non-native species

including the bullfrog, catfish (*Ictalurus* spp.), bass (*Micropterus* spp.), mosquito fish (*Gambusia affinis*), red swamp crayfish (*Procambarus clarkii*), and signal crayfish (*Pacifastacus leniusculus*). Chytrid fungus is a waterborne fungus that can decimate amphibian populations, and is considered a threat to California red-legged frog populations.

A 5-year review of the status of the California red-legged frog was initiated in May 2011, but has not yet been completed.

Critical Habitat

The Service first designated critical habitat for the California red-legged frog on March 13, 2001 (Service 2001). We revised the designation in a final rule published on March 17, 2010 (Service 2010a). The final rule describes 48 separate units, encompassing approximately 1,636,609 acres, in 27 counties in California. The designation includes lands supporting those features necessary for the conservation of the California red-legged frog. In addition, the Service finalized a special rule pursuant to section 4(d) of the Act, associated with final listing of the California red-legged frog as threatened, for existing routine ranching activities (Service 2006a). A detailed discussion of the history and methods used in developing critical habitat can be found in the final rule (Service 2010a).

In accordance with section 3(5)(A)(i) of the Act and Federal regulations at 50 CFR 424.12, in determining which areas to designate as critical habitat, we identified the PBFs essential to the conservation of the species which may require special management considerations or protection. Because not all life history functions require all the PBFs, not all areas designated as critical habitat will contain all of the PBFs. Based on our current knowledge of the life history, biology, and ecology of the California red-legged frog, we determined the California red-legged frog's PBFs to consist of: (1) aquatic breeding habitat; (2) aquatic non-breeding habitat; (3) upland habitat, and (4) dispersal habitat. Detailed descriptions of these PBFs can be found in the final rule (Service 2010a). The following is a brief summary of the PBFs:

Aquatic breeding habitat consists of standing bodies of fresh water (with salinities less than 4.5 parts per thousand), including natural and manmade (stock) ponds, slow moving streams or pools within streams and other ephemeral or permanent water bodies that typically become inundated during winter rains and hold water for a minimum of 20 weeks in all but the driest of years.

Aquatic non-breeding habitat consists of the freshwater habitats as described for aquatic breeding habitat but which may or may not hold water long enough for the species to complete the aquatic portion of its lifecycle but which provide for shelter, foraging, predator avoidance, and aquatic dispersal habitat of juvenile and adult California red-legged frogs.

Upland habitat consists of upland areas adjacent to or surrounding breeding and non-breeding aquatic and riparian habitat up to a distance of one mile in most cases (i.e., depending on surrounding landscape and dispersal barriers), including various vegetation types such as grassland, woodland, forest, wetland, or riparian areas that provide shelter, forage, and predator

avoidance for California red-legged frogs. Upland habitat should contain structural features such as boulders, rocks and organic debris (e.g., downed trees, logs), small mammal burrows, or moist leaf litter.

Dispersal habitat consists of accessible upland or riparian habitat within and between occupied or previously occupied sites that are located within 1 mile of each other, and that support movement between such sites. Dispersal habitat includes various natural habitats, and altered habitats such as agricultural fields that do not contain barriers (e.g., heavily traveled roads without bridges or culverts) to dispersal. Dispersal habitat does not include moderate- to high-density urban or industrial developments with large expanses of asphalt or concrete, nor does it include large lakes or reservoirs over 50 acres in size, or other areas that do not contain those features identified in PBFs 1, 2, or 3 as essential to the conservation of the species.

Recovery

The 2002 final recovery plan for the California red-legged frog (Service 2002a) states that the goal of recovery efforts is to reduce threats and improve the population status of the California red-legged frog sufficiently to warrant delisting. The recovery plan describes a strategy for delisting, which includes: (1) protecting known populations and reestablishing historical populations; (2) protecting suitable habitat, corridors, and core areas; (3) developing and implementing management plans for preserved habitat, occupied watersheds, and core areas; (4) developing land use guidelines; (5) gathering biological and ecological data necessary for conservation of the species; (6) monitoring existing populations and conducting surveys for new populations; and (7) establishing an outreach program. The California red-legged frog will be considered for delisting when:

Suitable habitats within all core areas are protected and/or managed for California red-legged frogs in perpetuity, and the ecological integrity of these areas is not threatened by adverse anthropogenic habitat modification (including indirect effects of upstream/downstream land uses).

Existing populations throughout the range are stable (i.e., reproductive rates allow for long-term viability without human intervention). Population status will be documented through establishment and implementation of a scientifically acceptable population monitoring program for at least a 15-year period, which is approximately 4 to 5 generations of the California red-legged frog. This 15-year period should coincide with an average precipitation cycle.

Populations are geographically distributed in a manner that allows for the continued existence of viable metapopulations despite fluctuations in the status of individual populations (i.e., when populations are stable or increasing at each core area).

The species is successfully reestablished in portions of its historical range such that at least one reestablished population is stable/increasing at each core area where California red-legged frog are currently absent.

The amount of additional habitat needed for population connectivity, recolonization, and dispersal has been determined, protected, and managed for California red-legged frogs.

The recovery plan identifies eight recovery units based on the assumption that various regional areas of the species' range are essential to its survival and recovery. The recovery status of the California red-legged frog is considered within the smaller scale of recovery units as opposed to the overall range. These recovery units correspond to major watershed boundaries as defined by U.S. Geological Survey hydrologic units and the limits of the range of the California red-legged frog. The goal of the recovery plan is to protect the long-term viability of all extant populations within each recovery unit.

Within each recovery unit, core areas have been delineated and represent contiguous areas of moderate to high California red-legged frog densities that are relatively free of exotic species such as bullfrogs. The goal of designating core areas is to protect metapopulations that combined with suitable dispersal habitat, will support long-term viability within existing populations. This management strategy allows for the recolonization of habitat within and adjacent to core areas that are naturally subjected to periodic localized extinctions, thus assuring the long-term survival and recovery of the California red-legged frog.

California Tiger Salamander - Central California DPS and Santa Barbara DPS

Legal Status

The Service recognizes three DPSs of the California tiger salamander: the Sonoma County DPS, the Santa Barbara County DPS, and the Central DPS. On September 21, 2000, the Service emergency listed the Santa Barbara County DPS of the California tiger salamander as endangered (Service 2000a). On March 19, 2003, the Service listed the Sonoma County distinct population segment of the California tiger salamander as endangered (Service 2003a). On August 4, 2004, the Service published a final rule listing the California tiger salamander as threatened range-wide, including the previously identified Sonoma and Santa Barbara distinct population segments (Service 2004a). This rule was subsequently vacated by a judicial decision on August 19, 2005, and the Sonoma and Santa Barbara County DPS was reinstated and returned to endangered status. The central California population is listed as threatened. The distribution of breeding locations of the three DPSs, don't naturally overlap (Loredo et al. 1996, Petranka 1998, Stebbins 2003).

In 2004, the Service designated critical habitat for the Santa Barbara County DPS of the California tiger salamander, consisting of six units totaling 7,491 acres (Service 2004b). In 2005, the Service designated critical habitat for the central DPS of the California tiger salamander, consisting of approximately 199,109 acres located within four geographic regions within California (Service 2005b).

Natural History

The California tiger salamander is a large and stocky terrestrial salamander with small eyes and a broad, rounded snout. Adults may reach a total length of 8.2 inches, with males generally averaging about 8 inches total length, and females averaging about 6.8 inches in total length. For both sexes, the average snout-to-vent length is approximately 3.6 inches (Service 2000a). The small eyes have black irises and protrude from the head. Coloration consists of white or pale yellow spots or bars on a black background on the back and sides. The belly varies from almost uniform white or pale yellow to a variegated pattern of white or pale yellow and black. Males can be distinguished from females, especially during the breeding season, by their swollen cloacae (a common chamber into which the intestinal, urinary, and reproductive canals discharge), larger tails, and larger overall size (Loredo and Van Vuren 1996).

Historically, California tiger salamanders inhabited low-elevation (generally under 1,500 feet) seasonal ponds and associated grassland, oak savannah, and coastal scrub plant communities of the Santa Maria, Los Alamos, and Santa Rita Valleys in the northwestern area of Santa Barbara County (Shaffer et al. 1993, Sweet 1993). Seasonal ponds, such as vernal pools (seasonal, shallow wetlands that alternate between dry and wet periods) and sag ponds (ponds located in depressions formed at a strike-slip fault), are typically used by California tiger salamanders for breeding. However, with the conversion and loss of many vernal pools through farmland conversion and urban and suburban development, ephemeral and permanent ponds that have been created for livestock watering are now frequently used by the species (Fisher and Shaffer 1996).

California tiger salamanders spend the majority of their lives in upland habitats and cannot persist without them (Trenham and Shaffer 2005). The upland component of California tiger salamander habitat typically consists of grassland savannah, but includes grasslands with scattered oak trees, and scrub or chaparral habitats (Shaffer et al. 1993, Service 2000a). Juvenile and adult California tiger salamanders spend the dry summer and fall months of the year in the burrows of small mammals, such as California ground squirrels (*Otospermophilus beecheyi*) and Botta's pocket gopher (*Thomomys bottae*; Storer 1925, Loredo and Van Vuren 1996, Trenham 1998). Burrow habitat created by ground squirrels and utilized by California tiger salamanders suggests a commensal relationship between the two species (Loredo et al. 1996). Movement of California tiger salamanders within and among burrow systems continues for at least several months after juveniles and adults leave the ponds (Trenham 2001). Active ground-burrowing rodent populations are likely required to sustain California tiger salamanders because inactive burrow systems become progressively unsuitable over time (Service 2004b). Loredo et al. (1996) found that California ground squirrel burrow systems collapsed within 18 months following abandonment by, or loss of, the mammals.

California tiger salamanders can undertake long-distance migrations, and can disperse long distances as well. They have been recorded traveling the second-longest distance among salamanders. California tiger salamanders move more readily among breeding ponds than other members of the family, a characteristic found consistently among different study sites (Trenham

et al. 2001, Wang et al. 2011). Many studies have recorded migration and dispersal distances by adult and juvenile California tiger salamanders, both through radio-tracking (Loredo et al. 1996, Trenham 2001) and upland drift fence capture (Trenham and Shaffer 2005, Orloff 2007, 2011). None of these studies were conducted within the range of the Santa Barbara County California tiger salamander, but are considered to be the best available scientific information on the species. Movement of California tiger salamanders is reviewed in Service (2009) and Searcy et al. (2013). In general, studies show that adults can move 1.2 miles to more than 1.4 miles from breeding ponds (Service 2000a, Trenham et al. 2001, Orloff 2011). Estimates differ on the proportion of a population likely to move large distances, with studies finding that 95 percent of a population occurs within 2,034 feet (Trenham and Shaffer 2005) and 1.1 miles (Search and Shaffer 2008, 2011, Searcy et al. 2013) of a breeding pond.

California tiger salamanders appear to have high site-fidelity, returning to their natal pond as adults and commonly returning to the same terrestrial habitat areas after breeding (Orloff 2007, 2011; Trenham 2001). Wang et al. (2009) studied genetic distinctness across 16 Central DPS California tiger salamander breeding sites (Fort Ord, Monterey County), and confirmed genetic differences at almost every site. Work is currently being conducted by the University of California, Los Angeles to determine the genetic distinctness across metapopulations in Santa Barbara County. Initial results show the northern two metapopulations (West Santa Maria and East Santa Maria) are more genetically similar than the four southern metapopulations (West Los Alamos, East Los Alamos, Purisima Hills, and Santa Rita Valley; Toffelmier and Shaffer 2017).

Winter rain events trigger California tiger salamanders to emerge from refugia and seek breeding ponds (Storer 1925). After mating, females attach their eggs to submerged twigs, grass stems, vegetation, or debris (Storer 1925; Twitty 1941). In ponds with little or no vegetation, females may attach eggs to objects, such as rocks and boards on the bottom (Jennings and Hayes 1994). In drought years, the seasonal pools may not form and the adults may not breed (Barry and Shaffer 1994). California tiger salamander eggs hatch into larvae within 10 to 28 days, (Petranka 1998; Hansen and Tremper 1993), with observed differences likely related to water temperatures. Generally, 10 weeks is required to allow sufficient time to metamorphose. The larval developmental period can be prolonged in colder weather, commonly in excess of 4 months (Trenham et al. 2000). After the larval developmental period, they emerge as terrestrial metamorphic salamanders, between approximately May and August (Trenham et al. 2000).

Metamorphosed juveniles leave the breeding sites in the late spring or early summer. Like the adults, juveniles may emerge from these retreats to feed during nights of high relative humidity (Storer 1925, Shaffer et al. 1993) before settling in their selected upland sites for the dry, hot summer months. While most California tiger salamanders rely on rodent burrows for shelter, some individuals may utilize soil crevices as temporary shelter during upland migrations (Loredo et al. 1996). Mortality of juveniles during their first summer exceeds 50 percent (Trenham 1998). Emergence from upland habitat in hot, dry weather occasionally results in mass mortality of juveniles (Holland et al. 1990). Juvenile dispersal is more common than adult dispersal (Trenham et al. 2001). Dispersing juveniles move from natal sites to future breeding sites that are not the pond of birth and not part of the local population.

Rangewide Status

Central California DPS

The range of the Central California tiger salamander has been classified into four recovery units (Service 2017). These recovery units are not regulatory in nature; the boundaries of the recovery units do not identify individual properties that require protection, but they are described solely to facilitate recovery and management decisions. The recovery units represent both the potential extent of Central California tiger salamander habitat within the species' range and the biologically (genetically) distinct areas where recovery actions should take place that will eliminate or ameliorate threats. All recovery units must be recovered to achieve recovery of the DPS.

The central California tiger salamander is endemic to the grassland community found in California's Central Valley, the surrounding foothills, and coastal valleys (Fisher and Shaffer 1996). We do not have data regarding the absolute number of California tiger salamanders due to the fact that they spend most of their lives underground. Virtually nothing is known concerning the historical abundance of the species. At one study site in Monterey County, Trenham *et al.* (2000) found the number of breeding adults visiting a pond varied from 57 to 244 individuals. A Contra Costa County breeding site approximately 124 miles north of the Trenham *et al.* (2000) study site in Monterey County showed a similar pattern of variation, suggesting that such fluctuations are typical (Loredo and Van Vuren 1996). At the local landscape level, nearby breeding ponds can vary by at least an order of magnitude in the number of individuals visiting a pond, and these differences appear to be stable across years (Trenham *et al.* 2001).

Santa Barbara DPS

The Santa Barbara County DPS of the California tiger salamander is restricted to northern Santa Barbara County in southern California. This population constitutes the southernmost range of the species (Service 2000a). At the time of publication of the emergency listing rule in January 2000, the Santa Barbara County California tiger salamander was known from 14 ponds. The emergency and final listing rules acknowledged that other potential breeding ponds or pond complexes may exist, but could not be surveyed at that time due to restricted access. The Santa Barbara County California tiger salamander is found in six metapopulation areas: (1) West Santa Maria/Orcutt, (2) East Santa Maria, (3) West Los Alamos, (4) East Los Alamos, (5) Purisima Hills, and (6) Santa Rita Valley (Service 2009). Each metapopulation areas encompasses both currently occupied, and potentially occupied suitable habitat for each metapopulation. Critical habitat for the Santa Barbara County California tiger salamander has been designated within portions of each of the six metapopulations (Service 2004b).

Currently, there are approximately 60 known extant California tiger salamander breeding ponds in Santa Barbara County (Service 2009) distributed across the six metapopulations. Since listing, Service and the CDFW developed guidance for protocol survey efforts (Service and CDFW 2003), and this guidance has aided in the detection of additional breeding ponds discovered post-listing. Several of the additional ponds were discovered as a result of surveys conducted as a part of proposed development or land conversion projects.

The California tiger salamander is threatened primarily by the destruction, degradation, and fragmentation of upland and aquatic habitats, primarily resulting from the conversion of these habitats by urban, commercial, and intensive agricultural activities (Service 2016a). Additional threats to the species include hybridization with introduced nonnative barred tiger salamanders (*A. tigrinum mavortium*; Service 2016a), destructive rodent-control techniques (e.g., deep-ripping of burrow areas, use of fumigants; Service 2016a), reduced survival due to the presence of mosquitofish (*Gambusia affinis*; Leyse and Lawlor 2000), and mortality on roads due to vehicles (Service 2000a). Disease, particularly chytridiomycosis and ranaviruses, and the spread of disease by nonnative amphibians, are discussed in the listing rule as an additional threat to the species (Service 2004a).

Lifetime reproductive success for California tiger salamanders is typically low. Less than 50 percent breed more than once (Trenham et al. 2000). In part, this is due to the extended length of time it takes for California tiger salamanders to reach sexual maturity; most do not breed until 4 or 5 years of age. Combined with low survivorship of metamorphs (e.g. in some populations, less than 5 percent of marked juveniles survive to become breeding adults; Trenham 1998), low reproductive success limits California tiger salamander populations. Because of this low recruitment, isolated subpopulations can decline greatly from unusual, randomly occurring natural events as well as from human-caused factors that reduce breeding success and individual survival. Based on metapopulation theory (Hanski and Gilpin 1991), factors that repeatedly lower breeding success in isolated ponds that are too far from other ponds for dispersing individuals to replenish the population further threaten the survival of a local population.

Critical Habitat

Central DPS

On August 23, 2005, the Service designated a total of 199,191 acres of critical habitat in 31 critical habitat units nested within four geographic regions for the Central population of California tiger salamander (Service 2005b). Per the final critical habitat designation, the physical or biological features within the defined area that are essential to the conservation of the species include:

- 1) Standing bodies of fresh water (including natural and manmade (e.g., stock)) ponds, vernal pools, and other ephemeral or permanent water bodies which typically support inundation during winter rains and hold water for a minimum of 12 weeks in a year of average rainfall.
- 2) Upland habitats adjacent and accessible to and from breeding ponds that contain small mammal burrows or other underground habitat that CTS depend upon for food, shelter, and protection from the elements and predation; and
- 3) Accessible upland dispersal habitat between occupied locations that allow for movement between such sites.

Santa Barbara DPS

On November 24, 2004, the Service designated critical habitat for the Santa Barbara County population of California tiger salamander in six disparate areas of Santa Barbara County (Service 2004b). The locations of these areas are not directly analogous to the locations of the six metapopulations described above.

A total of 11,180 acres in six separate units are designated as critical habitat for the California tiger salamander in Santa Barbara County. Per the final critical habitat designation, the PBFs within the defined area that are essential to the conservation of the species include:

- 1) Standing bodies of fresh water, including natural and man-made (e.g., stock) ponds, vernal pools, and dune ponds, and other ephemeral or permanent water bodies that typically become inundated during winter rains and hold water for a sufficient length of time (i.e., 12 weeks) necessary for the species to complete the aquatic portion of its life cycle;
- 2) Barrier-free uplands adjacent to breeding ponds that contain small mammal burrows. Small mammals are essential in creating the underground habitat that adult California tiger salamanders depend upon for food, shelter, and protection from the elements and predation; and
- 3) Upland areas between breeding locations (PBF 1) and areas with small mammal burrows (PBF 2) that allow for dispersal among such sites.

Recovery*Central DPS*

The strategy of the Recovery Plan for the central DPS of the California Tiger Salamander (Service 2017) focuses on alleviating the threat of habitat loss and fragmentation in order to increase population resiliency (ensure each population is sufficiently large to withstand stochastic events), redundancy (ensure a sufficient number of populations to provide a margin of safety for the species to withstand catastrophic events), and representation (conserve the breadth of the genetic makeup of the species to conserve its adaptive capabilities). Recovery of this species can be achieved by addressing the conservation of remaining aquatic and upland habitat that provides essential connectivity, reduces fragmentation, and sufficiently buffers against encroaching development and intensive agricultural land uses. Appropriate management of these areas will also reduce mortality by addressing non-habitat related threats, including those from non-native and hybrid tiger salamanders, other non-native species, contaminants, disease, and road mortality. Research and monitoring should be undertaken to determine the extent of known threats, identify new threats, and reduce threats to the extent possible.

The recovery strategy is intended to establish healthy, self-sustaining populations of Central California tiger salamanders through the protection and management of upland and aquatic breeding habitat, as well as the restoration of aquatic breeding habitat where necessary. It also

ensures habitat management and monitoring and the conducting of research. Due to shifting conditions in the ecosystem (e.g., invasive species, unforeseen disease, climate change, and effects from future development and conversion to agriculture), the Service anticipates the need to adapt actions that implement this strategy over time. The recovery strategy ensures that the genetic diversity of the Central California tiger salamander is preserved throughout the DPS to allow adaptation to local environments, maintenance of evolutionary potential for adaptation to future stresses, and reduction in the potential for genetic drift and inbreeding to result in inbreeding depression.

The recovery plan (Service 2017) addresses specific delisting criteria for the DPS and lists the following objectives for recovery of the species:

1. Permanently protect the habitat of self-sustaining populations of Central California tiger salamander throughout the full range of the DPS, ensuring conservation of native genetic variability and diverse habitat types (e.g., high and low elevation sites and areas with higher and lower rainfall);
2. Ameliorate or eliminate the current threats to the species; and
3. Restore and conserve a healthy ecosystem supportive of Central California tiger salamander populations.

Santa Barbara DPS

The goal of the recovery plan for the Santa Barbara County DPS of California tiger salamander (Service 2016a) is to reduce the threats to the population to ensure its long-term viability in the wild, and allow for its removal from the list of threatened and endangered species. The interim goal is to recover the population to the point that it can be downlisted from endangered to threatened status.

Downlisting may be warranted when the recovery criteria below have been met in a sufficient number of metapopulation areas such that the Santa Barbara County DPS of the California tiger salamander exhibits increased resiliency and redundancy to prevent endangerment in the foreseeable future.

Delisting may be warranted when the following recovery criteria have been met in a sufficient number of metapopulation areas to support long-term viability of the Santa Barbara DPS of the California tiger salamander:

1. At least four functional breeding ponds are in fully preserved status per metapopulation area;
2. A minimum of 623 acres of functional upland habitat around each preserved pond is in fully preserved status;
3. Adjacent to the fully preserved ponds and fully preserved upland habitat, a minimum of 1,628 acres of additional contiguous, functional upland habitat is present, which is at least 50 percent unfragmented and partially preserved;
4. Effective population size in the metapopulation is, on average, increasing for 10 years;

5. Management is implemented to maintain the preserved ponds free of non-native predators and competitors (e.g., bullfrogs and fish);
6. Risk of introduction and spread of non-native genotypes is reduced to a level that does not inhibit normal recruitment and protects genetic diversity within and among metapopulations; and
7. The effects of vehicle-strike mortality have been minimized to a level that does not threaten viability and protects connectivity within metapopulations, including providing means for effective migration and dispersal in a roadway-impacted landscape.

The overall objectives of the recovery plan are to: (1) protect and manage sufficient habitat within the metapopulation areas to support long-term viability of the Santa Barbara County Distinct Population Segment of the California tiger salamander; and (2) reduce or remove other threats to the Santa Barbara County Distinct Population Segment of the California tiger salamander.

Conservancy Fairy Shrimp

Legal Status

The Conservancy fairy shrimp was listed as endangered in 1994 (Service 1994b) and critical habitat was designated in 2005 (Service 2005c). A five-year review was published in June 2012. The conservancy fairy shrimp remains listed as endangered.

Natural History

Conservancy fairy shrimp are tiny freshwater crustaceans with delicate elongate bodies, large stalked compound eyes, and 11 pairs of phyllopod (swimming legs that also function as gills). Conservancy fairy shrimp do not have a hard shell, a characteristic of the order *Anostraca* to which they belong. This species can be differentiated from other branchinectids by the flattened portions of its antennae. Conservancy fairy shrimp are endemic to vernal pools, and have adapted to this ephemeral environment. Conservancy fairy shrimp hatch out of tiny cysts within the soil during the first winter rains, and complete their entire life cycle by early summer. This species is restricted to the Central Valley of California, except for one population in the Central Coast in Ventura County. The majority of sites inhabited by this animal are relatively large and turbid vernal pools called playa pools (Helm 1998, Eriksen and Belk 1999, Vollmar 2002, Service 2005c). Playa pools typically remain inundated much longer than most vernal pools, often well into the summer, even though they normally have maximum depths comparable to vernal pools (Vollmar 2002). For more detailed information regarding this species' biology and life history, see the Recovery Plan (Service 2005d).

Rangewide Status

The California Natural Diversity Data Base (CNDDDB) (2018) lists 43 occurrences for the Conservancy fairy shrimp. Conservancy fairy shrimp are rare, and at the time of listing, six

widely separated populations (i.e., clusters of localities) of this species were known (Service 1994b). The status of one of these six populations is unknown. This particular population was described as being located “south of Chico, Tehama County”. Tehama County is actually north of Chico, and the Service is not aware of its current status. Extensive surveys for fairy shrimp throughout the range of Conservancy fairy shrimp have located five additional populations since the species was listed in 1994. Currently, the Service is aware of 10 populations of Conservancy fairy shrimp, which include (from north to south): (1) Vina Plains, Butte and Tehama counties; (2) Sacramento National Wildlife Refuge (NWR), Glenn County; (3) Mariner Ranch, Placer County; (4) Yolo Bypass Wildlife Area, Yolo County; (5) Jepson Prairie, Solano County; (6) Mapes Ranch, Stanislaus County; (7) University of California (U.C.) Merced area, Merced County; (8) the Highway 165 area, Merced County; (9) Sandy Mush Road, Merced County; and (10) Los Padres National Forest, Ventura County (Service 2012) 5 year review.

Habitat loss and fragmentation is the greatest threat to the survival and recovery of vernal pool species. Habitat loss and fragmentation generally is a result of urbanization, agricultural conversion, and mining. Habitat loss occurs in the form of habitat alteration and degradation resulting from changes to natural hydrology; invasive species; incompatible grazing regimes, including insufficient grazing for prolonged periods; infrastructure projects such as roads, water storage and conveyance and utilities; recreational activities such as off-highway vehicles and hiking; erosion; and contamination. This habitat loss and fragmentation contributes to the isolation, fragmentation and functionality of vernal pool habitats. Direct loss of habitat generally represents irreversible damage to vernal pools; it disrupts the physical processes conducive to functional vernal pool ecosystems. The more severe the alteration and destruction, the more difficult it is to recover such areas in the future due to disruption of soil formations, hydrology, seed banks, and other components of a functional vernal pool ecosystem.

Even in areas where habitat is protected, the urbanization of surrounding lands can reduce the suitability of protected habitats, and hinders the dispersal of the Conservancy fairy shrimp within and between populations, as well as causing increased edge effects to pool complexes. Acquisition of land and conservation easements has resulted in the preservation of vernal pool habitat for the species, but the trend of vernal pool habitat loss in the state has continued. Remnant habitat that has been protected in small parcels is often subject to changed hydrological conditions, invasion by nonnative plants and other species, increased vegetation growth, and other conditions (such as inappropriate grazing levels) that serve to make habitat less suitable for the shrimp (Service 2012).

Climate change is expected to have an effect on vernal pool hydrology through changes in the amount and timing of precipitation inputs to vernal pools and the rate of loss through evaporation and evapotranspiration (Pyke 2004). These changes in hydrology will likely affect fairy shrimp species because they are obligate aquatic organisms with life histories dependent on certain hydrologic conditions (Pyke 2005). The suitability of vernal pools for fairy shrimp depends in large part on the timing and duration of wetland inundation, as these species are dependent on vernal pools that have sufficient water to remain wet throughout the annual reproductive phase of the species.

Critical Habitat

The PBFs of critical habitat for the vernal pool crustaceans (including vernal pool fairy shrimp) are the habitat components that provide:

1. topographic features characterized by mounds and swales and depressions within a matrix of surrounding uplands that result in complexes of continuously, or intermittently, flowing surface water in the swales connecting the pools, and providing for dispersal and promoting hydroperiods of adequate length in the pools;
2. depressional features including isolated vernal pools with underlying restrictive soil layers that become inundated during winter rains and that continuously hold water for a minimum of 18 days for vernal pool fairy shrimp and 19 days for Conservancy fairy shrimp in all but the driest years; thereby providing adequate water for incubation, maturation, and reproduction. As these features are inundated on a seasonal basis, they do not promote the development of obligate wetland vegetation habitats typical of permanently flooded emergent wetlands;
3. sources of food, expected to be detritus occurring in the pools, contributed by overland flow from the pools' watershed, or the results of biological processes within the pools themselves, such as single-celled bacteria, algae, and dead organic matter, to provide for feeding; and
4. structure within the pools consisting of organic and inorganic materials, such as living and dead plants from plant species adapted to seasonally inundated environments, rocks, and other inorganic debris that may be washed, blown, or otherwise transported into the pools, that provide shelter.

161,786 acres within six critical habitat units for the Conservancy fairy shrimp are designated in Butte, Colusa, Mariposa, Merced, Solano, Stanislaus, Tehama, and Ventura Counties, California.

Recovery

The Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon (Service 2005d) identifies eight core recovery areas found within five vernal pool regions for the Conservancy fairy shrimp: Vina Plains (Northeast Sacramento Region), Caswell and Grasslands Ecological Area (San Joaquin Region), Ventura County (Santa Barbara Region), Jepson Prairie, Sacramento National Wildlife Refuge and Collinsville (Solano-Colusa Region), and Madera (Southern Sierra Foothills Region).

General recovery criteria for Conservancy fairy shrimp and 19 other listed plants and animals are described in the Recovery Plan (Service 2005d). This Recovery Plan uses an ecosystem-level approach because many of the listed species and species of concern co-occur in the same natural ecosystem and share the same threats. The over-arching recovery strategy for Conservancy fairy shrimp is habitat protection and management. The five key elements that comprise this ecosystem-level recovery and conservation strategy are: (1) habitat protection; (2) adaptive

management, restoration, and monitoring; (3) status surveys; (4) research; and (5) participation and outreach.

The Recovery Plan identifies specific percentages of suitable habitat to be protected in each of the nine core areas. Core areas are ranked as zone 1, 2, or 3 in order of their overall priority for recovery. Core areas containing Conservancy fairy shrimp are included as both zones 1 and 2 in the Recovery Plan, with no core areas ranked as zone 3 (zone 3 represents currently unoccupied, historical habitat, which has not been identified for this species). To downlist the Conservancy fairy shrimp, the Recovery Plan recommends that 95 percent of the suitable species habitat in each of the zone 1 and zone 2 core areas (i.e., 95 percent of the suitable habitat in the Vina Plains core area, 95 percent of the suitable habitat in the Caswell area, etc.) be protected. This criterion has not been met. To delist the species, in addition to achieving the downlisting criteria, any newly discovered populations should be protected. This recovery criterion has been partially met, as the populations discovered since listing have been or will be protected. The Service does not yet have sufficient information to quantify either the acreage of suitable habitat within each core area or the acreage of protected habitat that is suitable for Conservancy fairy shrimp. The amount of suitable habitat that exists range wide has not yet been estimated; therefore, the percent that has been protected range wide is still unknown (Service 2012).

Vernal Pool Fairy Shrimp

Legal Status

The Service listed the vernal pool fairy shrimp as threatened on September 19, 1994 (Service 1994b) and designated critical habitat for the species on August 6, 2003 (Service 2003d). A recovery plan for vernal pool ecosystems of California and southern Oregon also addresses this species (Service 2005d); however, the populations in coastal San Luis Obispo County were not well known at the time the recovery plan was completed. The Service published the most recent 5-year review in 2007 (Service 2007c).

Natural History

This small crustacean ranges in size from 11 to 25 millimeters long and feeds on algae, bacteria, and protozoa. Like other fairy shrimp that live in vernal pools, this species survives the annual drying of vernal pools by reproducing with eggs (commonly called cysts) that can withstand heat, cold, and desiccation until the vernal pool refills once again. Vernal pool fairy shrimp require water temperatures of 50 degrees Fahrenheit or lower to hatch (Helm 1998; Eriksen and Belk 1999). The time to maturity and reproduction is temperature dependent, varying between 18 days and 147 days, with a mean of 39.7 days (Helm 1998). Immature and adult shrimp are known to die off when water temperatures rise to approximately 75 degrees Fahrenheit (Helm 1998). The vernal pool fairy shrimp is endemic to California where it exists only in ephemeral freshwater habitats, including alkaline pools, clay flats, vernal lakes, vernal pools, vernal swales, and other seasonal wetlands in California (Helm 1998). The vernal pool fairy shrimp sometimes,

but not often, co-occurs with other types of fairy shrimp, including the Conservancy fairy shrimp and Riverside fairy shrimp (Service 2005d)

The vernal pool fairy shrimp is a small freshwater crustacean in the family *Branchinectidae* of the order *Anostraca*. Adults range in size from 0.4 to 1.0 inches. Habitat for vernal pool fairy shrimp consists of vernal pools and other depressional features that pond for a period of time sufficient to complete their life cycle. Under optimal conditions this can be as little as 18 days; however, 41 days is more typical of usual seasonal conditions (Helm 1998, Eriksen and Belk 1999). The species often occurs in habitat that exhibits an unpredictable and short-lived inundation pattern and includes vernal pools and vernal pool-like depressions, depressions in sandstone rock outcrops, earth slumps, and grassy swales and depression basins. Upland vegetation communities associated with vernal pool fairy shrimp habitat include native and non-native grassland, alkaline grassland, alkaline scrub, and coastal sage scrub.

Vernal pool fairy shrimp are non-selective filter-feeders that filter suspended solids from the water column. They may filter and ingest detritus, bacteria, algal cells, and other items between 0.3 to 100 microns. This species rarely co-occurs with other fairy shrimp species but when they do, they are not usually the numerically dominant species (Eng et al. 1990, Eriksen and Belk 1999). All species of fairy shrimp provide a food source for a wide variety of wildlife, including beetles, insect larvae, frogs, salamanders, shorebirds, ducks, and even other fairy shrimp. Vernal pool fairy shrimp have a two-stage life cycle with the majority of their life cycle spent in a shelled embryo known as a cyst (or resting egg). It is unknown how many cysts a female can produce per clutch or over their lifetime. Cysts are either dropped to the pool bottom or remain in the brood sac until the female dies and sinks (Eriksen and Belk 1999). Fairy shrimp cysts are capable of withstanding heat, cold, and prolonged desiccation. While it is generally acknowledged that these cysts are able to live for a long time, there is very little information on just how long this might be (Belk 1998). We do know that they persist in the soil until conditions are favorable for successful hatching (Eng et al. 1990, Eriksen and Belk 1999). The cysts hatch when the vernal pools/seasonal depressional features fill with rainwater. Not all of the cysts in a feature hatch in a season, thus providing a mechanism for survival if the inundation period is too short in a given year. Vernal pool fairy shrimp may also undergo multiple hatches in a single feature during one wet season, if conditions are appropriate (Helm 1998, Gallagher 1996). Vernal pool fairy shrimp can mature quickly, allowing it to persist in short-lived shallow pools; however, the species also persists later into the spring when pool inundation persists. Resting eggs and adults disperse between suitable habitats passively by adhesion to waterfowl, migratory birds, cattle, and other wildlife and domestic animals (Eriksen and Belk 1999), as well as through the movement of water between suitable habitats or by resting egg adhesion to wind-blown dust.

Although vernal pool fairy shrimp are more widely distributed than most other fairy shrimp species, the species is generally uncommon throughout its range and rarely abundant where it is found (Eng et al. 1990, Eriksen and Belk 1999). The species currently occurs predominantly in a variety of vernal pool and ephemerally ponded habitats in the Central Valley and Coast Range of California, with a limited number of sites in the Transverse Range and on the Santa Rosa Plateau and in Hemet, Riverside County. There is also one disjunct occurrence in Jackson County,

southern Oregon. Elevations at which the species is typically found range from 33 feet to 4,000 feet above mean sea level, although it has been found at 5,600 feet in the Los Padres National Forest (Service 2007c).

Rangewide Status

The CNDDDB (2018) lists 766 occurrences for the vernal pool fairy shrimp. In California, the range of the species extends from disjunct locations in Riverside County and the Coast Ranges, north through Central Valley grasslands to Tehama County (Service 2007c). Within vernal pool and other ephemeral ponded habitats on the Central Coast of California (i.e., Monterey, San Luis Obispo, and Santa Barbara counties), vernal pool fairy shrimp are known to occupy at least 55 features on Fort Hunter Liggett, at least 46 features at Camp Roberts, in the vicinity of Soda Lake in the Carrizo Plain National Monument, several areas in the vicinity of Paso Robles, at least two sites in the Los Padres National Forest, in an estimated 60 features at the Chevron Tank Farm in San Luis Obispo, at least two vernal pools at the Santa Maria Airport, and in at least 12 complexes on Vandenberg Air Force Base (Service 2007c). A number of these sites were discovered after the publication of the final listing and critical habitat rules and 2005 recovery plan.

Maintaining the integrity of surrounding upland habitat is essential to the proper ecological function of vernal pool fairy shrimp habitat. Habitat loss and fragmentation represent the largest threats to the survival and recovery of vernal pool fairy shrimp and other species restricted to vernal pools and other ephemeral ponded habitats. Approximately 75 percent of historical vernal pool fairy shrimp habitat had been lost in the Central Valley by 1997 (Holland 1998), with additional habitat lost in the Central Coast mountain ranges (Holland 2003). Continuing annual habitat loss is estimated to be between 2 and 12 percent, depending on the region (Holland 2003). Habitat loss is generally a result of urbanization, agricultural conversion, and mining; although loss also occurs in the form of habitat alteration and degradation as a result of changes to natural hydrology, competition from invasive species, incompatible grazing regimes (including overgrazing), energy development, infrastructure projects (e.g., roads, water storage and conveyance, utilities), recreational activities (e.g., off-highway vehicles, hiking), erosion, mosquito abatement activities, climatic and environmental change, and contamination (Service 2007c).

The Service's 5-year review (Service 2007c) reported that delisting criteria 1 (reintroduction and protection of habitat) and 2 (habitat management and monitoring) have been partially met, including at least 13,000 acres of habitat protected; however, most recovery criteria have not been met. The Service does not have information indicating population or abundance trends for vernal pool fairy shrimp. Surveys for the species have increased the number of known occurrences including occurrences in San Luis Obispo and Santa Barbara Counties; however, concurrent habitat loss and fragmentation has occurred around some known populations. The 5-year review documents extensive habitat loss, including more than 50,000 acres impacted between 1994 and 2005 as a result of human population expansion and conversion of vernal pool habitat to agriculture. The 5-year review also discusses future habitat loss from anticipated

development around quickly growing urban areas. The indirect effects of development (e.g., pesticides, altered hydrology) on remaining habitat increasingly compound the effects of habitat loss on the species. The status review acknowledges that the threats to the species have not decreased since listing and recommends that the Service maintain the species' threatened status (Service 2007c).

Critical Habitat

The Service designated critical habitat collectively for four vernal pool crustaceans and 11 vernal pool plants in 34 counties in California and one county in southern Oregon on August 6, 2003 (Service 2003d) and a revised designation of critical habitat of approximately 858,846 acres was published on August 11, 2005 (Service 2005c). Both vernal pool fairy shrimp and Conservancy fairy shrimp are included in this designation (refer to the Conservancy shrimp Critical Habitat section above for PBFs).

On February 10, 2006, the Service published a final rule providing species-specific unit descriptions and maps identifying the critical habitat for each individual species. The rule identified 597,821 acres within 32 units for the vernal pool fairy shrimp.

Recovery

The Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon addressed 33 species, including the vernal pool fairy shrimp (Service 2005c). The goal of the recovery plan is to achieve and protect in perpetuity self-sustaining populations of vernal pool fairy shrimp throughout the species' range and delist the species. The decline of the vernal pool fairy shrimp is attributed primarily to habitat loss and fragmentation resulting from development and agricultural expansion, although invasive species and aquatic contaminants also have contributed to the species' decline. A primary component of the species' recovery is protecting vernal pool habitat in conservation areas and reserves.

The recovery plan specifies that the vernal pool fairy shrimp may be considered for delisting when:

1. at least 80 percent of occurrences and 85 percent of suitable habitat have been protected;
2. the species has been reintroduced to vernal pool regions and soil types where surveys indicate the species has been extirpated;
3. appropriate long-term management and monitoring is secured;
4. status surveys show that populations are stable or increasing and threats have been reduced or eliminated;
5. research has been conducted on genetic structure, population viability, and additional recovery actions; and
6. recovery teams and working groups are established to oversee recovery efforts and conduct outreach and incentive programs to develop partnerships.

Tidewater Goby

Legal Status

The Service listed the tidewater goby as endangered on March 7, 1994 (Service 1994d) and designated critical habitat for the tidewater goby on February 6, 2013 (Service 2013b). We published a recovery plan for the tidewater goby on December 12, 2005 (Service 2005f) and a 5-Year Review in September 2007 (Service 2007b). The Service published a proposed rule to downlist the tidewater goby on March 13, 2014 (Service 2014a). During the public comment period, the Service received substantial comments regarding the proposed change in species status, and the tidewater goby remains listed as endangered.

Natural History

The tidewater goby is endemic to California and is one of the only species of fish to live exclusively in brackish water coastal lagoons, estuaries, and marshes in California (Swift et al. 1989, Moyle 2002). Tidewater goby habitat is characterized by fairly still, but not stagnant, brackish water. They can withstand a wide range of habitat conditions and have been documented in waters with salinity levels that range from 0 to 42 parts per thousand, temperatures ranging from 46 to 77 degrees Fahrenheit and water depths from 10 to 79 inches (Irwin and Soltz 1984; Swift et al. 1989; Smith 1998). Most tidewater goby collections occurred in water of approximately one-third ocean salinity (i.e., 12 parts per thousand or less; Service 2005e). Tidewater gobies are generally found over substrate that has a high percentage of sand and gravel (Worcester 1992) and are often clumped in areas that have sparse to medium dense cover by aquatic plants or algae (Worcester 1992). Tidewater gobies often migrate upstream and are commonly found up to 0.6 mile up from a lagoon or estuary (Service 2005e), and have been recorded as far as 3 to 5 miles upstream of tidal areas (Irwin and Soltz 1985).

Tidewater gobies feed on small invertebrates, including amphipods, ostracods, snails, mysids, and aquatic insect larvae, particularly *chironomid* larvae (Swift et al. 1989). Predators of tidewater gobies include staghorn sculpin (*Leptocottus armatus*), prickly sculpin (*Cottus asper*), starry flounder (*Platichthys stellatus*), and largemouth bass (*Micropterus salmoides*); native birds and other predatory fish likely also prey on gobies (Swift et al. 1997, Swift et al. 1989).

The tidewater goby is primarily an annual species (Swift et al. 1989), although there is some variation in life history and some individuals have lived up to 3 years in captivity (Swenson 1999). If reproductive output during a single season fails, few (if any) tidewater gobies survive into the next year. Reproduction typically peaks from late April or May to July and can continue into November or December depending on the seasonal temperature and amount of rainfall (Swift et al. 1989, Worcester 1992, Goldberg 1977). Males begin the breeding ritual by digging burrows at least 3 to 4 inches apart in clean, coarse sand of open areas. Unlike most other fish, females court the males (Swift et al. 1989). Once chosen by a male, females will then deposit

eggs into the burrows, averaging 400 eggs per spawning effort (Swift et al. 1989, Swenson 1995). Males remain in the burrows to guard the eggs and fan the eggs to circulate water, frequently foregoing feeding (Moyle 2002).

Within 9 to 11 days after eggs are laid, larvae emerge and are approximately 4 to 6 millimeters in standard length (Swift et al. 1989, Service 2005e). Larval traits (larval duration, size at settlement, and growth rate) are correlated with water temperature, which varies considerably in the seasonally closed estuaries that tidewater gobies inhabit (Spies and Steele 2016). Larval tidewater gobies are pelagic for an average of 21 to 27 days and settle once they grow to approximately 12 to 13 millimeters in standard length (Spies et al. 2014). When they reach this life stage, they become substrate-oriented, spending the majority of time on the bottom rather than in the water column. Both males and females can breed more than once in a season, with a lifetime reproductive potential of 3 to 12 spawning events (Swenson 1999). Vegetation is critical for over-wintering tidewater gobies because it provides refuge from high water flows and tidewater goby densities are greatest among emergent and submerged vegetation (Moyle 2002).

Because they typically live for approximately one year and inhabit a seasonally changing environment, population sizes of tidewater gobies vary greatly spatially and seasonally, with recorded numbers ranging from 0 to 198 individuals per square meter (Swenson 1995). After the spring spawning season, there is typically an annual die-off of adults (Swift et al. 1989, Swenson 1995).

Rangewide Status

Historically, the tidewater goby occurred in at least 150 California coastal lagoons and estuaries, from Tillas Slough near the Oregon/California border south to Agua Hedionda Lagoon in northern San Diego County (Swift et al. 1989). The species is currently known to occur in 103 localities, although the number of sites fluctuates with climatic conditions and the current status is unknown in 12 localities. Currently, the most stable populations are in lagoons and estuaries of intermediate size (5 to 124 acres) that are relatively unaffected by human activities (Service 2005e).

Local populations of tidewater gobies are best characterized as metapopulations (Lafferty et al. 1999a), or “a network of semi-isolated populations with some level of regular or intermittent migration and gene flow among them, in which individual populations may go extinct but can then be recolonized from other populations” (Groom et al. 2006). Therefore, the stability of a metapopulation depends on the connectivity of subpopulations.

Tidewater gobies enter the marine environment when sandbars are breached during storm events. Lafferty et al. demonstrated that tidewater gobies were able to disperse at least 5.6 miles (Lafferty et al. 1999b), and genetic analysis suggests that this species can disperse much further, with genetic assignment tests showing movement of individuals up to approximately 30 miles (Jacobs et al. 2005). The species’ tolerance of high salinities for short periods of time enables it to withstand marine environment conditions of approximately 35 parts per thousand salinity,

thereby allowing the species to re-establish or colonize lagoons and estuaries following flood events (Swift et al. 1997). Genetic studies indicate that the tidewater goby population is highly geographically structured, indicating that there is low geneflow (Dawson et al. 2001, Dawson et al. 2002) and thus natural recolonization events are likely rare. Swift et al. (2016) estimates that the southernmost population of tidewater goby has been separated from other lineages for 2 to 4 million years, and it has been recognized as a distinct species (*Eucyclogobius kristinae*, the southern tidewater goby), but as of now the tidewater goby remains listed under Act as one entity.

Native predators are not known to be important regulators of tidewater goby population size in the lagoons of southern California. Rather, population declines are attributed to environmental conditions. The decline of the tidewater goby is attributed primarily to habitat loss or degradation resulting from urban, agricultural, and industrial development in and around coastal wetlands, lagoons, and estuaries (Irwin and Soltz 1985). High flows naturally and periodically breach lagoon barriers and expose tidewater gobies to tidal conditions, but artificial breaching has been observed to cause tidewater goby stranding and mortality (C. Dellith, U.S. Fish and Wildlife Service, pers. comm. 2018). Artificial breaching, especially during periods of low inflow, not only flushes tidewater gobies out into the ocean but also drains water from the lagoon and thus reduces the size of available habitat for this species; this can also concentrate predators within this reduced lagoon footprint. Some extirpations appear to be related to pollution, upstream water diversions, and the introduction of non-native predatory fish species, most notably centrarchid sunfish (*Lepomis* spp.) and bass (*Micropterus* spp.; Swift et al. 1989). These threats continue to affect some of the remaining populations of tidewater gobies. Climate change and the attendant sea level rise may further reduce suitable habitat for the tidewater goby as lagoons and estuaries are inundated with saltwater (Cayan et al. 2006) and severe storms interacting with increased sea levels may breach lagoons more frequently.

In 2014, the Service issued a 12-month finding proposing to reclassify the tidewater goby as threatened under the Act. During the public comment period, we received substantive comments regarding the proposed change in the species' status and new scientific information has been published regarding the species. The tidewater goby remains listed as endangered and its overall population and range is currently stable, but still faces ongoing and likely increasing threats of urbanization, artificial breaching, stochastic environmental conditions, and introduced predators. The southernmost population of tidewater goby remains critically endangered because this species has become extirpated from 5 of the 13 historical localities, 4 of which cannot be restored.

Critical Habitat

We originally designated critical habitat for the tidewater goby on November 20, 2000 (Service 2000c). In January 2008, we finalized a revised designation of critical habitat (Service 2008). On October 19, 2011, we published another proposed revision to critical habitat (Service 2011b), and on February 6, 2013, we published a final rule designating revised critical habitat for the tidewater goby (Service 2013b).

Under the Act and its implementing regulations, we are required to identify the PBFs essential to the conservation of the tidewater goby in areas occupied at the time of listing. We consider the PBFs that, when present in the appropriate quantity and spatial arrangement to provide for a species' life-history processes, are essential to the conservation of the species. The PBFs specific to the tidewater goby include:

1. Persistent, shallow (in the range of approximately 0.3 to 6.6 feet), still-to-slow-moving water in lagoons, estuaries, and coastal streams with salinity up to 12 parts per thousand, which provide adequate space for normal behavior and individual and population growth that contain one or more of the following:
 - a. Substrates (e.g., sand, silt, mud) suitable for the construction of burrows for reproduction;
 - b. Submerged and emergent aquatic vegetation, such as *Potamogeton pectinatus*, *Ruppia maritima*, *Typha latifolia*, and *Scirpus* spp., that provides protection from predators and high flow events; or
 - c. Presence of a sandbar(s) across the mouth of a lagoon or estuary during the late spring, summer, and fall that closes or partially closes the lagoon or estuary, thereby providing relatively stable water levels and salinity.

Critical habitat includes areas outside the geographical area occupied at the time of listing that contain suitable aquatic habitat in coastal lagoons or estuaries, provide connectivity between source populations or may provide connectivity in the future, or may be more isolated but represent unique adaptations to local features (habitat variability, hydrology, microclimate). In total, we designated 45 critical habitat units within the geographical area occupied at listing and 20 critical habitat units outside the geographical area occupied at listing that we have determined are essential for the conservation of the species.

Approximately 12,156 acres fall within the boundaries of the 65 critical habitat units designated by the 2013 final revised critical habitat rule. Revised critical habitat for the tidewater goby now occurs in Del Norte, Humboldt, Mendocino, Sonoma, Marin, San Mateo, Santa Cruz, Monterey, San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange, and San Diego Counties, California.

Overall, the critical habitat for this species has remained stable but is still threatened by coastal development.

Recovery

The goal of the tidewater goby recovery plan (Service 2005e) is to conserve and recover the tidewater goby throughout its range by managing threats and maintaining viable metapopulations within each recovery unit while retaining morphological and genetic adaptations to regional and local environmental conditions. The decline of the tidewater goby is attributed primarily to habitat loss or degradation resulting from urban, agricultural, and industrial development in and around coastal wetlands. The recovery plan identifies six recovery units: North Coast Unit,

Greater Bay Unit, Central Coast Unit, Conception Unit, Los Angeles/Ventura Unit, and South Coast Unit.

The recovery plan specifies that the tidewater goby may be considered for downlisting when:

1. Specific threats to each metapopulation (e.g., coastal development, upstream diversion, channelization of rivers and streams, etc.) have been addressed through the development and implementation of individual management plans that cumulatively cover the full range of the species; and
2. A metapopulation viability analysis based on scientifically-credible monitoring over a 10-year period indicates that each recovery unit is viable. The target for downlisting is for individual sub-units within each recovery unit to have a 75 percent or better chance of persistence for a minimum of 100 years.

The tidewater goby may be considered for delisting when the downlisting criteria have been met and a metapopulation viability analysis projects that all recovery units are viable and have a 95 percent probability of persistence for 100 years.

Coastal California Gnatcatcher

Legal Status

The Service listed the coastal California gnatcatcher as threatened on March 30, 1993 (Service 1993) and published a final rule designating critical habitat for the coastal California gnatcatcher on October 24, 2000 (Service 2000b). As a result of various lawsuits and court decisions, the Service re-proposed critical habitat on April 24, 2003 (Service 2003b), and the final rule designating critical habitat was published on December 19, 2007 (Service 2007a).

In September 2010, the Service completed a 5-Year Review addressing the status of the coastal California gnatcatcher (Service 2010b). In the 5-Year Review, we found that implementation of large-scale, multi-species, regional Natural Community Conservation Plans/Habitat Conservation Plans (NCCPs/HCPs) has reduced the magnitude of threats associated with urban and agricultural development; however, the threat of habitat type-conversion is increasing due to multiple factors. Because of the increased magnitude of the threat of habitat type conversion, the 5-Year Review recommended no change to the listing status of the species.

On June 11, 2014, we received a petition requesting the coastal California gnatcatcher be delisted. After reviewing the available information, the Service determined the petitioned action was not warranted (Service 2016b) and the coastal California gnatcatcher remains listed as threatened.

Natural History

The coastal California gnatcatcher is endemic to cismontane southern California and northwestern Baja California, Mexico (Atwood 1991). It typically occurs in or near coastal sage scrub, comprising relatively low-growing, dry-season deciduous and succulent plants. Weaver Weaver (1998) defined characteristic plants of these communities to include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), laurel sumac (*Malosma laurina*), lemonade berry (*Rhus integrifolia*), snapdragon penstemon (*Keckiella antirrhinoides*), sages (*Salvia* spp.), sunflowers (*Encelia* spp.), and cacti (*Opuntia* spp.). The coastal California gnatcatcher may also use chaparral, grassland, and riparian plant communities where they occur adjacent to or intermixed with coastal sage scrub, especially during the non-breeding season (Campbell et al. 1998). Potential factors contributing to the coastal California gnatcatcher's use of alternative habitats may include more abundant food resources, higher survival rates during dispersal, fire avoidance, and cooler microclimate during heat stress (Campbell et al. 1998); however, coastal California gnatcatchers are closely tied to sage scrub habitats for reproduction (Atwood 1993).

The coastal California gnatcatcher is primarily insectivorous. Based on fecal sample analysis, its diet consists of small arthropods, especially leaf-hoppers (*Homoptera*) and spiders (*Araneae*), while true bugs (*Hemiptera*) and wasps, bees, and ants (*Hymenoptera*) are minor components (Burger et al. 1999).

Coastal California gnatcatchers are non-migratory and exhibit strong site tenacity (Atwood 1993). Breeding season territories range widely in size, from less than 2.5 acres to 37 acres (Atwood et al. 1998; Preston et al. 1998), with mean territory size generally greater for inland populations than coastal populations (Preston et al. 1998). During the non-breeding season, coastal California gnatcatchers have been observed to wander in adjacent territories and unoccupied habitat increasing their home range size to approximately 78 percent larger than their breeding territory (Preston et al. 1998).

The breeding season of the coastal California gnatcatcher extends from late-February through early August, with the peak of nesting attempts occurring from mid-March through mid-May. Most coastal California gnatcatchers breed their first year of age (Atwood and Bontrager 2001). Nests are constructed over a 4- to 10-day period and are most often placed in California sagebrush about 3 feet above the ground (Atwood 1993). Clutch size averages approximately 4 eggs (Atwood and Bontrager 2001). The egg incubation period is 14 days, and the nestling period is 10 to 15 days (Grishaver et al. 1998). Both sexes participate in all phases of the nesting cycle, and some pairs may produce more than one brood in one nesting season (Atwood and Bontrager 2001).

Juveniles stay within their natal territories 21 to 35 days after fledging from the nest (Grishaver et al. 1998), with juveniles subsequently dispersing to find their own foraging and nesting territories, if available. Juveniles usually disperse less than 6.2 miles from their natal territory (Atwood and Bontrager 2001), but they generally disperse less than 2 miles on average (Bailey

and Mock 1998; Galvin 1998; Atwood and Bontrager 2001). Dispersing coastal California gnatcatchers are apparently able to traverse human-modified landscapes for at least short distances (Bailey and Mock 1998). Juveniles begin to vie for territories as early as late spring, and will have established territories by the end of October (Preston *et al.* 1998).

Similar to other songbirds, mortality of coastal California gnatcatchers is highest for the youngest age class, with much of this attributable to predation of young in nests. Mean average survivorship of coastal California gnatcatchers during their first year is estimated to be 29 percent, with annual survivorship for adults 57 percent, although there is probably a high annual variation within and between populations. The oldest documented individual was a female at least 8 years old (Atwood and Bontrager 2001).

Rangewide Status

The range of the coastal California gnatcatcher extends from southern Ventura and San Bernardino counties, California, south to near El Rosario, Mexico, at about 30 degrees north latitude (Service 2010b). The northern and eastern limits of the coastal scrub vegetation communities used by the coastal California gnatcatcher are bound by mountainous areas, while the southern limit is defined by the transition to the Vizcaíno Desert. Most of the coastal California gnatcatchers in the United States are found in Orange, western Riverside, and San Diego counties. Relatively isolated populations also remain in portions of its former range in Los Angeles, San Bernardino, and southern Ventura counties (Atwood and Bontrager 2001). The current overall range is roughly the same as it was at the time of listing (Service 2010b). While the species' overall distribution has not changed much over time, the amount of suitable habitat within that range has declined which led to the species' listing as threatened in 1993 (Service 1993).

Coastal California gnatcatchers were considered locally common in the mid-1940s, but they had declined substantially in the United States by the 1960s (Atwood and Bontrager 2001). In 1993, the Service estimated that about 2,562 coastal California gnatcatcher pairs remained in the United States, with the highest densities occurring in Orange and San Diego counties (Service 1993). In a study using more rigorous sampling techniques, Winchell and Doherty (2008) found a mean of 1,324 pairs of coastal California gnatcatchers over four sampling periods in an 111,006-acre area on public and quasi-public lands in Orange and San Diego counties. Their sampling frame covered only a portion of the U.S. range, focusing on the coast, and was limited to 1 year. Although it is not valid to extrapolate beyond the sampling area, especially in light of known differences in population densities across the range of the coastal California gnatcatcher (Atwood 1992), we conclude it is likely there are more coastal California gnatcatchers in the U.S. portion of the range than was suggested by earlier estimates. For example, new locations are being recorded in Ventura and Los Angeles counties where the species was thought to be extirpated or only present in very low numbers. We are not aware of any recent estimates of coastal California gnatcatcher populations in Baja California.

The population estimates described above are based on surveys conducted prior to catastrophic fires in San Diego County in 2003 and San Diego and Orange counties in 2007. These fires may have temporarily reduced the overall coastal California gnatcatcher population because of the temporary loss of coastal California gnatcatcher occupied habitat. In the 2007 fires, about 28,173 acres of coastal sage scrub burned in Orange County and about 84,202 acres of coastal sage scrub burned in San Diego County in several separate locations.

The 5-Year Review for coastal California gnatcatcher includes a detailed evaluation of the current threats and conservation needs of the species. The species was listed in 1993 because of habitat loss and fragmentation resulting from urban and agricultural development (Service 1993). The direct loss of habitat reduces the amount of breeding, sheltering, and foraging area available, thereby proportionally reducing the population size and overall reproductive capacity of the species. Habitats that are fragmented have reduced biological integrity due to the increased potential for human-generated disturbance. Directly associated with development is an increase in recreational use of habitats, fire frequency, waste dumping, air pollution, exotic plant and animal species, predators, cowbird parasitism, domestic pets, and night lighting, all of which can have adverse impacts on the quality of habitat for the coastal California gnatcatcher.

Several stressors, including livestock grazing, anthropogenic atmospheric pollutants, and wildfire, promote habitat type conversion within the range of the coastal California gnatcatcher. Wildfire in particular is a major contributor because it promotes a feedback loop. That is, wildfire allows non-native grasses to outcompete re-growing native shrubs, which leads to an increase in non-native grasses, which makes the area more susceptible to wildfire, which allows the process to repeat, but with successively fewer native shrubs with each iteration. The number of wildfires has increased dramatically as urbanization (with its multitude of ignition sources) has come into greater contact with open space areas. Thus, the threat of habitat type conversion has increased throughout the range of the coastal California gnatcatcher since listing (Service 2010b).

Critical Habitat

The Service designated 11 critical habitat units for the coastal California gnatcatcher comprising 197,303 acres of Federal, State, local, and private land in Ventura, Los Angeles, Orange, Riverside, San Bernardino, and San Diego counties (Service 2007a) critical habitat includes areas throughout the species' range in a variety of climatic zones and vegetation types that would preserve the genetic and behavioral diversity that currently exists within the species. The designation includes individual units that contain the physical and biological features essential to the species' conservation, and identifies special management considerations for the species.

The PBFs of designated critical habitat for the coastal California gnatcatcher are those habitat components that are essential to support the primary biological needs of foraging, nesting, rearing of young, intra-specific communication, roosting, dispersal, genetic exchange, or sheltering (Service 2007a). These include:

1. sage scrub habitats that provide space for individual and population growth, normal behavior, breeding, reproduction, nesting, dispersal, and foraging; and
2. non-sage scrub habitats such as chaparral, grassland, and riparian areas, in proximity to sage scrub habitats that provide space for dispersal, foraging, and nesting.

Recovery

The Service has not developed a recovery plan for the coastal California gnatcatcher. The 5-year review (Service 2010b) and the final rule on the petition to delist the species (Service 2016b) both contain information relative to this discussion, so we rely on those documents to assess the coastal California gnatcatcher's current recovery status and needs. The final rule on the delisting petition analyzes a 50-year timeframe with regard to the current threats to the coastal California gnatcatcher (Service 2016b).

Long-term management is required to address the numerous threats posed by the interface between the coastal California gnatcatcher's habitat and the urban interface. Some long-term management actions that will address identified threats include development and implementation of fire management plans, homeowner education programs (for residences adjacent to occupied habitat), predator control, cowbird trapping, routine invasive vegetation removal, limited public access in areas of high quality habitat, and control of irrigation water and other urban runoff adjacent to preserved habitat. Monitoring of the species distribution over time will assist in determining the effectiveness of management actions at reducing threats and will allow for changes in approach in the event that threats have not been adequately reduced.

Development continues throughout the range of the coastal California gnatcatcher. However, the implementation of regional NCCPs/HCPs in southern California has directed growth into certain areas, while establishing habitat preserves consisting of large "core" areas of coastal California gnatcatcher habitat and connecting "linkage" areas. Five regional plans are finalized and once fully implemented should preserve in perpetuity over 182,976 acres of coastal California gnatcatcher habitat (Service 2010b). Preserved habitat will be managed for the benefit of the coastal California gnatcatcher, thereby reducing the magnitude of the threat to the species due to habitat loss. Large Federal landholdings that support coastal California gnatcatcher habitat also contribute to core and linkage areas. These lands include Marine Corps Base Camp Pendleton, Marine Corps Air Station Miramar, Cleveland National Forest, and San Diego National Wildlife Refuge.

Another recovery concern is habitat type conversion. This occurs when native habitat is disturbed (e.g., fire, discing, etc.) that does not result in permanent ground disturbance but allows other plant communities (usually invasive, exotics plants) to convert the habitat into areas unsuitable for occupancy by coastal California gnatcatchers. Type conversion can affect all areas of habitat, even in those areas otherwise considered preserved. Because habitat type conversion is a threat of high magnitude, particularly given the increasing occurrence of wildfire, the 5-year review (Service 2010b) concluded that additional time is needed to evaluate the adequacy of existing management programs for reducing this threat.

Least Bell's Vireo

Legal Status

The least Bell's vireo was listed as endangered by the Service on May 2, 1986 (Service 1986a). The Service designated critical habitat on February 2, 1994, (Service 1994c) and completed a draft recovery plan in March 1998 (Service 1998).

We completed a 5-Year Review of the least Bell's vireo's status in September 2006 (Service 2006b). In the 5-Year Review, we recommended downlisting the least Bell's vireo from endangered status to threatened because of an increase in population size since its listing in 1986, expansion of locations with breeding least Bell's vireo throughout southern California, and conservation and management of suitable breeding habitat throughout its range. The Service has not published a rule downlisting the species, so the least Bell's vireo remains listed as endangered as of this writing.

Natural History

Least Bell's vireos are obligate riparian breeders, typically inhabiting structurally diverse woodlands along watercourses that feature dense cover within 3 to 6 feet of the ground and a dense, stratified canopy (Salata 1983; Gray and Greaves 1984; Service 1998). Important plant species in least Bell's vireo habitat include mature arroyo willows (*Salix lasiolepis*) and black willows (*S. gooddingii*) and occasional cottonwoods (*Populus* spp.), western sycamore (*Populus fremontii*), or coast live oak (*Quercus agrifolia*). The understory within this riparian habitat is typically dominated by mulefat (*Baccharis salicifolia*), California wild rose (*Rosa californica*), poison oak (*Toxicodendron diversiloba*), sandbar willow (*Salix hindsiana*), young individuals of other willow species, and several perennial species (Service 1998). Least Bell's vireos primarily forage and nest in riparian habitat, but they may also use adjoining upland scrub habitat (Salata 1983).

Vegetation structure more than the age of the vegetation appears to be the important determinant of vireo site use; however, early successional riparian vegetation typically supports the dense shrub cover required for nesting and also a structurally diverse canopy for foraging (Service 1998). Ecological processes that contribute to the formation of early successional riparian habitat include channel scour and deposition associated with periodic storm events. As riparian vegetation matures, the tall stands tend to shade out the shrub layer, making the sites less suitable for vireo nesting. In addition, vireo nests tend to occur in openings and along the riparian edge, where exposure to sunlight allows the development of shrubs (Service 1998).

Least Bell's vireos primarily feed on invertebrates, especially *lepidopteran* (butterfly and moth) larvae, within willow stands or associated riparian vegetation (Miner 1989). They occasionally forage in upland vegetation such as coastal sage scrub, chaparral, and oak woodlands, although foraging in these other habitats usually occurs within 100 feet of the edge of riparian vegetation (Salata 1983; Gray and Greaves 1984). The species' feeding largely consists of gleaning prey

from leaves or woody surfaces while perched or hovering and, less frequently, by capturing prey in aerial pursuit (Salata 1983; Miner 1989).

Least Bell's vireos generally arrive in southern California breeding areas by mid-March to early April, with males arriving before females and older birds arriving before first-year breeders (Service 1998). Individuals show site tenacity, typically returning to established breeding territories year after year (Greaves and Labinger 1997; Salata 1983). They generally remain on the breeding grounds until late September, although some post-breeding migration may begin as early as late July (Service 1998). Male least Bell's vireos establish and defend breeding territories through singing and physically chasing intruders (Barlow 1962; Service 1998). Their territories typically range in size from 0.5 to 4.5 acres, although a few as large as 7.5 acres have been recorded (Service 1998). Areas that contain relatively high proportions of degraded habitat are likely to have lower productivity (hatching success) than areas that contain high quality riparian woodland.

Least Bell's vireos begin building their nests a few days after pair formation, with the female selecting the nest site and both sexes constructing the nest (Barlow 1962; Service 1998). They typically suspend their nests in forked branches within 3 feet above the ground (Service 1998). Least Bell's vireos predominantly nest in willows (*Salix* spp.) and mulefat but will nest in a large variety of native and non-native plant species. Typically, three to four eggs are laid on successive days shortly after nest construction (Service 1998). The eggs are incubated by both parents for about 14 days with the young remaining in the nest for another 10 to 12 days (Nolan 1960; Barlow 1962). Each nest appears to be used only once with new nests constructed for each nesting attempt (Greaves 1987). Least Bell's vireos may attempt up to five nests within a breeding season, but they are typically limited to one or two successful nests within a given breeding season (Service 1998).

Multiple long-term monitoring studies indicate that approximately 59 percent of nests successfully produce fledglings, although on average only 1.8 chicks fledge per nest (Service 1998). Although least Bell's vireo nests appear to be more accessible to terrestrial predators because of their relatively low placement (Franzreb 1989), California scrub jays (*Aphelocoma californica*) account for the majority of documented depredation events (Peterson et al. 2004).

The activities of jays and other avian predators may have favored relatively low nest placement, as reflected in the least Bell's vireo's current nest site selection. Predation rates on least Bell's vireo nests can exceed 60 percent of the nests in a given area within a year (Kus 1999), but typical nest predation rates average around 30 percent (Franzreb 1989).

Some individual least Bell's vireos have been documented to live up to 7 years (Service 1998), but the average lifespan for this species is likely substantially lower. Greaves and Labinger (1997) and the Service (1998a) have estimated first-year survivorship to average approximately 25 percent. The annual survivorship of least Bell's vireos in subsequent years is estimated to be about 47 percent, and is slightly lower for females than males presumably due to the higher energetic costs of egg production (Service 1998).

Banding records indicate that while most first-year breeding least Bell's vireos return to their natal drainage after winter migration, some disperse considerable distances to other breeding locations (Greaves and Labinger 1997; Service 1998). For example, several least Bell's vireos banded as nestlings in San Diego County have been re-sighted as breeding adults in Ventura County, and the opposite movement from Ventura to San Diego has also been observed (Greaves and Labinger 1997).

Rangewide Status

The least Bell's vireo historically occupied willow riparian habitats from Tehama County in northern California, southward to northwestern Baja California, Mexico, and as far east as Owens Valley, Death Valley, and the Mojave River (Grinnell and Miller 1944; Service 1998). Although originally considered to be abundant locally, regional declines of this subspecies were noticeable by the 1940s (Grinnell and Miller 1944), and the least Bell's vireo was believed to have been extirpated from California's Central Valley by the early 1980s (Franzreb 1989). At the time of the listing in 1986, more than 99 percent of the remaining least Bell's vireos were concentrated in southern California (Santa Barbara County and southward), with San Diego County containing 77 percent of the population (Service 1986a).

The least Bell's vireo population in the United States increased 10-fold, from 291 to 2,968 known territories, between 1986 and 2005 (Service 2006b). Population growth was the greatest in San Diego and Riverside counties, with lesser but significant increases in Orange, Ventura, San Bernardino, and Los Angeles counties. The largest concentrations of vireos were located in San Diego County along the Santa Margarita River on Marine Corps Base Camp Pendleton and in Riverside County at the Prado flood control basin on the Santa Ana River (Service 2006b). Based on a composite of survey information collected between 2001 and 2005, 54 percent of the population was estimated to occur in San Diego County, 30 percent occurred in Riverside County, and the remaining vireo territories were scattered throughout Orange (6 percent), San Bernardino (3 percent), Ventura (4 percent), and Los Angeles counties (2 percent; Service 2006b). Less than one percent of the documented vireo territories occurred in Santa Barbara, Inyo, and Stanislaus counties (Service 2006b). Thus, despite a significant increase in overall population numbers and a slight shift northward in the species' distribution, the vireo continues to primarily be restricted to the southern portion of its historic range.

More recently, USGS presented population trends for least Bell's vireo between 2003 and 2014 (Kus et al. 2015). The trend data is difficult to interpret with certainty due to differences in survey effort and survey sites each year. In addition, the data likely underestimates the total population because many smaller sites lack consistent survey efforts. Nevertheless, the vireo population appears to have increased steadily up until 2010 and has declined slightly since that time (i.e., 3,280 territorial males were reported in 2010 and 2,477 territorial males were reported in 2014). The population remains above what was reported by USGS between 2003 and 2007.

The 1986 listing rule identified brood parasitism by brown-headed cowbirds (*Molothrus ater*) as a substantial threat to the least Bell's vireo, and it remains the primary threat to least Bell's vireo recovery (Service 2006b). Cowbird trapping has proven to be an effective management technique for recovering vireo populations in areas where it is implemented; however, Kus and Whitfield (2005) argue that trapping programs may not be the best way to achieve long-term recovery of the vireo since it relies on continued human intervention. Nevertheless an effective alternative to cowbird trapping has not yet been identified. Therefore, additional research is needed to identify the best way to manage this threat over the long term (Service 2006b).

At the time of the listing, loss of habitat due to agricultural practices, urbanization, and exotic plant invasion was identified as a major threat to least Bell's vireo populations. The destruction and modification of riparian habitat within the species' current range has been curtailed significantly since the least Bell's vireo was listed, primarily due to protections provided by its listing in 1986 along with other Federal and State regulations that protect wetlands. Agriculture and grazing continue to threaten riparian habitat within the larger historical range of the least Bell's vireo, particularly the Salinas, San Joaquin, and Sacramento valleys (Service 1998); however, urbanization has displaced former agriculture and grazing operations in many areas within southern California. Occupied least Bell's vireo habitat that is adjacent to highly urbanized areas or within major river systems continues to be impacted by flood control and water impoundment projects and may be subject to ongoing and future habitat loss or degradation (Service 2006b).

Giant reed (*Arundo donax*) is a persistent threat throughout much of the vireo's range as it displaces native vegetation, reducing the quality of riparian habitat for the vireo (Service 1998). Within the past decade, control of giant reed and other exotic plants is being conducted systematically in watersheds throughout the vireo's range (Service 2006b). In general, giant reed removal has been effective at restoring least Bell's vireo habitat, but will require continued annual efforts to achieve local eradications and address new invasions. Although control of giant reed has made great progress since the original listing of the least Bell's vireo, invasions by other exotic plants [e.g., Tamarix species, perennial pepperweed (*Lepidium latifolium*)] continue to threaten existing riparian habitat.

Within the past few years, a new threat has emerged that has the potential to significantly impact vireo nesting throughout its range. A disease complex involving two species of ambrosia beetles, the polyphagous shot hole borer (*Euwallacea* sp. 1) and Kurushio shot hole borer (*Euwallacea* sp. 5), a mix of associated fungi (Lynch et al. 2016), and other pathogens is causing widespread damage to trees in riparian ecosystems throughout southern California (Eskalen et al. 2013). These shot hole borers create galleries in trees and inoculate the galleries with fungal spores. *Fusarium* sp. causes significant damage to trees, and the galleries open up trees to attack from other pathogens that may be even more damaging.

The combination of structural damage from the galleries and tissue damage from the pathogens causes limbs to break and trees to die. For example, occupied habitat in the Tijuana River (Recovery Unit 1) has already been infested, and an estimated 140,000 trees or 35 percent of the

trees showed extensive damage from the disease complex (Boland 2016). Willow species are particularly susceptible to damage from the infestation. Preliminary reports suggest that the Prado Basin (Recovery Unit 7) and the San Luis Rey River (Recovery Unit 5) also have substantial infestations. The Sweetwater River (Recovery Unit 3) and San Diego Creek (Recovery Unit 8) are also known to be infested.

No systematic, regional surveys for shot hole borers have been conducted, and it is likely that additional vireo habitat is infested. Because vireos require structure associated with willows and similar species, we anticipate that vireo breeding success will decline in infested habitats. It is too early to determine how this significant new threat will affect the overall status of the species, but it is being monitored closely by the Service. Significant mortality of mature trees related to this threat may alter vireo prey availability, increase exposure to predation (especially for vireo nests), and affect hydrogeomorphic processes (e.g., flooding, alluvial deposition) important for maintaining healthy riparian woodlands that vireos use for feeding, sheltering, and breeding.

Several large, regional habitat conservation plans in southern California have addressed the effects of urban development on the least Bell's vireo. These plans are expected to provide long-term protection of core occurrences of least Bell's vireos in western Riverside, Orange, and San Diego counties. In addition, compliance-driven and voluntary riparian restoration activities throughout the species' historical range may have contributed to an increase in riparian habitat since the listing of the least Bell's vireo (Service 2006b).

Critical Habitat

The Service designated critical habitat for the least Bell's vireo on February 2, 1994 (Service 1994c). In determining the areas we designated, we considered the PBFs essential to the conservation of the species and that require special management consideration (as defined at 50 CFR 424.12). The final rule describes these PBFs as riparian woodland vegetation that generally contains both canopy and shrub layers, and includes some associated upland habitats (Service 1994c).

The final rule also identifies actions that may affect critical habitat (Service 1994c). These activities include:

1. removal or destruction of riparian vegetation;
2. thinning of riparian growth, particularly near ground level;
3. removal or destruction of adjacent chaparral or other upland habitats used for foraging; and,
4. increases in human-associated or human-induced disturbance.

While these are examples of activities that may affect critical habitat for the least Bell's vireo, other activities may be proposed that also affect the PBFs.

We designated critical habitat in 10 locations in southern California totaling 38,000 acres (Table 2). Within those 38,000 acres, approximately 10,979 acres are federal land (U.S. Forest Service, U.S. Army Corps of Engineers, and International Boundary and Water Commission). The remainder of the acreage is under control of state, county, city, Tribal, or private entities. At the time of the final rule for the critical habitat, the 38,000 acres represented approximately 49 percent of least Bell's vireo population in the United States (Service 1994c).

Table 2: Least Bell's Vireo Critical Habitat Locations

Index Map Location*	Drainage	County
A	Santa Ynez River	Santa Barbara
B	Santa Clara River	Los Angeles/Ventura
C	Santa Ana River	Riverside/San Diego
D	Coyote Creek	San Diego
E	Santa Margarita River	San Diego
F	San Luis Rey River	San Diego
G	San Diego River	San Diego
H	Sweetwater River	San Diego
I	Jamul-Dulzura Creeks	San Diego
J	Tijuana River	San Diego

* Index Map Locations from final rule (Service 1994c)

Recovery

The Service published a draft recovery plan for the least Bell's vireo in 1998 (Service 1998), but the plan was never finalized. Subsequently, we prepared a 5-year status review for the species (Service 2006b) that examined the recovery criteria in that draft plan and concluded, "Due to new information regarding the species and an improved understanding of ongoing recovery actions to reduce threats, the recovery goals and strategies should be modified and refined." The 5-year status review (Service 2006b) provided a set of recommendations for a future recovery plan that included:

1. complete a functional recovery plan for the vireo with realistic, objectively based recovery goals;
2. provide funding and technical support for further studies investigating continuing threats to the vireo from cowbird parasitism, exotic plant invasion of riparian habitats, and potentially elevated predation pressures due to habitat fragmentation or presence of exotic predators (i.e., domestic cats and Argentine ants);
3. Complete an assessment or support other efforts (such as the RHJV effort) to assess the amount and distribution of riparian habitat in California including:
 - a. establishment of baseline values for comparison to past and future estimates, including an assessment of various riparian habitat subtypes;
 - b. An evaluation of changes in distribution and connectivity of riparian habitat at different stream-order levels (i.e., primary, secondary, tertiary, etc.); and

- c. an evaluation of the amount of riparian habitat restoration attempted and successfully completed since the listing, including restoration not driven by regulatory compliance; and
4. Develop and implement:
 - a. a systematic survey program to locate vireo re-colonization of the Salinas, San Joaquin, and Sacramento Valleys so that appropriate management can be developed and implemented; and,
 - b. systematic survey programs for watersheds in southern California that are no longer regularly surveyed within a given 5-year period (e.g., Dulzura Creek/Jamul Creek/Otay River, San Diego River, San Dieguito River/Santa Ysabel Creek, San Gabriel River, etc.). It is possible that these systematic surveys may need to rely on volunteer efforts organized and supported by the Service.

Until a final recovery plan for the least Bell's vireo is developed, we rely on the most up-to-date information for discussing recovery in our biological opinions. The ideas provided in the 5-year status review and cited above are currently the best information we have on which to base our analysis.

Southwestern Willow Flycatcher

Legal Status

The southwestern willow flycatcher was federally listed as endangered on February 27, 1995 (Service 1995) and critical habitat was designated for the subspecies on October 19, 2005 (Service 2005e). Revised critical habitat was designated January 3, 2013 (Service 2013a). The final recovery plan for the subspecies was completed in August 2002 (Service 2002b).

Natural History

The southwestern willow flycatcher breeds in southern California (north to the Santa Ynez River, Kern River, and Independence on the Owens River), southern Nevada, southern Utah, Arizona, New Mexico, and extreme western Texas. All subspecies of the willow flycatcher are completely migratory. The species as a whole winters from southern Mexico south through Central America to Panama and western Venezuela. Subspecies *extimus* has been collected in winter in Mexico, Guatemala, El Salvador, Nicaragua, and Costa Rica (Unitt 1987, Paxton et al. 2011).

The southwestern willow flycatcher breeds only in riparian woodland, typically adjacent to or over water. Surface water or saturated soil is usually present in or adjacent to nesting sites during at least the initial portion of the nesting period (Tibbitts et al. 1994). Riparian woodland used by willow flycatchers typically has a canopy and an understory of shrubs or saplings. Native willows dominate the habitat commonly represented in current and historical records.

Southwestern willow flycatchers do nest in some riparian habitats containing and even dominated by tamarisk (McKernan and Braden 1999, Paradzick et al. 2000). In terms of

southwestern willow flycatcher productivity, the suitability of tamarisk dominated habitats is not known. Southwestern willow flycatcher productivity in some sites dominated by non-native vegetation is lower than in some native-dominated habitats (Sogge et al. 1997). The reverse is also true, however; within some tamarisk-dominated habitats southwestern willow flycatcher productivity is similar or higher than nearby native-dominated sites (McKernan and Braden 1999, Paradzick et al. 2000).

The southwestern willow flycatcher is a diurnal insectivore, catching its prey on the wing usually in the middle story of riparian woodland. Males maintain and advertise a territory by singing to attract females. There is little information on the factors a southwestern willow flycatcher female uses to select a mate, though it may be related to some factor of habitat quality or potential quality of the male (Service 2002b). Territorial defense begins immediately after spring arrival. Females occasionally sing, apparently when stimulated by territorial disputes (Sogge et al. 1997). Male southwestern willow flycatchers sing most persistently early in the breeding season, but song rate declines as the season progresses, particularly once the male finds a mate and nesting efforts begin (Finch et al. 2000). Their response to taped playback of songs during surveys has also been known to decrease as the nesting season progresses. Mapped breeding territory sizes are 0.15 to 0.5 acre on the Colorado River (Sogge et al. 1997), 0.5 to 1.25 acres along the Verde River, Arizona (Sogge 1995), and 0.35 to 5.7 acres along the Kern River, California (Whitfield and Enos 1996).

Nests are initiated usually within one week of pair formation, 10 to 14 days after spring arrival. Building nests takes 3 to 8 days. In historical egg collections from southern California, 86 percent of nests were in *Salix* spp. (willow), 4 percent in *Urtica dioica* (stinging nettles), and 10 percent in other plants (Unitt 1987). Females typically lay one egg per day, until the nest contains three to four eggs. Incubation begins after the last egg is laid, and lasts 12 to 13 days (Service 2002b). During incubation, females spend approximately 50 percent of the day attending (incubating or shading) the eggs and incubate throughout the night. Incubation and shading bouts can last from less than 1 to more than 60 minutes (Finch et al. 2000).

Southwestern willow flycatcher young usually leave the nest 12 to 15 days after hatching. During the brooding period, the young are cared for by both the male and female. Feeding trips during the peak of this period can reach 30 trips per hour during days 5 to 10 (Finch et al. 2000). Fledglings stay close to the nest and each other for 3 to 5 days, and may repeatedly return to and leave the nest during this period (Spencer et al. 1996).

Southwestern willow flycatchers typically arrive on breeding grounds from late April to early June (Service 2002b). Evidence gathered during multi-year studies of color-banded populations show that although most southwestern willow flycatchers return to former breeding areas, they regularly move among sites within and between years (Netter et al. 1998). From 1997 to 2000, 66 to 78 percent of southwestern willow flycatchers returned to the same breeding site (Luff et al. 2000). Movements within drainages are more common than between drainages.

Rangewide Status

Unitt (1987) concluded that the southwestern willow flycatcher was once fairly common in the Los Angeles Basin, where habitat is virtually absent now. Approximately 616 acres of riparian habitat has regenerated along the South Fork Kern River since the early 1980s, but fluctuations in number of territories in this area has made it difficult to determine a trend in the population for this area (Whitfield et al. 1999). Downstream from the South Fork Kern River, willow flycatchers (unknown subspecies) were common breeders in the early 1900s, but today virtually no riparian habitat remains. Outside of the Kern River, southwestern willow flycatcher populations are present along the Owens, San Luis Rey, and Santa Margarita (Camp Pendleton) Rivers. Changes in land use along the San Luis Rey River have improved habitat quality and extent, which has resulted in an increase in the number of territorial southwestern willow flycatcher males from 12 in the late 1980s (Unitt 1987) to more than 40 in 1999 (Kus et al. 1999). In contrast, the populations on Camp Pendleton have remained fairly constant for the past two decades despite apparently suitable habitat to support population expansion. The remaining southwestern willow flycatcher populations in southern California, most of which number fewer than five territories, occur at scattered sites along drainages that have changed little in the past 15 years.

The decline of the southwestern willow flycatcher is attributed to numerous factors, including nest depredation and brood parasitism by the brown-headed cowbird. However, large scale loss of southwestern wetlands, particularly cottonwood-willow riparian habitat, is the principal reason for the southwestern willow flycatcher's current status. Habitat loss is a result of urban and agricultural development, water diversion and impoundment, livestock grazing, and hydrological changes attributable to these and other land uses (Service 1995). In some cases, willow flycatchers are faced with situations that force movement, such as when catastrophic habitat loss occurs from fire or flood. Several such cases have been documented, with some of the resident willow flycatchers moving to remaining habitat within the breeding site, some moving to other sites 1.2 to 16.8 miles away (Paxton et al. 1997, Owen and Sogge 1997), and others disappearing without being seen again.

Critical Habitat

Revised critical habitat for the southwestern willow flycatcher was designated on January 3, 2013 (Service 2013a). Designated southwestern willow flycatcher habitat provides aquatic and terrestrial habitat containing the essential PBFs to support and maintain self-sustaining populations and metapopulations throughout its range. The southwestern willow flycatcher breeds in riparian habitats along rivers, streams, or other wetlands, where relatively dense growths of trees and shrubs are established, near or adjacent to surface water or underlain by saturated soil. Habitat characteristics such as dominant plant species, size and shape of habitat patch, canopy structure, vegetation height, and vegetation density vary widely among sites. As a neotropical migrant (migrating between Central and South America and the United States), migration stopover areas for the southwestern willow flycatcher, even though not used for breeding, are critically important, (i.e. essential) resources affecting productivity and survival.

Based on our current knowledge of the life history, biology, and ecology of the subspecies and the requirements of the habitat to sustain the essential life history functions, we determined that the southwestern willow flycatcher's PBFs are:

1. Riparian habitat in a dynamic river or lakeside, natural or manmade successional environment (for nesting, foraging, migration, dispersal, and shelter) that comprises trees and shrubs (that can include Gooddings willow, coyote willow, Geyers willow, arroyo willow, red willow, yewleaf willow, pacific willow, box elder, tamarisk, Russian olive, buttonbush, cottonwood, stinging nettle, alder, velvet ash, poison hemlock, blackberry, seep willow, oak, rose, sycamore, false indigo, Pacific poison ivy, grape, Virginia creeper, Siberian elm, and walnut) and some combination of:
 - a. Dense riparian vegetation with thickets of trees and shrubs that can range in height from about 6 to 98 feet. Lower-stature thickets (6 to 13 feet tall) are found at higher-elevation riparian forests and tall-stature thickets are found at middle- and lower-elevation riparian forests; and/or
 - b. Areas of dense riparian foliage at least from the ground level up to approximately 13 feet above ground or dense foliage only at the shrub level, or as a low, dense tree canopy; and/or
 - c. sites for nesting that contain a dense (about 50 to 100 percent) tree or shrub (or both) canopy (the amount of cover provided by tree and shrub branches measured from the ground); and/or
 - d. dense patches of riparian forests that are interspersed with small opening of open water or marsh or areas with shorter and sparser vegetation that creates a variety of habitat that is not uniformly dense. Patch size may be as small as 0.25 acre or as large as 175 acres; and
2. A variety of insect prey populations found within or adjacent to riparian floodplains or moist environments, including: flying ants, wasps, and bees (*Hymenoptera*); dragonflies (*Odonata*); flies (*Diptera*); true bugs (*Hemiptera*); beetles (*Coleoptera*); butterflies/moths and caterpillars (*Lepidoptera*); and spittlebugs (*Homoptera*).

Critical habitat for the southwestern willow flycatcher is designated across a wide portion of the subspecies' range and is organized in Management Units (as described in the Recovery Plan; Service 2002b). We designated stream segments in 15 management units found in 5 recovery units as critical habitat for the southwestern willow flycatcher. Critical habitat is located in Apache, Cochise, Gila, Graham, Greenlee, Maricopa, Mohave, Pinal, Pima, Santa Cruz, Yavapai, and Yuma counties in Arizona; Imperial, Los Angeles, Kern, Mono, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura counties in southern California; Clark, Lincoln, and Nye counties southeastern Nevada; Catron, Cibola, Dona Ana, Grant, Hidalgo, McKinley, Mora, Rio Arriba, Santa Fe, San Juan, Socorro, Taos, and Valencia counties in New Mexico; Alamosa, Conejos, Costilla, la Plata, and Rio Grande counties in southern Colorado and; Kane, Juan, and Washington counties in Southwestern Utah.

The physical and biological features essential to the conservation of the southwestern willow flycatcher described above are results of the dynamic river environment that germinates,

develops, maintains, and regenerates the riparian forest and provides food for breeding, nonbreeding, dispersing, territorial, and migrating southwestern willow flycatchers. Anthropogenic factors such as dams, irrigation ditches, or agricultural field return flow can assist in providing conditions that support flycatcher habitat. It is important to recognize that the PBFs are present throughout the river segments selected (PBF 1), but the specific quality of riparian habitat for nesting (PBF 1), migration (PBF 1), foraging (PBF 1 and 2), and shelter (PBF 1) will not remain constant in their condition or location over time due to succession (*i.e.*, plant germination and growth) and the dynamic environment in which they exist.

The Service designated stream “segments” as critical habitat for the southwestern willow flycatcher that provide for flycatcher habitat (nesting, foraging, migrating, regenerating, etc.) and allows for the changes in habitat locations or conditions from those that exist presently. The actual riparian habitat in these areas is expected to expand, contract, or change as a result of flooding, drought, inundation, and changes in floodplains and river channels (Service 2002b) that result from current flow management practices and priorities. Stream segments include breeding sites in high connectivity and other essential flycatcher habitat components needed to conserve the subspecies. Those other essential components of flycatcher habitat (foraging habitat, habitat for nonbreeding flycatchers, migratory habitat, regenerating habitat, streams, elevated groundwater tables, moist soils, flying insects, and other alluvial floodplain habitats, etc.) adjacent to or between sites, along with the dynamic process of riparian vegetation succession and river hydrology, provide current and future habitat for the southwestern willow flycatcher which is dependent upon vegetation succession.

The conservation role critical habitat river segments/units contribute to the southwestern willow flycatcher is metapopulation stability, population connectivity, gene flow, and protection against catastrophic loss of populations. Because the southwestern willow flycatcher exists in disjunct breeding populations across a wide geographic and elevation range, and is subject to dynamic events, the designated critical habitat river segments are widespread across the subspecies range. The focus of the critical habitat designation is therefore a conservation strategy which relies on protecting large southwestern willow flycatcher populations as well as small populations with high connectivity (Service 2002b). Large populations, centrally located, contribute the most to metapopulation stability, especially if other breeding populations are nearby (Service 2002b). Large populations persist longer than small ones, and produce more dispersers capable of emigrating to other populations or colonizing new areas (Service 2002b). Smaller populations in high connectivity can provide as much or more stability than a single isolated population with the same number of territories because of the potential to disperse colonizers throughout the network of sites (Service 2002b).

The approach for defining critical habitat areas supports other key central strategies tied to southwestern willow flycatcher conservation identified in the Recovery Plan (Service 2002b) such as:

1. populations should be distributed close enough to each other to allow for movement;
2. maintaining or augmenting existing populations is a greater priority than establishing new populations; and
3. a population's increase improves the potential to disperse and colonize.

Because large populations, as well as small populations with high connectivity, contribute the most to metapopulation stability (Service 2002b), we identified these areas to help guide the delineation of areas with features essential to the conservation of the southwestern willow flycatcher. The rule defines a large population as a single site or collection of smaller connected sites that support 10 or more territories.

Recovery

The 2002 final recovery plan (Service 2002b) for the southwestern willow flycatcher states that the goal of recovery efforts is the reclassification of the subspecies from endangered to threatened and, ultimately, delisting of the subspecies. The plan states that reclassification to threatened status may be considered when either of the following criteria have been met:

Criterion A: Increase the total known population to a minimum of 1,950 territories (equating to approximately 3,900 individuals), geographically distributed to allow proper functioning as metapopulations, so that the southwestern willow flycatcher is no longer in danger of extinction. For reclassification to threatened status, these prescribed numbers and distributions must be reached as minimum, and maintained over a 5 year period.

Criterion B: Increase the total known populations to a minimum of 1,500 territories (equating to approximately 3,000 individuals), geographically distributed among management units and recovery units, so that the southwestern willow flycatcher is no longer in danger of extinction. Recovery units are large watershed or hydrologic areas, while management units are a subset of the recovery units and encompass local drainages and distinct geographic features. For reclassification to threatened status, these prescribed numbers and distributions must be reached as a minimum, and maintained over a 3 year period, and the habitats supporting this subspecies must be protected from threats and loss.

The plan states that the southwestern willow flycatcher may be removed from the list of threatened and endangered species when both of the following criteria have been met:

Criterion 1: Meet and maintain, at a minimum, the population levels and geographic distribution specified under reclassification to threatened Criterion A.

Criterion 2: Provide protection from threats and create/secure sufficient habitat to assure maintenance of these populations and/or habitat over time. The sites containing southwestern willow flycatcher breeding groups, in sufficient number and distribution to warrant downlisting, must be protected into foreseeable future through development and

implementation of conservation management agreements (e.g., public land management planning process for Federal lands, habitat conservation plans, conservation easements, and land acquisition agreements for private lands, and intergovernmental conservation agreements with Tribes). Prior to delisting, the Service must confirm that the agreements have been created and executed in such a way as to achieve their role in southwestern willow flycatcher recovery, and individual agreements for all areas within all Management Units (public, private, and Tribal) that are critical to metapopulation stability (including suitable, unoccupied habitat) must have demonstrated their effectiveness for a period of at least 5 years.

The recovery plan categorizes recovery actions into nine types: (1) increase and improve occupied, suitable, and potential breeding habitat; (2) increase metapopulation stability; (3) improve demographic parameters; (4) minimize threats to wintering and migration habitat; (5) survey and monitor; (6) conduct research; (7) provide public education and outreach; (8) assure implementation of laws, policies, and agreements that benefit the southwestern willow flycatcher; and (9) track recovery progress.

Yellow-billed cuckoo

Legal Status

The western yellow-billed cuckoo was listed as threatened on October 3, 2014 (Service 2014b). Only the Western DPS, which is larger than its eastern counterpart, was listed. Critical habitat for the cuckoo was proposed on August 15, 2014 (Service 2014c). A five-year review was initiated on June 18, 2018, but is not yet complete.

Natural History

The yellow-billed cuckoo is a member of the avian family *Cuculidae* and is a Neotropical migrant bird that winters in South America and breeds in North America. Adult yellow-billed cuckoos have a fairly stout and slightly down-curved bill; a slender, elongated body with a long-tailed look; and a narrow yellow ring of colored, bare skin around the eye. The plumage is loose and grayish brown above and white below, with reddish primary flight feathers. The tail feathers are boldly patterned with black and white below. They are a medium sized bird about 12 inches in length, and about 2 ounces in weight. The bill is blue-black with yellow on the basal half of the lower mandible. The legs are short and bluish-gray. All cuckoos have a zygodactyl foot with two toes pointing forwards and two toes pointing backwards. Juvenile yellow-billed cuckoos resemble adults, except the tail patterning is less distinct and the lower bill has little or no yellow. Males and females differ slightly and are indistinguishable in the field (Hughes 1999). Typically a secretive and hard-to detect bird, adult yellow-billed cuckoos have a distinctive “kowlp” call, which is a loud, nonmusical series of notes that slows down and slurs toward the end. Yellow-billed cuckoos advertise for a mate using a series of soft “cooing” notes, which they give at night as well as during daytime. Both members of a pair use a soft knocking call as a contact or warning call near the nest (Hughes 1999).

Yellow-billed cuckoos breed within large tracts of suitable riparian habitat. Home ranges are flexible and territories may overlap in this weakly territorial species (Hughes 1999, Halterman 2009, Sechrist et al. 2013). Rangelwide, individual home ranges during the breeding season average over 100 acres (Service 2014b). However, Laymon et al. (1993) reported an average cuckoo home range size of 42 acres, and home range estimates for radio-telemetered cuckoos in New Mexico varied from 12 to 697 acres (Sechrist et al. 2009). In New Mexico, the average maximum daily distance traveled was 2,795 feet, and the average maximum seasonal distance traveled was 4,790 feet. Extensive riparian forests may support the greatest density of breeding cuckoos, but other habitats are also important for recovery (Service 2015c). Cuckoos may use narrow bands of riparian woodland for nesting (Arizona Game and Fish Department 2015, Cornell Lab of Ornithology 2015) and even non-riparian habitats (Brown 1994, Cornell Lab of Ornithology 2015, Corman and Magill 2000). Tamarisk may be a component of breeding habitat, but there is usually a native riparian tree component present (Gaines and Laymon 1984, Johnson et al. 2008, McNeil et al. 2013, Carstensen et al. 2015). Site-specific variation is likely a result of characteristics unique to each location such as type and quality of habitat or patch configuration (Hughes 1999, Halterman 2009, Sechrist et al. 2013). Habitat can be found in relatively contiguous stands of dense vegetation, in irregularly shaped mosaics of dense and open vegetation, and in patches that are narrow and linear or savannah-like. Humid conditions created by surface and subsurface moisture and a multi-layered canopy appear to be important for successful hatching and rearing of young (Hamilton and Hamilton 1965, Gaines and Laymon 1984).

Rangelwide Status

Yellow-billed cuckoos spend the winter in South America, east of the Andes, primarily south of the Amazon Basin in southern Brazil, Paraguay, Uruguay, eastern Bolivia, and northern Argentina. The breeding range of the entire species formerly included most of North America from southeastern and western Canada (southern Ontario, Quebec, and southwestern British Columbia) south throughout the continental United States to the Greater Antilles and northern Mexico (Service 2014b). Currently, the species no longer breeds in western Canada and the northwestern continental United States (Washington, Oregon, and Montana).

The geographical breeding range of the yellow-billed cuckoo in western North America includes suitable habitat within the low- to moderate-elevation areas west of the crest of the Rocky Mountains in Canada, Mexico, and the United States, including the upper and middle Rio Grande, the Colorado River Basin, the Sacramento and San Joaquin River systems, the Columbia River system, and the Fraser River. In Mexico, the range includes the Cape Region of Baja California Sur, and river systems in the Mexican States of Sonora, Sinaloa, western Chihuahua, and northwestern Durango.

Western populations of the cuckoo are most commonly found in large tracks of dense, multilayered gallery forests consisting primarily of cottonwood (*Populus* spp), willow, and mesquite (*Prosopis* spp) (including mesquite bosques) along riparian corridors in otherwise arid areas (Laymon and Halterman 1989, Hughes 1999).

Within the boundaries of the DPS, cuckoos occur from sea level to elevations up to 7,000 feet or more; however, the moist conditions that support riparian plant communities typically occur at lower elevations. Cuckoo breeding habitat in much of the species' range is associated with perennial rivers and streams in regulated and unregulated flows (Poff et al. 1997). Hydrologic conditions at cuckoo breeding sites can vary widely in a single year and among years, and due to these changes cuckoos may move from one area to another in the same season and from year to year. Recent guidance on cuckoo habitat use (Service 2015c) indicates that cuckoos are more flexible in their choice of foraging and migration stopover habitat than they are in selecting nesting habitat. Foraging areas can be less dense or more patchy than nesting areas, with lower levels of canopy cover (Carstensen et al. 2015, Sechrist et al. 2009). Habitat flexibility during migration may extend to monotypic tamarisk and shrubby habitats, hedgerows, coastal scrub, orchards, and semi-desert grasslands.

The primary threat to the western yellow-billed cuckoo is loss or fragmentation of high-quality riparian nesting habitat. Many factors have altered and eliminated cuckoo habitats, including water diversions, ground water pumping, stream channelization and stabilization, agricultural development, mining, livestock grazing, wildfires, establishment of nonnative vegetation, drought, defoliation of tamarisk by the introduced tamarisk leaf beetle, and prey scarcity due to pesticides (Ehrlich et al. 1992, Corman and Wise-Gervais 2005, Service 2014a;b). Habitat fragmentation has led to the isolation of small populations and has increased their susceptibility to further declines and local extirpations due to all the factors discussed above and to stochastic factors such as weather, fluctuating prey populations, and climate change (Thompson 1961, McGill 1975, Wilcove et al. 1986). Cuckoos in the DPS were formerly widespread and locally common in much of the western U.S., Canada, and Mexico (American Ornithologists' Union 1998, Hughes 1999). The largest remaining breeding areas are in southern and central California, Arizona, New Mexico, and northwestern Mexico (Service 2014b).

Critical Habitat

In total, approximately 546,335 acres are proposed for designation as critical habitat in Arizona, California, Colorado, Idaho, Nevada, New Mexico, Texas, Utah, and Wyoming. However, there is no proposed critical habitat within the VFWO's jurisdiction.

Recovery

A recovery plan for this species has not been published. However, recovery of this species is highly dependent on ameliorating the threats to riparian systems. In particular, activities that benefit the hydrological function of the riparian system, as well as restore or conserve riparian habitat or prevent any additional loss or degradation of riparian habitat, will all benefit yellow-billed cuckoo. Avoiding application of pesticides that would limit the abundance of large insects and their larva on or in the vicinity of riparian areas at any time of year would help to maintain an adequate prey base for the cuckoo. Additionally, any management activities that would protect and enhance the physical or biological features for the western yellow-billed cuckoo by reducing or eliminating threats would aid recovery (Service 2014).

Smith's Blue Butterfly

Legal Status

The Service listed the Smith's blue butterfly as endangered on June 1, 1976 (Service 1976). Critical habitat was proposed on February 8, 1977 (Service 1977), but was not ever designated, thus, there is no designated critical habitat. The Service completed a recovery plan for the species on November 9, 1984 (Service 1984).

Natural History

Smith's blue butterflies co-occur with buckwheat plants that grow in coastal dune, cliffside chaparral, coastal scrub, and coastal grassland communities from the mouth of the Salinas River in Monterey County to San Carpoforo Creek in northern San Luis Obispo County. The Smith's blue butterfly is dependent upon its host plant species, Seacliff buckwheat (*Eriogonum parvifolium*) and coast buckwheat (*Eriogonum latifolium*), during all life stages, except that adults may also feed on nectar from naked buckwheat (*Eriogonum nudum*).

Synchronous with peak flowering of its buckwheat hosts, adult Smith's blue butterflies emerge from their pupal cases for a single flight season extending from mid-June to early September. Adults live for about 1 week, during which time they locate mates, court, and copulate. Females oviposit singly in individual flower heads. Larvae hatch 4 to 8 days after oviposition and feed on buckwheat flowers as they grow and molt through five instars. Under natural conditions, pupation occurs from early August to mid-September (Arnold 1980). The location where pupation occurs has not been adequately documented. Researchers have surmised that pupation occurs in the heads of flowers, adjacent to leaf or stem axils, in the duff, or several inches below the soil surface (Arnold 1980). Larvae overwinter as pupae and emerge as adults the following flight season.

Like many other *lycaenid* butterflies, Smith's blue butterfly larvae are tended by ants during the third through fifth instars. The larvae produce a sugary secretion upon which the ants feed. In return, the ants are presumed to provide the larvae with protection from predation or parasitism. The importance of such ant associations to the Smith's blue butterfly is currently unknown.

Rangewide Status

In the northern portion of their range, Smith's blue butterflies occur at the Salinas River National Wildlife Refuge, in the Marina area (including Marina State Beach), on Fort Ord, and in the vicinity of Sand City (Service 2006c). In the southern portion of their range, Smith's blue butterflies occur in Carmel Valley (including occupied sites at Garland Ranch Regional Park, the Santa Lucia Preserve, and Palo Corona Regional Park; Service 2006c) and along the Big Sur coast, including at least 69 sites between Cooper Point (in Monterey County near the border of Andrew Molera and Pfeiffer Big Sur State Parks) and San Carpoforo Creek (in northern coastal San Luis Obispo County; Arnold 2002). The exact elevation range of the species is unknown and

likely varies from north to south, but Smith's blue butterflies have been observed from near sea level to 2,300 feet and potential habitat occurs to approximately 2,500 feet in some locations (Arnold 1980; Service 2003c).

There are no occupied Smith's blue butterfly localities found from just south of Sand City to the Carmel Highlands (i.e., an approximately 9 mile gap occurs within the range). Smith's blue butterflies are notably absent from the Monterey Peninsula, although, historically, they have been observed just to the north at the Naval Postgraduate School and the south at Point Lobos State Reserve. Thus, Smith's blue butterflies are found within two disjunctive areas within their range; 1) a northern area of primarily dune habitats along Monterey Bay north of the Monterey Peninsula, and 2) a southern area of primarily scrub, chaparral, and grassland habitats of the Carmel Valley and Big Sur Coast south of the Monterey Peninsula (Service 2006c). Long-term monitoring has not occurred for any population of the Smith's blue butterfly. Most of our knowledge of the distribution of the Smith's blue butterfly is the result of singular observations made in the past 30 years. Therefore, the number, size, and persistence of colonies throughout the range of the species are poorly understood.

Several colonies of Smith's blue butterflies and some potential habitat are currently protected from at least some of the threats which led to its listing. Large amounts of land that have supported known colonies of the Smith's blue butterfly are owned and managed by resource agencies. Along the Monterey Bay, these areas include the Salinas River National Wildlife Refuge, Monterey State Beach, Marina State Beach, and the coastal portion of the former Fort Ord. Further south, several occupied localities and at least 574 acres of habitat have been confirmed in the Los Padres National Forest (Service 2003c).

Vegetation within the range of the Smith's blue butterfly is very dynamic, especially where stands of Seacliff buckwheat occur. Seacliff buckwheat seedlings depend upon disturbances such as landslides and other erosional features for the development of site conditions favorable for germination and establishment. Landslides and mass wasting are common along the Monterey coast and provide the disturbances required by Seacliff buckwheat; conversely, these geologic activities can also destroy existing stands of Seacliff buckwheat. The Smith's blue butterfly may benefit from some human disturbances when they mimic natural processes. The quality of habitat likely changes over relatively brief periods due to natural successional processes and, increasingly, due to the invasion of non-native plants. Over time, especially when disturbances are rare, stands of Seacliff buckwheat are likely to be displaced by larger native shrubs on all but the harshest sites.

The role of dynamic processes in creating and maintaining habitat for the Smith's blue butterfly is poorly understood. Most likely, Smith's blue butterflies abandon areas where Seacliff buckwheat is replaced by other vegetation. Adults would be expected to disperse and colonize new areas that contain adequate patches of host buckwheat plants. Arnold (1991) found that the density and age class distribution of Seacliff buckwheat and coast buckwheat are important determinants for the establishment and persistence of Smith's blue butterfly populations in some locations. The Smith's blue butterfly has a wingspan of generally less than 1 inch and adult

Smith's blue butterflies are not strong fliers; therefore, colonies may become isolated if suitable habitat is not available nearby for dispersal and colonization.

Threats to the Smith's blue butterfly exist at many of the sites that are protected from development pressures. Much of the species' habitat has been invaded and, in some cases overtaken, by invasive plants. At least 70 non-native plant species introduced during the past 200 years threaten habitat for the Smith's blue butterfly in both protected and unprotected areas throughout the sub-species' range.

The decline of the Smith's blue butterfly is attributed to degradation and loss of habitat as a result of urban development, recreational activities in dune habitats, sand mining, military activities, fire suppression in chaparral habitat, and encroachment of exotic plant species. Wildfire suppression increases the risk of large-scale, high-intensity wildfires and reduces the frequency of smaller fires. Smaller fires would be expected to create disturbances that favor establishment of Seacliff buckwheat plants; while large, high-intensity fires would be more likely to damage soils and destroy seed banks to the detriment of native plant communities. As a recent example, the 2008 Basin Complex fire burned approximately 19,424 acres of potential Smith's blue butterfly habitat. Fire intensity was variable and the effects of that fire on habitat have not been well documented, but the large size of the area burned creates concern about the ability of Smith's blue butterflies to recolonize the area. Aggressive, disturbance-oriented invasive plant species such as kikuyu grass (*Pennisetum clandestinum*), pampas grass (*Cortaderia jubata*), Cape ivy (*Delairea odorata*), and French broom (*Genista monspessulana*) are found on sites otherwise suitable for seacliff buckwheat and the Smith's blue butterfly. In sand dunes along Monterey Bay, non-native ice plant (*Carpobrotus* spp.) has covered hundreds of acres of formerly suitable habitat for the Smith's blue butterfly. The low vagility of adults, coupled with fragmentation of suitable habitat, reduce the probabilities of colonization events and migratory exchange between populations. Due to the lack of long-term monitoring, the status of the Smith's blue butterfly must be assessed largely based on the status of habitat for the species.

Urban development, recreational activities, and other activities continue to result in habitat loss and degradation. Urban development, introduction of invasive plant species and recreational use have fragmented and continue to fragment habitat for the Smith's blue butterfly. This fragmentation has several ramifications for the Smith's blue butterfly. The quality of the remaining suitable habitat is reduced, the distance dispersing adults must travel to reach the next island of suitable habitat is increased, the entire metapopulation structure is potentially disrupted, and genetic diversity is reduced. Overall, groups of Smith's blue butterflies occupying smaller, more isolated stands of suitable habitat are more likely to be extirpated by stochastic or anthropogenic factors.

Critical Habitat

There is no designated critical habitat for Smith's blue butterfly.

Recovery

The Smith's blue butterfly recovery plan was published in 1984 and is outdated. The recovery objectives in the plan focus on protection of those localities that were known when the plan was published. However, due to changes in our knowledge of the subspecies' range and the threats that it faces, the objectives are largely obsolete. The range is larger and shifted to the south, relative to what was understood in 1984, and several of the locations identified for protection in the recovery plan do not have suitable habitat or are outside the currently accepted range (Service 2003c). Of the 18 locations identified for protection in the recovery plan (Service 1984), 3 are north of the currently accepted range (Service 1986b) and 1 was likely misidentified, as it is at a higher elevation than any other occupied location and has no suitable habitat (Service 2003c).

The general recovery needs of the Smith's blue butterfly include conserving and managing existing habitat, maintaining and improving connectivity between areas of habitat, and increasing the amount of occupied habitat through restoration efforts. The Smith's blue butterfly occurs in two disjunct areas and conservation of the subspecies in both will be necessary for recovery. Although the recovery plan is outdated, several of the recovery actions it identifies are still valid, including:

1. revegetating existing blow-out areas with native plants and removing exotic plants;
2. controlling off-road vehicle use of dunes;
3. carrying out prescribed burns;
4. iceplant and Holland dune grass eradication; and,
5. developing public awareness.

ENVIRONMENTAL BASELINE

Action Area

The implementing regulations for section 7(a)(2) of the Act define the "action area" as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 Code of Federal Regulations 402.02). The action area for this biological opinion is the geographic jurisdiction of the VFWO: Santa Cruz, San Benito, Monterey, San Luis Obispo, Santa Barbara, Ventura, and the northern part of Los Angeles County (Figure 1, FEMA 2018). Please see Appendix E for species range maps within the jurisdiction of the VFWO.

Previous Consultations in the Action Area

The Service has previously issued a biological opinion with FEMA for disaster assistance projects eligible for FEMA funding with the Service under Presidential disaster declarations (FEMA-1628-DRCA and FEMA-1646-DR-CA) in 36 counties in Northern California. The PBA and corresponding PBO addressed potential effects of FEMA-funded actions on approximately 140 federally listed species and habitats. This PBO required implementation of general minimization measures and species-specific conservation measures to be implemented during each project, and authorized the take of up to 1 acre of habitat for listed species at any given project site and the cumulative take of up to 900 acres of habitat for all qualifying projects. The PBA and corresponding PBO expired on July 6, 2011.

As the action area encompasses VFWO's entire jurisdiction, numerous other consultations have been completed. A record of these consultations is available at the VFWO.

EFFECTS OF THE ACTION

FEMA has designed the implementation of their program to incorporate species conservation. They collaborated with the Service to develop a streamlined process for environmental compliance of this program. The program relies on Subapplicants voluntarily choosing a streamlined approach for environmental compliance, and incorporating measures to avoid and minimize impacts to listed species and critical habitat into project proposals. Successful implementation of this programmatic could demonstrate an effective use of stream-lined regulatory compliance benefiting Subapplicants, species conservation, and both federal agencies.

Effects of the action on all species

The federally-listed species addressed in this programmatic consultation may be directly or indirectly harmed (e.g., killed or injured) as a result of implementing FEMA-funded projects. The effects to listed species addressed in this PBO are project-specific and widely variable. The likelihood that a proposed project will adversely affect covered species or their critical habitats depends on a variety of factors, including, but not limited to, the conditions present in the individual project action area, the probability of species occurrence, timing of the activity, and the quality and quantity of the habitat within the project footprint and its vicinity. For proposed projects covered under the PBO, we anticipate that implementation of general avoidance and minimization measures and species-specific conservation measures, as proposed, will reduce adverse effects, in some instances to levels that are insignificant, discountable, or wholly beneficial.

Activities that are likely to cause direct or indirect harm to covered species and their habitats include grading and earthmoving; road construction; excavation; maneuvering vehicles and heavy equipment on and off roads; production of noise, vibration, and dust; vegetation management; prescribed or accidental fire; placement and removal of cofferdams and other temporary water diversions in creeks and rivers; discharge of fill and sediments in water; and

placement of riprap and water control structures. Some animal species may occur in close proximity to disaster-affected areas and may be indirectly affected by project activities that extend beyond the damaged features themselves, which may include access routes, staging areas, borrow sites, and downstream effects in watercourses. Indirect effects from the covered activities can affect a species ability to breed, feed, disperse, and find shelter. Such indirect effects include the removal of cover and/or habitat, which in turn make the species more vulnerable to predation as they need to travel further to find suitable areas to breed, feed and/or find shelter. Disturbing or displacing species or host plants can reduce the likelihood of breeding, feeding, or finding shelter. Invasive non-native species may be introduced which can result in increased interspecific competition and displacement, and introductions of pathogens can lead to decreased fitness of species and make them more vulnerable to diseases.

Projects funded by FEMA under the Program are limited to repair and replacement of existing facilities and natural areas, rather than new or expanded construction. Also, many of the projects are in previously disturbed areas. Many of the effects of the proposed projects funded by FEMA will be temporary and localized; conditions are expected to return to baseline levels or become better over time periods ranging from minutes (noise) to a few years (recovery of vegetation). Other actions, while seemingly minor when implemented by themselves, may have cumulative, long-term effects over time. For example, the repair of multiple erosion sites along an earthen canal or creek with riprap will have long-term, cumulative effects both upstream and downstream of each individual project site by hardening the embankment, thereby having an effect on the system's water velocity, transport volume, and other parameters, which may include water quality.

All of the covered species may be directly or indirectly affected by temporary disturbance to, or permanent loss of, suitable habitats as a result of proposed projects. Temporary and permanent habitat disturbances can adversely affect covered species by reducing the availability of key habitat components, which species need for breeding, feeding, sheltering, and dispersing. Habitat loss and disturbance may reduce prey availability and foraging habitat, remove or damage host-plant species, reduce or remove shade cover, or cause incremental degradation or temperature increases to in-water habitats. Additionally, loss of habitat can cause an increase in both interspecific and intraspecific competition leading to displacement, which ultimately decrease an individual's fitness through reduced survival and reproductive success due to physical and physiological constraints. Construction-related habitat disturbances may cause mortality or non-lethal harm such as injury to surviving individuals by being crushed by equipment, maintenance materials, or worker foot traffic.

Although permanent loss or alteration of habitat may occur as part of a Subapplicant's proposed project, this will occur infrequently, and most project footprints are small (many less than 1 acre), which will affect only small areas. For projects such as fuel reduction, erosion, and sedimentation control, these adverse effects may occur in the short term, but may ultimately result in beneficial effects to plants, wildlife, and covered species.

Removal or reduction of habitat can result in habitat fragmentation, which also can lead to isolation and edge effects. Isolation effects can negatively impact a species ability to find suitable mates thereby reducing its reproductive success. If populations are isolated for long periods of time, this can lead to inbreeding depressions which can make the population more vulnerable to stochastic events. Edge effects generally have a negative impact on both the biotic and abiotic environments. Edge effect negatively impact species through increased risk through the introduction of invasive competitors or pathogens and an increased risk of predation. Effects to the abiotic environment can also negatively impact species by increasing water and ambient temperatures leading to physiological changes that could make the habitat unsuitable for species at all life stages.

Production of noise, vibration or dust may result in an increased vulnerability to predation or desiccation; individuals displaced from protective cover are subject to predation and accidental death or injury from vehicular or foot traffic as they move across the landscape to avoid the area. Nesting birds, may be flushed from nesting areas, abandoning nests and young in response to significant noise disturbance. Eggs and young are more vulnerable to predation when adults are flushed from nests. Difficulty hearing calls from conspecifics could reduce fitness by decreasing the ability to mate, find food, or avoid predation. The potential for disturbance and will be minimized by implementing Conservation Measures that require onsite biological monitoring, worker education programs, and successful capture and relocation of individuals. The likelihood of disturbance and displacement will be further reduced by avoidance, when feasible, and buffers. Conservation measures that minimize the area disturbed by project-related activities will reduce the potential for fleeing and abandonment as a result of the action, as will the requirement to work outside of the nesting season.

Barriers to migration and movement may be temporary (during construction) or permanent and could result in partial or localized blockage of covered species migration or movement. Effects to covered species migration or movement could differ depending on the covered species, timing, and size of the project and the nature of the activity. Such barriers could result from activities such as the conversion of land to unsuitable habitat; the loss of suitable habitat associated with vegetation management; or the repair, replacement, or construction of new highways, walls, or other infrastructure.

Implementation of the proposed conservation measures will avoid or reduce the extent and severity of adverse effects. For example, requirements to conduct work outside of the sensitive periods, for breeding, nesting, migration and dispersal periods for covered species, will reduce the effects of such activities which include human disturbance and vibration and noise of construction equipment. Restoring areas to pre-project conditions will enable species to move back into areas after project completion. Providing environmental awareness training to workers and having biological monitors onsite during all construction activities will reduce or eliminate negative encounters with individuals of any of the species. Also, clearly delineating work areas and avoidance areas using appropriate construction fencing, seasonal limitations for breeding

areas, and appropriate buffers around, for instance, vernal pools. The Conservation Measures section of this PBO provides a full description of these general and species-specific protective measures

Effects of the action on aquatic species

Increased erosion, turbidity, and sedimentation may affect aquatic species, including arroyo toads, California red-legged frog and California tiger salamander eggs and larvae, tidewater goby, and vernal pool species. Effects include reduced visibility of prey or forage items, respiratory stress, temperature changes, and in severe cases, suffocation and damage to gills, lungs, or other organs.

Heavy equipment use during in-water work activities such as installing temporary diversions or dewatering, may cause increased sedimentation. Construction-generated dust may be deposited into nearby waters and vegetation, and terrestrial or riparian vegetation removal and fuel reduction activities may increase erosion and sedimentation during storm runoff events. These activities can lead to the smothering of eggs thereby interfering with the species ability to complete its life cycle. Arroyo toad, California red-legged frog and California tiger salamander eggs may be smothered by excessive silt and larvae may have difficulty locating food in turbid waters.

Pile driving, in-water drilling, cutting, or excavation can have short-term adverse effects on covered aquatic species such as the arroyo toad, California red-legged frog, and tidewater goby, by increasing in-water noise and vibration. For example, pile driving in or adjacent to water causes high-intensity sound, which acts as a pressure wave that can collapse burrows of tidewater gobies.

For most covered projects, implementing the proposed conservation measures will likely reduce the aforementioned adverse effects to covered species, their prey, and their habitats within vernal pools and other aquatic habitat. These measures include restricting work during seasonal work windows, restricting the entry of heavy equipment into waterbodies, and establishing upland staging areas for equipment and materials. Installing silt fences, sediment curtains, and hay bales will reduce effects from erosion, turbidity, and sedimentation; the dewatering of work areas will minimize the amount and duration of suspended sediment. The Conservation Measures section of this PBO provides a full description of these general and species-specific measures.

Arroyo Toad, California red-legged frog, and California tiger salamander

In addition to the aforementioned effects for all species and for aquatic species, arroyo toad, California red-legged frog, and California tiger salamander are also susceptible to additional effects. Actions within riparian habitats, ponded features, and surrounding upland habitat for arroyo toads, California red-legged frogs, and California tiger salamanders may directly and indirectly adversely affect these species. Personnel, equipment, or materials entering the streambed or waterbody could injure or kill amphibians by trampling or crushing adults,

tadpoles, or eggs. Construction activity can lead to increased erosion and in-water work can stir up sediment; this can settle out and cover eggs leading to injury or mortality, and increase turbidity rendering adults and juveniles less able to detect prey or predators. The Subapplicant would minimize these effects by having a VFWO-approved biologist onsite, conducting pre-construction surveys, inspecting the action area and all equipment/materials, and providing construction awareness training to project staff. The Subapplicant will further minimize effects through the implementation of an Erosion Control Plan to ensure that sediment-control devices are installed and maintained, and that all disturbed soils at the site will undergo erosion control treatment before the rainy season starts. Previously disturbed or developed areas will be used for staging equipment, and heavy equipment will avoid flowing water other than temporary crossing or diverting activities.

If dewatering or heavy equipment use is necessary in occupied habitat, a VFWO-approved biologist will capture and relocate arroyo toad, California red-legged frog, and California tiger salamander individuals to minimize the chance of injury or mortality. Capture and relocation would annoy and potentially harm or kill individuals. Chytrid fungi may be spread to arroyo toad, California red-legged frogs, and California tiger salamanders during capture and relocation if done without proper handling techniques and practices.

Any individuals that avoid detection and capture and remain in the construction zone or dewatered area may be subjected to trampling, crushing, or disturbance from project activities. Egg masses or egg strands would be stranded, likely leading to mortality from desiccation. Pumping could suck in and trap eggs and tadpoles. Temporary indirect effects as a result of dewatering or heavy equipment use include reducing available habitat, altering behavior, and preventing movement of tadpoles. Altering flow by rerouting streams, dewatering, removing or installing a dam, etc. would affect these species downstream by increasing temperature, turbidity, and/or aquatic habitat availability.

The Subapplicant will avoid or minimize these effects by ensuring that water intakes will be completely screened with wire mesh not larger than 5 millimeters and the intake should be placed using a method to attenuate suction, such as a perforated bucket, to prevent arroyo toads, California red-legged frogs, and California tiger salamanders from entering the pump system. Pumped water will be carefully released so that it does not contribute to turbidity in nearby waters so as not cause to erosion and avoids and minimizes streambed structure and water flow alteration. Temporary culverts to convey live flow during construction activities will be placed at stream grade and be of an adequate size as to not increase stream velocity.

Ground disturbing activities in uplands occupied by arroyo toads, California red-legged frogs, and California tiger salamanders could directly injure or kill individuals by crushing, trampling, or entrapping adults or juveniles. Arroyo toads, California red-legged frogs, and California tiger salamanders may become trapped within natural and artificial structures by falling into trenches, sheltering in pipes, debris piles, and equipment and be injured or killed if they are not detected, captured, and relocated.

Project activities such as dredging, and installing bank protection or culverts may alter an area in a way that makes it uninhabitable for submergent and emergent vegetation. Riparian habitat is important for arroyo toads and California red-legged frogs to shelter, forage, and breed. A decrease or elimination of aquatic and riparian plants would increase this species' vulnerability to predation and desiccation and may increase water temperature due to decreased shading. To minimize these effects the Subapplicant would return contours of the streambed, vegetation, and stream flows to their pre-construction condition or better. This consultation anticipates that most activities will occur within a footprint that has been previously disturbed.

Arroyo toad, California red-legged frog and California tiger salamander riparian habitat can become isolated and fragmented due to the proposed covered activities. The fragmentation and isolation of a subpopulation can lead to a decline in dispersal between subpopulations, jeopardizing the metapopulation. The isolated populations then can become vulnerable to local extinction due to stochastic environmental and human-induced events. Additionally, removal of riparian cover can also have negative effects on reproductive success of all three species by allowing more solar radiation to heat pools and slow moving streams. Since egg masses are dependent on specific temperatures, incremental changes to water temperatures may reduce reproductive success of these amphibians. Lastly, the California tiger salamander is dependent on barrier-free landscapes for successful migration and dispersal. Thus, fragmentation or other barriers will reduce connectivity of the metapopulation, isolating subpopulations making them more vulnerable to stochastic events and less likely to be recolonized if extirpated.

The Santa Barbra Distinct DPS of California tiger salamanders are particularly vulnerable. To minimize the types of adverse effects listed above, FEMA has proposed to follow the Service's conservation strategy for the Santa Barbara DPS which requires that effects to specific metapopulations be offset such that isolation and fragmentation does not occur on a level that will lead to local extirpations. Additionally, we anticipate projects covered under this PBO will generally impact less than 1 acre of habitat each and will occur in previously disturbed areas. With implementation of the proposed conservation measures we do not anticipate these effects to cause local extirpations of any California red-legged frogs, arroyo toads, or California tiger salamander populations.

Conservancy fairy shrimp and vernal pool fairy shrimp

In addition to the aforementioned effects for all species and for aquatic species, vernal pool branchiopods are also susceptible to additional effects. Conservancy and vernal pool fairy shrimp use a variety of habitats from typical vernal pools with vegetation rings characteristic of such features, to seasonally inundated depressions that hold water for a sufficient period for branchiopods to complete their life cycle but not sufficient to establish vegetation typical of vernal pools. Vernal pool habitats are in areas with specific soil, geology, and microtopography, making them highly susceptible to degradation from environmental changes. FEMA proposes to avoid direct effects to occupied habitat for conservancy and vernal pool fairy shrimp. Depending on the nature and location of the project, indirect effects could alter the hydrology, surrounding vegetation, and sedimentation rate. These indirect effects have the potential to affect the habitat

characteristics that vernal pool branchiopods require, leading to reduced or eliminated populations from affected features.

Many vernal pool areas contain hardpan soils that, if disturbed, will no longer hold water appropriately. Vernal pools also rely on runoff from surrounding areas during winter rains to refill. Re-grading these areas may affect the flow of water and alter the amount of water entering the vernal pool. These activities, as well as effects from erosion, dust, and construction activities may temporarily or permanently alter vernal pool habitat, making such areas less suitable for the covered species occupying the habitat. Vernal pool species are especially vulnerable to alterations in the existing hydrology of vernal pool habitats, because the timing, water depth, and inundation period determines which vernal-pool branchiopods are able to reproduce and persist in a given vernal pool. For example, indirect alterations to the hydrology of vernal pool habitats can result in too little soil moisture for the hatching of vernal pool branchiopod eggs. Indirect alterations to the hydrology of vernal pool habitats may also cause vernal pools to dry too fast, or cause vernal pool water temperatures to increase too soon for a vernal pool species to complete its lifecycle and reproduce.

This PBO does not cover proposed projects that involve placement of fill material in, or excavation of, any vernal pools (wet or dry) as this will require a separate section 7 consultation. However, grading, excavation and filling outside of a vernal pools may have indirect effects on vernal swales and vernal complexes by altering the natural hydrology either upstream or downstream. This can cause unseasonal drying or flooding that can negatively affect species that occupy vernal pool habitats, which can lead to species unable to complete their life cycle. Upland habitat and swales around a vernal pool and within a vernal pool complex are essential to the hydrological and biological integrity of the vernal pool and complex. Typically, if any portion of a vernal pool is affected, then the entire vernal pool is considered affected. Where the reach of these indirect effects cannot be determined definitively, the Service considers most activities in areas within 250 feet of a vernal pool to have potential for indirect effects.

The proposed general and species specific conservation measures will minimize adverse effects. These measures include pre-construction surveys, construction monitoring by a VFWO-approved biologist, establishing construction work windows and activity buffers, and identifying and flagging sensitive areas. Mortality-related effects will be minimized by buffers. The Conservation Measures section of this PBO provides a full description of these general and species-specific conservation measures.

The natural history of both Conservancy and vernal pool fairy shrimp make them difficult to locate and many areas of suitable habitat have not been surveyed. Projects that occur under this program may inadvertently occur in occupied areas. The Subapplicant would minimize the risk of this occurring by providing the Service with a habitat assessment survey completed by a VFWO-approved biologist with demonstrable experience with the diversity of habitat types in which listed branchiopod species can occur. This would include all suitable conservancy and

vernal pool fairy shrimp habitat, including the basin/inundation feature(s) where fairy shrimp and/or resting eggs would be found, and the area of the watershed needed to support the feature(s).

Tidewater goby

In addition to the aforementioned effects for all species and for aquatic species, tidewater goby are also susceptible to additional effects. Any in-water work within occupied habitat can directly affect the tidewater goby through injury or mortality caused by trampling, crushing, or entrapment. Personnel or equipment entering the streambed or waterbody could trample, crush, or entrap all life stages in burrows, and even displace individuals from their habitat if they are caught in equipment or debris during removal. Project activities that include removing debris such as wood and sediment could disturb the substrate and potentially bury burrows. The subapplicant would minimize these effects by having a VFWO -approved biological monitor onsite who would survey for tidewater gobies and assess turbidity levels within the work areas. If necessary, a VFWO -approved biologist may capture and relocate tidewater gobies to suitable habitat, which would annoy individuals and potentially lead to injury or mortality.

Debris removal may also indirectly affect this species. Project activities could reduce habitat quality by increasing turbidity and erosion, removing emergent vegetation that shade aquatic habitat, or removing submerged vegetation, substrate, or other features that are used as foraging habitat or shelter for the tidewater goby. Increasing turbidity may affect this species by decreasing water clarity and rendering individuals less able to detect prey or predators. When the particles in the water settle, burrows and eggs could be covered in sediment, thus reducing water and oxygen circulation to embryos. Removing habitat complexity such as submerged or emergent vegetation exposes tidewater gobies to increased predation from other fish and birds because it would remove shelter and shaded areas. The subapplicant would minimize these effects by preparing an Erosion Control Plan that includes erosion and sedimentation control measures for areas where disturbed substrate may potentially wash into waters via rainfall or runoff, particularly around stockpiled material and at the downstream end of each project reach. Bank stabilization activities may also be implemented to minimize erosion potential and would contain design elements suitable for supporting riparian vegetation.

Removing debris that block flow in streams and in lagoons would reduce barriers to fish movement. If debris is blocking the mouth of a lagoon, removing this debris could restore natural tidal flow and allow dispersal when the lagoon is intermittently breached, which is necessary for this species to maintain its metapopulation structure. However, artificially causing a sudden breaching event, especially outside the typical wet season, would not give this species warning through environmental cues and could flush tidewater gobies out to the ocean or strand them on sand banks, leaving them vulnerable to predation and desiccation.

Depending on the location of the project, indirect effects from road and trail, utility, and rail line construction activities could increase sedimentation and turbidity in tidewater goby habitat. The Subapplicant would minimize these effects by preparing an Erosion Control Plan that takes into

account erosion and sedimentation control measures in all areas where disturbed substrate may potentially wash into waters via rainfall or runoff, particularly around stockpiled material and at the downstream end of each project reach.

Overall, we anticipate that individual projects will be limited in size (generally affecting less than 1 acre of occupied tidewater goby habitat), and that projects will most commonly be located in previously-disturbed areas. With implementation of the avoidance and minimization measures, we do not anticipate that actions covered under this PBO will cause, or substantially contribute to, the extirpation of any occupied estuary/lagoon.

California gnatcatcher and Riparian Birds: Least Bell's vireo, southwestern willow flycatcher, and yellow-billed cuckoo

Coastal California gnatcatchers and the listed riparian birds (least Bell's vireo, southwestern willow flycatcher, and yellow-billed cuckoo) may be indirectly affected by project activity through disturbance and habitat modification. Increased activity and significant noise disturbance and vibration from heavy machinery operation and foot traffic in riparian corridors or scrub habitat can cause these species to abandon the habitat and potentially abandon nesting attempts or active nests. Eggs and young are more vulnerable to predation when adults are flushed from nests.

The riparian birds are migratory and are only anticipated to be present during spring summer months, but coastal California gnatcatchers are non-migratory and will be present year-round. Activities that disturb habitat for riparian birds in the non-breeding season, can have adverse effects to birds returning to their territories the following year. Activities that disturb habitat for coastal California gnatcatchers can have impacts to the birds year-round; however during the non-breeding season gnatcatchers can move away from work areas to other suitable habitat. To minimize effects to nesting birds, clearing of vegetation within occupied, or potential suitable habitat will occur outside the respective breeding seasons to the maximum extent possible. If work must proceed during the breeding season, surveys will be conducted to identify and avoid nesting birds by establishing no-work buffer zones around nests. Despite efforts to identify and avoid nesting birds, adverse effects may still occur if birds are missed during surveys, or if surveys and project activities displace birds from otherwise suitable habitat.

Since nests will be protected from direct impacts, eggs and nestlings will not be directly impacted under the proposed action. However, the proposed projects could result in the removal of vegetation, thus reducing the availability of foraging and nesting resources. Project activities could also result in the introduction and/or spread of the nonnative plant species, particularly giant reed, which can form dense stands that are unsuitable for riparian birds. Destruction of habitat outside the breeding season could impact individuals returning to previous nest sites. Individuals could be forced to compete with each other when attempting to expand an existing territory or establish a new territory or miss the opportunity to breed. Also, if displaced birds cannot find suitable habitat to forage and shelter in, they will be more vulnerable to predation and may die or be injured. Individuals that successfully establish territories in adjacent habitat

are expected to experience reduced productivity (e.g., delayed initiation or prevention of nest building, fewer nesting attempts per season, and/or overall reduction in reproductive output) due to reduced availability of foraging and breeding habitat and increased territorial interactions.

Projects that require lighting could result in direct and indirect effects on the covered species. Direct effects to covered bird species will be primarily associated with changes in behavior. Lights may cause disruption, such as disorientation, in local, seasonal, or long-distance dispersal or migration events. These effects may be temporary or permanent, and may alter breeding or foraging behaviors, or affect the ability of species to find or return to breeding territories.

No permanent loss of occupied or designated critical habitat will occur within or outside of the breeding season under this PBO. For any specific project, temporary impacts on occupied or designated critical habitat will be limited to a maximum of 1 acre. Temporary impacts from all the projects covered under this PBO will also be limited to a maximum of 20 acres of occupied or designated critical habitat.

Smith's blue butterfly

Ground disturbance or vegetation clearing in areas of occupied Smith's blue butterfly habitat could directly affect this species if larvae or pupae associated with host buckwheat plants or in the surrounding soil are crushed, trampled, or entombed, leading to injury or death. Foot and vehicular traffic from constructing or modifying facilities, along with ongoing disturbance from operation and maintenance of these facilities, could startle Smith's blue butterflies and cause them to abandon a safe area, thus making them more vulnerable to predation or collisions with vehicles.

If seacliff or coast buckwheat plants must be removed during the implementation of a project, this not only could lead to injury or mortality by directly removing larvae living on host plants or pupae in surrounding soil and duff, but it would also remove habitat for Smith's blue butterfly. In addition to reducing sheltering and foraging opportunities for this species, habitat loss can also decrease connectivity and lead to isolated populations that are less resilient to stochastic events. The Subapplicant would minimize these effects by having a VFWO-approved biologist onsite in areas with buckwheat plants, implementing measures such as restricting speed limits to 20 mph when travelling off of highways or county roads (15 mph in the project footprint), holding a construction awareness training for project staff, and avoiding damage or removal of seacliff and coast buckwheat. Furthermore, relocating facilities and roads to areas that do not contain or encroach on suitable habitat (thereby reducing foot and vehicular traffic), along with revegetating areas with native species could be beneficial to the species.

Construction-related noise can also adversely affect covered butterfly species, by startling them away from a safe area thus making them more vulnerable to collisions with vehicles and equipment and predation by other species.

Effects to Critical Habitat

As described above, the Action Area encompasses the entire VFWO jurisdiction and all critical habitat units within the VFWO's jurisdiction for the arroyo toad, California red-legged frog, California tiger salamander (Central DPS and Santa Barbara DPS), conservancy fairy shrimp, coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, tidewater goby, and vernal pool fairy shrimp. The Service anticipates that projects funded by FEMA could negatively affect some of the critical habitat units and PBFs for these species within the Action Area.

Arroyo toad Critical Habitat

The Service anticipates effects could occur to PBF 1 (rivers or streams), PBF 2 (alluvial streamside terraces), and PBF 4 (dispersal and connectivity habitat) through implementation of a variety of ground disturbing activities associated with individual projects covered under the PBO. PBF 3 (flooding regime) may be impacted by installation of structures that modify the hydrogeology of arroyo toad habitat, such as levees or other hardened surfaces. These effects would be minimized by FEMA's proposed measure to avoid permanent impacts to critical habitat unless the impact is so small that it will have a negligible effect on habitat quality for arroyo toads. Therefore, we do not expect any appreciable reduction in the ability of the critical habitat to provide for the survival and recovery of arroyo toads.

California Red-Legged Frog Critical habitat

The Service anticipates that the activities associated with the proposed action could negatively affect PBF 1 (aquatic breeding habitat), PBF 2 (non-breeding aquatic habitat), PBF 3 (upland habitat), and PBF 4 (dispersal habitat) of the California red-legged frog critical habitat within the Action Area. However, these activities will likely result in minor effects to habitat as most projects will restore the area to pre-disaster conditions. The Action Area contains aquatic breeding and non-breeding habitat (PBFs 1 and 2) in the form of ponds, creeks, and streams. This habitat could be affected by construction activities through erosion from project activities such as culvert replacement, though following conservation measures will minimize these effects. However, constructing flood control structures such as levees could channelize the applicable waterway permanently affecting the PBFs making them less suitable for the California red-legged frog. Some permanent activities are proposed such as constructing new facilities or relocating existing facilities outside of disaster prone areas. These activities will permanently affect upland and dispersal habitat (PBFs 3 and 4) by installing structures on high quality habitat which will remove upland areas for the California red-legged frog to hide and will create barriers to movement to and from aquatic areas. However, the footprint of the project will confine these effects to a small area. When implemented with both the general and species-specific conservation measures, these proposed activities will not prevent critical habitat from providing essential conservation values for the California red-legged frog. Therefore, we do not expect any appreciable reduction in the ability of the critical habitat to provide for the survival and recovery of California red-legged frogs.

California Tiger Salamander (Central California and Santa Barbara DPS) Critical Habitat

The Service anticipates that the activities associated with the proposed action could negatively affect PBF 1 (aquatic breeding habitat), PBF 2 (upland habitat), and PBF 3 (dispersal habitat) of the California tiger salamander critical habitat within the Action Area. However, these activities will likely result in minor effects to habitat as most projects will restore the area to pre-disaster conditions. Activities with a larger effect are those that will construct new facilities such as developing demonstration projects. These projects have the potential to fill aquatic breeding habitat (PBF 1), excavate and fill burrow systems (PBF 2), and construct barriers that prevent movement to and from breeding sites (PBF 3). When implemented with both the general and species-specific conservation measures, these activities will not prevent critical habitat from providing essential conservation values for the California tiger salamander. Therefore, we do not expect any appreciable reduction in the ability of the critical habitat to provide for the survival and recovery of California tiger salamander.

Conservancy Fairy Shrimp and Vernal Pool Fairy Shrimp Critical Habitat

The Service anticipates that the activities associated with the proposed action could negatively affect PBF 1 (topographic features), PBF 2 (depressional features), PBF 3 (food sources), and PBF 4 (shelter) of the vernal pool branchiopods critical habitat within the Action Area. However, these activities will likely only result in minor effects to habitat as most projects will restore the area to pre-disaster conditions. Activities associated with the proposed action could negatively impact all four PBFs if activities are located adjacent to vernal pool branchiopod critical habitat. The habitat could be affected by construction activities that divert extra water to or from the vernal pool critical habitat. Altering the topography of adjacent sites could negatively impact PBF 2 by altering the frequency and duration of filling. Additionally, this change could affect prey species (PBF 3) and vernal pool plants that provide shelter (PBF 4). However, project footprints will confine these effects to a small area. When implemented with both the general and species-specific conservation measures, these activities will not prevent critical habitat from providing essential conservation values for the vernal pool branchiopods. Therefore, we do not expect any appreciable reduction in the ability of the critical habitat to provide for the survival and recovery of conservancy fairy shrimp and/or vernal pool fairy shrimp.

Coastal California Gnatcatcher Critical Habitat

The Service anticipates effects could occur to PBFs 1 (i.e., sage scrub) and 2 (i.e., non-sage scrub habitat associated with sage scrub, including chaparral, grassland, and riparian habitat) of gnatcatcher critical habitat via removal during construction and maintenance activities. However, temporary impacts from all will be limited to a maximum of 1 acre of designated critical habitat per project and twenty acres of gnatcatcher designated critical habitat overall and no permanent loss of habitat is expected. Thus, impacts should be small in scale, spread out over the range of the species, and intermittent over the life of the project and impact a small proportion of the approximately 197,303 acres of designated critical habitat for this species. Therefore, no appreciable reduction in the ability of the critical habitat to provide for the survival and recovery

of this species is expected. Therefore, we do not expect any appreciable reduction in the ability of the critical habitat to provide for the survival and recovery of coastal California gnatcatcher.

Least Bell's Vireo Critical Habitat

The Service anticipates that activities associated with the proposed action could negatively affect the PBFs, which are described as riparian woodland vegetation that generally contains both canopy and shrub layers, and includes some associated upland habitats. Activities that may negatively affect least Bell's vireo critical habitat include removal or destruction of riparian vegetation; thinning of riparian growth, particularly near ground level; removal or destruction of adjacent chaparral or other upland habitats used for foraging; and increases in human-associated or human-induced disturbance. The overall area of critical habitat that is anticipated to be impacted by projects covered under this PBO is small in comparison to any individual critical habitat unit. FEMA proposes no permanent loss of designated critical habitat for least Bell's vireo, unless the impacts are determined to have a negligible effect on habitat quality for least Bell's vireo. Therefore, no appreciable reduction in the ability of the critical habitat to provide for the survival and recovery of least Bell's vireo is expected.

Southwestern Willow Flycatcher Critical Habitat

The Service anticipates that activities associated with the proposed action could negatively affect PBF 1 (riparian habitat) and PBF 2 (a variety of insect prey). Activities that may negatively affect southwestern willow flycatcher critical habitat include removal or destruction of riparian vegetation; thinning of riparian growth; and increases in human-associated or human-induced disturbance. The overall area of critical habitat that is anticipated to be impacted by projects covered under this PBO is small in comparison to any individual critical habitat unit. FEMA proposes no permanent loss of designated critical habitat for southwestern willow flycatcher, unless the impacts are determined to have a negligible effect on habitat quality for southwestern willow flycatcher. Therefore, no appreciable reduction in the ability of the critical habitat to provide for the survival and recovery of southwestern willow flycatcher is expected.

Tidewater Goby Critical Habitat

The Service anticipates that the activities associated with the proposed action could negatively affect PBF 1a (substrate), PBF 1b (aquatic vegetation), PBF 1c (sandbars) of the tidewater goby critical habitat within the Action Area. However, these activities will likely result in minor effects to habitat as most projects will restore the area to pre-disaster conditions. As the specific PBFs are flexible depending on the water level, repairing coastal features such as coastal flood-control structures could affect the PBFs by shrinking the amount of available habitat that fall within the PBFs should the repair extend outside of the original footprint. When implemented with both the general and species-specific conservation measures, these activities will not prevent critical habitat from providing essential conservation values for the tidewater goby.

Therefore, no appreciable reduction in the ability of the critical habitat to provide for the survival and recovery of tidewater goby is expected.

Summary of effects to Critical Habitat

Most of the covered activities will only result in minor effects limited to small areas. These activities are not likely to diminish the quality of PBFs in a unit for any of the covered species critical habitat. While disturbance within critical habitat may prevent some covered species from using portions of the critical habitat for essential life function whether temporarily or permanently, they will still be able to complete their essential ecological and biological functions in the remaining areas of critical habitat. Therefore, all critical habitat units will retain their PBFs and the PBFs within each critical habitat unit for each covered species will still remain functional. Consequently, the designated critical habitat for all covered species will still be able to perform its intended functions and conservation role.

In conclusion, the Service determines that the majority of activities associated with any proposed projects will result in only minor effects to PBFs, and with implementation of the conservation measures, will not prevent critical habitat from providing essential conservation values. The restoration of native vegetation, removing invasive species, improving water quality and hydrology, stabilizing eroding banks, reducing sedimentation, replacing structures that form partial or complete barriers to movement, and vegetation management to reduce wildfire risk will have negligible or beneficial effects to critical habitat. This determination is further based on the fact that projects funded by FEMA primarily will occur in previously disturbed areas, and the project footprint of most individual projects will be small in size and impact. The Service anticipates that habitat loss and degradation at individual project sites will be minimal and implementation of conservation measures will further minimize effects.

Effects to Recovery

The proposed activities do not conflict with the recovery actions or goals described in the draft recovery plan or the 5-year review because permanent loss of habitat is not expected and temporary impacts should be small in scale, spread out over the range of the species, and intermittent over the life of project activities. Further, the potential for impacts from the project activities are effectively minimized due to the proposed conservation measures. Finally, the number of individuals that may be affected is a small proportion of the total and regional populations. Additionally, we do not expect the proposed project to appreciatively reduce the recovery capacity of any of the 12 listed entities covered in this PBO because FEMA, in coordination with the Service, has developed procedures for implanting its disaster mitigation, and preparedness programs within the context of listed species conservation. In addition to the comprehensive list of conservation measures that are directed towards the protection of the habitat and, therefore, the long-term protection of individual species, FEMA has committed to educating Subapplicants about species conservation and encouraging them to proactively implement conversation measures; educating Subapplicants on conservation efforts at the project design and project planning levels; and is incorporating an ecosystem services approach into

FEMA's decision-making process. Thus, overall, FEMA's commitment to implement a meaningful section 7(a)(1) program within their authority will likely help improve the status of the species covered in this PBO.

CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, tribal, local or private actions that are reasonably certain to occur in the action area considered in this PBO. We do not consider future Federal actions that are unrelated to the proposed action in this section because they require separate consultation pursuant to section 7 of the Act. The following actions may affect the species covered in this PBO by directly or indirectly harming individuals or by adversely affecting designated or proposed critical habitats.

An undetermined number of future land use conversions and routine land management practices are anticipated to be implemented and are often not reviewed for environmental compliance under the federal permitting process. These activities may alter the habitat or increase incidental take of federally-listed species and are cumulative to the proposed programmatic actions. These cumulative effects include, for example:

- Ongoing land conversion leading to continued habitat loss, fragmentation, or degradation;
- Increased recreational activities such as off-road vehicle use, golf courses, species collecting, bike and equestrian use, wave action in water channels caused by boats;
- Increased mining, oil and gas exploration and production, incompatible grazing, and unsustainable timber harvesting;
- Increased invasive species and predation that generally accompany urban expansion;
- Increased mosquito abatement programs (that introduce exotic fish into breeding and non-breeding ponds impact the reproductive success of amphibians.
- Dredging and clearing of vegetation from irrigation canals;
- Deep-ripping, discing or mowing upland habitat;
- Use of burrow fumigants on levees or in other potential upland refugia;
- Use of plastic erosion control netting; and
- Point and non-point source chemical contaminant discharges (e.g., selenium, pesticides, herbicides, fuels, and other toxic substances).

CONCLUSION

The regulatory definition of "to jeopardize the continued existence of the species" focuses on assessing the effects of the proposed action on the reproduction, numbers, and distribution, and their effect on the survival and recovery of the following species being considered in the PBO:

- Arroyo toad
- California red-legged frog
- California tiger salamander – Central California DPS and Santa Barbara DPS
- Conservancy fairy shrimp

- Vernal pool fairy shrimp
- Tidewater goby
- Coastal California gnatcatcher
- Least Bell's vireo
- Southwestern Willow Flycatcher
- Yellow-billed cuckoo
- Smith's blue butterfly

Reproduction

FEMA and the Service worked extensively in coordinating a comprehensive suite of general and species-specific conservation measures designed with species conservation in mind. While temporary decreased fitness to individuals may occur as a result of projects implemented under this PBO, we do not expect those effects to be significant or meaningful at a population or species level. Consequently, we do not anticipate the actions covered within this PBO to impact reproduction of any of the listed species to the extent that it “reduces appreciably the likelihood of both the survival and recovery” of the aforementioned species.

Numbers

FEMA and the Service worked extensively in coordinating a comprehensive suite of general and species-specific conservation measures designed with species conservation in mind. While temporary reduction of numbers may occur within individual populations as a result of projects implemented under this PBO, we do not expect those effects to be significant or meaningful at a population or species level. Consequently, we do not anticipate the actions covered within this PBO to impact the numbers of any of the listed species to the extent that it “reduces appreciably the likelihood of both the survival and recovery” of the aforementioned species.

Distribution

FEMA and the Service worked extensively in coordinating a comprehensive suite of general and species-specific conservation measures designed with species conservation in mind. While temporary impacts to individuals may occur as a result of projects implemented under this PBO, we do not expect those effects to be significant or meaningful at a population or species level. Consequently, we do not anticipate the actions covered within this PBO to impact distribution of any of the listed species to the extent that it “reduces appreciably the likelihood of both the survival and recovery” of the aforementioned species.

After reviewing the current status of the 12 listed entities covered by this PBO, the species' status, environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it is the Service's biological opinion that FEMA's Program in California, as proposed, is not likely to jeopardize the continued existence of the following species:

The Service reached this conclusion because the project-related effects to the species, when

added to the environmental baseline and analyzed in consideration of all potential cumulative effects, will not rise to the level of precluding recovery or reducing the likelihood of survival of the species based on the following:

(1) FEMA, in coordination with the Service, has proposed an extensive suite of general and species-specific conservation measures to be implemented for each project that are directed towards the protection of the habitat and, therefore, the long-term protection of individual species; (2) most individual project areas will have small footprints (less than 1 acre), therefore, not all populations or habitats will be affected by the proposed actions; and (3) FEMA will initiate individual section 7 consultations on all actions involving species and projects that do not specifically qualify for coverage under this PBO, as described in the PBA.

Critical Habitat

After reviewing the current status of the designated critical habitat, the environmental baseline of critical habitat for the action area, the effects of the proposed action(s) on critical habitat, and the cumulative effects, it is the Service's biological opinion that the action(s), as proposed, is not likely to result in the destruction or adverse modification of critical habitat of the following species:

- Arroyo toad
- California red-legged frog
- California tiger salamander – Central California DPS and Santa Barbara DPS
- Conservancy fairy shrimp
- Vernal pool fairy shrimp
- Tidewater goby
- Coastal California gnatcatcher
- Least Bell's vireo
- Southwestern Willow Flycatcher

The Service reached this conclusion because the project-related effects to the designated critical habitat for these species will not rise to the level of precluding the function of the respective critical habitat to serve its intended conservation role for the species based on the following: (1) FEMA, in coordination with the Service, has proposed an extensive suite of general and species-specific conservation measures that will be implemented for each project; (2) the majority of the effects of the projects are temporary and not persistent; (3) most of the projects restore structures such as roads, bridges, or other pre-existing facilities that are not in themselves physical and biological features essential to species' conservation; and (4) the effects to critical habitat for these species are small and discrete, relative to the entire area designated, and are not expected to appreciably diminish the value of the critical habitat or prevent it from sustaining its role in the conservation of these species.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened wildlife species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by the Service as an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not the purpose of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this incidental take statement.

In June 2015, the Service finalized new regulations implementing the incidental take provisions of section 7(a)(2) of the Act. The new regulations also clarify the standard regarding when the Service formulates an Incidental Take Statement [50 CFR 402.14(g)(7)], from "...if such take may occur" to "...if such take is reasonably certain to occur." This is not a new standard, but merely a clarification and codification of the applicable standard that the Service has been using and is consistent with case law. The standard does not require a guarantee that take will result; only that the Service establishes a rational basis for a finding of take. The Service continues to rely on the best available scientific and commercial data, as well as professional judgment, in reaching these determinations and resolving uncertainties or information gaps.

AMOUNT OR EXTENT OF TAKE

We anticipate that some arroyo toads, California red-legged frogs, California tiger salamanders (Central California and Santa Barbara Distinct Population Segments), California coastal gnatcatcher, conservancy fairy shrimp, least Bell's vireo, smith's blue butterfly, southwestern willow flycatcher, tidewater goby, and yellow-billed cuckoos could be taken as a result of the proposed action. We expect the incidental take to be in the form of lethal and non-lethal harm through capture and relocation, habitat disturbance that displaces listed species, or activities in occupied habitat that results in injury or death of listed species.

We cannot quantify the precise number of covered species that may be taken as a result of the actions that FEMA has proposed for multiple reasons. Individuals move over time; for example, animals may have entered or departed the action area since the time of pre-construction surveys. Other individuals may not be detected due to their cryptic nature, small size, and low mobility. The protective measures proposed by FEMA are likely to prevent mortality or injury of most individuals. In addition, finding a dead or injured covered species is unlikely.

Consequently, we are unable to reasonably anticipate the actual number of covered species that would be taken by the proposed project; however, we must provide a level at which formal consultation would have to be reinitiated. The Environmental Baseline and Effects Analysis sections of this PBO indicate that adverse effects to covered species would likely be low given the extensive suite of conservation measures, and we, therefore, anticipate that take of covered species would also be low. We also recognize that for every individual found dead or injured, other individuals may be killed or injured that are not detected, so when we determine an appropriate take level we are anticipating that the actual take would be higher and we set the number below that level.

Arroyo Toad

The Service anticipates that incidental take of the arroyo toad associated with FEMA's proposed action may occur from project activities within occupied aquatic and upland habitat. Individuals may be subject to take in the form of non-lethal harm during relocation of animals that are found in the work area, and take in the form of injury or death if arroyo toads go undetected in the work area and are crushed or otherwise directly or indirectly impacted by project activities. The Service anticipates impacts to not more than 1 acre of occupied habitat at any given project site, and a maximum of 10 acres of impacts to occupied habitat overall for all projects for the five-year term of the PBO.

The Service anticipates and is exempting take incidental to the proposed action in the form of harm, injury, or death of no more than three juvenile or adult arroyo toads and no more than 1 egg strand per site per year; and/or no more than 20 juveniles or adult arroyo toads and no more than 5 egg strands total for all sites for the 5-year duration of this PBO. Additionally, the service is exempting all take in the form of capture and relocation for the project footprint.

Accordingly, the Service concludes that the incidental take of arroyo toads will be considered exceeded if one or more of the following conditions are met. Under these circumstances, as provided in 50 CFR §402.16, reinitiation of formal consultation will be required.

1. More than one (1) acre of occupied habitat is impacted at any given project site;
2. More than ten (10) acres of occupied habitat are impacted during the 5-year duration of the PBO;
3. Death or injury of more than three (3) juvenile or adult arroyo toads and one (1) egg strand at any individual site;
4. Death or injury of more than twenty (20) juveniles or adults and five (5) egg strands for the 5-year duration of the PBO.

California Red-legged Frog

The Service anticipates that incidental take of California red-legged frogs associated with FEMA's proposed action may occur from project activities within occupied aquatic and upland habitat. Individuals may be subject to take in the form of non-lethal harm during relocation of

animals that are found in the work area, and harm in the form of injury or death if California red-legged frogs go undetected and are crushed or otherwise directly or indirectly impacted by project activities. The Service anticipates that individual projects will generally impact 1 acre of occupied habitat or less, and a maximum of 50 acres of impacts to occupied habitat will occur overall for all projects during the five-year term of the PBO.

The Service anticipates and is exempting take incidental to the proposed action in the form of harm, injury, or death of no more than three juvenile or adult California red-legged frogs and no more than 1 egg mass per site per year; and/or no more than 30 juveniles or adult California red-legged frogs and no more than 5 egg masses total for all sites for the 5-year duration of this PBO. Additionally, the service is exempting all take in the form of capture and relocation for the project footprint.

Accordingly, the Service concludes that the incidental take of California red-legged frogs will be considered exceeded if one or more of the following conditions are met. Under these circumstances, as provided in 50 CFR §402.16, reinitiation of formal consultation will be required.

1. More than fifty (50) acres of occupied habitat are impacted during the five-year term of the PBO;
2. Death or injury of more than three (3) juvenile or adult California red-legged frogs or one (1) egg mass at any individual site; or
3. Death or injury of more than thirty (30) juveniles or adults and five (5) egg masses total for all sites for the 5-year duration of the PBO.

California Tiger Salamander – Central California DPS

The Service anticipates that incidental take of California tiger salamanders in the Central California DPS may occur during FEMA's proposed from project activities that directly and indirectly affect occupied aquatic and upland habitat. Individuals may be subject to take in the form of non-lethal harm during relocation of California tiger salamanders that are found in the work area, and harm in the form of injury or death if California tiger salamanders go undetected and are crushed or otherwise impacted by project activities. The Service anticipates that individual projects will impact 1 acre of occupied habitat or less, and a maximum of 20 acres of impacts to occupied habitat will occur overall for all projects during the five-year term of the PBO.

The Service anticipates and is exempting take incidental to the proposed action in the form of harm, injury, or death of no more than three juvenile or adult California tiger salamanders per site per year; no more than 30 juveniles or adult California tiger salamanders total for all sites for the 5-year duration of this PBO. Additionally, the service is exempting all take in the form of capture and relocation for the project footprint.

Accordingly, the Service concludes that the incidental take of California tiger salamanders will be considered exceeded if one or more of the following conditions are met. Under these circumstances, as provided in 50 CFR §402.16, reinitiation of formal consultation will be required.

1. More than one (1) acre of occupied habitat is impacted at any given project site;
2. More than twenty (20) acres total of occupied habitat is impacted by all projects over the 5-year duration of the PBO;
3. Death or injury of more than three (3) juvenile or adult California tiger salamanders at any individual project site; or
4. Death or injury of more than ten (30) juvenile or adults California tiger salamanders for all sites for the 5-year duration of the PBO.

California Tiger Salamander – Santa Barbara DPS

The Service anticipates that incidental take of California tiger salamanders in the Santa Barbara DPS may occur during FEMA's proposed from project activities that directly and indirectly affect occupied aquatic and upland habitat. Individuals may be subject to take in the form of non-lethal harm during relocation of California tiger salamanders that are found in the work area, and harm in the form of injury or death if California tiger salamanders go undetected and are crushed or otherwise impacted by project activities. The Service anticipates that individual projects will impact 1 acre of occupied habitat or less, and a maximum of 20 acres of impacts to occupied habitat will occur overall for all projects during the five-year term of the PBO.

The Service anticipates and is exempting take incidental to the proposed action in the form of harm, injury, or death of no more than three juvenile or adult California tiger salamanders per site per year; no more than 15 juvenile or adult California tiger salamanders total for all sites for the 5-year duration of this PBO. Additionally, the service is exempting all take in the form of capture and relocation for the project footprint.

Accordingly, the Service concludes that the incidental take of California tiger salamanders will be considered exceeded if one or more of the following conditions are met. Under these circumstances, as provided in 50 CFR §402.16, reinitiation of formal consultation will be required.

1. More than one (1) acre of occupied habitat is impacted at any given project site;
2. More than twenty (20) acres of habitat are impacted by all projects over the 5-year duration of the PBO;
3. Death or injury of more than three (3) juvenile or adult California tiger salamanders per site per year; or
4. Death or injury of more than fifteen (15) juveniles or adults total for all sites for the 5-year duration of the PBO.

Coastal California Gnatcatcher

The Service anticipates that incidental take of the coastal California gnatcatcher associated with FEMA's proposed action may occur from habitat removal. We anticipate take in the form of harm associated with habitat removal that may cause individuals to be displaced from their territories, or may cause injury or death of adults, chicks, and eggs. We expect that individual projects will not have impacts to more than 1 acre of occupied coastal California gnatcatcher habitat. Impacts from all projects covered under this consultation will be limited to a maximum of 20 acres of coastal California gnatcatcher occupied habitat.

The Service anticipates and is exempting take incidental to the proposed action in the form of harm, injury, or death of no more than one adult coastal California gnatcatcher or one nest containing coastal California gnatcatcher eggs or chicks for the 5-year duration of this PBO.

Accordingly, the Service concludes that the incidental take of coastal California gnatcatcher will be considered exceeded if one or more of the following conditions are met. Under these circumstances, as provided in 50 CFR §402.16, reinitiation of formal consultation will be required.

1. More than one (1) acre of occupied habitat at any given project site is impacted;
2. More than twenty (20) acres occupied habitat are impacted by all projects during the 5-year duration of the PBO;
3. More than one (1) coastal California gnatcatcher adult is found dead or injured; or
4. More than one (1) coastal California gnatcatcher nest containing eggs or chicks is damaged or destroyed.

Conservancy Fairy Shrimp and Vernal Pool Fairy Shrimp

The Service anticipates that direct impacts to occupied basin/inundation features will be avoided; however, project activities in the watershed surrounding occupied features may cause take of conservancy fairy shrimp and/or vernal pool fairy shrimp through indirect effects. An indeterminable number of vernal pool fairy shrimp would be subject to take in the form of injury or mortality from the proposed activities. We cannot predict the exact number of vernal pool fairy shrimp that may be affected by the project activities because of fluctuations in population sizes between years and the species random distribution in the environment. Because of their small size, finding dead or injured vernal pool fairy shrimp is unlikely. The Service is providing a mechanism (number of basin/inundation features affected) to quantify when we will consider take to be exceeded as a result of the proposed project. We have determined that project activities within 250 feet of a basin/inundation area have the potential to have indirect effects that may result in take of Conservancy fairy shrimp and vernal pool fairy shrimp. With implementation of the conservation measures, take is not anticipated to occur from activities greater than 250 feet from occupied basin/inundation features.

Therefore, the Service anticipates that no more than 5 basin/inundation features would be affected by any individual project, and not more than 25 features would be affected over the 5-year term of the PBO. A basin/inundation feature will be considered affected if project activities occur within 250 feet of occupied habitat. Additionally, a basin/inundation feature may include a complex of small depressions or areas of inundation (e.g., tire ruts or other similarly-sized depressions) that would count as one feature for the purpose of quantifying incidental take. Accordingly, the Service concludes that the threshold for incidental take of conservancy fairy shrimp and/or vernal pool fairy shrimp will be considered exceeded under one or more of the following conditions. Under these circumstances, as provided in 50 CFR §402.16, reinitiation of formal consultation will be required.

1. More than five (5) basin/inundation features are affected by any individual project; or
2. More than twenty-five (25) basin/inundation features are affected during the 5-year term of the PBO.

Least Bell's Vireo

The Service anticipates that incidental take of the least Bell's vireo associated with FEMA's proposed action may occur from habitat removal during the non-breeding season (affecting birds returning to impacted territories the following breeding season) or from project activities that occur during the breeding season that may displace adults and kill juveniles or eggs. We anticipate that any individual project would not exceed 1 acre of least Bell's vireo habitat disturbance, within which a maximum of two pairs of least Bell's vireos may be impacted by being displaced from their territory and be subject to non-lethal harm. Temporary impacts from all projects covered under this consultation will be limited to a maximum of 20 acres of least Bell's vireo occupied habitat, within which a maximum of 40 least Bell's vireo pairs that would be impacted.

The Service anticipates and is exempting take incidental to the proposed action in the form of non-lethal harm to a maximum of 40 least Bell's vireos within 20 acres of habitat; and harm in the form of injury or death of no more than two adult least Bell's vireos or one nest containing least Bell's vireo eggs or chicks for the 5-year duration of this PBO.

Accordingly, the Service concludes that the incidental take of least Bell's vireo will be considered exceeded if one or more of the following conditions are met. Under these circumstances, as provided in 50 CFR §402.16, reinitiation of formal consultation will be required.

1. More than one (1) acre of occupied habitat at any given project site is impacted by any individual project;
2. More than twenty (20) acres of occupied habitat are impacted by all projects during the 5-year term of the PBO;
3. More than one (1) least bell's vireo adult is found dead or injured; or
4. More than one (1) least Bell's vireo nest containing eggs or chicks is damaged or destroyed.

Smith's Blue Butterfly

The Service anticipates that incidental take of Smith's blue butterflies will be difficult to detect because the Smith's blue butterfly has a small body size and finding dead or injured individuals is unlikely. While adults and larvae might occasionally be located through careful surveys by trained personnel, take of eggs and pupae would be nearly impossible to detect. We have further concluded that the use of habitat as a surrogate for the take of individual butterflies is appropriate because reliance on finding killed or injured individuals would likely underestimate the actual effects of the actions; i.e., the number of individual butterflies found dead or injured is going to be lower than what actually occurs. Since we cannot estimate the number of individual Smith's blue butterfly that will be incidentally taken for the reasons listed above, the Service is providing a mechanism (acres) to quantify when we will consider take to be exceeded as a result of the proposed project. Since we expect take to result from the proposed project's effects to habitat, the quantification of habitat becomes a direct surrogate for the species that will be taken.

Therefore, the Service anticipates that all Smith's blue butterflies within occupied habitat that would be impacted by project activities will be subject subject to incidental take in the form of harm, injury, or mortality. The Service anticipates and is exempting the take of not more than 1 acre of occupied habitat at any given project, and no more than 10 total acres of occupied habitat over the five-year term of the PBO.

Accordingly, the Service concludes that the incidental take of Smith's blue butterfly will be considered exceeded if one or more of the following conditions are met. Under these circumstances, as provided in 50 CFR §402.16, reinitiation of formal consultation will be required.

1. More than one (1) acre of occupied habitat is impacted by project activities at any individual project site; or
2. More than ten (10) acres of occupied habitat are impacted by all projects over the five-year term of the PBO.

Southwestern Willow Flycatcher

The Service anticipates that incidental take of the southwestern willow flycatcher associated with FEMA's proposed action may occur from habitat removal during the non-breeding season (affecting birds returning to impacted territories the following breeding season) or from project activities that occur during the breeding season that may displace adults and kill juveniles or eggs. We anticipate that any individual project would not exceed 1 acre of southwestern willow flycatcher habitat disturbance, within which a maximum of two pairs of southwestern willow flycatcher could be impacted by being displaced from their territory and be subject to non-lethal harm. Due to the very low density of southwestern willow flycatchers within the action area, this is likely an overestimate of take that would occur. Temporary impacts from all projects covered under this consultation will be limited to a maximum of 20 acres of southwestern willow flycatcher habitat, within which we estimate that a maximum of 12 southwestern willow flycatcher pairs could be impacted through non-lethal harm over the 5-year duration of the PBO.

The Service anticipates and is exempting take incidental to the proposed action in the form of non-lethal harm to a maximum of 12 southwestern willow flycatchers within 20 acres of habitat; and harm in the form of injury or death of no more than one adult southwestern willow flycatcher or one nest containing southwestern willow flycatcher eggs or chicks for the 5-year duration of this PBO.

Accordingly, the Service concludes that the incidental take of southwestern willow flycatcher will be considered exceeded if one or more of the following conditions are met. Under these circumstances, as provided in 50 CFR §402.16, reinitiation of formal consultation will be required.

1. More than one (1) acre of occupied habitat at any individual project site is impacted;
2. More than twenty (20) acres of occupied habitat are impacted by all projects covered during the five-year term of the PBO;
3. More than one (1) southwestern willow flycatcher adult is found dead or injured; or
4. More than one (1) southwestern willow flycatcher nest containing eggs or chicks is damaged or destroyed.

Tidewater Goby

The Service anticipates that take of the tidewater goby in the form of harm, injury, or mortality may occur as a result of implementing the proposed projects in and around tidewater goby habitat. Take will be difficult to detect due to the species cryptic coloring, life history, and ecology. The exact number of individuals taken will be difficult to quantify because tidewater goby population sizes fluctuate greatly seasonally and year-to-year, with the amount of occupied area varying with seasonal and stochastic events.

We anticipate that any individual project would not exceed 1 acre of tidewater goby occupied habitat. The Service is exempting take incidental to the proposed action in the form of harm

during capture and relocation or other project activities. We anticipate take in the form of death or injury of up to five percent of individuals captured and relocated at any individual project site. We do not anticipate that the proposed action will cause take of more than 5 percent of the estimated population at any individual occupied feature (i.e., estuary/lagoon).

Accordingly, the Service concludes that the incidental take of the tidewater goby will be considered exceeded if one or more of the following conditions are met. Under these circumstances, as provided in 50 CFR §402.16, reinitiation of formal consultation will be required.

1. More than one (1) acre of occupied habitat at any individual project site is taken; or
2. Death or injury of more than five (5) percent of individuals captured and relocated at any individual project site.

Yellow-Billed Cuckoo

The Service anticipates that incidental take of the yellow-billed cuckoo associated with FEMA's proposed action may occur from habitat removal during the non-breeding season (affecting birds returning to impacted territories the following breeding season) or from project activities that occur during the breeding season that may displace adults and kill juveniles or eggs. We anticipate that any individual project would not exceed 1 acre of yellow-billed cuckoo habitat disturbance, within which a maximum of one pair of yellow-billed cuckoos may be impacted by being displaced from their territory and be subject to non-lethal harm. Due to the very low density of yellow-billed cuckoos within the action area, this is likely an overestimate of take that would occur. Temporary impacts from all projects covered under this consultation will be limited to a maximum of 20 acres of yellow-billed cuckoo occupied habitat, within which a maximum of 10 yellow-billed cuckoo pairs are estimated to be impacted.

The Service anticipates and is exempting take incidental to the proposed action in the form of non-lethal harm to a maximum of 10 yellow-billed cuckoos within 20 acres of habitat; and harm in the form of injury or death of no more than one adult yellow-billed cuckoos or one nest containing yellow-billed cuckoo eggs or chicks for the 5-year duration of this PBO.

Accordingly, the Service concludes that the incidental take of yellow-billed cuckoo will be considered exceeded if one or more of the following conditions are met. Under these circumstances, as provided in 50 CFR §402.16, reinitiation of formal consultation will be required.

1. More than one (1) acre of occupied habitat is impacted at any individual project site;
2. More than twenty (20) acres of yellow-billed cuckoo occupied habitat are impacted by all projects during the five-year term of the PBO;
3. More than one (1) yellow-billed cuckoo adult is found dead or injured; or
4. More than one (1) yellow-billed cuckoo nest containing eggs or chicks is damaged or destroyed.

EFFECT OF THE TAKE

In the accompanying PBO, the Service determined that this level of anticipated take is not likely to result in jeopardy to the species or adverse modification of critical habitat.

REASONABLE AND PRUDENT MEASURE

The measure described below is non-discretionary, and must be undertaken by FEMA or made a binding condition of any grant or permit issued to the (Subapplicant), as appropriate, for the exemption in section 7(o)(2) to apply. FEMA has a continuing duty to regulate the activity covered by this incidental take statement. If FEMA (1) fails to assume and implement the terms and conditions or (2) fails to require the Subapplicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. To monitor the impact of incidental take, FEMA or the Subapplicant must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement [50 CFR 402.14(i)(3)].

The Service believes the following reasonable and prudent measure is necessary and appropriate to minimize the impacts of the incidental take of the 12 covered entities:

1. FEMA and their Subapplicants shall fully implement and adhere to all general and species-specific conservation measures, as described in the PBA and restated in the Conservation Measures section of this PBO. Additionally, FEMA and their Subapplicants will adhere to any landscape level plans developed by the VFWO for the species covered in this PBO.

TERMS AND CONDITIONS

In order to be exempt from the prohibitions of section 9 of the Act, the FEMA must ensure compliance with the following terms and conditions, which implement the reasonable and prudent measure described above. These terms and conditions are nondiscretionary.

1. FEMA shall require that all personnel and Subapplicants associated with this project are made aware of the general and species-specific conservation measures that are applicable to their individual project and are aware of their responsibility to implement these measures fully.
2. FEMA Region IX shall attend an annual coordination meeting with the Service by May 15 each year to discuss the annual monitoring report and any adaptive management measures needed to minimize impacts, including the addition or removal of any conservation measures or inclusion of any landscape level strategies developed by the VFWO.

REPORTING REQUIREMENTS

Pursuant to 50 CFR 402.14(i)(3), FEMA must report the progress of the action and its impact on the species to the Service as specified in this incidental take statement. FEMA shall submit an annual report to the Service by March 15 summarizing all projects completed during the previous calendar year. These annual reports shall include a tabular summary of those projects and for each project:

1. Subapplicant and project name;
2. Project location with map or GIS shape file;
3. Covered species impacted;
4. Estimated acres of covered species' habitat affected (acres, linear feet, etc.), as stated in the ESA Review Form;
5. Any other pertinent information that allows the Service to evaluate the causes and extent of habitat effects and any incidental taking that may have occurred that was not authorized in the Incidental Take Statement of this PBO.
6. The annual report will also include a summary of acres of habitat taken and individuals injured or killed from all previous years.
7. FEMA shall require that the Subapplicant to provide a copy of the project report to the Service and FEMA with the following project-specific details on its respective projects within 45 days of project construction completion:
 - a. Date the project was initiated and completed;
 - b. Number of observed instances of injury or mortality of any covered species;
 - c. Number of observations of live, uninjured individuals of any covered species;
 - d. Pertinent information concerning the success of the project in meeting the conservation measures; and
 - e. An explanation of failure to meet such measures, if any.

DISPOSITION OF DEAD OR INJURED SPECIMENS

As part of this incidental take statement and pursuant to 50 CFR 402.14(i)(1)(v), upon locating any dead or injured species covered in this PBO, initial notification within 24 hours of its finding must be made by telephone and in writing to the VFWO (805-644-1766). If the encounter occurs

after normal working hours, FEMA or its Subapplicants shall contact the VFWO at the earliest possible opportunity the next working day. The report must include the date, time, location of the carcass, a photograph, cause of death or injury, if known, and any other pertinent information.

Injured listed species must be cared for by a licensed veterinarian or other qualified person(s), such as the VFWO-approved biologist. Dead individuals must be sealed in a resealable plastic bag containing a paper with the date and time when the animal was found, the location where it was found and the name of the person who found it, and the bag containing the specimen frozen in a freezer located in a secure site, until the Service provides instructions regarding the disposition of the dead specimen.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to use their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information. FEMA has included a meaningful Section 7(a)(1) component to this project and the Service recognizes FEMA's effort to design their program within the context of listed species conservation. The Service acknowledges the conservation measures in this PBO and comprehensive. Any additional information related to listed species helps Service biologists in their management. As such the Service recommends the following action:

- Sightings of any listed and sensitive species encountered during FEMA-funded activities should be reported to the CNDDDB, California Department of Fish and Game.
- FEMA should work with the Service to implement proactive conservation measures for species of species concern such as the Monarch butterfly (*Danaus plexippus plexippus*).
- FEMA should continue to work with the VFWO to deliver conservation measures contained within this PBO through the Service's ECOS-IPaC platform.
- FEMA should continue to work with the service to develop additional 7(a)(1) actions to contribute towards trusted resources conservation.

The Service requests notification of the implementation of any conservation recommendations so we may be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats.

REINITIATION NOTICE

This concludes formal consultation on the action(s) outlined in the request. As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered

in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, the exemption issued pursuant to section 7(o)(2) may have lapsed and any further take could be a violation of section 4(d) or 9. Consequently, we recommend that any operations causing such take cease pending reinitiation.

If you have any questions about this biological opinion, please contact Jenny Marek of my staff at (808) 677-3313, or by electronic mail at jenny_marek@fws.gov.

Sincerely,



Stephen P. Henry
Field Supervisor

Appendix A

The U.S. Fish and Wildlife Service (Service) consulted on the Federal Emergency Management Agency's (FEMA) Disaster, Mitigation, and Preparedness Programs in California within the Ventura Fish and Wildlife Office (VFWO) and its effects on federally listed species and critical habitat, in accordance with section 7 of the Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 et seq.). The Service provided a programmatic concurrence with FEMA's 'not likely to adversely affect' determination for six listed species and, if applicable, their critical habitat. The programmatic concurrence was based on the assumption that FEMA and its Subapplicants will implement a suite of conservation measures (see Appendix B) developed during extensive collaboration between FEMA and the Service. The measures were designed with species conservation in mind to reduce direct and indirect impacts on listed species to an insignificant and discountable level. If the measures in Appendix B are not able to be implemented for a specific project, FEMA will submit the project for separate section 7 consultation.

California Least Tern (*Sterna antillarum browni*) and Light-Footed Ridgway's Rail (*Rallus longirostris levipes*)

California least tern and light-footed Ridgway's rail could be affected by removal of habitat and direct impacts to nests, nestlings, and eggs. They could also be affected by noise that disrupts breeding, feeding, and predator avoidance. However, FEMA's action includes implementation of the species specific conservation measures listed in Appendix B. Specifically, the measures require project activities in habitat for these species will occur outside the season of use for these species, and ground disturbance will be restricted to hand tools. Thus, impacts will not occur to nest, nestlings, and eggs, and impacts to habitat will have an insignificant effect on California least tern and light-footed Ridgway's rail. Further, project activities during the season of use will occur 800 feet away from California least tern habitat and 500 feet away from light-footed Ridgway's rail habitat, and only hand tools will be used. These measures were designed, with extensive collaboration between the Service and FEMA, to reduce direct and indirect impacts to California least tern and light-footed Ridgway's rail to an insignificant and discountable level. Thus, the VFWO concurs with FEMA's not likely to adversely affect determination.

Contra Costa goldfields (*Lasthenia conjugens*)

Contra Costa goldfields is a vernal pool plant species with previous known occurrences in Santa Barbara and Monterey counties. Recent wildfires have impacted the status of the species such that we are not currently aware of any known occurrences. This species could be affected by crushing, trampling, or removal of individual plants. Additionally, the species could be impacted by changes in hydrology, introduction of pesticides, or invasive plants into the vernal pool system. However, FEMA's action includes implementation of the species specific conservation measures listed in Appendix B. Specifically, the measures require pre-activity surveys, buffers, erosion control measures, and precautions against invasive species. These measures were designed, with extensive collaboration between the Service and FEMA, to reduce direct and indirect impacts to Contra Costa goldfields to an insignificant and discountable level. Thus, the VFWO concurs with FEMA's not likely to adversely affect determination.

Marbled murrelet (*Brachyramphus marmoratus*)

A small amount of terrestrial habitat for marbled murrelets occurs within the action area. Marbled murrelets could be affected by removal of habitat and direct impacts to nests, nestlings, and eggs. They could also be affected by noise that disrupts breeding, feeding, and predator avoidance. However, FEMA's action includes implementation of the species specific conservation measures listed in Appendix B. Specifically, the measures include restrictions on removal of vegetation, and parameters on activities that may cause disturbance. These measures were designed, with extensive collaboration between the Service and FEMA, to reduce direct and indirect impacts to Marbled murrelet to an insignificant and discountable level. Thus, the VFWO concurs with FEMA's not likely to adversely affect determination.

Riverside Fairy Shrimp (*Streptocephalus woottoni*)

The only known location occurrences of Riverside fairy shrimp within the VFWO's jurisdiction, occur within Designated Critical Habitat Unit (CHU) 1a and 1b. These two CHUs are critically vital to the species' conservation within our jurisdiction. However, FEMA's action includes implementation of the species specific conservation measures listed in Appendix B. Specifically, the measures exclude projects that have any adverse effects to CHU 1a and 1b and also prevent impacts to the actual basin/inundation features in any suitable Riverside fairy shrimp habitat. These measures were designed, with extensive collaboration between the Service and FEMA, to reduce direct and indirect impacts to Riverside fairy shrimp to an insignificant and discountable level. Thus, the VFWO concurs with FEMA's not likely to adversely affect determination.

Western Snowy Plover (*Charadrius nivosus* ssp. *Nivosus*)

Western snowy plover could be affected by removal or modification of habitat and direct impacts to nests, nestlings, and eggs. They could also be affected by noise that disrupts breeding, feeding, and predator avoidance. However, FEMA's action includes implementation of the species specific conservation measures listed in Appendix B. Specifically, the measures require project activities in habitat for these species to be restricted to hand tools, and temporary impacts to be restored. Thus, impacts due to habitat loss will be insignificant. Also, a biological monitor will be used to ensure that impacts to breeding western snowy plovers are avoided. Human activities and use of hand tools during the non-breeding season may result in minor disturbance or displacement of overwintering birds, but these activities are not anticipated to substantially impact western snowy plover survival or reproduction. These measures were designed, with extensive collaboration between the Service and FEMA, to reduce direct and indirect impacts to Western snowy plover to an insignificant and discountable level. Thus, the VFWO concurs with FEMA's not likely to adversely affect determination.

Appendix B

The U.S. Fish and Wildlife Service (Service) consulted on the Federal Emergency Management Agency's (FEMA) Disaster, Mitigation, and Preparedness Programs in California within the jurisdiction of the Ventura Fish and Wildlife Office (VFWO) and its effects on federally listed species and critical habitat, in accordance with section 7 of the Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 et seq.). FEMA provided these conservation measures as part of the programmatic biological assessment¹ (PBA) for the programmatic consultation. Implementation of the following conservation measures is required in order for any specific project activity to be considered under the programmatic concurrence provided in the accompanying document. For any actions where FEMA or its Subapplicants are unable to implement the following measures, FEMA must submit the project for separate section 7 consultation as the effects to listed species or their designated critical habitat outside the scope of these conservation measures have not been assessed or analyzed.

Conservation Measures for California Least Tern (*Sterna antillarum browni*) and Light-Footed Ridgway's Rail (*Rallus longirostris levipes*)

1. To avoid the nesting season of the California least tern, project activity in occupied habitat will be allowed from September 30 - March 31. Occupied habitat for this species is well documented online. If project activities occur during the nesting season, they will occur at least 800 feet away from California least tern occupied habitat, and noise within occupied habitat will be monitored to ensure that it does not exceed 60 decibels hourly Leq.
2. A habitat assessment will be conducted by a biologist to determine whether suitable habitat (including foraging, nesting, and dispersal) for the light-footed Ridgway's rail occurs in the Action Area. If suitable habitat for this species is identified in the Action Area and the proposed project may affect suitable habitat that is not known to be occupied by the light-footed Ridgway's rail, the VFWO will be contacted regarding the need for additional surveys and those surveys will be conducted, as appropriate. Otherwise, if the VFWO agrees, the species will be assumed to be present in areas with suitable habitat.
3. To avoid the nesting season of the light-footed Ridgway's rail, project activity in occupied habitat will be allowed from September 16 - March 14. If project activities occur during the nesting season, they will occur at least 500 feet away from light-footed Ridgway's rail occupied habitat, and noise within occupied habitat will be monitored to ensure that it does not exceed 60 decibels hourly Leq.
4. A Service-approved biologist will monitor all construction activities within occupied habitat to ensure that no take of the species or destruction of occupied habitat occurs. The Service-approved biologist will have stop work authority if adverse effects of nesting California least terns or light-footed Ridgway's rails are observed.
5. Non-breeding season project activity in occupied habitat will be limited to the use of handheld tools, including handheld motorized implements such as chain saws and power

¹ The measures in the PBA are part of a state-wide consultation. The measures were created by different Service offices in collaboration with FEMA. For consistency with the state-wide programmatic, we have kept the numbering system reflective of the PBA even though it is not consistent within this appendix.

augers. Tools will be washed prior to use in these habitats to reduce the potential for spread of non-native and invasive plant species and their seeds. No heavy equipment will be allowed within suitable nesting habitats.

6. No soil stabilization materials or off-site materials (e.g., decomposed granite, soil, rocks, etc.) will be added to the surface within occupied habitat. No excavation or grading would be allowed within occupied habitat either.
7. If handheld motorized tools are used, operators will employ best management practices to avoid and minimize soil and water contamination from fuel and lubricants. Measures include:
 - a. use spill-resistant fuel and lubricant containers;
 - b. use a portable containment pad for re-fueling in the field;
 - c. immediately report petroleum spills to the landowner, or land management agency, and notify appropriate local authorities for advice and action on containment and cleanup of spills; and
 - d. clearly mark the location and/or boundaries of the spill site to enable rapid remedial action.
8. When necessary to minimize the area affected by the project, work site boundaries will be marked with flagging or other visible materials, which will be removed at the conclusion of the project.
9. Workers will avoid temporary or permanent placement of structures (e.g., posts, railings, tall equipment, or fence lines) that could provide elevated perches for predatory birds near or within occupied habitat.
10. Access to work sites in occupied habitat will be by foot travel only. Motorized vehicles, including all-terrain vehicles, will not be used in occupied habitat.
11. At the conclusion of the project, areas temporarily affected by project activity will be restored to their pre-project condition (e.g. footpaths will be raked to their original ground contour and native vegetation will be reestablished, if necessary).
12. Trash, food, food containers, and food waste will be secured at all times by individual workers, or placed in animal-proof trash containers placed at the work site. The contents of trash containers will be transferred from the work site at the end of each day.
13. Project activities will avoid creation of berms and dykes, steepening of channel slopes, placement of rock slope protection, and other actions that could result in alteration of hydrology, changes to water surface elevation levels, increased flooding, changes to flow velocities, and increased scour within light-footed Ridgway's rail occupied habitat.

Conservation Measures for Contra Costa goldfields (*Lasthenia conjugens*)

To avoid and minimize potential adverse effects to the vernal pool plants, the measures listed below will be implemented in the project footprint where suitable listed branchiopod habitat (e.g., vernal pools, seasonal wetlands) occurs and the species have potential to occur.

Vernal Pools

1. If possible, prior to construction activities, the Service-approved biologist will conduct protocol-level bloom-season plant surveys in seasonally inundated habitats (seasonal wetland, non-inundated wetlands) within the project footprint. If any listed vernal pool plant species are found during the surveys, the Service-approved biologist will submit a

report to the Service within 1 month of completing the field work. The report will provide results of all surveys, a summary of all the data collected, and the habitat assessment. Information regarding the location of listed plant populations will be provided to CDFW's California Natural Diversity Database (CNNDDB) according to their reporting protocols. If surveys are not possible, then listed vernal pool species presence will be assumed on all suitable habitats within the Action Area.

2. Flagging or other field markers identifying the plants, or in the event protocol-level surveys were not conducted – the suitable habitat, will be placed prior to each work event and removed after that work event is completed for all phases of the proposed project.
3. A Service-approved biologist will monitor all construction activities within 250 feet of suitable habitat for listed vernal pool plants to ensure that no unnecessary loss or destruction of habitat occurs.
4. A Service-approved biologist will delineate a 50-foot avoidance buffer around all listed plants or their suitable habitat. The non-disturbance exclusion zones will be established, maintained and monitored by a Service approved biological monitor to ensure that loss of listed vernal pool plants or destruction of their habitat does not occur outside of the project footprint where suitable habitat (e.g., vernal pools, seasonal wetlands) occurs and the species have potential to occur.
5. Work within 250 feet of suitable listed vernal pool plant habitat (e.g., vernal pools, seasonal wetlands) will be performed between June 1 and October 15 under dry site conditions to the maximum extent possible to minimize potential adverse impacts to aquatic habitats.
6. A Service-approved project biologist will flag or monitor all operations and maintenance work during the *dry season* (generally June 1 to October 15) within 250 feet of a vernal pool, vernal pool grassland, or seasonal wetland. The following buffers will be enforced:
 - a. Hand-held herbicide application is prohibited within the pool or at the edge of the pool;
 - b. Power spray herbicide application is prohibited within 100 feet of the edge of the pool;
 - c. Broadcast herbicide application is prohibited within 150 feet of the edge of the pool; and
 - d. Ground-disturbing activities are prohibited within 25 feet of the edge of the pool.
7. If any construction activities remain and must occur during the October 15 - June 1 *wet period*, exclusion fencing and erosion control materials will be placed around the vernal pools and other seasonal wetlands as determined by the Service-approved biologist to reduce sedimentation into vernal pool habitat. The fencing will provide a buffer between construction activities and the vernal pools and other seasonal wetlands. The Service approved biologist will erect and maintain the exclusion fencing.
8. Any vernal pool, vernal pool grassland, or seasonal wetland will be protected from siltation and contaminant runoff by use of erosion control.
9. Erosion-control materials will be of a tightly woven natural fiber netting or similar material that will not entrap reptiles and amphibians (e.g., coconut coir matting). No micro-filament netting will be used.
10. Erosion-control measures will be placed between the outer edge of the buffer and the activity area. All fiber rolls and hay bales used for erosion control will be certified as free of noxious weed seed.

11. Dust control measures will be implemented to prevent the transport of soil from exposed surfaces to vernal pool, swale, and rock pool habitat. Sprinkling with water will not be done in excess to minimize the potential for non-storm water discharge.
12. A Service-approved biologist will flag or monitor all operations and maintenance work during the *wet season* (generally October 1 to June 1) within 150 feet of a vernal pool, vernal pool grassland, or seasonal wetland. The following buffers will be enforced:
 - a. Hand-held herbicide application is prohibited within 25 feet of the edge of the pool;
 - b. Power spray herbicide application is prohibited within 100 feet of the edge of the pool;
 - c. Broadcast herbicide application is prohibited within 150 feet of the edge of the pool;
 - d. Manual clearing of vegetation is prohibited at the pool or beyond the edge;
 - e. Mechanical clearing of vegetation is prohibited within 100 feet of the edge of the pool; and
 - f. Ground-disturbing activities are prohibited within 50 feet of the edge of the pool.
13. A buffer of at least 300 feet from any vernal pool, vernal pool grassland, or seasonal wetland will be established for the following:
 - a. Staging areas of all equipment for storage, fueling, and maintenance with hazardous material absorbent pads available in the event of a spill; and
 - b. Mixing of pesticides, herbicides, or other potentially toxic chemicals.
14. Vehicles will be inspected daily for fluid leaks before leaving a staging area.
15. Routine maintenance activities within 250 feet of vernal pool and swale habitat will be avoided to the maximum extent possible.
16. When restoring upland areas to pre-project condition, native plants will be used to the maximum extent practicable.
17. To minimize the introduction of invasive plant species, construction vehicles will be cleaned prior to entering any vernal pool habitat.

Conservation Measures for Marbled murrelet (*Brachyramphus marmoratus*)

(a) Occupied Habitat

If marbled murrelet surveys (using the Service 2003 survey protocol; Evans Mack *et al.* 2003) determine² that the Action Area is occupied **or** if FEMA or the Service presumes marbled murrelet occupancy without conducting surveys, the project Subapplicant will adhere to the following Conservation Measures:

- i. Vegetation Removal or Alteration of Known or Potential Nest Trees:
 - a. No potential marbled murrelet nest trees³ will be removed during the nesting season (March 24 to September 15).

² Surveyors are required to meet or exceed all training recommendations in Evans Mack *et al.* (2003), and be registered as qualified surveyors on a current Service 10(a)1(b) Recovery Permit.

³ Potential habitat defined by Nelson *et al.* (2003) as: (1) mature (with or without an oldgrowth component) and old-growth coniferous forests; and (2) younger coniferous forests that have platforms (relatively flat, at least 4-inch diameter and at least 33 feet above the base of the live crown of a coniferous tree). Platform presence is more important than tree size.

- b. Avoid removing or damaging known or potential nest trees, unless they are a confirmed safety hazard. For sites that have not been surveyed according to 2003 survey protocol, potential habitat is defined as (1) mature (with or without an old-growth component) and old growth coniferous forests; **and** (2) younger coniferous forest that have platforms.
 - c. Avoid removing or damaging trees with potential nesting platforms. A platform is a relatively flat surface at least 10 centimeters (4 inches) in diameter and 10 meters (33 feet) in height in the live crown of a coniferous tree. Platforms can be created by a wide bare branch, moss or lichen covering a branch, mistletoe, witches brooms, or other deformities, or structures such as squirrel nests.
 - d. Project activities will not remove the function of suitable nesting habitat.
 - While habitat elements may be removed, such as individual large trees if they are a confirmed safety hazard, from nesting habitat, the treatment must not be so extensive as to remove the overall function of the nesting habitat, and will be conducted outside of the nesting season.
 - e. Non-suitable nest trees or limb trimming or pruning, brush trimming or removal, and hazard tree felling within suitable habitat may occur outside of the nesting season, September 16 to March 23.
- ii. Auditory, Visual, or Other Disturbance:
- a. Construction equipment must be in good working order, with emphasis on hydraulic and noise abatement systems. Hydraulic leakage and damaged mufflers (or spark arresters) must be promptly addressed and remedied to the degree practicable.
 - b. No proposed activity generating sound levels 20 or more decibels above ambient sound levels **or** with maximum sound levels (ambient sound levels plus activity-generated sound levels) above 90 decibels (excluding vehicle back-up alarms) may occur within suitable marbled murrelet nesting habitat during the majority of the murrelet nesting season (*i.e.*, March 24 to August 5)
 - c. Between August 6 (date when most marbled murrelets have fledged in coastal northern California) and September 15 (end of marbled murrelet nesting season) of any year, project activities, with adjacent suitable nesting habitat, that will generate sound levels greater than or equal to 10 decibels above ambient sound levels will observe a daily work window beginning 2 hours post-sunrise and ending 2 hours pre-sunset. However, prep work that does not generate sound levels above ambient sound levels, including street sweeping and manual removal of pavement markers, can occur during all hours. The need for this daily work window depends on the distance between suitable nesting habitat and the above-ambient sound generating activity following the Service guidelines (Service 2006). For example, if above-ambient sound levels generated by proposed activities will become attenuated back down to ambient sound levels prior to reaching suitable nesting habitat, the daily work window would not be necessary.
 - d. No human activities will occur within visual line-of-sight of 40 meters (131 feet) or less from a known nest or suitable nest tree during the nesting season (March 24 to September 15) (Service 2006).

(b) Unoccupied Habitat

- (i) If recent protocol surveys determine that all suitable marbled murrelet nesting habitat within the Action Area is considered unoccupied, the auditory, visual, and other disturbance measures listed above under iii) do not apply for habitat determined to be unoccupied.

(c) Marbled Murrelet Critical Habitat

- (i) Ensure that there are no “adverse effects” to designated critical habitat for marbled murrelet within the Action Area. However, the Service has no specific quantitative thresholds, above which there would likely be an adverse effect to critical habitat. If a Subapplicant’s proposed project encounters this situation, contact the Service to determine whether proposed habitat removal within designated critical habitat would constitute an adverse effect. Generally, the removal of a few small trees in unoccupied habitat would not result in adverse effect” on designated critical habitat.
- (ii) When working in designated critical habitat for marbled murrelet, all measures described in Items (a) Occupied Habitat, or (b) Unoccupied Habitat for reducing impacts in suitable habitat will also be implemented. This will help reduce effects, and may result in some instances in effects that are insignificant and discountable.

Literature Cited

Evans Mack, D., W. P. Ritchie, S. K. Nelson, E. Kuo-Harrison, P. Harrison, and T. E. Hamer 2003. Methods for surveying Marbled Murrelets in forests: a revised protocol for land management and research. Pacific Seabird Group unpublished document available at: <http://www.pacificseabirdgroup.org>.

Service 2006. Estimating the effects of auditory and visual disturbance to northern spotted owls and marbled murrelets in northwestern California. Available at: http://www.fws.gov/arcata/es/birds/NSO/ns_owl.html.

Conservation Measures for Western Snowy Plover

The following avoidance and minimization measures apply to Action Areas within suitable snowy plover nesting habitat and designated critical habitat regardless of whether snowy plovers have been detected during Service approved protocol surveys.

- (a) Project construction activities in suitable nesting habitat will occur during the species non-breeding season: the period beginning October 1 and continuing through February 28 of the following year; or through February 29 in a leap year.
- (b) Project construction activities in suitable nesting habitat will be limited to the use of handheld tools including handheld motorized implements such as chain saws and power augers. No heavy equipment will be allowed within suitable nesting habitat.
- (c) If handheld motorized implements are used, operators will employ best management practices to avoid and minimize soil and water contamination from fuel and lubricants. Measures include:

1. Use spill-resistant fuel and lubricant containers;
 2. Consider the use of a portable containment pad for re-fueling in the field;
 3. Immediately report petroleum spills to the landowner, or land management agency, and notify appropriate local authorities for advice and action on containment and cleanup of spills; and
 4. Clearly mark the location and/or boundaries of the spill site to enable rapid remedial action.
- (d) If project construction activities occur in adjacent to, but not within suitable nesting habitat, then project activities should be conducted during the species non-breeding season, if possible. If nonbreeding season construction is not possible, then the Subapplicant will employ a Service-approved biologist to conduct weekly western snowy plover surveys. If western snowy plovers are observed, the Service-approved biologist will notify the Service within 1 day of the observation and will monitor all construction activities conducted adjacent to western snowy plovers suitable nesting habitat. The qualified biologist will have the right and responsibility to stop work if adverse effects of nesting western snowy plovers are observed.
- (e) When necessary to minimize the area affected by the project, the Subapplicant or their contractors will mark the work site boundaries with flagging or other visible materials, and remove those markers at the conclusion of the project.
- (f) Workers will avoid temporary or permanent placement of structures (e.g., posts, railings, tall equipment, or fence lines) that could provide elevated perches for predatory birds.
- (g) Access to work sites will be by foot travel only. Motorized vehicles, including all-terrain vehicles, are not permitted on work sites located within suitable nesting habitat.
- (h) Vehicles used for transport of personnel will be restricted to existing parking lots or roadside parking areas.
- (i) At the conclusion of the project, areas temporarily impacted by project activity will be restored to their pre-project condition (for example, footpaths are to be raked to their original ground contour and cut vegetation is to be removed or piled for future disposal).
- (j) Trash, food, food containers, and food waste will be secured at all times by individual workers, or placed in animal-proof trash containers placed at the work site. The contents of trash containers will be transferred from the work site at the end of each day.
- (k) Pets will be prohibited from all work sites.

Conservation measures for Riverside fairy shrimp

The following conservation measures apply to any suitable Riverside fairy shrimp habitat within the VFWO's jurisdiction. For the purposes of this PBO, suitable fairy shrimp habitat includes the basin/inundation feature where fairy shrimp and/or resting eggs would be found, and the area of the watershed needed to support the feature(s).

1. Prior to any site disturbance (e.g., vegetation removal, soil disturbance) in suitable fairy shrimp habitat or initiation of construction activities, a VFWO-approved biologist with demonstrable experience with the diversity of habitat types in which listed branchiopod species can occur will conduct a habitat assessment survey. The intent of this survey is to provide information regarding the likelihood that potential habitat for one or more of the three listed branchiopod species is present within, or immediately adjacent to, the project footprint. As part of this assessment, if inundated features are present, their quality and

suitability for occupation by one or more of these species will be included. If, based on the results of the habitat assessment, species presence is likely, FEMA or the project applicant will contact the Ventura Fish and Wildlife Office (VFWO) regarding the need for surveys according to current Service guidance. Modification to this guidance may be allowed if pre-approved by the VFWO. If it is not feasible to conduct surveys, the species presence will be assumed for all suitable habitat in the project area.

2. Any projects that have the potential to result in adverse effects to Critical habitat units 1a and 1b designated for Riverside fairy shrimp in Ventura County are not included in this concurrence and will require separate consultation.
3. Impacts to basin/inundation areas known or presumed occupied by one or more of the species and likely to contain resting eggs will be avoided.
4. Impacts to watershed areas that support occupied or presumed occupied basin/inundation features will be avoided to the maximum extent possible. If avoidance is not possible, the following measures will be implemented as applicable.
5. Disturbance exclusion zones will be established, maintained, and monitored by a VFWO-approved biologist to ensure that impacts to basin/inundation features watershed, and/or critical habitat do not extend beyond the identified project footprint.
6. A VFWO-approved biologist will monitor all site preparation (e.g., soil disturbance, vegetation removal) and/or construction activities within 250 feet of fairy shrimp habitat to ensure that there are no impacts to either inundation feature/basin. No permanent impacts to fairy shrimp habitat will occur. Actions that result in permanent alteration of the hydrology that supports inundation/basin features (e.g., construction of culverts, v-ditches, berms, roads, will could divert flows) must be avoided as they have not been analyzed and are not addressed in this programmatic consultation.
7. All equipment storage, fueling, cleaning, maintenance, and mixing of pesticides, herbicides, or other potentially toxic chemicals is restricted to an area at least 300 feet from any basin/inundation features. Hazardous material absorbent pads must be present onsite and made easily accessible in the event of a spill.
8. To the maximum extent possible, site preparation and construction activities will be restricted to the dry season (generally considered to be between June 1 and October 15) and occur only under conditions when soil is dry to the touch at the surface and to a depth of 2.5 cm (1 in.). The Service may approve modifications to this timing on a case-by-case basis. The following measures will be established and enforced:
 - (a) There will be no soil disturbing activities or herbicide application in a basin/inundation feature or within 25 feet of such a feature;
 - (b) There will be no held herbicide application within 50 feet of a basin/inundation feature;
 - (c) There will be no power spray herbicide application within 100 feet of a basin/inundation feature; and
 - (d) There will be no broadcast herbicide application within 150 feet of a basin/inundation feature.
9. If it is not possible to restrict site preparation and/or construction activities to the dry season, the following measures will be established and enforced:
 - (a) A VFWO-approved biologist will monitor all site preparation, construction, and/or maintenance activities to occur within 150 feet of a basin/inundation feature.

- (b) Exclusion fencing and erosion control materials will be installed under the supervision of a VFWO-approved biologist to prevent the discharge of sediment into basin/inundation features
 - (c) There will be no soil disturbing activities or manual clearing of vegetation in or within 50 feet of a basin/inundation feature;
 - (d) There will be no mechanical clearing of vegetation within 100 feet of a basin/inundation feature;
 - (e) There will be no hand-held herbicide application within 25 feet of the edge of a basin/inundation feature; and
 - (f) There will be no power spray or broadcast herbicide application within 150 feet of a basin/inundation feature.
10. The following practices will be implemented within or immediately adjacent to fairy shrimp habitat:
- (a) Implementation of erosion control measures that will protect basin/inundation features from siltation and contaminant runoff. Erosion-control materials will be composed of a tightly woven natural fiber netting or similar material that will not entrap other wildlife species.
 - (b) Erosion control materials cannot be comprised of plastic or microfilament netting and all fiber rolls and hay bales used for erosion control must be certified as free of noxious weed seed.
 - (c) There will be no application of water (e.g., for dust suppression) within 100 feet of a basin/inundation feature without the use of additional protective measures (e.g., barriers and/or use of low flow water truck nozzles) to keep this type of water out of these features.
 - (d) All refueling, maintenance, and staging of equipment and vehicles is restricted to those areas specifically designed to contain any spills. These activities will not occur in any location where spill materials could drain towards a basin/inundation feature.
 - (e) Vehicles will be inspected daily for fluid leaks before leaving a staging area.
11. The VFWO-approved biologist will ensure that the spread or introduction of invasive nonnative plant species, via introduction by arriving vehicles, equipment, imported gravel, and other materials, is avoided to the maximum extent possible. Construction vehicles will be certified clean prior to any work within 150 feet of fairy shrimp habitat to minimize the introduction of invasive nonnative plant species. As practicable, nonnative plant species present within the project area will be removed from the site. Disposal will be in a manner that will not promote their spread to other areas. Invasive nonnative species are those identified in the California Invasive Plant Council's (Cal-IPC) Inventory Database, accessible at: www.cal-ipc.org/ip/inventory/index.php.
12. Restoration of temporary impacts to topography and vegetation will occur in accordance with a restoration plan reviewed and approved by the VFWO prior to the initiation of project activities. Plant species used in revegetation efforts will consist of native species suitable for the area. Locally collected plant materials will be used to the extent practicable.

Appendix C

ESA Review Form for Projects Under FEMA's PBA with USFWS in California in the Sacramento, Ventura, or Carlsbad FWO Jurisdictions (to be submitted to USFWS)

INSTRUCTIONS: This Endangered Species Act (ESA) Review Form is for proposed projects that may be funded under various FEMA grants programs in California and that would be covered under FEMA's Programmatic Biological Assessment (PBA) and the corresponding U.S. Fish and Wildlife Service (USFWS) Programmatic Biological Opinions (PBOs) from the Sacramento, Ventura, and Carlsbad Fish and Wildlife Offices (FWOs). This form must be filled out by a qualified Biologist¹ who is knowledgeable on the ESA, federally listed species² and their habitats, and Critical Habitat³. This form provides the information necessary for FEMA to make a determination of effects from the Subapplicant's proposed project for compliance with the ESA regarding federally listed species and their Critical Habitats. For subapplicant's proposed projects that meet the criteria for coverage under the PBA-PBOs, FEMA would submit this completed form to the USFWS and request coverage under the one of the PBA-PBOs from the applicable FWO. There are four sections in this form (check the sections being submitted):

- Section A:** Information on the proposed project,
- Section B:** Determination of effects to federally listed species and/or Critical Habitat protected under the ESA,
- Section C:** ESA Review for Not Likely to Adversely Affect (NLAA) determinations for proposed projects under the applicable FEMA PBA-PBO, and
- Section D:** ESA Review for Likely to Adversely Affect (LAA) determinations for proposed projects under the applicable FEMA PBA-PBO.
- Section E:** For USFWS to complete and sign.

Please complete **Sections A and B**, and complete either **Section C or D** of the form, as needed. Use the highest level of the ESA determination to select whether to complete Section C or D of this form. If there is an LAA determination for at least one federally listed species and/or Critical Habitat, please complete Section D only and address the other species in that section as well. Attach photographs, relevant maps, preliminary engineering designs, and any additional information on the Subapplicant's proposed project. After completing the applicable sections of this form, please fill out the Summary Table below:

¹ A qualified Biologist consists of an environmental professional with at least a Bachelor's degree in Biology, Ecology, Natural Resources, Environmental Sciences, or similar, and has significant experience over multiple years working with federally listed species, their habitats, and Endangered Species Act implementation in the State of California.

² In this form, the term "federally listed species" includes species listed or proposed to be listed as threatened or endangered under Endangered Species Act.

³ In this form, the term "Critical Habitat" refers to designated Critical Habitat and proposed Critical Habitat for federally listed species protected under the Endangered Species Act.

Summary Table			
Summary of ESA Effects Determination on Federally Listed Species and Critical Habitat			
FEMA Grant # or Disaster # and Project Worksheet # and Site/LOP #	Species Name	ESA Effects Determination	Critical Habitat
	Species 1 (common and scientific name)	Choose between: <ul style="list-style-type: none"> • No effect • May affect, but is not likely to adversely affect • May affect, and is likely to adversely affect 	Choose between: <ul style="list-style-type: none"> • No effect • May affect, but is not likely to adversely affect critical habitat • May affect, and is likely to adversely affect critical habitat (i.e., physical and biological features)
	Species 2 (common and scientific name)	Choose between: <ul style="list-style-type: none"> • No effect • May affect, but is not likely to adversely affect • May affect, and is likely to adversely affect 	Choose between: <ul style="list-style-type: none"> • No effect • May affect, but is not likely to adversely affect critical habitat • May affect, and is likely to adversely affect critical habitat (i.e., physical and biological features)
	Species 3 (common and scientific name)	Choose between: <ul style="list-style-type: none"> • No effect • May affect, but is not likely to adversely affect • May affect, and is likely to adversely affect 	Choose between: <ul style="list-style-type: none"> • No effect • May affect, but is not likely to adversely affect critical habitat • May affect, and is likely to adversely affect critical habitat (i.e., physical and biological features)

Note: If the Subapplicant’s proposed project is under another Federal agency’s jurisdiction (e.g., U.S. Forest Service, National Park Service, Bureau of Land Management, Bureau of Reclamation, etc.) or another Federal agency is functioning as the Lead Federal Agency (e.g., U.S. Army Corps of Engineers), then there no need to prepare this FEMA form.

Name of Qualified Biologist and Date of Preparation:

Biologist's Qualifications:

Professional Degree:

Years of experience working with federally listed species, their habitats, and Endangered Species Act implementation in the State of California:

SECTION A. INFORMATION ON PROPOSED PROJECT (press F11 to advance to the next field)

A.1. Project Name:

A.2. FEMA Grant # or Disaster and Project Worksheet #s:

A.3. Name of Subapplicant (Agency Name)⁴:

A.4. Project Location (street address, latitude/longitude, or UTM and Datum/Zone):

A.5. State/County/Municipality:

A.6. Description of the Action Area⁵:

Please attach a map(s), aerial image, photographs, GIS data layers, and other information on the Action Area. Please include a description of the vegetation communities, aquatic habitats, slope, ambient noise levels, and any sensitive biological resources in the Action Area.

Briefly describe the project footprint⁶ in a few sentences below:

⁴ In the case of a Tribe, the term to be used is "Applicant".

⁵ Action Area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR §402.02).

⁶ Project footprint corresponds to all the areas with structures affected by implementation of the Subapplicant's proposed project, including construction staging areas, spoils disposal sites, gravel or rock pits, access routes, any areas of ground disturbance, etc.

Are any water bodies including rivers, streams, seasonal wetlands (i.e., vernal pools, ponds, wet meadows, etc.), estuaries, or coastal water bodies located within the Action Area?

YES NO

If Yes, will in-water work be needed for completion of the Subapplicant's proposed project?

YES NO

If No, how far is the water body from the limits of ground disturbance and/or vegetation removal?

What is the name of the river, stream, estuary, or coastal water body? If the river/stream is a tributary, provide the name of the receiving water body. For seasonal/annual bodies of water, describe the time of year and the duration of time that water is typically present. Describe the flow of water (i.e., still, slow moving, swift, etc.) anticipated during the scheduled activities for the proposed project.

A.7. Proposed Project Schedule and Duration:

Please provide start and end dates (including month and year) of project implementation, number of work days, and number of work hours per day (e.g., 5 days of work for 10 hours per day).

Start Date End Date

Number of work days:

Number of work hours per day:

Will any work activities occur during nighttime? If so, please describe them.

A.8. Description of Subapplicant's Proposed Project:

Describe the project activities in detail, including construction methods (i.e., equipment to be used, access routes, construction work areas, construction staging areas, **spoils disposal sites, gravel or rock pits, etc.**) Include the Subapplicant's best management practices⁷ to be implemented, and post-construction activities, if applicable. (The details described here are as provided by the Subapplicant in their project description.) Attach project plans and layouts and post-project monitoring and reporting plans, if available.

Select the applicable project type(s):

- | | |
|--|--|
| <input type="checkbox"/> Non-Emergency Debris Removal | <input type="checkbox"/> Airport Runway Construction |
| <input type="checkbox"/> Road and Trail Construction | <input type="checkbox"/> Facility Disaster Mitigation Activities |
| <input type="checkbox"/> Utility Construction | <input type="checkbox"/> Building and Facility Construction |
| <input type="checkbox"/> Rail Line Construction | <input type="checkbox"/> Channelization |
| <input type="checkbox"/> Flood Control Activities | <input type="checkbox"/> Stormwater Management |
| <input type="checkbox"/> Culvert Construction | <input type="checkbox"/> Dam Construction |
| <input type="checkbox"/> Bridge Construction | |
| <input type="checkbox"/> Bank Protection, Stabilization, and Erosion Control Activities | |
| <input type="checkbox"/> Detention/Retention, or Basin Water Storage Facility Construction | |
| <input type="checkbox"/> Linear Water Conveyance Facility Construction | |
| <input type="checkbox"/> Shoreline Facilities - Recreational or Maritime Use | |
| <input type="checkbox"/> Shoreline Facilities - Protection | |
| <input type="checkbox"/> Wildfire Risk reduction - Defensible Space Creation and Hazardous Fuels Reduction | |

Describe the access routes:

⁷ In this form, BMPs refer to standard measures proposed by the subapplicant as part of their proposed project. BMPs should not be confused with the Conservation Measures included in FEMA's PBA and the corresponding USFWS PBO.

Describe the construction staging and work areas:

If the Subapplicant's proposed project includes vegetation removal and/or trimming, describe the vegetation type and the extent that would be removed and/or trimmed. Describe the planned revegetation efforts, which should be consistent with the measures described in the applicable PBA-PBO.

SECTION B. DETERMINATION OF EFFECTS TO FEDERALLY LISTED SPECIES AND/OR CRITICAL HABITAT PROTECTED UNDER ESA

B.1. Does the Action Area for the Subapplicant's proposed project have the potential to support federally listed species and/or does it contain Critical Habitat including physical or biological features essential for the conservation of the species? Also, describe the methods and results of any listed species surveys and/or habitat assessments conducted.

Surveys/Habitat Assessment:

NO

It has been determined that the Action Area occurs either:

- a) Outside the range of any federally listed species,
- b) Within the range of a federally listed species but outside of occupied or suitable habitat and outside Critical Habitat, or
- c) Within Critical Habitat designation but lacks the physical or biological features essential for the conservation of the species.

Go to B.2.

YES. List the federally listed species and Critical Habitat that is present or potentially present in the Action Area of the Subapplicant's proposed project (go to B.2)

B.2. Could the Subapplicant's proposed project directly or indirectly affect federally listed species and/or Critical Habitat (i.e., the physical or biological features essential for the conservation of the species) in the Action Area?

NO

No Effect. FEMA has determined that implementation of the proposed project would not affect federally listed species and/or Critical Habitat. If a No Effect determination has been made for the proposed project, do not complete Section C (for NLAA determinations only), nor Section D (for LAA determinations only). No notification to FEMA is required.

No consultation with the USFWS is required under the ESA.

YES (go to B.3)

B.3. Can the Subapplicant incorporate the general *Avoidance and Minimization Measures* and the species-specific *Conservation Measures* listed in the applicable FEMA PBA-PBO into the proposed project to avoid or minimize effects on federally listed species (including avoiding take⁸ as defined under ESA) and/or their Critical Habitat to levels that are insignificant, discountable, or wholly beneficial?

YES

FEMA has determined that the proposed project May Affect, but is Not Likely to Adversely Affect (NLAA) federally listed species and/or their Critical Habitat. Direct and indirect effects would be insignificant, discountable or wholly beneficial. There are no adverse effects to species or their Critical Habitat. As such, take of individual(s) or destruction/adverse modification to Critical Habitat will not occur. Complete Section C of this form for NLAA determinations. FEMA will notify the USFWS by submitting the completed ESA Review Form for the proposed project and request that the proposed project be covered under the applicable FEMA PBA-PBO as an NLAA project.

NO

FEMA has determined that the proposed project is Likely to Adversely Affect (LAA) at least one federally listed species and/or their Critical Habitat. Adverse effects to at least one federally listed species or at least one physical or biological feature of Critical Habitat may occur to reach an LAA determination. Complete the relevant portions of Section D of this form for LAA determinations. FEMA will notify the USFWS by submitting the completed ESA Review Form for the proposed project which may request coverage under the Incidental Take Statement (ITS) already included in the USFWS PBO issued to FEMA, if applicable.

SECTION C. ESA REVIEW FOR NLAA DETERMINATIONS FOR PROPOSED PROJECTS UNDER THE APPLICABLE FEMA PBA-PBO

C.1. Briefly describe the species potential to occur onsite (including closest CNDDDB occurrences, suitable habitat, etc.) and the potential direct and indirect effects from implementation of the Subapplicant's proposed project in the Action Area. Refer to the applicable FEMA PBA-PBO for a description of potential effects, and describe additional effects as applicable.

a. Direct and Indirect Effects on Federally Listed Species

b. Direct and Indirect Effects on Critical Habitat (including effects on specific Physical and Biological Features⁹)

C.2. Please list all the general *Avoidance and Minimization Measures* and the species-specific *Conservation Measures* that are applicable from the FEMA PBA-PBO, and indicate which will be implemented and why implementation of others is not necessary for the Subapplicant's proposed project to avoid and minimize direct and indirect effects, and briefly note how they would reduce those effects within the Action Area on the following:

a. Federally Listed Species

b. Critical Habitat

⁸ Take: Under the ESA "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct [ESA §3(19)].

⁹ Per 81 *FR* 7414, the physical or biological features refer to the features that are present that are essential to the conservation of the species and may require special management considerations or protection, which were formerly referred to as "Primary Constituent Elements."

Note: Please note that take (as defined under the ESA) of federally listed species is not allowed under the NLAA determination. If take of a federally listed species is reasonably certain to occur, then please fill out **Section D** for LAA determinations instead of this one.

C.3. Are there any interrelated¹⁰ and/or interdependent¹¹ actions associated with the Subapplicant's proposed project? If so, please describe them.

C.4. Are there any other FEMA funded projects occurring within 1 mile of the Subapplicant's proposed project? If so, please list the disaster number (DR), Project Worksheet (PW), project name, and distance to this proposed project.

C.5. Summary of FEMA's NLAA Determination for Federally Listed Species and Critical Habitat from implementation of the Subapplicant's proposed project to demonstrate that the subapplicant's proposed project will have insignificant, discountable, or wholly beneficial effects to federally listed species or their Critical Habitat. List all the federally listed species and/or Critical Habitat covered under this NLAA determination. An ESA determination for each federally listed species and/or Critical Habitat is required.

Species: (common name)

Determination Rationale for Species: This project may affect, but is not likely to adversely affect the XX because of XXX (briefly summarize supporting rationale, application of AMMs, timing of actions, etc.).

Determination Rationale for Critical Habitat: This project may affect, but is not likely to adversely affect the Physical and Biological Features of the species Critical Habitat because of XXX (briefly summarize supporting rationale, etc.).

Species: (common name)

Determination Rationale for Species: This project may affect, but is not likely to adversely affect the XXX because of XXX (briefly summarize supporting rationale, application of AMMs, timing of actions, etc.).

Determination Rationale for Critical Habitat: This project may affect, but is not likely to adversely affect the Physical and Biological Features of the species Critical Habitat because of XXX (briefly summarize supporting rationale, etc.).

SECTION D. ESA REVIEW FOR LAA DETERMINATIONS FOR PROPOSED PROJECTS UNDER THE APPLICABLE FEMA PBA-PBO

D.1. Briefly describe the species potential to occur onsite (including closest CNDDDB occurrences, suitable habitat, etc.) and the potential direct and indirect effects from implementation of the Subapplicant's proposed project in the Action Area. Refer to the applicable FEMA PBA-PBO for a description of potential effects, and describe additional effects as applicable.

a. Direct and Indirect Effects on Federally Listed Species (including the potential for take to occur)

¹⁰ Interrelated actions are actions that are part of a larger action and depend on the larger action for their justification (50 CFR §402.02).

¹¹ Interdependent actions are actions having no independent utility apart from the proposed action (50 CFR §402.02).

- b. Direct and Indirect Effects on Critical Habitat (including effects on specific Physical and Biological Features¹²). If there are adverse effects, quantify the area (in acres, square feet, etc.) of Critical Habitat affected.

D.2. Please list all the general *Avoidance and Minimization Measures* and the species-specific *Conservation Measures* that are applicable from the FEMA PBA-PBO , and indicate which will be implemented and why implementation of others is not necessary for the Subapplicant's proposed project to avoid and minimize direct and indirect effects, and briefly note how they would reduce those effects within the Action Area on the following:

- a. Federally Listed Species
- b. Critical Habitat

Note: Please note that take (as defined under the ESA) of federally listed species and/or destruction/adverse modification to Critical Habitat may occur under an LAA determination.

D.3. Based on the information provided in Sections D.1 and D.2, is there potential for the Subapplicant's proposed project to result in take of a federally listed species?

YES

FEMA has determined that the proposed project may result in take of at least one federally listed species, and FEMA is requesting coverage under the ITS previously issued from the USFWS to FEMA under the programmatic consultation for ESA Section 7 compliance to be complete. Complete Sections D.4 through D.10 of this form to make an LAA determination and request coverage under the existing ITS. FEMA will notify the USFWS by submitting the completed ESA Review Form for the proposed project.

NO

Complete Sections D.7 through D.10 (skip Sections D.4 through D.6) of this form for LAA determinations. FEMA will notify the USFWS by submitting the completed ESA Review Form for the proposed project.

D.4. Briefly describe the mechanism(s) of take as it may occur from implementation of the Subapplicant's proposed project in the Action Area.

Mechanism(s) of Take

D.5. Describe any additional –project-specific measures that would be implemented to reduce the magnitude of take.

¹² Per 81 FR 7414, the physical or biological features refer to the features that are present that are essential to the conservation of the species and may require special management considerations or protection, which were formerly referred to as "Primary Constituent Elements."

D.6. Provide an estimate of the magnitude of take for each federally listed species that may result from the Subapplicant's proposed project, including:

- Take estimate based on existing population status, if available, otherwise use the area of suitable habitat affected as a surrogate for the take estimate;
- References for any materials utilized to develop these estimates.

a. Species 1 – Estimated Take

b. Species 2 – Estimated Take

c. (Add entries for additional species, if needed)

d. References

D.7. Are there any cumulative effects¹³ anticipated from implementation of the Subapplicant's proposed project, including construction activities? If so, please describe them.

D.8. Are there any interrelated¹⁴ and/or interdependent¹⁵ actions associated with the Subapplicant's proposed project? If so, please describe them.

D.9. Are there any other FEMA funded projects occurring within 1 mile of the Subapplicant's proposed project? If so, please list the disaster number (DR), Project Worksheet (PW), project name, and distance to this proposed project.

¹³ Cumulative effects are those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation (50 CFR §402.02).

¹⁴ Interrelated actions are actions that are part of a larger action and depend on the larger action for their justification (50 CFR §402.02).

¹⁵ Interdependent actions are actions having no independent utility apart from the proposed action (50 CFR §402.02).

D.10. Provide a summary of FEMA’s LAA Determination for Federally Listed Species and Critical Habitat from implementation of the Subapplicant’s proposed project. List all the federally listed species and/or Critical Habitat that could be directly or indirectly affected, and summarize those effects as they are presented in this Section. An ESA determination for each federally listed species and/or Critical Habitat is required.

Species: (common name)

Determination Rationale for Species: This project may affect, and is likely to adversely affect the XX because of XXX (briefly summarize supporting rationale for the adverse effect determination, application of AMMs, timing of actions, etc.).

Determination Rationale for Critical Habitat: This project may affect, and is likely to adversely affect the Physical and Biological Features of the species Critical Habitat because of XXX (briefly summarize supporting rationale for the adverse effect determination, etc.).

Species: (common name)

Determination Rationale for Species: This project may affect, and is likely to adversely affect the XXX because of XXX (briefly summarize supporting rationale for the adverse effect determination, application of AMMs, timing of actions, etc.).

Determination Rationale for Critical Habitat: This project may affect, and is likely to adversely affect the Physical and Biological Features of the species Critical Habitat because of XXX (briefly summarize supporting rationale for the adverse effect determination, etc.).

SECTION E. FOR USFWS TO COMPLETE AND SIGN

Project Name:

FEMA Grant # or Disaster and Project Worksheet #s:

I concur with FEMA’s determination on federally listed species and critical habitat as described in this ESA Review Form, pursuant to Section 7 of the Endangered Species Act. The proposed projects are covered activities, and the affects to the Federally-listed species presented in this ESA Review Form have been analyzed in the July 2019, Programmatic Biological Opinion for the Federal Emergency Management Agency’s Disaster, Mitigation, and Preparedness Programs within the Ventura Fish and Wildlife Office’s Jurisdiction (08EVEN00-2018-F-0700) (programmatic biological opinion).

Take for listed species presented in Section D of this ESA Review Form is exempt under the programmatic biological opinion.

The proposed projects are appended to the July 2019, programmatic biological opinion under the following Service File Number: [FWS will insert TAILS number]. Therefore, no further action pursuant to the Act is necessary for the proposed projects unless new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; the action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered; or a new species is listed or critical habitat designated that may be affected by the identified action.

I do not concur with FEMA’s determination for the following reason(s):

Signature is listed below:

[Name]
Assistant Field Supervisor
Ventura Fish and Wildlife Office
U.S. Fish and Wildlife Service

Date

Appendix D

U.S. Fish and Wildlife Service and California Department of Fish and Wildlife

Draft Conservation Strategy and Mitigation Guidance for the California Tiger Salamander, Santa Barbara County Distinct Population Segment

Information in this document is presented in the following order:

1. Purpose
2. Conservation Strategy
3. Impacts to California tiger salamanders
4. Mitigation to Offset Impacts
5. Determining Mitigation
6. Providing Mitigation
7. Siting Mitigation
8. Translocation

This document is not meant to contain complete information regarding species biology, regulatory requirements, U.S. Fish and Wildlife Service policies, or compensatory mitigation procedures. Additional materials supporting this document and providing supplemental information relevant to this topic are indicated within this document. This document will be updated as needed to reflect new scientific information, species needs, or policy changes.

1. Purpose

The U.S. Fish and Wildlife Service (Service) provides this conservation strategy and mitigation guidance document in support of the conservation and recovery of the endangered Santa Barbara County distinct population segment (DPS) of the California tiger salamander. The main purpose of this document is to provide guidance when assessing land use and project development impacts to the Santa Barbara County DPS of the California tiger salamander and to strategically identify our preferred approaches to offset unavoidable impacts through compensatory mitigation when triggered under the Federal Endangered Species Act of 1973, as amended. The recommendations from this document should be assessed and, when appropriate, incorporated into all projects occurring within the known range of the DPS. We recommend that biologists, consultants, and project proponents use it to inform and facilitate their work with the Service in a regulatory context.

The Federal Endangered Species Act of 1973, as amended, is the primary Federal law providing protection for the Santa Barbara County DPS of the California tiger salamander. The listing of the DPS as endangered provided the full protection of Act. Sections 7, 9, and 10 of the Act have been the most relevant sections that have provided a conservation benefit to the species. Section 9 of the Act prohibits unauthorized taking of any federally listed endangered or threatened species. Section 3(18) defines “take” to mean “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.”

2. Conservation Strategy

The goal of this conservation strategy and mitigation guidance is to protect and manage sufficient habitat to support long-term viability of the Santa Barbara County DPS of the California tiger salamander. The species depends on a series of interconnected aquatic breeding habitats and upland habitats as a metapopulation, making it particularly sensitive to changes in the amount, configuration, and quality of these habitats. The loss and destruction of habitat represents the primary threat to the species. We believe that to ensure the long-term viability of California tiger salamander populations in Santa Barbara County, habitat loss needs to be reduced and that California tiger salamander habitat needs to be conserved and protected following strategic methodology. The recovery plan (Service 2016) lays out recovery criteria by which a minimum viable population can be conserved in each metapopulation area. This conservation strategy and mitigation guidance strives to conserve habitat in a strategic way through mitigation such that recovery criteria will be met in each metapopulation.

Aquatic breeding habitat for California tiger salamanders is characterized as ponds with seasonal, shallow wetlands that alternate between dry and wet periods. For regulatory purposes, ponds with a documented breeding California tiger salamander population are identified as known breeding ponds. Ponds with the appropriate hydroperiod to support California tiger salamander breeding (i.e., at least 10 weeks) and surrounding upland habitat, but in which

California tiger salamander breeding has not been documented, are identified as potential breeding ponds. Potential breeding ponds may have breeding California tiger salamander populations that have not been documented for a variety of reasons, including insufficient survey effort. Salamanders can forego breeding for 2 to 8 years, resulting in negative aquatic surveys despite the presence of the species in adjacent uplands (Trenham et al. 2000). For the purpose of this document, potential breeding ponds are treated the same as known breeding ponds. For project purposes, potential breeding ponds are presumed to be known breeding ponds unless a negative finding is achieved by correctly and completely following the Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander (Service and Department 2003).

We used the average size of known breeding ponds in Santa Barbara County (1.47 acres) to define the number of ponds needs in each metapopulation area to support a minimum viable population size of California tiger salamanders. Four ponds of this size are required to preserve a minimum viable population for each metapopulation based on calculations that are discussed in the Service's (2015) draft recovery plan. In metapopulation areas where ponds are smaller than 1.47 acres, more than 4 ponds may be needed to support the minimum viable population size because effective population size is related to pond area. For example, if ponds are 0.4 acres, then 5 ponds will be necessary to support a minimum viable population size.

To preserve the minimum viable population found in single pond, at least 623 acres of functional upland habitat around each pond is required. 623 acres of functional upland habitat encompasses approximately 75 percent of the individuals using that pond based on calculations that are discussed in the Service's 2016 recovery plan. The remaining 25 percent of the population is distributed across an additional 1,628 acres of functional upland habitat.

Compensatory mitigation should work to further meeting recovery criteria. The recovery plan (Service 2016) established the following recovery criteria to support long-term viability of the Santa Barbara County DPS of the California tiger salamander:

1. At least four functional breeding ponds are in fully preserved status per metapopulation area.
2. A minimum of 623 acres of functional upland habitat around each preserved pond is in fully preserved status.
3. Adjacent to the fully preserved ponds and fully preserved upland habitat, a minimum of 1,628 acres of additional contiguous, functional upland habitat is present, which is at least 50 percent unfragmented and partially preserved.
4. Effective population size in the metapopulation is, on average, increasing for 10 years.

5. Management is implemented to maintain the preserved ponds free of non-native predators and competitors (e.g., bullfrogs and fish).
6. Risk of introduction and spread of non-native genotypes is reduced to a level that does not inhibit normal recruitment and protects genetic diversity within and among metapopulations.

Given the different landscape context in each metapopulation area, the method in which recovery criteria will be met in each metapopulation will differ (see Table 1 below). The first priority is preservation of existing ponds, followed by restored or created ponds – metapopulations that are limited by the number of functional breeding ponds would likely require the creation of additional breeding ponds to meet the first recovery criteria as listed above.

Table 1. The six metapopulation areas of the Santa Barbara County DPS of the California Tiger Salamander and the actions the Service currently envisions are necessary to achieve recovery, including the number of breeding ponds needed to maintain a minimum viable population size (MVP). The average pond size was calculated using the geometric mean of all known breeding ponds in each metapopulation based on 2010 known California tiger salamander breeding pond data; number of breeding ponds needed to maintain an MVP was calculated as defined in Appendix A of the recovery plan (Service 2015). These calculations should be updated as new information about known breeding ponds is acquired.

Metapopulation	Number of Known Breeding Ponds	Average Size of Known Breeding Ponds (acres)	Number of Breeding Ponds Needed to Maintain an MVP	Upland habitat in fully preserved status needed (acres)	Current Recommended Recovery Actions
West Santa Maria/Orcutt	15	0.76	4	2,492	Preservation of existing ponds to conserve a minimum viable population
East Santa Maria	5	1.31	4	2,492	Prioritize preservation of existing ponds and restore those as identified in the draft recovery plan (Service 2015)
West Los Alamos	11	0.51	5	3,115	Preservation of existing ponds to conserve a minimum viable population
East Los Alamos	4	1.12	4	2,492	Pond creation will likely be necessary in this metapopulation to

					support a minimum viable population size
Purisima	19	0.42	5	3,115	Preservation of existing ponds to conserve a minimum viable population
Santa Rita	5	0.64	4	2,492	Prioritize preservation of existing ponds, restore or create ponds if necessary, and restore upland habitat as identified in the draft recovery plan (Service 2015)

DRAFT

3. Impacts to California tiger salamanders

For projects that have unavoidable adverse effects on California tiger salamanders and/or their habitats, compensatory mitigation is needed to conserve California tiger salamanders. The amount of compensatory mitigation to offset a proposed project's impacts should be determined by assessing a project's level of impacts to California tiger salamanders and their habitat. Impacts to California tiger salamanders result from direct mortality to individuals, loss or alteration of suitable breeding habitat, loss or alteration of suitable upland habitat, interference with breeding migration, or interference to dispersal and connectivity between metapopulations. Impacts may be permanent or temporary, direct or indirect, immediate or cumulative.

4. Mitigation to Offset Impacts

Mitigation is typically defined as avoiding, minimizing, rectifying, reducing, and then compensating for unavoidable impacts that result from a project, to a species or its habitat. Projects should incorporate conservation measures that help to avoid, reduce, or minimize impacts. Under this conservation strategy and mitigation guidance, any remaining impacts to the California tiger salamander or its habitat should be offset through compensatory mitigation undertaken in a strategic way such that the mitigation contributes to meeting the recovery criteria in the affected metapopulation. Compensatory mitigation, in this document, means physical habitat that is permanently conserved, managed, maintained, and endowed in perpetuity to ensure conservation benefits for the California tiger salamander.

5. Determining Mitigation

The Service will consider a number of primary factors when determining how much mitigation should be provided to adequately offset impacts that will be incurred by a proposed project. These primary factors are:

1. The amount of breeding habitat and/or upland California tiger salamander habitat to be directly or indirectly impacted;
2. The quality of California tiger salamander habitat to be impacted as valued through Searcy and Shaffer (2008);
3. California tiger salamander occupancy and use of the site to be impacted;
4. Number of breeding ponds within dispersal distance (1.3 miles) of the impact area;
5. Location and landscape context of the site to be impacted.

Other factors that should be taken into account by both the Service and the project proponent include: how well the proposed mitigation site supports recovery of California tiger salamander; whether the impact is temporary or permanent; and whether the proposed mitigation to offset impacts provides immediate conservation and recovery benefits to California tiger salamanders

or if there will be a delay in such benefits. The Service prefers that lands to be used for mitigation already contain suitable habitat for the California tiger salamander, as opposed to lands that may need restoration or enhancement, to ensure immediate benefits to the species in exchange for proposed impacts.

6. Providing Mitigation

When a project's impact calls for compensatory mitigation, it can be provided by the project proponent by buying mitigation from a mitigation provider (mitigation bank), by paying a fee towards a Service-approved mitigation account for the California tiger salamander (mitigation account), or by establishing a mitigation site that meets the specification for approved mitigation (permittee-responsible mitigation).

Mitigation Bank

Applicants may purchase credits from an approved conservation bank commensurate with the required mitigation, to provide compensation for impacts to California tiger salamanders. Performance and success criteria for providing compensation for impacts to the California tiger salamander will be deemed to have been met upon purchase of such credits.

In order to determine how many credits an applicant must purchase, the applicant must calculate the loss of reproductive value that would result from their project. The Service has calculated the average reproductive value of one credit at approved conservation banks as a means to determine how many credits a project proponent must purchase to offset the loss in reproductive value resulting from a project. An applicant must purchase as many credits needed to reach a mitigation ratio of 1:1 for reproductive value. For example, if a credit at a conservation bank has a reproductive value of 100 and a project results in a reproductive loss of 200, that project proponent must purchase 2 credits from that bank to offset the loss in reproductive value. Project proponents that are proposing to purchase mitigation credits from a conservation bank should coordinate with the Service to ensure they are using the correct reproductive value of one credit from the conservation bank in which the project proponents proposes to purchase credits from.

For those pursuing compensatory mitigation for impacts occurring in the East and West Los Alamos, Purisima, or Santa Rita metapopulation areas, but unable or not interested in establishing and securing a mitigation site, it may be possible to pay an fee to or to purchase credits from a mitigation site or mitigation bank, each of which could result in providing California tiger salamander conservation benefits commensurate with project impacts. Paying a fee or purchasing credits both entail a payment of U.S. dollars by the entity needing to provide mitigation to a third party who will provide that mitigation. This payment is relatively simple and fast compared to permittee-responsible mitigation.

For project proponents intending to provide compensatory mitigation for impacts occurring in the East and West Los Alamos, Purisima, or Santa Rita metapopulation areas by purchasing credits from a bank, the Service will determine the quality of California tiger salamander habitat as valued through Searcy and Shaffer (2008) for each credit within the bank. The Service and Department will then use that to set the appropriate number of credits for perspective projects to purchase the required mitigation ratio (defined below under *Methodology on How to Determine Mitigation*).

California Tiger Salamander Mitigation and Conservation Account

The Service created a California tiger salamander Mitigation and Conservation Account that is intended to collect mitigation fees for impacts to the California tiger salamander that occur in the East and West Santa Maria metapopulation areas. While there are six metapopulations of the Santa Barbara County distinct population segment of the California tiger salamander, the East and West Santa Maria metapopulation areas are under the greatest threat from land conversion and habitat loss. In order to avoid precluding recovery in these metapopulation areas, mitigation for impacts in West Santa Maria and East Santa Maria should occur within these metapopulations areas. Therefore, the mitigation account pertains only to mitigation fees resulting from impacts occurring in the East and West Santa Maria Metapopulation areas and will be used for mitigation within these metapopulations. With the current prices of property, single applicants are unable to purchase land as mitigation for their projects. Therefore, a mitigation account is necessary to compile funds from multiple projects to be able to purchase parcels of land to put into conservation easements for the California tiger salamander in the Santa Maria metapopulation areas.

The Account is held, managed and administered by the National Fish and Wildlife Foundation to receive monies paid by project applicants in connection with offsetting impacts to the California tiger salamander occurring in the East and West Santa Maria metapopulations. These monies will be received as compensation for unavoidable impacts to the California tiger salamander. The types of activities for which the Account will be used include, but are not necessarily limited to: habitat restoration and enhancement; long-term protection of habitat, including establishment of conservation easements on habitat lands and/or long-term management and monitoring of habitat lands; and recovery activities. These activities will only be implemented in the East and West metapopulations for the California tiger salamander, Santa Barbara distinct population. The Service recognizes that a temporal loss may occur between a project's impacts and implementation of compensatory mitigation. In order to minimize the extent of the temporal loss, funds should be used to implement the aforementioned activities within 5 years of the date of deposit.

In 2017, the Service calculated the reproductive value of one mitigation credit from the La Purisima Conservation Bank. At the time, one credit had a reproductive value of 850. The

Service used that number to establish a mitigation fund fee calculator to determine the mitigation fee needed to offset the loss in reproductive value resulting from a project. The Service consulted with the National Fish and Wildlife Foundation to develop a mitigation fund fee calculator (Service 2017) to account for various fees associated with establishing a conservation easement. The Service anticipates revisiting the fund fee calculator every 5 years to ensure the accuracy of the fee calculator. The calculator is based on the loss of reproductive value resulting from a project to ensure a mitigation ratio of 1:1 [as calculated in Searcy and Shaffer (2008)] is met for the impacts to California tiger salamanders and their habitats. The mitigation fund fee calculator (Service 2017) has detailed information about how mitigation fees are calculated.

Permittee-Responsible Mitigation

Applicants may acquire compensation land to satisfy compensation requirements for impacts to the California tiger salamander. Compensation land must be acquired prior to initiating ground-disturbing activities within the Planning Area and financial assurances must be provided to ensure funding for the long-term management of the compensation lands. All compensation land must be recorded, managed and maintained and endowed in perpetuity prior to the onset of ground-disturbing activities. The compensation land will conserve sufficient reproductive value, as addressed in the Conservation Strategy and Mitigation Guidance for the California tiger salamander (Service 2016), to offset the impacts to the California tiger salamander. As stated above, a mitigation ratio of 1:1 [as calculated in Searcy and Shaffer (2008)] will be required for impacts to California tiger salamanders and their habitats. In other words, the reproductive value of habitat proposed for mitigation should equal the calculated reproductive value of the impacted habitat. When potentially suitable compensation land is identified, the applicant will prepare and submit a report to the Service outlining the suitability of the land for compensatory purposes. Once the Service agrees to the suitability of the compensatory land and the land is placed into conserved status, the performance and success criteria for the provision of onsite compensation lands will be deemed to have been met.

For permittee-responsible onsite or offsite mitigation, applicants will provide for the long-term monitoring and management of the compensation lands by providing initial funding for a long-term, non-wasting endowment. All compensation land must be protected under a perpetual Conservation Easement and be recorded, managed and maintained and endowed in perpetuity prior to the onset of ground-disturbing activities. Applicants must develop a management plan for mitigation lands to be included in a Conservation Easement. The management plan provides for: 1) annual easement inspections, which will generate up-to-date information on the Easement Area's overall condition and biological resources; 2) periodic biological monitoring, which will generate detailed data describing onsite species: including population abundance, condition of habitat and condition of related human infrastructure, particularly water impoundment structures; 3) management, maintenance and enhancement tasks, which will ensure the sustainability of these resources and the health of the species' habitat; and 4) annual reports, which will

summarize maintenance and management activities undertaken during the previous year, and provide an opportunity to creatively consider future needs and adaptive responses.

For those establishing a mitigation site to provide their own mitigation or to establish a bank, it will be necessary to work with the Service to ensure approval of key elements needed to authorize the mitigation site. The Service will provide detailed guidance and feedback on each of the following key elements:

1. Identifying a land parcel(s) adequate for providing compensatory mitigation.
2. Recording a permanent conservation easement on the property.
3. Developing a management plan for the property that documents baseline conditions. A management plan will establish biological goals, objectives, and performance standards, prescribe monitoring and reporting, and provide for adaptive management.
4. Providing financial assurances (specifically, an endowment) for the interim and perpetual maintenance, management, and monitoring of the mitigation site property.
5. Private parties must obtain an Incidental Take Permit (i.e., Section 10 permit pursuant to the Act) or otherwise be covered by an existing permit. This occurs in part by developing a Habitat Conservation Plan (HCP) or being covered by an existing conservation plan. For additional information on HCPs, see: <http://www.fws.gov/endangered/what-we-do/hcp-overview.html>
6. Federal agencies should complete a consultation (pursuant to section 7 of the Act) in which the proposed project action includes compensatory mitigation to offset impacts California tiger salamanders or their habitat.

7. Siting Mitigation

For all circumstances, mitigation for impacts to California tiger salamanders and its habitat should occur at a location within the affected California tiger salamander metapopulation unless otherwise determined by the Service. In general, large sites functionally connected to other permanently conserved lands are preferred for mitigation as they would likely contribute the greatest toward meeting recovery criteria. Within each metapopulation, compensatory mitigation should be directed to areas encompassing known breeding ponds and their associated upland habitat that contribute in the greatest extent to meeting the aforementioned recovery criteria. Mitigation should be steered away from ponds that are isolated from other ponds in a metapopulation area and/or that do not have sufficient functional upland habitat to support long-term viability of a metapopulation. Proposed mitigation areas should be located within areas that are capable of supporting a minimum viable population of California tiger salamanders. As specified in the Service's 2016 recovery plan, a minimum of 623 acres of functional upland habitat around a preserved pond is necessary to support a minimum viable population. Mitigation

areas must be evaluated and approved by the Service to qualify as mitigation for proposed impacts to California tiger salamanders.

All areas approved for mitigation must be placed into fully preserved status. Fully preserved status is either: (1) owned in fee title by an agency or conservation organization; or, (2) privately-owned lands protected in perpetuity with conservation easements. These lands must have funding secured for long-term management and monitoring. Parcels will be legally and permanently conserved, managed, and endowed to help ensure their long-term ecological value, in a manner consistent with the Service's 2003 Conservation Banking guidance and the Service's most current recommendations for implementing that guidance specific to federally-listed species conservation.

For impacts occurring outside the six metapopulations, mitigation efforts should be directed to the closest defined metapopulation. The Service will evaluate impacts occurring outside of the six metapopulations and provide recommendations and guidance on where compensatory mitigation should be directed on a case-by-case basis. The different metapopulations within Santa Barbara County are shown by different colors on the map located on the following page. These six metapopulations were delineated by the Service upon consideration of the range of the Santa Barbara County DPS of California tiger salamander and are defined by a series of interconnected breeding and upland habitat. These metapopulations could be refined in the future as biological information, recovery needs, and land uses change. We believe that siting mitigation in and adjacent to other parcels that are conserved and managed for similar upland ecosystem functions and values can be advantageous both ecologically and economically.

Proposed mitigation areas outside the areas that are capable of supporting a minimum viable population of California tiger salamanders will be considered on a case-by-case basis. Under this scenario, mitigation proposals would likely incur a longer review process and may be subjected to additional requirements, including greater mitigation ratios.

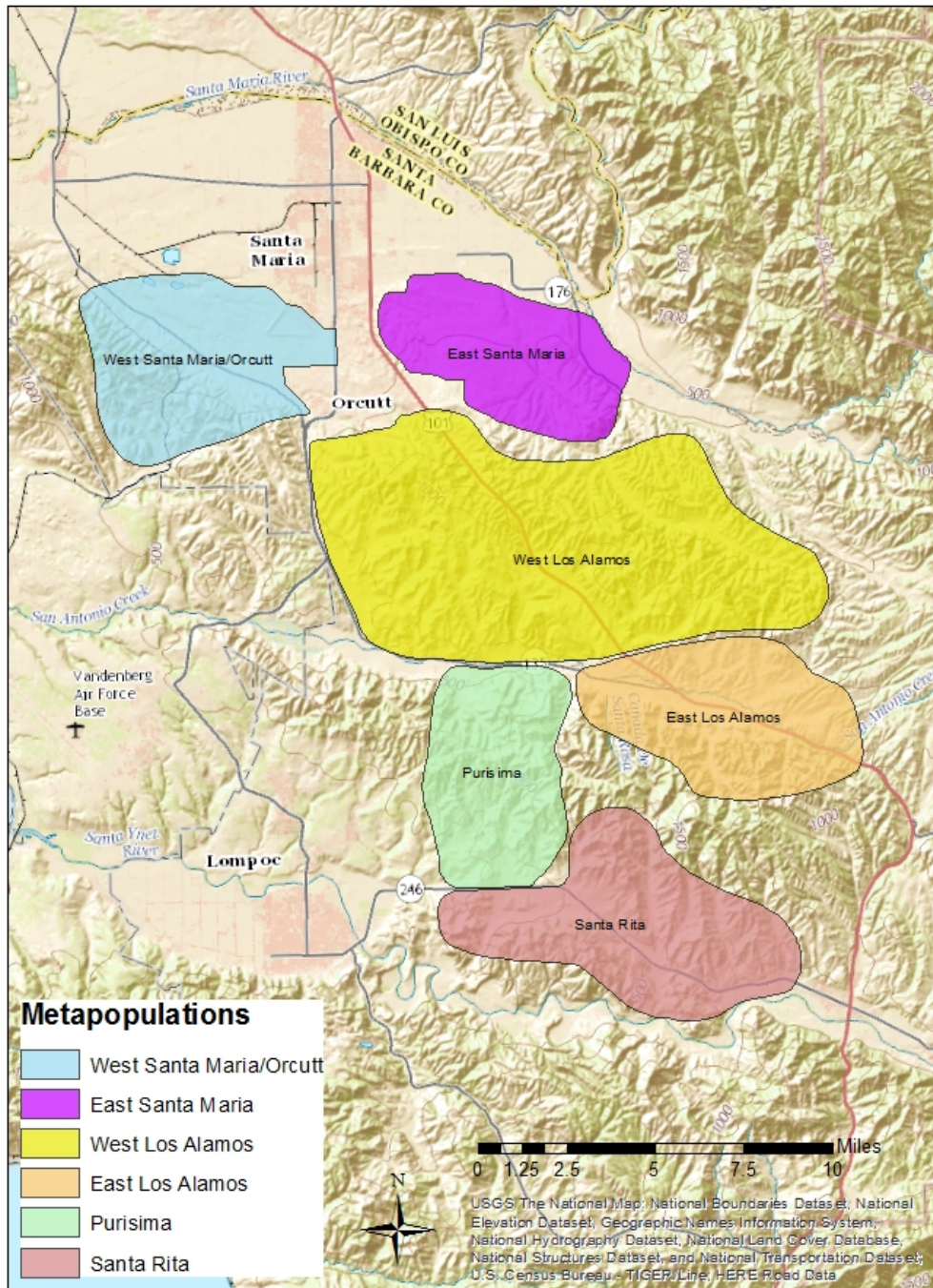
8. Translocation

Translocation involves the human-mediated movement of animals from one area, with release in another. Techniques for successful California tiger salamander translocation are not refined at this time, and there is currently little data on the conservation value of California tiger salamander translocation to the species. In general, we do not consider the translocation of California tiger salamanders for the purposes of removing an individual out of harm's way appropriate mitigation at this time. Since California tiger salamander translocation is not presently viewed as a viable mitigation option by the Service, translocation will occur at the discretion and authorization of the Service on a case-by-case basis. Translocation may be appropriate when recovery or research objectives are likely to be met (i.e., when reestablishing a local population or restocking a breeding pond). A translocation proposal must be submitted to

the Service for evaluation and approval prior to any potential translocation of California tiger salamanders.

DRAFT

Santa Barbara County Disting Population Segment of the California Tiger Salamander



Methodology on How to Determine Mitigation

This section describes the methodology on how to determine the estimated impacts to the Santa Barbara County DPS of the California tiger salamander and amount of compensatory mitigation needed so that project development can move forward where appropriate. Our application of these methods will depend on our evaluation of project-specific conditions. We have considered these methods specifically for use in projects impacting the Santa Barbara County DPS of the California tiger salamander; however, they may have applicability elsewhere.

- The value of the impacted habitat should be calculated using the methodology outlined in Searcy and Shaffer (2008), incorporating the amount of California tiger salamander aquatic breeding habit and upland habitat covering the site to be impacted.
- The value of the land proposed for mitigation habitat should be calculated using Searcy and Shaffer (2008). Typically, a mitigation ratio of 1:1 will be required for impacts to California tiger salamanders and their habitats. Habitat proposed for mitigation should have an equal calculated value of the reproductive value of the impacted habitat. Additionally, habitat proposed for mitigation should be placed into a permanent conservation status.

The method described in Searcy and Shaffer (2008) attaches a value to habitat that scales with the reproductive value of the individuals estimated to be occupying an area.

According to Searcy and Shaffer (2008) the reproductive value of a site is a function of:

- a. Distance from each breeding pond within dispersal distance of the site, and
- b. Land-use in the surrounding areas.

The density distribution of reproductive value decreases exponentially with increasing distance from a breeding site and decreases with increasing habitat loss in the surrounding uplands. For example, parcels close to a breeding pond, or several ponds, with intact upland habitat in the surrounding area will have a higher reproductive value than those with one pond where upland habitat has been converted to a use that is incompatible with California tiger salamanders.

Studies have recorded migration and dispersal distances by adult and juvenile California tiger salamanders, both through radio-tracking (Loredo et al. 1996, Trenham 2001) and upland drift fence capture (Trenham and Shaffer 2005, Orloff 2007, Orloff 2011). None of these studies were conducted within the range of the Santa Barbara County DPS of the California tiger salamander but are considered to be the best available scientific information on the species. Movement of California tiger salamanders is reviewed in Service (2009) and Searcy et al. (2013). In general, adults may migrate up to 1.2 miles (6,336 feet; 2 kilometers) from upland habitats to aquatic breeding sites (Service 2000). Orloff (2011) found that a considerable number of adult and juvenile California tiger salamanders moved more than 2,625 feet (800 meters) from their

breeding pond, and some more than 1.4 miles (7,392 feet; 2.2 kilometers). Based on studies at Jepson Prairie (Central DPS), researchers estimated that California tiger salamanders use a much greater area around the pond, as compared to Trenham and Shaffer's (2005) original 2,200-foot (670-meter) estimate, with 95 percent of salamanders found within 1.1 miles (5,587 feet; 1.7 kilometers) of a breeding pond from the most outlying pool edge (Searcy and Shaffer 2008, 2011, Searcy et al. 2013, Service 2015).

The location of a site within, or outside, a metapopulation area affects the site's relative importance to the persistence and recovery of California tiger salamanders. Areas capable of supporting a minimum viable population are those geographies with potential for conservation of upland habitat of at least 623 acres around known breeding ponds. Thus, mitigation should be steered away from ponds that are isolated from other ponds in the metapopulation area and/or that do not have sufficient functional upland habitat to support long-term viability of the population. Mitigation should be applied in a strategic way such that it contributes toward meeting recovery criteria in the metapopulation area where the project occurs.

Methodology for Calculating Permanent vs. Temporary Impacts

In general, Searcy and Shaffer (2008) demonstrate that there are two components of habitat loss for California tiger salamanders: (1) project footprint plus (2) "deficit wedge." The project footprint is the direct loss of habitat where the impact occurs, which is straight-forward in concept. More complex is the "deficit wedge" that results from the impact to habitat. The deficit wedge is the habitat that becomes isolated from a given breeding pond as a consequence of the impact and is rendered inaccessible to a California tiger salamander migrating in a straight line away from the center of a pond. The total impact of the project includes a sum of the footprint and the deficit wedges (or shadows) where habitat has become inaccessible to salamanders from ponds within dispersal distance of the project.

In calculating mitigation owed for impacts to listed species and/or the habitat that supports them, temporary impacts are of a different nature than permanent impacts. Therefore, mitigation for permanent and temporary should be calculated differently. Permanent impacts should be calculated using the methodology outlined in Searcy and Shaffer (2008), as described above. The deficit wedge (shadow) described above is only created by permanent or long-term impacts that impede California tiger salamander that are dispersing across the landscape. For temporary impacts occurring over one dry season (approximately May to October), there is no shadow because there is no habitat that becomes isolated during migration or dispersal. Calculating mitigation owed for temporary impacts only includes the direct loss of habitat within the project footprint where the impact to habitat occurs.

Not all temporary impacts occur over one dry season. For temporary impacts spanning more than one dry season, the aforementioned methodology does not account for impacts that could occur to migrating California tiger salamanders over a rainy season. While the effects are still

temporary, there is a temporary deficit wedge that is created over the rainy season. The lifetime reproductive success of California tiger salamanders is typically low because metamorphs have low survivorship; in some populations, less than 5 percent survive to breed (Trenham 1998). In addition, metamorphs require an extended amount of time before they reach sexual maturity (4 to 5 years) (Trenham et al. 2000). Less than 50 percent of first-time breeding California tiger salamanders typically survive to breed more than once (Trenham et al. 2000). Therefore, we assume that a temporary impact lasting more than 5 years could affect the entire reproductive output of an individual California tiger salamander, such that a temporary impact has the same impact as a permanent impact. Thus, any temporary impact lasting 5 or more years will be treated as a permanent impact as described above. If a temporary impact occurs over one rainy season, we assume that 1/5 of the entire population is potentially permanently affected during that rainy season and we calculate the temporary impact of the deficit wedge as 1/5 of the total reproductive value of the wedge. The following table shows the percentage of the population and the associated percentage of the deficit wedge that would be mitigated for.

Years of Disturbance	Percent of Deficit Wedge to Mitigate
1	20
2	40
3	60
4	80
5	100

Literature Cited

- Loredo, I., D. VanVuren, and M. L. Morrison. 1996. Habitat use and migration behavior of the California tiger salamander. *Journal of Herpetology* 30:282-285.
- Orloff, S. 2007. Migratory movements of California tiger salamander in upland habitat – a five-year study (Pittsburg, California). Ibis Environmental, Inc., prepared for Bailey Estates LLC. Dated May. 47 pp. + appendices.
- Orloff, S. 2011. Movement patterns and migration distances in an upland population of California tiger salamander (*Ambystoma californiense*). *Herpetological Conservation and Biology* 6(2):266-276. Dated April 1.
- Searcy, C. A. and H. B. Shaffer. 2008 Calculating biologically accurate mitigation credits: insights from the California tiger salamander. *Conservation Biology* 22: 997-1005.
- Searcy, C. A., E. Gabbai-Saldate, and H. B. Shaffer. 2013. Microhabitat use and migration distance of an endangered grassland amphibian. *Biological Conservation* 158:80-87.
- Trenham P. C., H. B. Shaffer, W. D. Koenig and M. R. Stromberg. 2000. Life history and demographic variation in the California tiger salamander. *Copeia* 2000(2):365-377.
- Trenham, P. C. 2001. Terrestrial habitat use by adult California tiger salamanders. *J. Herpetology*, 35(2):343-346.
- Trenham, P. C. and H.B. Shaffer. 2005. Amphibian upland habitat use and its consequences for population viability. *Ecological Applications*, 15(4): 1158-1168.
- U.S. Fish and Wildlife Service. 2000. U.S. Fish and Wildlife Service. 2000. Endangered and threatened wildlife and plants; final determination of endangered status for the Santa Barbara County Distinct Vertebrate Population Segment of the California Tiger Salamander (*Ambystoma californiense*).
- U.S. Fish and Wildlife Service. 2009. California tiger salamander (*Ambystoma californiense*) Santa Barbara County Distinct Population Segment 5-year review: Summary and Evaluation. Ventura Fish and Wildlife Office. Ventura, California. Dated November.
- U.S. Fish and Wildlife Service. 2016. Final recovery plan for the Santa Barbara County distinct population segment of the California tiger salamander (*Ambystoma californiense*). Ventura Fish and Wildlife Office. Ventura, California.
- U.S. Fish and Wildlife Service. 2017. Santa Barbara County distinct population segment of the California tiger salamander Mitigation Fund Fee Calculator. Ventura Fish and Wildlife Office. Ventura, California.
- U. S. Fish and Wildlife Service and California Department of Fish and Wildlife. 2003. Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander.
(http://www.dfg.ca.gov/hcpb/species/stds_gdl/amp_sg/CTSFinalGuide10.03.pdf).

Attachment B

Geotechnical Report for Casitas Municipal Water District – Emergency Generators at Rincon, Avenue 1 and Avenue 2 Pump Plants, Oak View and Ojai, California



Rincon Consultants, Inc.

180 North Ashwood Avenue
Ventura, California 93003

805 644 4455

info@rinconconsultants.com
www.rinconconsultants.com

June 14, 2022
Project No: 21-11714

Julia Aranda, PE
Engineering Manager
Casitas Municipal Water District
1055 Ventura Avenue
Oak View, California 93022
Via email: jaranda@casitaswater.com

Subject: Casitas Municipal Water District’s Backup Diesel Generators Project CEQA Categorical Exemption, Ventura County, California

Dear Ms. Aranda:

This memorandum provides an analysis to support the Casitas Municipal Water District’s (Casitas), as the California Environmental Quality Act (CEQA) lead agency, determination the proposed Backup Diesel Generators Project (herein referred to as “proposed project” or “project”) is exempt from CEQA pursuant to Section 15301, of Title 14, of the California Code of Regulations.

Project Background

Casitas is a municipal water district established in 1952, providing wholesale and retail potable water to western Ventura County, including approximately 6,000 agricultural, commercial, and residential customers. Casitas’ boundaries encompass the City of Ojai, Upper Ojai, the Ventura River Valley area, the City of Ventura (west of Mills Road), and the unincorporated beach communities of Solimar, La Conchita, and Rincon. Casitas operates the Robles Diversion Facility, Robles Canal, Lake Casitas, Casitas Dam (owned by the U.S. Bureau of Reclamation), Lake Casitas Recreation Area, Casitas Water Treatment Plant, as well as 14 steel tanks totaling 30 million gallons of storage, nine pump stations, and approximately 160 miles of pipelines.

In 2017, Casitas acquired the Ojai Water System, which includes 32 miles of pipelines, five tanks totaling 1.544 million gallons of storage, five booster pump stations, five active groundwater wells, and an iron and manganese treatment facility. Current water supply sources include:

- Surface water into Lake Casitas from the surrounding watershed, including Coyote Creek and San Antonio Creek
- Surface water from the Ventura River to Lake Casitas via the Robles Diversion and Robles Canal; the diversion is subject to the requirements of the Biological Opinion of the National Marine Fisheries Service (2003)
- Groundwater wells in the Ojai Valley Groundwater Basin

To improve the reliability of its water system during planned and unplanned outages, Casitas proposes to install stationary generators at the Rincon, Avenue 1, and Avenue 2 Pump Plants. The Rincon Pump Plant serves the beach communities within the Casitas service area. Avenue 1 serves those customers



not within the Rincon or gravity system service areas. Avenue 2 serves customers in the pumping zones above the Avenue 1 zone. Figure 1 shows the locations of the three project sites on a regional level and Table 2 provides information about the project sites. The project sites are located in areas with different features. Rincon Pump Plant is located adjacent to Casitas’ Water Treatment Plant at the base of Casitas Dam. The area is surrounded by undeveloped open space. Avenue 1 Pump Plant is located on the western side of State Route 33 at Old Creek Road, adjacent to a horse stable/boarding facility. Avenue 2 Pump Plant is located west of State Route 33 and east of a residential neighborhood, to the immediate north and south are open common areas. Table 2 shows the capacity of each pump plant and estimated population served.

Table 1 Project Site Information

Pump Plant	Site Address	Assessor’s Parcel Number	Surrounding Land Use
Rincon	1892 Casitas Vista Road, Ventura	060022001	Open Space/Rural
Avenue 1	State Route 33 at Old Creek Road, Oak View	061015011	Open Space/Rural
Avenue 2	10851 Ventura Avenue, Mira Monte	032024303	Residential/Commercial

Table 2 Pump Plant Capacity and Estimated Population Served

Pump Plant	Capacity (gallons per minute)	Estimated Population Served Based on 2015 Data
Rincon	5,150	830
Avenue 1	17,950	25,410
Avenue 2	18,800	16,620

Project Description

The proposed project includes the installation and operation of stationary electrical generators at three pumping plants in the Casitas water system: Rincon Pump Plant, Avenue 1 Pump Plant, and Avenue 2 Pump Plant. The generators would be located on concrete pads in generally flat areas requiring minimal grading. Each generator would have integrated diesel fuel storage. Each generator would comply with the United States Environmental Protection Agency’s New Source Performance Standards for stationary emergency engines. Generators under consideration are Cummins QSK50 series. Underground conduit would be installed to connect to proposed switchgear sections in the existing pump buildings. At Avenue 1, a 6-foot-high retaining wall would be constructed with minimal drainage improvements. Project characteristics are listed in Table 3. Figure 2, Figure 3, and Figure 4 show the conceptual site plans at the Rincon, Avenue 1, and Avenue 2 Pump Plants, respectively.

Table 3 Project Characteristics

Pump Plant	Generator Size (kilowatts)	Diesel Fuel Storage (gallons)	Concrete Pad Dimensions (feet X feet)
Rincon	1,000	2,000	28 X 12
Avenue 1	1,500	2,500	36 X 12
Avenue 2	1,000	2,000	28 X 12



Construction

Construction would be limited to Casitas' normal working hours of 8:00 a.m. to 4:30 p.m., Monday through Friday, except on Casitas holidays. Occasional work may be conducted outside of normal working hours to minimize disruptions to water service. Construction is anticipated to occur in three phases: one generator installed each of the next three fiscal years. Rincon Pump Plant would be the first site, to be initiated in Summer 2022, followed by Avenue 1 Pump Plant and then Avenue 2 Pump Plant. Construction is anticipated to require approximately three months at each of the three project sites. Ground disturbance would occur in previously disturbed areas. No vegetation would be affected by the project. Existing access roads would be used for construction. The Contractor's laydown area for equipment and employee parking would be fully contained within the existing fenced sites. The construction sequence includes the following activities at each site:

- Minimal site grading to accommodate a concrete pad
- Construction of a retaining wall at Avenue 1 Pump Plant and minimal drainage improvements
- Installation of below-grade electrical conduit
- Installation of stationary electrical generators and associated switchgear
- Connection to existing electrical facilities
- Acceptance testing and startup
- Site cleanup

Operation

The backup generators would be operated periodically for testing and maintenance to ensure all components are functioning properly. Testing and maintenance is expected to occur monthly and would last approximately three hours per generator.

During planned and unplanned electrical outages, the backup generators would operate to provide potable water service to customers. Planned outages may occur when the electrical service provider, Southern California Edison (SCE) must perform maintenance on its facilities or when SCE implements its Power Safety Power Shutoff program during high winds. Casitas staff would monitor tank levels during planned outages and only operate the generators if necessary. Unplanned outages include natural disasters such as earthquakes, wildfires, or severe winds. Under these conditions, the proposed generator(s) would operate until electrical service is restored.

Operation of the generators during an emergency meets the definition of Section 21060.3 of the Public Resources Code in that it would mitigate the loss of essential public services (water). Operation of the generators is exempt from CEQA under Section 21080 of the Public Resources Code in that it is a specific action necessary to mitigate an emergency (loss of potable water supply).

Exemption Analysis

Suitability of Use of Categorical Exemption

The project qualifies for a Categorical Exemption (CE) under CEQA. Public Resources Code Section 21084 requires the *CEQA Guidelines* to include a list of classes of projects determined not to have a significant



effect on the environment, and which therefore, are exempt from CEQA (see Chapter 19 Sections 15301 through 15333 of the *CEQA Guidelines*). Categorically exempt projects under CEQA fall into several distinct categories; Class 1 applies to the project.

Section 15301 – Existing Facilities: Class 1 consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use.

The proposed project would involve a minor alteration at the three existing pump facilities to ensure the continuous operation of Casitas' Rincon, Avenue 1, and Avenue 2 Pump Plants. Implementation of the proposed project would enable the pump stations to operate as designed during planned and unplanned power outages, and would not result in the need for additional water supply or water supply facilities within Casitas' jurisdiction (i.e., there would be no expansion of existing capacity at the pump plants). Each backup generator would be placed on a relatively small portion of each project site and would not involve the removal of sensitive vegetation. Therefore, the Class 1 exemption is applicable.

Discussion of CEQA Guidelines 15300.2 Exceptions

Projects consistent with the categorical exemptions identified in the *CEQA Guidelines* sections 15301 through 15333 are not automatically exempt from CEQA review. Section 15300.2 (Exceptions) of the *CEQA Guidelines* outlines the cases in which projects normally exempt from CEQA review would not be exempt. These exceptions are as follows:

- a. **Location.** Classes 3, 4, 5, 6, and 11 are qualified by consideration of where the project is to be located – a project which is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant. Therefore, these classes are considered to apply in all instances, except where the project may impact an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies.
- b. **Cumulative Impact.** All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.
- c. **Significant Effect.** A categorical exemption shall not be used for an activity where there is a reasonable possibility the activity will have a significant effect on the environment due to unusual circumstances.
- d. **Scenic Highways.** A categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway. This does not apply to improvements which are required as mitigation by an adopted negative declaration or certified EIR.
- e. **Hazardous Waste Sites.** A categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code.
- f. **Historical Resources.** A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource.



The following sections address each one of the potential exceptions and demonstrate none apply to the proposed project.

15300.2(a) Location. Classes 3, 4, 5, 6, and 11 are qualified by consideration of where the project is to be located – a project which is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant. Therefore, these classes are considered to apply in all instances, except where the project may impact an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies.

Although the project would not rely on Classes 3, 4, 5, 6, or 11, this exception is included herein for informational purpose only. As stated in the *Environmental Impact Analysis* prepared for the project, the project sites currently contain pump plants and are devoid of vegetation communities that could support special-status species or sensitive habitat. Additionally, no federal or state wetlands or waters are located on or adjacent to the project sites. Therefore, the project would not significantly impact sensitive biological resources. In addition, as stated below in the discussion of *Exception 15300.2(e), Hazardous Waste Sites*, the project site is not listed as containing or being contaminated by hazardous materials. Therefore, installation activities and operation of the proposed project would not impact an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies. This exception to a CE does not apply to the proposed project.

15300.2(b) Cumulative Impact. All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.

As stated in the *Environmental Impact Analysis* prepared for the project, the project would not result in significant environmental impacts, and there are no other successive projects of the same type or scale planned by Casitas. There are no major reasonably foreseeable future projects in the service area of Casitas which would result in significant cumulative impacts in combination with the proposed project. Therefore, no significant cumulative impacts would result from successive projects in the same place over time. This exception to a CE does not apply to the proposed project.

15300.2(c) Significant Effect. A categorical exemption shall not be used for an activity where there is a reasonable possibility the activity will have a significant effect on the environment due to unusual circumstances.

The circumstances of the proposed project, which would result in the installation and operation of a backup generator at three pump station sites, are not considered unusual because the project would enable the pump plants to continue to operate and supply water to Casitas customers during planned and unplanned electrical outages. The inclusion of backup generators at pump plant sites is becoming standard practice to respond to planned and unplanned outages and is not unusual. The proposed project would not result in an expansion of use at the pump stations or result in additional water use. As discussed in the *Environmental Impact Analysis* prepared for the project, the proposed project would not result in a significant effect on the environment due to unusual circumstances. Therefore, this exception to a CE does not apply to the proposed project.



15300.2(d) Scenic Highways. A categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway. This does not apply to improvements which are required as mitigation by an adopted negative declaration or certified EIR.

As stated in the *Environmental Impact Analysis* prepared for the project, according to the California Department of Transportation, the nearest eligible State Scenic Highway is State Route 33, located approximately 125 feet east of the nearest project site (Avenue 2 Pump Plant), and approximately 1.3 miles east of the furthest project site (Rincon Pump Plant).¹ The proposed project would include construction and operation of backup generators at three pump station sites to ensure continuous use of the pump stations during planned and unplanned power outages to provide Casitas' customers with uninterrupted water supply. The proposed generators would be placed within existing Casitas-owned properties, which have been previously developed. Additionally, the proposed generator at the Avenue 2 Pump Plant would be screened from the adjacent residences by the existing fence and landscaping surrounding the project site. The proposed project would not result in damage to trees, historic buildings, rock outcroppings, or similar scenic resources within the State Route 33 viewshed. Therefore, this exception to a CE does not apply to the proposed project.

15300.2(e) Hazardous Waste Sites. A categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code.

As stated in the *Environmental Impact Analysis* prepared for the project, according to a search of the California Department of Toxic Substances Control's EnviroStor database and the State Water Resources Control Board's GeoTracker database conducted in September 2021, the project sites are not on or within 0.25 mile of a hazardous waste site.^{2, 3} Additionally, according to a search of the California Department of Toxic Substances Control's Hazardous Waste and Substances Site List (Cortese List), there are not Cortese List sites on or near the project sites.⁴ Therefore, this exception to a CE does not apply to the proposed project.

15300.2(f) Historical Resources. A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource.

As the project sites do not contain historical resources, the proposed project would not result in a substantial adverse change to historical resources. Ground disturbance would occur to install pads for the proposed generators. In addition, minimal trenching would occur for placement of the conduits. Implementation of the avoidance and minimization measures presented under "Project Description" of the *Environmental Impact Analysis* prepared for the project would reduce potential impacts to unknown

¹ California Department of Transportation. 2018. Scenic Highways. <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways> (accessed September 2021). <http://www.dot.ca.gov/design/lap/livability/scenic-highways/> (accessed December 2018).

² California Department of Toxic Substances Control. 2021. EnviroStor Database. <https://www.envirostor.dtsc.ca.gov/public/> (accessed September 2021).

³ State Water Resources Control Board. 2021. Geotracker Database. <https://geotracker.waterboards.ca.gov/> (accessed September 2021).

⁴ California Department of Toxic Substances Control. 2021. Hazardous Waste and Substances Site List (Cortese). https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site_type=CSITES,FUDS&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+%28CORTESE%29 (accessed September 2021).



buried cultural resources, including historical resources, to a less-than-significant level. Therefore, this exception to a CE does not apply to the proposed project.

Determination

Based on this analysis, the proposed project meets the qualifications of the Class 1 (Section 15301, Existing Facilities) categorical exemption and as provided in Article 19 and is exempt from CEQA pursuant to the *CEQA Guidelines* Section 15301.

Sincerely,

Rincon Consultants, Inc.

A blue ink signature of Melissa J. Whittemore, consisting of a series of loops and a long horizontal stroke.

Melissa J. Whittemore
Supervising Environmental Planner

A blue ink signature of Jennifer Haddow, PhD, featuring a stylized 'J' and 'H' with a horizontal line extending to the right.

Jennifer Haddow, PhD
Vice President/Principal Environmental Scientist

Attachments

- Figure 1 Vicinity Map
- Figure 2 Conceptual Site Plan – Rincon Pump Plant
- Figure 3 Conceptual Site Plan – Avenue 1 Pump Plant
- Figure 4 Conceptual Site Plan – Avenue 2 Pump Plant

Figure 1 Vicinity Map

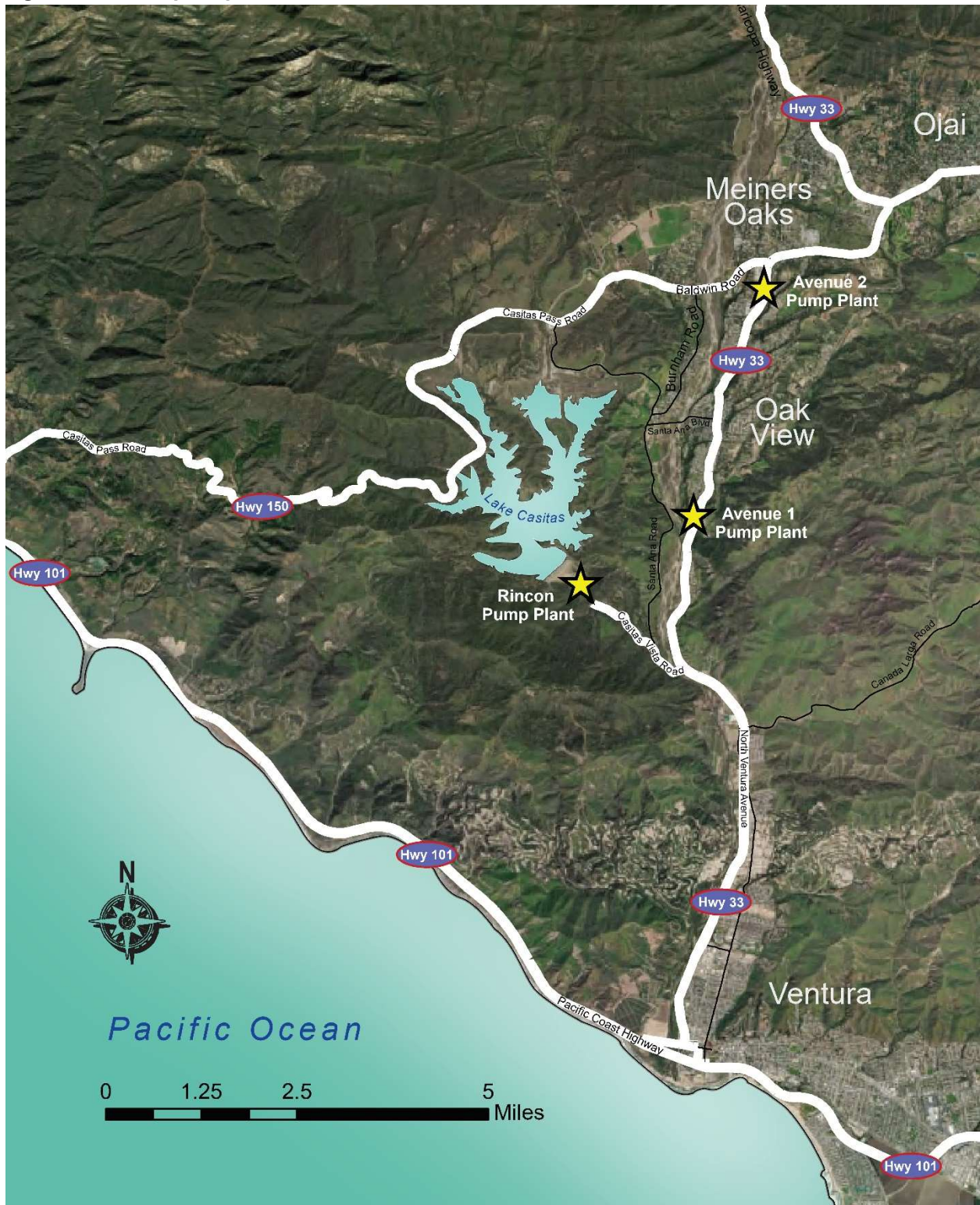


Figure 2 Conceptual Site Plan – Rincon Pump Plant

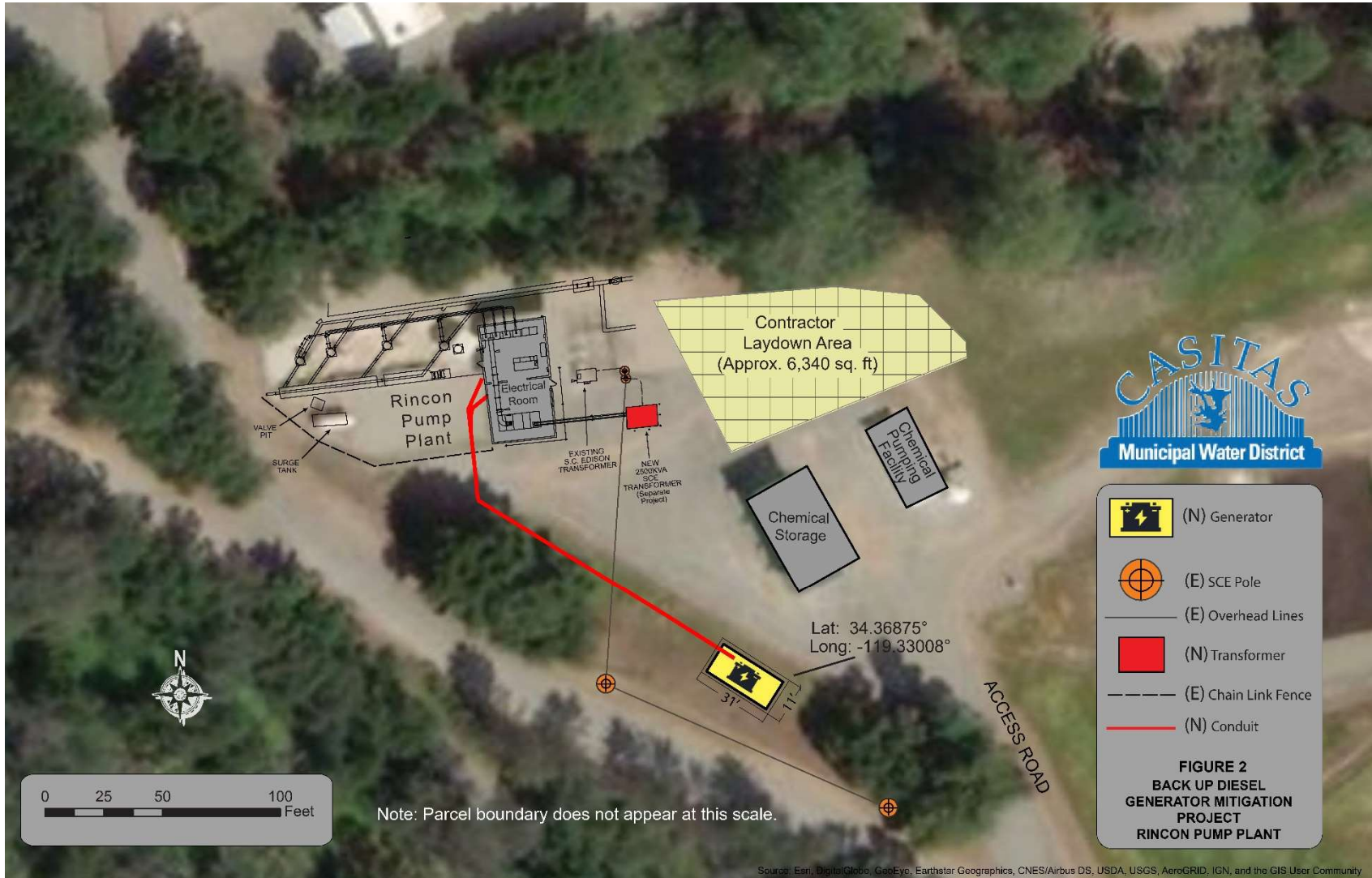


Figure 3 Conceptual Site Plan – Avenue 1 Pump Plant

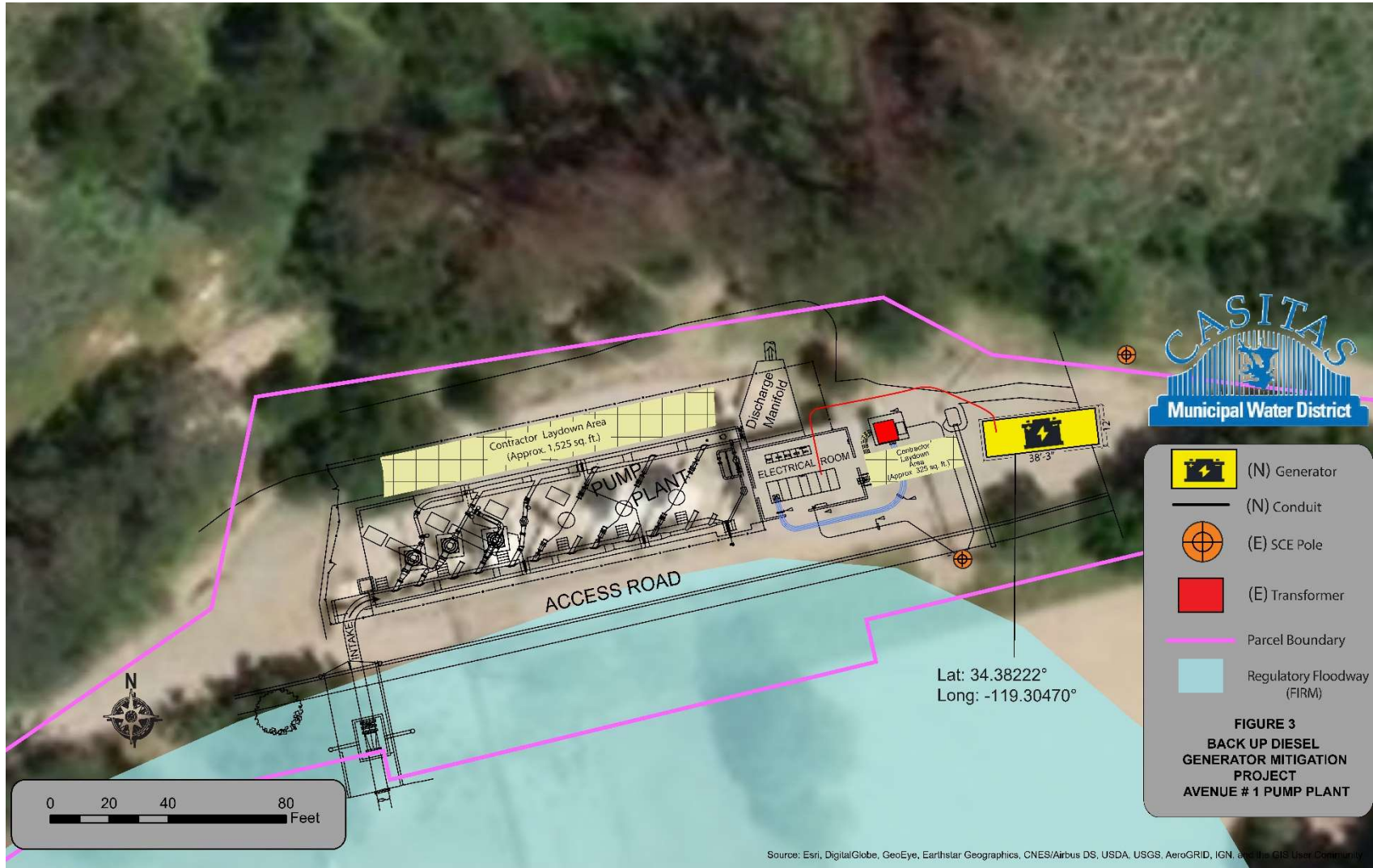
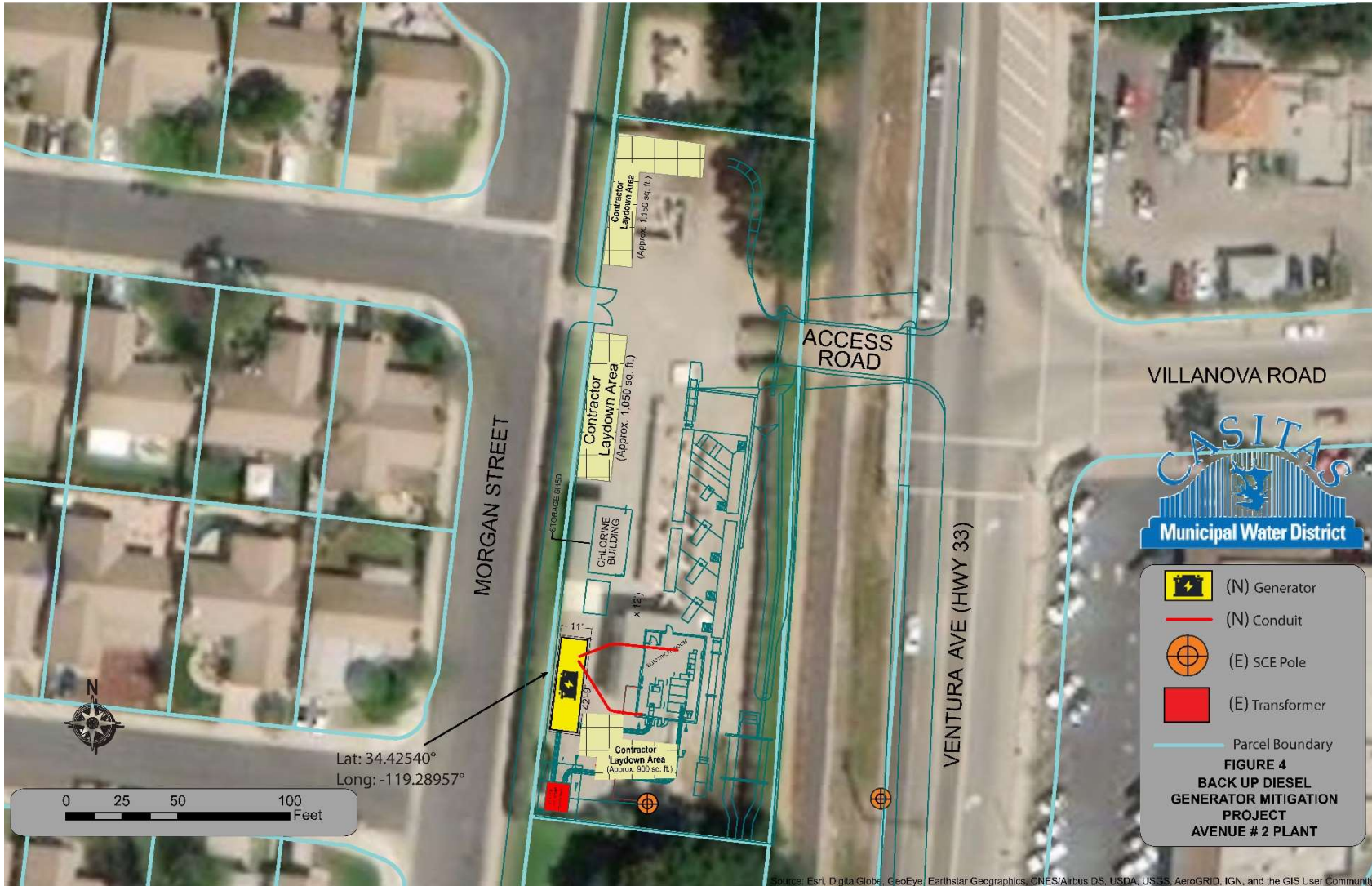


Figure 4 Conceptual Site Plan – Avenue 2 Pump Plant



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

To: Office of Planning and Research
P.O. Box 3044, Room 113
Sacramento, CA 95812-3044

County Clerk
County of: _____

From: (Public Agency): _____

(Address)

Project Title: _____

Project Applicant: _____

Project Location - Specific:

Project Location - City: _____ Project Location - County: _____

Description of Nature, Purpose and Beneficiaries of Project:

Name of Public Agency Approving Project: _____

Name of Person or Agency Carrying Out Project: _____

Exempt Status: (check one):

- Ministerial (Sec. 21080(b)(1); 15268);
- Declared Emergency (Sec. 21080(b)(3); 15269(a));
- Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- Categorical Exemption. State type and section number: _____
- Statutory Exemptions. State code number: _____

Reasons why project is exempt:

Lead Agency
Contact Person: _____ Area Code/Telephone/Extension: _____

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? Yes No

Signature: _____ Date: _____ Title: _____

Signed by Lead Agency Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Date Received for filing at OPR: _____

**CASITAS MUNICIPAL WATER DISTRICT
MEMORANDUM**

TO: BOARD OF DIRECTORS
FROM: MICHAEL FLOOD, GENERAL MANAGER
SUBJECT: ON-CALL ENGINEERING SERVICES FOR FY 2021-22
DATE: 06/22/2022

RECOMMENDATION:

- Approve, and Authorize Board President to sign, Agreements with: 1) Michael K. Nunley & Associates, Inc.; 2) Water Works Engineers, LLC; 3) MNS Engineers, Inc.; 4) Kennedy/Jenks Consultants, Inc. and 5) Cannon Corporation, for on-call engineering services for Fiscal Year 2022-23

BACKGROUND:

The Board authorized annual Agreements with several engineering firms in fiscal year 2021-22 to support implementation of capital projects within the Casitas and Ojai water systems. These agreements included provisions for extension of no more than two additional years, which were implemented for five firms:

1. Michael K. Nunley & Associates, Inc.
2. Water Works Engineers, LLC
3. MNS Engineers, Inc.;
4. Kennedy/Jenks Consultants, Inc.
5. Cannon Corporation.

All the agreements include provisions to extend the term of each Agreement for additional one-year terms. Based on current projects underway and anticipated projects in FY 2022-23, these services are necessary for the District to continue capital projects and provide support to Operations and Maintenance.

FUNDING SOURCE:

Funding for individual projects is included as part of the Casitas System Capital budget and Ojai System Capital budget for FY 2022-23.

**CASITAS MUNICIPAL WATER DISTRICT
MEMORANDUM**

TO: BOARD OF DIRECTORS
FROM: MICHAEL FLOOD, GENERAL MANAGER
SUBJECT: ON-CALL ENVIRONMENTAL CONSULTING SERVICES FOR FY 2022-23
DATE: 06/22/22

RECOMMENDATION:

- Approve, and Authorize Board President to sign, Agreements for on-call environmental consulting services for Fiscal Year 2022-23 with: Provost & Pritchard Consulting Group; Rincon Consultants; Padre Associates, Inc.; and Catalyst Environmental Solutions

BACKGROUND:

A Request for Qualifications was issued in April 2022 to solicit Statements of Qualifications (SOQs) for on-call environmental services for fiscal year 2022-23. Services to be provided may include preparation of studies and documents to comply with California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA), permitting support with regulatory agencies, and monitoring of construction mitigation measures.

Seven SOQs were received and reviewed by District Engineering staff. References for similar project experience were also checked. Based on the scoring, ranking and reference checks, On-Call Environmental Services agreements are recommended with:

- Provost & Pritchard Consulting Group
- Rincon Consultants, Inc.
- Padre Associates, Inc.
- Catalyst Environmental Solutions

The agreements include provisions to extend the term of each Agreement for additional one-year terms for a maximum of two additional years.

FUNDING SOURCE:

Funding for individual projects is included as part of the Casitas System capital budget and Ojai System capital budget for FY 2022-23.

**CASITAS MUNICIPAL WATER DISTRICT
MEMORANDUM**

TO: BOARD OF DIRECTORS
FROM: MICHAEL FLOOD, GENERAL MANAGER
SUBJECT: ON-CALL GEOTECHNICAL SERVICES FOR FY 2022-23
DATE: 06/22/22

RECOMMENDATION:

- Approve, and Authorize Board President to sign, Agreements for on-call geotechnical services for Fiscal Year 2022-23 with: NV5 West, Inc; Bajada Geosciences, Inc.; and Yeh and Associates, Inc.

BACKGROUND:

A Request for Qualifications was issued in April 2022 to solicit Statements of Qualifications (SOQs) for on-call geotechnical services for fiscal year 2022-23. Services to be provided may include materials sampling and testing, drilling and subsurface investigation, geological and geotechnical engineering, and pavement evaluation.

Seven SOQs were received and reviewed by District Engineering staff. References for similar project experience were also checked. Based on the scoring, ranking, and reference checks, On-Call Geotechnical Services agreements are recommended with:

- NV5 West, Inc.
- Bajada Geosciences, Inc.
- Yeh and Associates, Inc.

The agreements include provisions to extend the term of each Agreement for additional one-year terms for a maximum of two additional years.

FUNDING SOURCE:

Funding for individual projects is included as part of the Casitas System capital budget and Ojai System capital budget for FY 2022-23.

**CASITAS MUNICIPAL WATER DISTRICT
MEMORANDUM**

TO: BOARD OF DIRECTORS

FROM: MICHAEL FLOOD, GENERAL MANAGER

SUBJECT: EXTENSION OF CONTRACT FOR ASPHALT PAVING FY22-23
SPECIFICATION NO. 21-439

DATE: June 22, 2022

RECOMMENDATION:

- Extend the contract for Asphalt Paving, Specification No. 21-439 for Fiscal Year (FY) 2022-2023 to BSN Construction Inc. and Wingate Earthworks; and the President of the Board execute the agreements for said work.

BACKGROUND AND DISCUSSION:

Repairs to pipelines and water service lines require excavation, causing damage to asphalt roadways. Casitas crews cover the damaged area with a temporary patch. This contract solicited bids for FY21-22 to install permanent asphalt patches meeting City, County, and State requirements using the awarded contractors to complete patch lists. The project was advertised on the District's website. Two bids were received. A "sample" patch list was used as the basis to compare unit prices. In June 2021 the Board awarded contracts to BSN Construction Inc. (BSN) and Wingate Earthworks (Wingate).

The contract documents included language: "It is anticipated that the contract term will be for a minimum of one year with provisions for mutually-agreed renewal for up to two additional years. In addition, the District may award to more than one, but not more than two, contractors if the bid pricing is favorable to do so." BSN and Wingate have agreed to keep their pricing from FY21-22 for FY22-23.

FINANCIAL IMPACT:

The proposed budget for FY 2022-23 includes \$250,000 for the project. Patch lists will be provided to each contractor as necessary dependent on leaks and breaks.



CASITAS MUNICIPAL WATER DISTRICT

HYDROLOGY REPORT

WATER YEAR 2021

June 2022

Prepared by Virgil Clary, PE, Project Manager



TABLE OF CONTENTS

1. INTRODUCTION	1
2. WATER YEAR 2021 SUMMARY	5
2.1. Rainfall	5
2.1.1. WY 2021	5
2.2. Streamflow Conditions.....	5
2.2.1. WY 2021	5
2.3. Lake Storage and System Deliveries	7
2.3.1. WY 2021	7
2.4. Ambient Air Temperatures	8
2.4.1. WY 2021	8
3. HYDROLOGY STATIONS	8
3.1. Historical Hydrology Period 1959 through 2021	8
3.2. Trends	9
3.2.1. Ten-Year Moving Average of Mean Precipitation.....	9

Tables

- 2-1 WY 2021 Diversions**
- 2-2 WY 2021 Storm Peaks**
- 2-3 WY 2021 Casitas Reservoir Direct Inflow**
- 3-1 Hydrology Stations**

Figures

- 1-1 Watershed of Lake Casitas**
- 1-2 Thomas Fire Boundary**
- 3-1 Casitas Reservoir Storage Volume 1970-2021**
- 3-2 Progressive Ten-Year Mean Precipitation**

Appendix A – Rainfall Data

Appendix B – Streamflow Gaging Station Data

Appendix C – Fisheries Storm Peak Logs

Appendix D – Casitas Reservoir Operational Data

Appendix E – Reservoir Elevation Data

Appendix F – System Delivery Data for Mira Monte Well and Ojai Water System

Appendix G – Ambient Air Temperature Data

Appendix H – Historical Hydrology Data



1. INTRODUCTION

Casitas Municipal Water District (CMWD or Casitas), in cooperation with the Ventura County Watershed Protection District (VCWPD) and the U.S. Geological Service (USGS), collects hydrology data on the Ventura River system. Figure 1-1 shows the watershed boundaries including drainage areas, stream gaging stations, and weather stations. The hydrology data is a valuable asset for developing an understanding of the water resources of the Ventura River system. Since 1981, CMWD has summarized the data into a series of annual reports. This report presents information and data for the 2020–2021 Water Year (WY 2021). Data is also presented for Calendar Year 2021 for comparison to historical data.

Casitas acquired the Ojai Water System in June 2017 which serves a population of 6,801 as of December 31, 2020. The main water source for this system is a wellfield which draws from the Ojai Valley Groundwater Basin, located within the San Antonio Creek Watershed, a sub-basin to the Ventura River Watershed. The Ojai Water System is supplemented by surface water deliveries from Casitas Reservoir (also referred to as Lake Casitas herein), particularly in times of drought and/or high demand when aquifers are typically depleted and well production is reduced or limited.

Ventura County experienced a major fire (the Thomas Fire) in WY 2018 which burned nearly the entire watershed, as shown in Figure 1-2. Hydrologic impacts from the Thomas Fire are subsiding with less impacts observed in WY 2021 than previous affected years.

Post-fire run-off deposited fine sediment in the stream channels which appears to have reduced streambed percolation, resulting in prolonged spring and summer time streamflow, and an increased duration of surface connection between the upper portions of the Ventura River watershed and the Pacific Ocean. Historically, Robles does not experience surface flow during the summer and fall in all but well above-average rainfall years. Surface flow was present at Robles since the first storm event following the Thomas Fire through June 10, 2021 when the flow reading reached 0 cfs through the facility. Minimal storm runoff occurred in 2020 and early 2021 which contributed to the end of flow through the facility, but it also indicates runoff conditions from the watershed are returning to pre-Thomas Fire conditions.

Streamflow monitoring was also impacted by the Thomas Fire as minimal scouring occurred in WY 2021 at Santa Ana/Coyote Creeks. Data from gaging stations continue to be impacted by heavy sediment loads deposited during post-fire storm events. Further discussion of the impacts and corrective actions taken is included in Section 2.2 herein.

Data from an additional rainfall station located on Ojai’s East End and a San Antonio Creek gaging station are included in this report to reflect hydrologic conditions within the San Antonio Creek Watershed. Ojai Water System Sources and Deliveries are also included in this report.

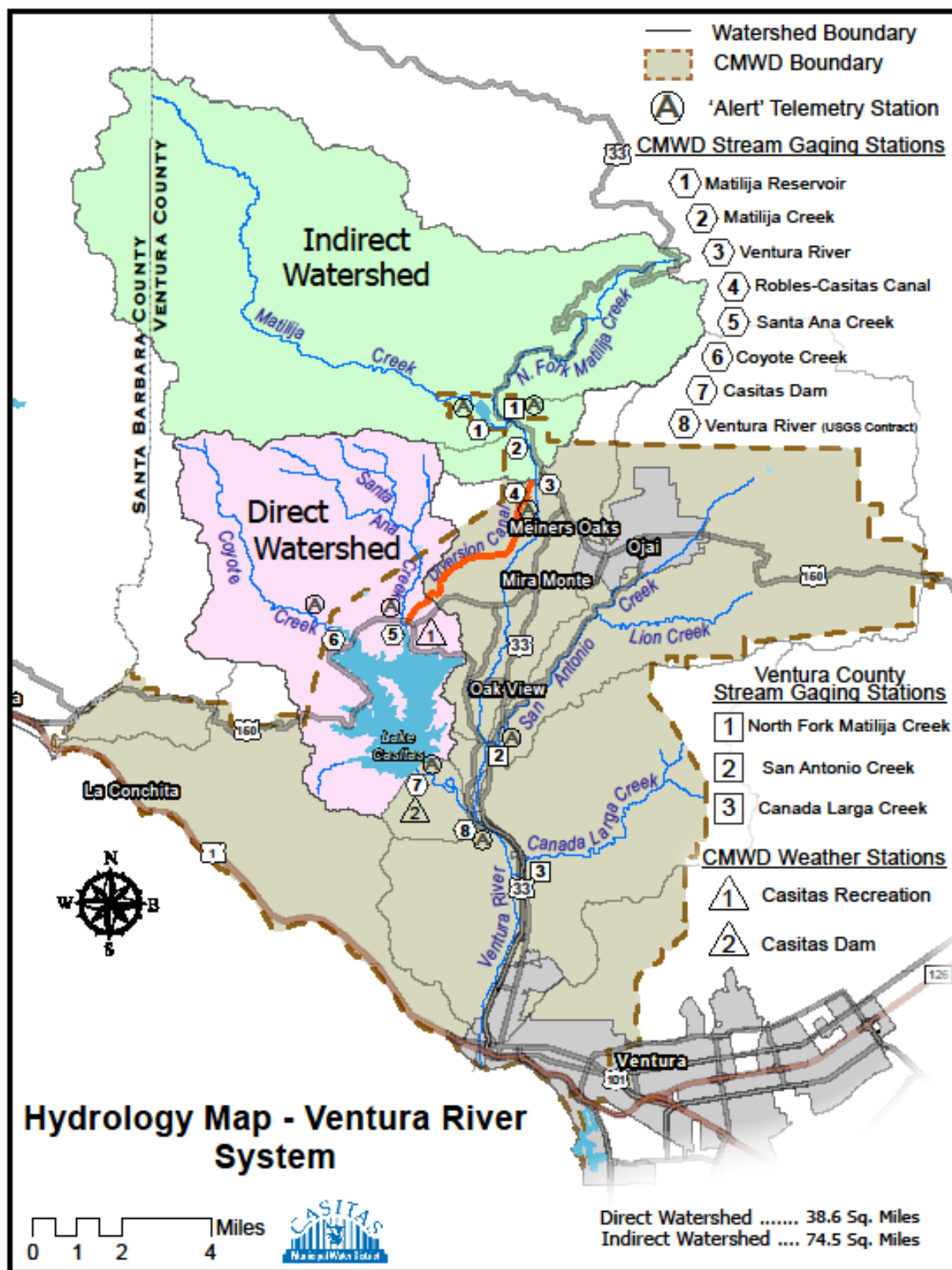


FIGURE 1-1 – Watershed of Lake Casitas

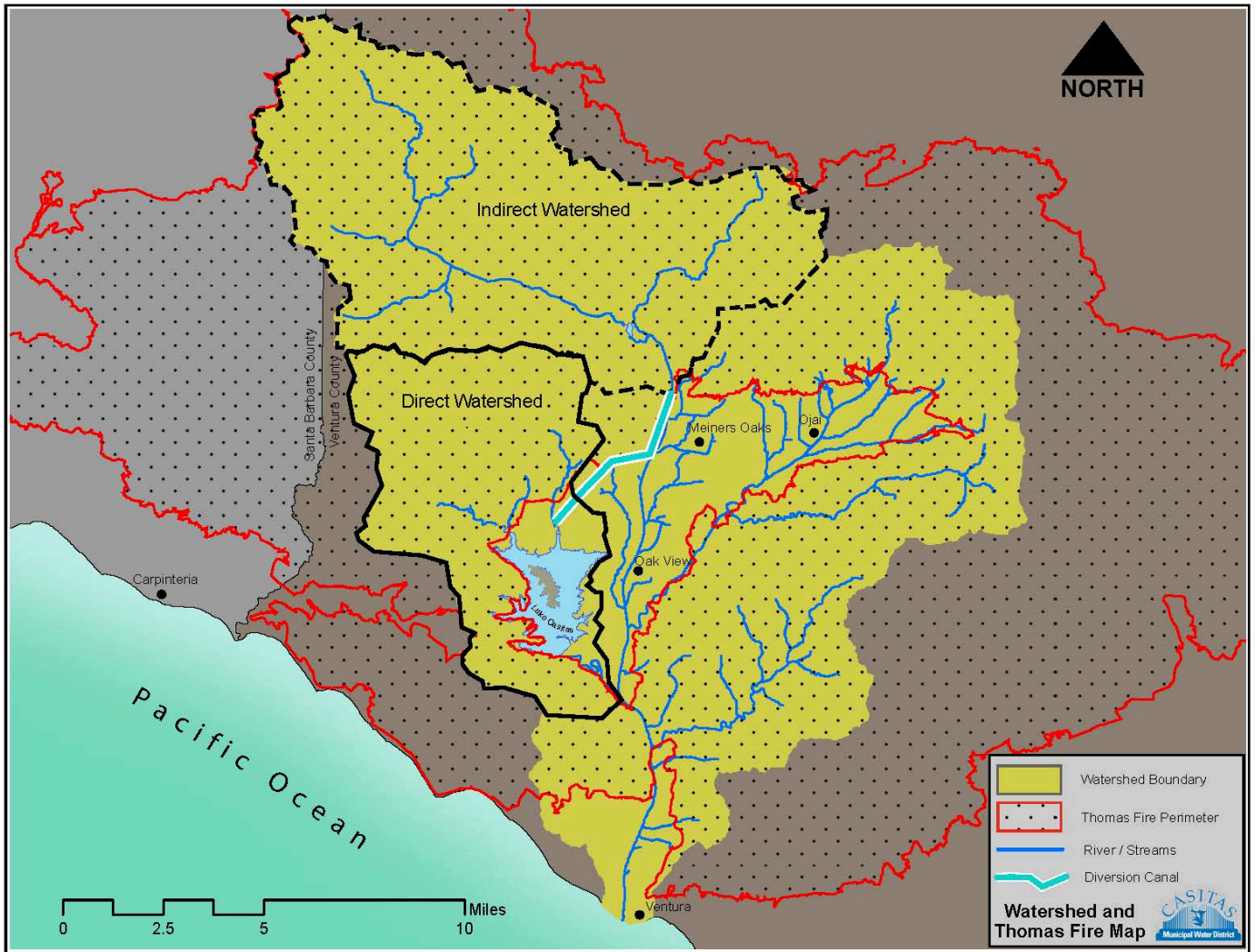


FIGURE 1-2 – Thomas Fire Boundary

2. WATER YEAR 2021 SUMMARY

The Water Year (WY) is a standard used for reporting hydrological cycles. It begins on October 1 of the preceding year and ends September 30 of the named water year. For this report:

- WY 2021 began on October 1, 2020 and ended September 30, 2021

There are four key elements of collected data evaluated this report: 1) rainfall, 2) streamflow conditions, 3) lake storage and system deliveries and 4) ambient air temperatures. Each of these elements are monitored and recorded by CMWD on a daily basis. The following subsections are summaries of the hydrologic characteristics of WY 2021.

2.1.Rainfall

Rainfall and evaporation data are collected on a daily basis by Casitas at two stations, one at the Casitas Dam and one at the Lake Casitas Recreational Area (LCRA). The methods for data collection are standardized for consistency. Rainfall data for Matilija Dam and Thacher School are obtained from VCWPD. Raw data is provided in Appendix A.

2.1.1. WY 2021

The average of the four rainfall stations was 6.65 inches for WY 2021. This is below the long-term average of 23.83 inches. Casitas Dam received 7.07 inches while Matilija Dam received 6.48 inches.

The bulk of precipitation at Casitas Dam fell in the months of December, January, and March when cumulative monthly rainfall was 1.69, 3.99, and 1.29 inches, respectively. The highest daily rainfall was recorded on January 29, 2021 with 2.84 inches of rainfall measured at Casitas Dam.

2.2.Streamflow Conditions

Streamflow conditions are assessed by collecting data at key points in the Ventura River system. Gage station locations are shown in Figure 1-1. Mean daily stream flow data is included in Appendix B.

2.2.1. WY 2021

Due to the ongoing drought, streamflow conditions were below average across the basin. Preliminary data provided by VCWPD indicates discharge from North Fork Matilija Creek totaled 875 acre-feet (AF) between October 1, 2020 and September 30, 2021. Discharge from Matilija Dam measured at the Matilija Hot Springs gage totaled 2,418 AF with a peak mean daily flow of approximately 29 cubic feet per second (cfs) on January 29, 2021¹.

Surface flow at the measurement weir at Robles was present October 1, 2020 and continued through June 10, 2021 and then again from August 7 through August 11, 2021 due to a download from the Matilija Dam. During that period, 2,234 AF was released downstream².

Diversions to the Casitas Reservoir began on January 28, 2020. Prior to January 28, all inflow was released downstream to allow for aquifer levels to rise to the extent that would be expected under natural conditions for the

¹ Matilija Dam measurement from data compiled by CMWD based on instantaneous readings shown as an average daily flow in Appendix B.

² Robles weir measurement from data compiled by CMWD based on instantaneous readings shown as an average daily flow in Appendix B.

time of year and type of year (*Trial Operating Criteria for Robles Casitas Diversion Facilities, 1959*). The diversion canal was operated for 4 days and 33 AF was diverted during WY 2021 as shown in Table 2-1³.

Table 2-1
WY 2021 Diversions

Month	Days	Volume Diverted (AF)
October 2020	0	0
November 2020	0	0
December 2020	0	0
January 2021	3	31
February 2021	1	2
March 2021	0	0
April 2021	0	0
May 2021	0	0
June 2021	0	0
July 2021	0	0
August 2021	0	0
September 2021	0	0
TOTAL	4	33

There were no storm peaks that met the Biological Opinion parameters to initiate supplemental downstream releases for fish passage. All flow was released downstream when inflow was less than the required supplemental release.

Coyote Creek and Santa Ana Creek drainage areas contribute directly to Lake Casitas storage. Coyote Creek and to a lesser extent Santa Ana Creek gaging station continues to be impacted by sediment transport and re-channelization following the Thomas Fire, rendering poor quality flow data. Direct inflow into Lake Casitas, which is reported in the Casitas Reservoir Operation data (Appendix C), was used as a surrogate for Coyote and Santa Ana creeks as the major tributaries, but also accounts for other direct runoff including smaller tributaries such as Ayers, Chismahoo, Willow, and Poplin Creeks. Direct inflow is a zero sum calculation and accounts for change in Lake Casitas storage not accounted for by precipitation, Ventura River Diversions, evaporation, precipitation, and releases to the Marion Walker Water Treatment Plant. This value may be negative at times which is attributed to approximation in evaporation coefficients and water loss to infiltration. Only months with a positive direct inflow values are considered as a surrogate for true direct inflow into Lake Casitas and totaled 757 AF for WY 2021 with February 2021 accounting for 201 AF of total direct inflow as shown in Table 2-2⁴.

³ Robles canal measurement from data compiled by CMWD based on instantaneous readings shown as an average in Appendix B.

⁴ Direct inflow into Lake Casitas is shown in Appendix D.

Table 2-2
WY 2021 Casitas Reservoir Direct Inflow

Month	Direct Flow Volume (AF) ⁵
October 2020	N/A
November 2020	N/A
December 2020	N/A
January 2021	91
February 2021	201
March 2021	83
April 2021	83
May 2021	80
June 2021	118
July 2021	N/A
August 2021	N/A
September 2021	101
TOTAL	757

2.3.Lake Storage and System Deliveries

Water storage volumes for system reservoirs, Casitas Dam and Matilija Dam, were ascertained by the daily recording of the reservoir elevation and applying the elevation number to a storage table for each reservoir. Casitas Reservoir data is included in Appendix C and Matilija Reservoir Data is provided in Appendix E. System delivery data for Mira Monte Well and the Ojai Water System can be found in Appendix F.

2.3.1. WY 2021

Lake Casitas Reservoir had a net decrease in water storage for WY 2021. Lake elevation was 500.17 feet above mean sea level (MSL) on October 1, 2020 and ended on September 30, 2020 at 487.20 feet above MSL, corresponding to 79,683 AF of storage in Lake Casitas at the end of the WY. The reservoir’s 12.97-foot decrease in elevation resulted in a net loss of 18,094 AF. Storage increased by 501 AF during a five day period of January; net monthly storage losses occurred outside of that period.

A new Casitas Reservoir storage rating table was adopted after completion of a LIDAR and bathymetric study resulting in a re-calculated reservoir capacity of 237,760 acre-feet (down from 254,000 acre-feet). This table was implemented on October 1, 2017 (start of WY 2018) and Casitas Reservoir storage reported from that date forward will reflect this adjustment.

Water deliveries from the reservoir to the main conveyance system totaled 12,468 AF for the Calendar Year. This is up 15 percent from 2020 and down 13 percent from the average deliveries during the previous ten years. Mira Monte well production was 219 AF during WY 2021. Deliveries within the Ojai Water System totaled 1,714 AF during WY 2021; 1,229 AF of which was sourced from the Ojai Water System Wellfield with the additional 484 AF coming from Lake Casitas.

⁵ N/A indicates the month is not applicable because the value was negative.

Casitas did not exercise water rights to divert water released from Matilija Dam. At the request of the State of California Department of Water Resources Division of Safety of Dams (DSOD), the valves were operated in August 2021. Casitas conducted controlled releases from Matilija Dam at the dam on August 2-12 which totaled 0 AF of diversion at Robles.

2.4.Ambient Air Temperatures

Data was recorded by CMWD staff at two locations, Casitas Dam and LCRA. These measurements are made on a daily basis and include the maximum and minimum ambient air temperatures and wind speed. This data is included in Appendix G.

2.4.1. WY 2021

Two temperature records dating back to 1960 was broken during the 2021 calendar year: highest monthly maximums (January for Casitas Dam and Casitas Recreation Area).

3. HYDROLOGY STATIONS

Table 3-1 shows responsible agencies for various hydrology stations throughout the watershed.

**Table 3-1
Hydrology Stations**

Type	Location	Agency
Reservoir	Casitas Dam	Casitas
Reservoir	Matilija Dam	VCWPD
Rainfall and Evaporation	LCRA	Casitas
Rainfall and Evaporation	Casitas Dam	Casitas
Rainfall	Matilija Dam	VCWPD
Rainfall	Thacher School	VCWPD
Streamflow	Matilija Creek at Matilija Hot Springs	Casitas/VCWPD
Streamflow	Ventura River Near Meiners Oaks	Casitas
Streamflow	Robles-Casitas Canal	Casitas
Streamflow	Ventura River near Ventura (Foster Park)	USGS
Streamflow	North Fork Matilija at Matilija Hot Springs	VCWPD
Streamflow	San Antonio Creek at Old Creek Road	VCWPD
Streamflow	Santa Ana Creek near Oak View	Casitas/VCWPD
Streamflow	Coyote Creek near Oak View	Casitas/VCWPD

3.1.Historical Hydrology Period 1959 through 2021

The historical data was updated for the reporting period and is presented in Figure 3-1 for the period from 1959 through 2021. The historical data includes summaries for the Casitas Reservoir operation, Robles Diversion, rainfall, and ambient air temperature. Storage volume, represented by a solid line, is reservoir storage at the start of each calendar year (elevation measured on last day of previous calendar year). Rainfall, represented by data points with

drop lines, is the three-station water year average for Casitas Dam, LCRA, and Matilija Dam rain gages. Reservoir volume prior to 1970 (not shown) represents initial filling period after Casitas Dam completion in 1959⁶.

The change in Casitas Reservoir capacity was made due to performance of a bathymetric survey in 2017 which decreased the previously used 254,000 AF to 237,760 AF. Calendar year 2021 provided a net decrease in the storage volume as shown in Figure 3-1.

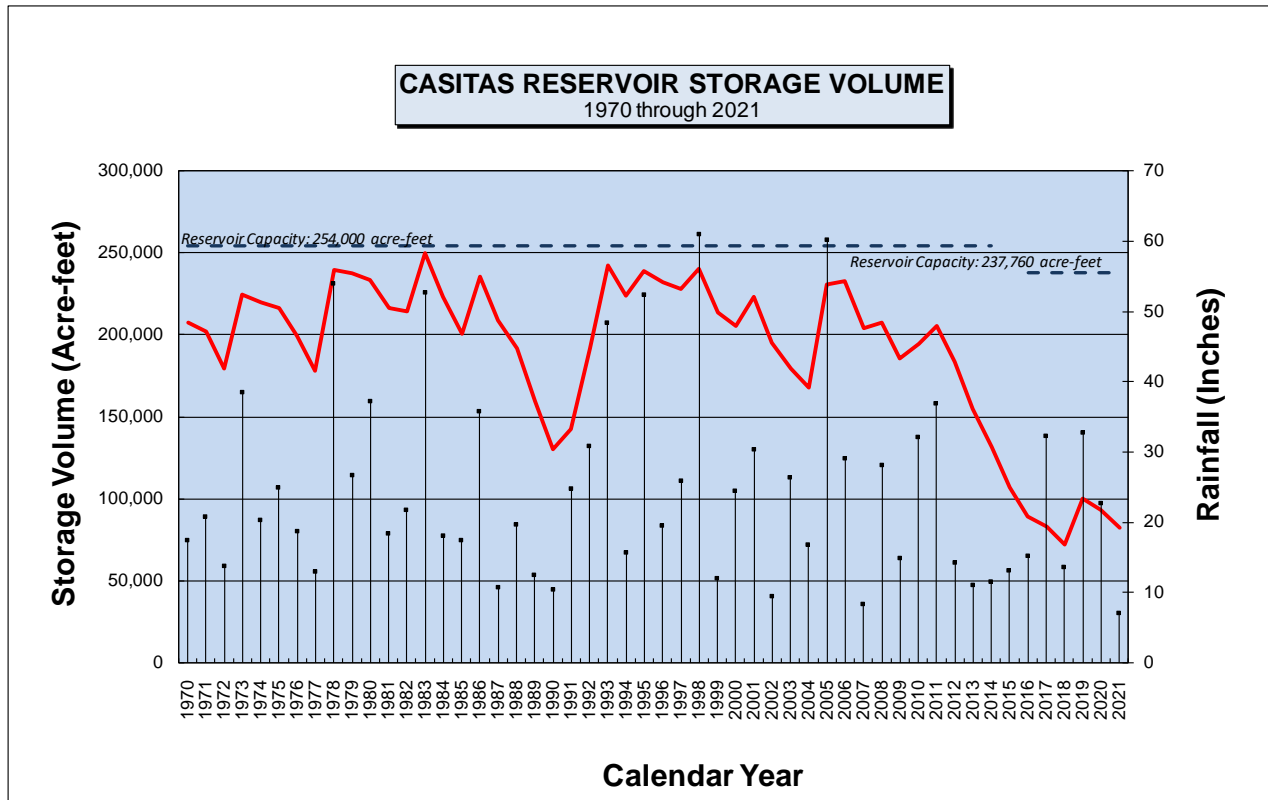


FIGURE 3-1 – Casitas Reservoir Storage Volume 1970-2021

3.2. Trends

The historical section of this summary report contains data tables and figures to illustrate trends experienced by CMWD pertaining to rainfall and water use.

3.2.1. Ten-Year Moving Average of Mean Precipitation

The trend presented in Figure 3-2 is a ten-year moving average of precipitation from 1880 to present and was created by calculating an average of a water year’s three-station average rainfall combined with the previous nine years. The ten-year moving average is represented by the solid line traversing across the overall average for the period (24.3 inches). Rainfall data for all three stations are available since 1959, rainfall prior to 1959 was assembled using comparable nearby stations and/or correlation factors with other available stations within the watershed. The

⁶ Historical hydrology data is provided in Appendix H.

trend has resulted in what appears to be a somewhat sinusoidal curve, illustrating reoccurring periods of wet and dry conditions.

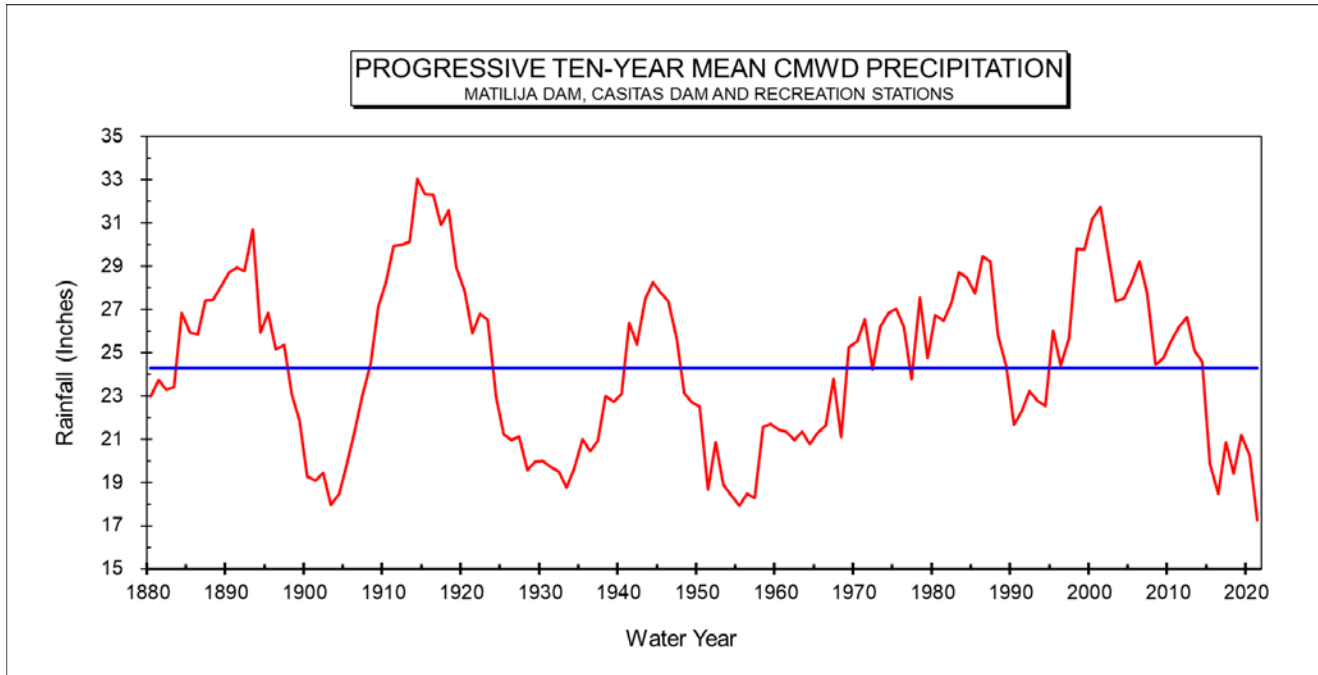


FIGURE 3-2 – Progressive Ten-Year Mean Precipitation

Appendix A

Rainfall Data

VENTURA COUNTY, CALIFORNIA
WATER SURVEY
DAILY RAINFALL RECORD

STATION: **Casitas Dam**
 OBSERVER: CMWD Damtender
 AUTHORITY: Casitas Municipal Water District
 ADDRESS: P.O. Box 37, Oak View, CA 93022
 COMPILED: V. Clary

NUMBER: 4
 OBSER. TIME: 0800
 LATITUDE: 34d22m
 LONGITUDE: 119d20m
 ELEV:

2020-2021

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												
2												
3												
4												
5												
6												
7		0.18										
8		0.01										
9												
10						0.51						
11						0.41						
12						0.10						
13						0.07						
14								0.02				
15						0.19						
16						0.01						
17												
18												
19												
20	0.01											
21												
22												
23												
24				0.33								
25				0.06								
26												
27				0.06								
28			0.65	0.62								
29			1.04	2.84								
30				0.08								
31												
Mo Total	0.01	0.19	1.69	3.99	0	1.29	0	0.02	0	0	0	0
Yr Total	0.01	0.20	1.89	5.88	5.88	7.17	7.17	7.19	7.19	7.19	7.19	7.19

Rainfall in inches

D:\Shared drives\Hydrology\Rainfall\Daily\DailyRain2020-21.xlsx\THACHER SCHOOL

VENTURA COUNTY, CALIFORNIA
WATER SURVEY
DAILY RAINFALL RECORD

STATION: **Lake Casitas Recreation Area**
 OBSERVER: CMWD Recreation staff
 AUTHORITY: Casitas Municipal Water District
 ADDRESS: P.O. Box 37, Oak View, CA 93022
 COMPILED: V. Clary

NUMBER: 204
 OBSER. TIME: 0800
 LATITUDE: 34d25m
 LONGITUDE: 119d20m
 ELEV: 592

2020-2021

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												
2												
3												
4												
5												
6												
7		0.18										
8		0.01				0.01						
9												
10						0.60						
11						0.39						
12					0.03	0.15						
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24				0.10								
25				0.05								
26												
27				0.10								
28			0.90	0.76								
29			1.75	2.00								
30				0.19								
31												
Mo Total	0	0.19	2.65	3.20	0.03	1.15	0	0	0	0	0	0
Yr Total	0	0.19	2.84	6.04	6.07	7.22	7.22	7.22	7.22	7.22	7.22	7.22

Rainfall in inches

VENTURA COUNTY, CALIFORNIA
WATER SURVEY
DAILY RAINFALL RECORD

STATION:	Matilija Dam	NUMBER:	134
OBSERVER:	Automated	OBSER. TIME:	0800
AUTHORITY:	Ventura County Watershed Protection District	LATITUDE:	34°29' N
ADDRESS:	800 S. Victoria Ave, Ventura, CA 93009	LONGITUDE:	119°18' W
COMPILED:	Hydrologist	ELEV:	1060 ft

2020-21

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												
2												
3												
4												
5												
6												
7		0.04										
8												
9		0.01										
10						0.47						
11						0.21						
12						0.43						
13						0.01						
14												
15						0.13						
16								0.01				
17												
18												
19												
20												
21												
22												
23												
24				0.05								
25				0.01								
26							0.01					
27				0.09			0.03					
28			0.99	0.58			0.01					
29			1.01	2.26								
30				0.12								
31				0.01								
Mo Total	0.00	0.05	2.00	3.12	0.00	1.25	0.05	0.01	0.00	0.00	0.00	0.00
Yr Total	0.00	0.05	2.05	5.17	5.17	6.42	6.47	6.48	6.48	6.48	6.48	6.48

Rainfall in inches

**Data is preliminary and subject to revision - VCWPD*

VENTURA COUNTY, CALIFORNIA
WATER SURVEY
DAILY RAINFALL RECORD

STATION:	Ojai - Thacher School	NUMBER:	059
OBSERVER:	Automated	OBSER. TIME:	0800
AUTHORITY:	Ventura County Watershed Protection District	LATITUDE:	34°28' N
ADDRESS:	800 S. Victoria Ave, Ventura, CA 93009	LONGITUDE:	119°10' W
COMPILED:	Hydrologist	ELEV:	1440 ft

2020-21

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												
2												
3												
4												
5												
6												
7		0.07										
8												
9		0.01										
10						0.48						
11						0.25						
12					0.01	0.09						
13												
14						0.01						
15						0.20						
16						0.02		0.02				
17								0.04				
18												
19												
20						0.02						
21						0.01						
22							0.01					
23												
24				0.11								
25				0.04								
26				0.02			0.02					
27				0.04			0.02					
28			0.83	0.16								
29			0.71	2.51								
30				0.12								
31												
Mo Total	0.00	0.08	1.54	3.00	0.01	1.08	0.05	0.06	0.00	0.00	0.00	0.00
Yr Total	0.00	0.08	1.62	4.62	4.63	5.71	5.76	5.82	5.82	5.82	5.82	5.82

Rainfall in inches

**Data is preliminary and subject to revision - VCWPD*

Appendix B
Streamflow Gaging Station Data

Matilija Creek at Matilija Hot Springs

USGS #: 11115500
 VCWPD #: 602
 DATE INSTALLED: 10/1927
 MAINTAINED BY: CMWD/VCWPD

LATITUDE: 34°28'58" N
 LONGITUDE: 119°18'7" W
 ELEVATION: 900 ft
 DRAINAGE AREA: 54 sq mi

WATER YEAR OCTOBER 2020 TO SEPTEMBER 2021
 Daily Mean Discharge, cubic feet per second

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3	3	4	5	13	5	3	2	2	1	0.3	1
2	3	3	3	5	11	5	3	2	2	1	3	1
3	3	3	3	5	10	6	3	2	2	0.9	7	1
4	3	3	4	5	10	6	3	2	1	0.8	7	1
5	3	3	4	5	9	5	4	2	1	0.9	7	0.9
6	3	3	3	5	9	5	3	2	2	0.9	7	0.9
7	3	4	3	5	8	5	3	2	2	0.9	7	0.9
8	3	4	3	4	8	5	3	2	2	0.8	7	1
9	3	4	3	4	8	5	3	2	2	0.8	7	2
10	3	4	3	5	7	8	3	2	1	0.8	7	2
11	3	4	3	4	7	8	3	2	1	0.7	6	2
12	3	4	3	4	7	7	3	2	1	0.7	2	2
13	3	4	3	4	7	6	3	2	1	0.8	1	2
14	3	4	3	4	6	6	4	2	1	0.9	0.9	2
15	3	4	3	4	6	7	3	2	1	0.9	0.9	2
16	3	4	3	4	6	6	3	3	1	0.9	0.9	1
17	3	4	3	4	6	6	3	3	1	0.8	0.9	1
18	3	4	3	4	6	5	3	2	1	0.8	0.9	1
19	3	4	3	4	6	5	3	2	1	0.8	1	0.9
20	3	4	3	4	6	5	3	2	1	0.7	1	0.9
21	3	4	3	4	6	5	3	2	1	0.8	1	1
22	3	4	3	4	6	5	3	2	1	0.6	1	1
23	4	4	3	5	6	5	3	2	1	0.6	1	1
24	4	4	3	5	6	5	3	2	1	0.6	1	0.9
25	4	4	3	5	5	5	3	1	1	0.6	1	0.9
26	4	4	3	4	6	5	3	1	1	0.7	1	1
27	4	4	3	7	5	4	3	1	1	0.6	1	1
28	4	4	9	12	5	4	3	2	0.9	0.5	1	1
29	4	4	6	29	----	4	2	2	0.9	0.5	1	1
30	4	4	5	23	----	4	2	2	0.9	0.4	1	1
31	3	----	5	16	----	4	----	2	----	0.4	1	----
TOTAL	99	109	109	202	200	164	94	62	36	23	87	34
MEAN	3	4	4	7	7	5	3	2	1	0.74	3	1
MAX	4	4	9	29	13	8	4	3	2	1	7	2
MIN	3	3	3	4	5	4	2	1	1	0	0	1
ACRE FT	196	216	217	400	397	326	186	123	72	46	172	68

Estimated daily data

These data are preliminary and subject to change until checked and evaluated by Ventura County. Unverified data may contain errors that have not been checked by Hydrology staff. Ventura County does not guarantee the accuracy of these data; please note that flows may vary considerably during each day and from day to day.

North Fork Matilija Creek at Matilija Hot Springs

USGS #: 11116000
 VCWPD #: 604
 DATE INSTALLED: 01/1934
 MAINTAINED BY: VCWPD

LATITUDE: 34°29'34" N
 LONGITUDE: 119°18'23" W
 ELEVATION: 1142 ft
 DRAINAGE AREA: 15.8 sq mi

WATER YEAR OCTOBER 2020 TO SEPTEMBER 2021
 Daily Mean Discharge, cubic feet per second

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1	1	1	1	3	2	2	1	0.8	0.6	0.5	0.6
2	1	1	1	1	3	2	2	1	0.8	0.6	0.5	0.6
3	1	1	1	1	2	2	2	1	0.8	0.6	0.5	0.6
4	1	1	1	1	2	2	2	1	0.8	0.6	0.5	0.6
5	1	1	1	1	2	2	2	1	0.8	0.6	0.5	0.5
6	1	1	1	1	2	2	1	1	0.8	0.6	0.5	0.5
7	1	1	1	1	2	2	1	1	0.8	0.6	0.5	0.5
8	1	1	1	1	2	2	1	1	0.8	0.6	0.5	0.5
9	1	1	1	1	2	2	1	1	0.7	0.6	0.5	0.5
10	1	1	1	2	2	2	1	1	0.7	0.5	0.5	0.5
11	1	1	1	2	2	2	1	1	0.7	0.5	0.5	0.5
12	1	1	1	2	2	2	1	1	0.7	0.5	0.5	0.5
13	1	1	1	2	2	2	1	1	0.7	0.5	0.5	0.5
14	1	1	1	2	2	2	1	1	0.7	0.5	0.6	0.5
15	1	1	1	2	2	2	1	0.9	0.7	0.5	0.6	0.5
16	1	1	1	2	2	2	1	0.9	0.7	0.5	0.6	0.5
17	1	1	1	2	2	2	1	0.9	0.7	0.5	0.6	0.5
18	1	1	1	2	2	2	1	0.9	0.7	0.5	0.6	0.5
19	1	1	1	2	2	2	1	0.9	0.7	0.5	0.6	0.5
20	1	1	1	2	2	2	1	0.9	0.7	0.5	0.6	0.5
21	1	1	1	2	2	2	1	0.9	0.7	0.5	0.6	0.5
22	1	1	1	2	2	2	1	0.9	0.7	0.5	0.6	0.5
23	1	1	1	2	2	2	1	0.9	0.7	0.5	0.6	0.5
24	1	1	1	2	2	2	1	0.9	0.6	0.5	0.6	0.5
25	1	1	1	2	2	2	1	0.8	0.6	0.5	0.6	0.5
26	1	1	1	2	2	2	1	0.8	0.6	0.5	0.6	0.5
27	1	1	1	2	2	2	1	0.8	0.6	0.5	0.6	0.5
28	1	1	1	11	2	2	1	0.8	0.6	0.5	0.6	0.5
29	1	1	1	12	---	2	1	0.8	0.6	0.5	0.6	0.5
30	1	1	1	4	---	2	1	0.8	0.6	0.5	0.6	0.5
31	1	---	1	3	---	2	---	0.8	---	0.5	0.6	---
TOTAL	35	36	40	71	63	58	39	29	21	16	17	16
MEAN	1	1	1	2	2	2	1	1	1	1	1	1
MAX	1	1	1	12	3	2	2	1	1	1	1	1
MIN	1	1	1	1	2	2	1	1	1	0	1	1
ACRE FT	69	71	80	140	124	116	78	58	42	32	34	31

Estimated daily data

These data are preliminary and subject to change until checked and evaluated by Ventura County. Unverified data may contain errors that have not been checked by Hydrology staff. Ventura County does not guarantee the accuracy of these data; please note that flows may vary considerably during each day and from day to day.

Ventura River near Meiners Oaks (Robles)

USGS #: 11116550
 VCWPD #: 607
 DATE INSTALLED: 05/1959
 MAINTAINED BY: CMWD

LATITUDE: 34°27'49" N
 LONGITUDE: 119°17'26" W
 ELEVATION: 740 ft
 DRAINAGE AREA: 74 sq mi

WATER YEAR OCTOBER 2020 TO SEPTEMBER 2021
 Daily Mean Discharge, cubic feet per second

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2	3	4	6	15	7	4	1	1	0	0	0
2	2	3	3	6	13	7	4	2	1	0	0	0
3	2	3	3	5	12	7	4	2	1	0	0	0
4	3	3	3	5	12	7	4	1	1	0	0	0
5	3	2	3	5	11	7	4	1	1	0	0	0
6	2	2	3	5	11	7	4	1	1	0	0	0
7	1	3	3	5	11	7	4	1	1	0	1	0
8	2	3	3	5	10	7	4	2	1	0	1	0
9	2	3	3	5	10	6	4	2	1	0	1	0
10	3	4	3	5	10	10	3	1	1	0	1	0
11	3	4	4	5	9	10	3	2	0	0	1	0
12	3	4	4	5	9	9	3	1	0	0	0	0
13	2	4	4	5	9	8	4	1	0	0	0	0
14	2	3	4	5	9	8	4	1	0	0	0	0
15	2	3	4	4	9	9	3	1	0	0	0	0
16	1	3	4	4	9	8	3	2	0	0	0	0
17	1	3	4	4	8	8	3	2	0	0	0	0
18	2	3	4	4	8	7	3	1	0	0	0	0
19	2	3	4	4	8	7	2	1	0	0	0	0
20	2	3	4	4	8	7	2	1	0	0	0	0
21	2	3	4	4	7	7	2	1	0	0	0	0
22	2	3	4	4	8	6	3	1	0	0	0	0
23	2	3	4	5	8	6	3	1	0	0	0	0
24	3	3	3	5	7	5	3	1	0	0	0	0
25	3	4	4	5	7	6	3	1	0	0	0	0
26	3	4	4	4	7	7	3	1	0	0	0	0
27	3	4	4	7	7	6	3	1	0	0	0	0
28	3	4	12	16	7	6	3	1	0	0	0	0
29	3	4	9	23	---	5	2	1	0	0	0	0
30	3	4	7	20	---	5	2	1	0	0	0	0
31	3	---	6	18	---	4	---	1	---	0	0	---
TOTAL	70	98	131	208	258	214	95	38	9	0	6	0
MEAN	2	3	4	7	9	7	3	1	0	0	0	0
MAX	3	4	12	23	15	10	4	2	1	0	1	0
MIN	1	2	3	4	7	4	2	1	0	0	0	0
ACRE FT	139	194	260	412	513	425	188	75	17	0	11	0

Data is provisional and subject to revision

Robles-Casitas Canal (First Bridge)

USGS #: N/A
 VCWPD #: N/A
 DATE INSTALLED: 1958
 MAINTAINED BY: CMWD

LATITUDE: 34°27'43" N
 LONGITUDE: 119°17'34" W
 ELEVATION: 770 ft
 DRAINAGE AREA: N/A

WATER YEAR OCTOBER 2020 TO SEPTEMBER 2021
 Daily Mean Discharge, cubic feet per second

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	1	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0.40	0	0	0	0	0	0	0	0
29	0	0	0	13	---	0	0	0	0	0	0	0
30	0	0	0	3	---	0	0	0	0	0	0	0
31	0	---	0	0	---	0	---	0	---	0	0	---
TOTAL	0	0	0	16	1	0	0	0	0	0	0	0
MEAN	0	0	0	0.51	0.04	0	0	0	0	0	0	0
MAX	0	0	0	13	1	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
ACRE FT	0	0	0	31	2	0	0	0	0	0	0	0

Data is provisional and subject to revision.

Ventura River near Ventura (Foster Park)

USGS #: 11118500
 VCWPD #: 608
 DATE INSTALLED: 10/1929
 MAINTAINED BY: USGS, Water Resources Division

LATITUDE: 34°21'09" N
 LONGITUDE: 119°18'29" W
 ELEVATION: 205 ft
 DRAINAGE AREA: 187 sq mi

WATER YEAR OCTOBER 2020 TO SEPTEMBER 2021

Daily Mean Discharge, cubic feet per second

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3	2	2	2	3	2	3	3	3	1	0.89	1
2	3	2	2	2	3	2	4	4	3	1	0.90	1
3	4	2	2	2	2	3	4	4	3	1	0.77	1
4	4	2	2	2	2	2	4	4	3	1	0.72	1
5	4	2	2	2	2	2	4	3	3	1	0.93	1
6	4	2	2	2	2	2	4	3	3	0.94	1	1
7	4	2	2	2	2	3	4	3	3	1	2	1
8	4	2	2	2	2	2	4	3	3	1	2	1
9	4	2	2	2	2	3	4	3	3	1	2	1
10	4	2	2	2	2	3	4	3	3	1	2	1
11	4	2	2	2	2	3	4	3	3	1	2	1
12	3	2	2	2	2	3	4	3	3	1	2	1
13	3	2	2	2	2	3	4	3	3	2	2	1
14	4	2	2	2	2	3	4	3	2	2	2	1
15	3	2	2	2	2	3	4	3	2	1	2	1
16	3	1	2	2	2	3	4	3	2	1	2	1
17	3	1	2	2	2	3	4	3	2	1	2	1
18	3	1	2	2	2	3	4	3	2	1	2	1
19	4	1	2	2	2	3	3	3	2	1	2	0.99
20	4	1	2	2	2	3	3	3	2	1	2	0.98
21	4	1	2	2	2	3	3	3	2	1	2	0.95
22	4	2	2	2	2	3	4	3	2	1	2	0.93
23	4	2	2	3	2	3	4	3	2	1	1	0.93
24	4	2	2	2	2	3	4	3	2	1	1	0.96
25	3	2	2	2	2	3	4	3	2	1	1	0.99
26	3	2	2	2	2	3	4	3	2	1	1	0.98
27	3	2	2	3	2	3	4	3	2	1	1	1
28	3	2	3	9	2	3	3	3	1	1	1	1
29	3	2	2	13	---	3	3	3	1	0.98	1	1
30	3	2	2	4	---	3	3	3	1	0.93	1	1
31	3	---	2	3	---	3	---	3	---	0.93	1	---
TOTAL	108	57	58	80	54	90	115	97	70	37	43	31
MEAN	3	2	2	3	2	3	4	3	2	1	1	1
MAX	4	2	3	13	3	3	4	4	3	2	2	1
MIN	3	1	2	2	2	2	3	3	1	0.93	0.72	0.93
ACRE FT	215	113	115	158	107	179	227	193	138	73	85	62

San Antonio Creek at Old Creek Rd

USGS #: 11117500
 VCWPD #: 605A
 DATE INSTALLED: 10/1949
 MAINTAINED BY: VCWPD

LATITUDE: 34°22'57" N
 LONGITUDE: 119°18'10" W
 ELEVATION: 312 ft
 DRAINAGE AREA: 51.2 sq mi

WATER YEAR OCTOBER 2020 THROUGH SEPTEMBER 2021 Daily Mean Discharge, cubic feet per second

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0.26	1	2	2	0.70	0	0	0	0
2	0	0	0	0.10	0.29	2	2	0.83	0	0	0	0
3	0	0	0	0.02	0.15	2	3	0.58	0	0	0	0
4	0	0	0	0.06	0.10	2	3	0.87	0	0	0	0
5	0	0	0	0.05	0.02	2	3	1	0	0	0	0
6	0	0	0	0.03	0.02	3	3	1	0	0	0	0
7	0	0	0	0.01	0.01	3	3	2	0	0	0	0
8	0	0	0	0.01	0.09	2	3	2	0	0	0	0
9	0	0	0	0.02	0.39	2	3	1	0	0	0	0
10	0	0	0	0.01	0.44	3	3	0.63	0	0	0	0
11	0	0	0	0.02	0.65	3	3	0.58	0	0	0	0
12	0	0	0	0.04	0.51	3	3	0.53	0	0	0	0
13	0	0	0	0.14	0.30	3	3	0.47	0	0	0	0
14	0	0	0	0.17	0.16	2	2	0.42	0	0	0	0
15	0	0	0	0.31	0.23	2	1	0.37	0	0	0	0
16	0	0	0	0.42	0.31	1	1	0.32	0	0	0	0
17	0	0	0	0.30	0.27	1	1	0.26	0	0	0	0
18	0	0	0	0.28	0.28	2	1	0.21	0	0	0	0
19	0	0	0	0.15	0.27	2	1	0.16	0	0	0	0
20	0	0	0	0.21	0.61	2	1	0.11	0	0	0	0
21	0	0	0	0.59	1	2	0.97	0.05	0	0	0	0
22	0	0	0	0.81	1	3	1	0	0	0	0	0
23	0	0	0	2	0.87	2	2	0	0	0	0	0
24	0	0	0	1	1	2	0.70	0	0	0	0	0
25	0	0	0	0.92	2	3	1	0	0	0	0	0
26	0	0	0	0.80	2	3	0.80	0	0	0	0	0
27	0	0	0	2	1	2	0.42	0	0	0	0	0
28	0	0	2	14	1	2	0.45	0	0	0	0	0
29	0	0	0.46	10	-----	2	0.43	0	0	0	0	0
30	0	0	0.45	3	-----	3	0.34	0	0	0	0	0
31	0	-----	0.43	2	-----	3	-----	0	-----	0	0	-----
TOTAL	0	0	4	40	16	70	55	14	0	0	0	0
MEAN	0	0	0.12	1	0.59	2	2	0.45	0	0	0	0
MAX	0	0	2	14	2	3	3	2	0	0	0	0
MIN	0	0	0	0.01	0.01	1	0.34	0	0	0	0	0
ACRE FT	0	0	7	79	33	139	109	28	0	0	0	0

Estimated daily data

These data are preliminary and subject to change until checked and evaluated by Ventura County. Unverified data may contain errors that have not been checked by Hydrology Staff. Ventura County does not guarantee the accuracy of these data; please note that flows may vary considerably during each day and from day to day.

Appendix C
Fisheries Storm Peak Logs

(NO FISHERIES STORM PEAK LOGS)

Appendix D
Casitas Reservoir Operational Data

**CASITAS RESERVOIR WATER INVENTORY SUMMARY
2020 - 2021 WATER YEAR**

figures in acre-feet except where otherwise noted

MONTH	RESERVOIR (last of previous month)		RESERVOIR INFLOW				RESERVOIR RELEASES			
	ELEV (ft)	STORAGE	DIRECT	VENTURA RIVER DIVERSIONS	TOTAL	PRECIP	EVAP	TO MAIN SYSTEM	SPILL	CHANGE IN STORAGE
OCT 2020	500.21	97838	-36	0	-36	1	562	1271	0	-1868
NOV 2020	498.98	95970	-94	0	-94	25	376	948	0	-1394
DEC 2020	498.05	94576	-106	0	-106	279	342	958	0	-1127
JAN 2021	497.29	93449	91	31	122	461	206	553	0	-177
FEB 2021	497.17	93272	201	2	203	2	328	477	0	-501
MAR 2021	496.83	92771	83	0	83	156	443	556	0	-761
APR 2021	496.31	92010	83	0	83	0	565	995	0	-1478
MAY 2021	495.29	90532	80	0	80	1	633	1175	0	-1726
JUN 2021	494.08	88806	118	0	118	0	748	1397	0	-2027
JUL 2021	492.63	86779	-68	0	-68	0	844	1577	0	-2488
AUG 2021	490.79	84291	-167	0	-167	0	750	1639	0	-2556
SEP 2021	488.82	81735	101	0	101	0	529	1624	0	-2052
OCT 2021	487.20	79683	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL			284	34	317	924	6326	13169	0	-18155

reservoir capacity = 237,700 a.f. @ 567 ft.

D:\Shared drives\Hydrology\Casitas Dam\Annual\[CasitasReservoir2022.xlsx]Wtr Yr. 2020-21

CASITAS RESERVOIR OPERATION
OCTOBER 2020

*figures in acre-feet except where otherwise noted

DATE	RESERVOIR (@ 0800 hrs.)			INFLOW			EVAPORATION			PRECIPITATION			RELEASES			STORAGE CHANGE
	Elevation (ft MSL)	Sep 30 th Storage	Surface Area (acres)	Direct	Ventura River Divers'n	Total	Pan @Dam (in)	Pan @Rec (in)	Lake Total (af)	at Dam (in)	at Rec (in)	Lake Total (af)	To Main System	To River	To Spill	
1	500.17	97777	1590	13	0	13	0.29	0.29	29	0	0	0	45	0	0	-61
2	500.10	97670	1590	10	0	10	0.51	0.51	51	0	0	0	67	0	0	-107
3	500.05	97593	1588	5	0	5	0.16	0.16	16	0	0	0	66	0	0	-77
4	500.01	97532	1588	15	0	15	0.30	0.30	30	0	0	0	46	0	0	-61
5	499.98	97487	1586	4	0	4	0.20	0.20	20	0	0	0	29	0	0	-45
6	499.93	97410	1586	-15	0	-15	0.12	0.21	16	0	0	0	46	0	0	-77
7	499.88	97334	1584	-6	0	-6	0.16	0.18	17	0	0	0	53	0	0	-76
8	499.84	97273	1584	27	0	27	0.15	0.56	35	0	0	0	53	0	0	-61
9	499.80	97212	1584	-6	0	-6	0.14	0.14	14	0	0	0	42	0	0	-61
10	499.77	97167	1583	7	0	7	0.22	0.22	22	0	0	0	30	0	0	-45
11	499.74	97121	1583	-11	0	-11	0.06	0.06	6	0	0	0	29	0	0	-46
12	499.72	97090	1583	8	0	8	0.15	0.15	15	0	0	0	24	0	0	-31
13	499.67	97014	1581	-15	0	-15	0.15	0.29	22	0	0	0	39	0	0	-76
14	499.62	96938	1581	3	0	3	0.17	0.27	22	0	0	0	57	0	0	-76
15	499.57	96863	1579	0.12	0	0.12	0.16	0.19	17	0	0	0	58	0	0	-75
16	499.54	96817	1579	20	0	20	0.32	0.11	21	0	0	0	45	0	0	-46
17	499.48	96726	1577	-22	0	-22	0.30	0.02	16	0	0	0	53	0	0	-91
18	499.45	96680	1577	10	0	10	0.15	0.15	15	0	0	0	42	0	0	-46
19	499.42	96635	1577	7	0	7	0.15	0.47	31	0	0	0	21	0	0	-45
20	499.39	96590	1575	-15	0	-15	0	0.04	2	0.01	0	0.66	29	0	0	-45
21	499.36	96544	1575	10	0	10	0.06	0.24	15	0	0	0	41	0	0	-46
22	499.32	96484	1575	-16	0	-16	0.08	0.07	7	0	0	0	36	0	0	-60
23	499.28	96423	1574	-7	0	-7	0.26	0.07	16	0	0	0	37	0	0	-61
24	499.25	96378	1574	3	0	3	0.15	0.12	13	0	0	0	35	0	0	-45
25	499.23	96347	1574	3	0	3	0.10	0.10	10	0	0	0	25	0	0	-31
26	499.19	96287	1572	-29	0	-29	0.10	0.07	8	0	0	0	23	0	0	-60
27	499.14	96211	1572	-25	0	-25	0.04	0.20	12	0	0	0	39	0	0	-76
28	499.10	96151	1572	-8	0	-8	0.13	0.12	12	0	0	0	40	0	0	-60
29	499.06	96091	1570	-2	0	-2	0.19	0.21	20	0	0	0	38	0	0	-60
30	499.02	96030	1570	-2	0	-2	0.19	0.20	19	0	0	0	40	0	0	-61
31	498.98	95970	1568	-4	0	-4	0.15	0.15	15	0	0	0	41	0	0	-60
TOTAL				-36	0	-36	5	6	562	0.01	0	0.66	1271	0	0	-1868

Reservoir capacity = 237,761 acre-feet at 567 ft. elevation.

Direct reservoir inflow values may be negative due to inaccuracies of the evaporation coefficients (supplied by the USBR)

Evaporation and precipitation readings taken at approximately 8 a.m.

Monthly Evaporation Coefficients: Jan=0.65, Feb=0.77, Mar=0.76, Apr=0.80, May=0.81, Jun=0.82, Jul= Aug=0.81, Sep=0.76, Oct=0.75, Nov=0.72, Dec=0.66

CASITAS RESERVOIR OPERATION
NOVEMBER 2020

*figures in acre-feet except where otherwise noted

DATE	RESERVOIR (@ 0800 hrs.)			INFLOW			EVAPORATION			PRECIPITATION			RELEASES			STORAGE CHANGE
	Elevation	Oct 31 st 95970 Storage	Surface Area (acres)	Ventura River			Pan @Dam (in)	Pan @Rec (in)	Lake Total (af)	at Dam (in)	at Rec (in)	Lake Total (af)	To Main System	To River	Spill	
	(ft MSL)			Direct	Divers'n	Total										
1	498.95	95925	1568	-1	0	-1	0.15	0.15	16	0	0	0	28	0	0	-45
2	498.93	95895	1568	8	0	8	0.15	0.15	16	0	0	0	22	0	0	-30
3	498.89	95834	1567	-23	0	-23	0.07	0.07	7	0	0	0	30	0	0	-61
4	498.84	95759	1567	-23	0	-23	0.07	0.04	6	0	0	0	46	0	0	-75
5	498.82	95729	1567	31	0	31	0.11	0.11	12	0	0	0	49	0	0	-30
6	498.79	95684	1565	8	0	8	0.08	0.38	25	0	0	0	28	0	0	-45
7	498.75	95624	1565	-58	0	-58	0	0	0	0.18	0.18	23	25	0	0	-60
8	498.74	95609	1565	30	0	30	0.24	0.24	26	0.01	0.01	1	21	0	0	-15
9	498.70	95549	1565	-44	0	-44	0.05	0.05	5	0	0	0	10	0	0	-60
10	498.67	95504	1563	-8	0	-8	0.18	0.18	19	0	0	0	18	0	0	-45
11	498.62	95429	1563	-25	0	-25	0.15	0.04	10	0	0	0	40	0	0	-75
12	498.58	95369	1562	0.71	0	0.71	0.11	0.13	13	0	0	0	48	0	0	-60
13	498.54	95309	1562	-5	0	-5	0.20	0.05	13	0	0	0	42	0	0	-60
14	498.52	95279	1562	15	0	15	0.12	0.12	13	0	0	0	32	0	0	-30
15	498.49	95234	1560	-6	0	-6	0.10	0.10	11	0	0	0	29	0	0	-45
16	498.46	95189	1560	-5	0	-5	0.07	0.18	13	0	0	0	27	0	0	-45
17	498.42	95129	1560	-12	0	-12	0.09	0.17	14	0	0	0	34	0	0	-60
18	498.39	95084	1558	14	0	14	0.10	0.14	13	0	0	0	46	0	0	-45
19	498.36	95039	1558	5	0	5	0.06	0.06	6	0	0	0	44	0	0	-45
20	498.34	95009	1558	22	0	22	0.21	0.20	22	0	0	0	30	0	0	-30
21	498.31	94964	1558	-3	0	-3	0.14	0.08	12	0	0	0	30	0	0	-45
22	498.28	94919	1556	-1	0	-1	0.13	0.13	14	0	0	0	30	0	0	-45
23	498.26	94890	1556	0.95	0	0.95	0.10	0.10	11	0	0	0	19	0	0	-29
24	498.22	94830	1556	-10	0	-10	0.08	0.24	17	0	0	0	33	0	0	-60
25	498.19	94785	1555	-1	0	-1	0.08	0.07	8	0	0	0	36	0	0	-45
26	498.16	94740	1555	0.48	0	0.48	0.08	0.08	8	0	0	0	37	0	0	-45
27	498.11	94666	1555	-22	0	-22	0.12	0.12	13	0	0	0	39	0	0	-74
28	498.09	94636	1553	0.65	0	0.65	0.05	0.05	5	0	0	0	25	0	0	-30
29	498.07	94606	1553	19	0	19	0.20	0.20	21	0	0	0	28	0	0	-30
30	498.05	94576	1553	-2	0	-2	0.07	0.07	7	0	0	0	21	0	0	-30
TOTAL				-94	0	-94	3	4	376	0.19	0.19	25	948	0	0	-1394

*Evaporation and Precipitation data from LCRA not logged; Casitas Dam data substituted

Reservoir capacity = 254,000 acre-feet at 567 ft. elevation.

Direct reservoir inflow values may be negative due to inaccuracies of the evaporation coefficients (supplied by the USBR)

Evaporation and precipitation readings taken at approximately 8 a.m.

Monthly Evaporation Coefficients: Jan=0.65, Feb=0.77, Mar=0.76, Apr=0.80, May=0.81, Jun=0.82, Jul= Aug=0.81, Sep=0.76, Oct=0.75, Nov=0.72, Dec=0.66

CASITAS RESERVOIR OPERATION
DECEMBER 2020

*figures in acre-feet except where otherwise noted

DATE	RESERVOIR (@ 0800 hrs.)			INFLOW			EVAPORATION			PRECIPITATION			RELEASES			STORAGE CHANGE
	Elevation (ft MSL)	Nov 30 th 94576 Storage	Surface Area (acres)	Direct	Ventura River Divers'n	Total	Pan @Dam (in)	Pan @Rec (in)	Lake Total (af)	at Dam (in)	at Rec (in)	Lake Total (af)	To Main System	To River	To Spill	
1	498.02	94531	1553	5	0	5	0.09	0.21	13	0	0	0	38	0	0	-45
2	497.97	94457	1551	-16	0	-16	0.07	0.16	10	0	0	0	49	0	0	-74
3	497.92	94383	1551	-18	0	-18	0.07	0.09	7	0	0	0	49	0	0	-74
4	497.88	94323	1550	-1	0	-1	0.19	0.03	9	0	0	0	50	0	0	-60
5	497.86	94293	1550	18	0	18	0.16	0.22	16	0	0	0	31	0	0	-30
6	497.83	94249	1550	-1	0	-1	0.10	0.06	7	0	0	0	36	0	0	-44
7	497.81	94219	1550	3	0	3	0.09	0.26	15	0	0	0	18	0	0	-30
8	497.77	94160	1548	8	0	8	0.29	0.29	25	0	0	0	43	0	0	-59
9	497.73	94100	1548	-9	0	-9	0.26	0.15	17	0	0	0	34	0	0	-60
10	497.71	94070	1548	16	0	16	0.20	0.23	18	0	0	0	28	0	0	-30
11	497.69	94041	1547	27	0	27	0.20	0.12	14	0	0	0	42	0	0	-29
12	497.63	93952	1547	-56	0	-56	0.10	0.05	6	0	0	0	27	0	0	-89
13	497.60	93907	1547	-11	0	-11	0.10	0.13	10	0	0	0	24	0	0	-45
14	497.57	93863	1545	-5	0	-5	0.12	0.21	14	0	0	0	25	0	0	-44
15	497.55	93833	1545	5	0	5	0.10	0.06	7	0	0	0	28	0	0	-30
16	497.52	93789	1545	-3	0	-3	0.11	0.18	12	0	0	0	28	0	0	-44
17	497.51	93774	1545	41	0	41	0.16	0.24	17	0	0	0	39	0	0	-15
18	497.46	93700	1543	-20	0	-20	0.07	0.19	11	0	0	0	43	0	0	-74
19	497.44	93670	1543	24	0	24	0.24	0.14	16	0	0	0	38	0	0	-30
20	497.40	93611	1543	-11	0	-11	0.20	0.20	17	0	0	0	31	0	0	-59
21	497.39	93596	1542	13	0	13	0.06	0.04	4	0	0	0	24	0	0	-15
22	497.37	93567	1542	16	0	16	0.01	0.05	3	0	0	0	43	0	0	-29
23	497.32	93493	1542	-21	0	-21	0.09	0.20	12	0	0	0	40	0	0	-74
24	497.29	93449	1540	9	0	9	0.20	0.21	17	0	0	0	35	0	0	-44
25	497.25	93390	1540	-24	0	-24	0.14	0.11	11	0	0	0	25	0	0	-59
26	497.23	93360	1540	8	0	8	0.29	0.19	20	0	0	0	18	0	0	-30
27	497.20	93316	1540	-19	0	-19	0.09	0.10	8	0	0	0	17	0	0	-44
28	497.26	93404	1540	5	0	5	0	0	0	0.65	0.90	99	17	0	0	88
29	497.33	93508	1542	-65	0	-65	0	0	0	1	2	179	10	0	0	104
30	497.31	93478	1542	-17	0	-17	0.02	0.01	1	0	0	0	11	0	0	-30
31	497.29	93449	1540	-8	0	-8	0.05	0.04	4	0	0	0	17	0	0	-29
TOTAL				-106	0	-106	4	4	342	2	3	279	958	0	0	-1127

Reservoir capacity = 254,000 acre-feet at 567 ft. elevation.

Direct reservoir inflow values may be negative due to inaccuracies of the evaporation coefficients (supplied by the USBR)

Evaporation and precipitation readings taken at approximately 8 a.m.

Monthly Evaporation Coefficients: Jan=0.65, Feb=0.77, Mar=0.76, Apr=0.80, May=0.81, Jun=0.82, Jul= Aug=0.81, Sep=0.76, Oct=0.75, Nov=0.72, Dec=0.66

CASITAS RESERVOIR OPERATION
JANUARY 2021

*figures in acre-feet except where otherwise noted

DATE	RESERVOIR (@ 0800 hrs.)			INFLOW			EVAPORATION			PRECIPITATION			RELEASES			STORAGE CHANGE
	Elevation	93449 Storage	Surface Area (acres)	Direct	Ventura River Divers'n	Total	Pan @Dam (in)	Pan @Rec (in)	Lake Total	at Dam (in)	at Rec (in)	Lake Total	To Main System	To River	To Spill	
1	497.28	93434	1540	10	0	10	0.16	0.18	14	0.00	0	0	11	0	0	-15
2	497.26	93404	1540	-10	0	-10	0.18	0.06	10	0.00	0	0	10	0	0	-30
3	497.26	93404	1540	14	0	14	0.08	0.03	5	0.00	0	0	9	0	0	0
4	497.25	93390	1540	8	0	8	0.14	0.03	7	0.00	0	0	15	0	0	-14
5	497.24	93375	1540	-1	0	-1	0.03	0.04	3	0.00	0	0	11	0	0	-15
6	497.23	93360	1540	7	0	7	0.07	0.14	9	0.00	0	0	14	0	0	-15
7	497.22	93345	1540	3	0	3	0.02	0.12	6	0.00	0	0	12	0	0	-15
8	497.21	93331	1540	7	0	7	0.24	0.02	11	0.00	0	0	10	0	0	-14
9	497.20	93316	1540	15	0	15	0.17	0.14	13	0.00	0	0	17	0	0	-15
10	497.18	93286	1539	-7	0	-7	0.10	0.06	7	0.00	0	0	17	0	0	-30
11	497.17	93272	1539	9	0	9	0.06	0.03	4	0.00	0	0	19	0	0	-14
12	497.15	93242	1539	-1	0	-1	0.06	0.20	11	0.00	0	0	18	0	0	-30
13	497.14	93227	1539	13	0	13	0.08	0.10	8	0.00	0	0	21	0	0	-15
14	497.12	93198	1539	0	0	0	0.04	0.05	4	0.00	0	0	25	0	0	-29
15	497.06	93110	1537	-53	0	-53	0.14	0.16	12	0.00	0	0	23	0	0	-88
16	497.06	93110	1537	40	0	40	0.10	0.06	7	0.00	0	0	34	0	0	0
17	497.02	93051	1537	-24	0	-24	0.09	0.00	4	0.00	0	0	31	0	0	-59
18	497.00	93021	1537	-6	0	-6	0.01	0.07	3	0	0	0	21	0	0	-30
19	496.95	92948	1535	-32	0	-32	0.07	0.07	6	0.00	0	0	35	0	0	-73
20	496.93	92918	1535	33	0	33	0.17	0.24	17	0.00	0	0	46	0	0	-30
21	496.90	92874	1535	-12	0	-12	0.19	0.00	8	0.00	0	0	24	0	0	-44
22	496.86	92815	1534	-17	0	-17	0.22	0.14	15	0.00	0	0	27	0	0	-59
23	496.85	92801	1534	20	0	20	0.08	0.10	7	0.00	0	0	26	0	0	-14
24	496.86	92815	1534	-1	0	-1	0.00	0.00	0	0.33	0.10	27	12	0	0	14
25	496.85	92801	1534	-9	0	-9	0.00	0.00	0	0.06	0.05	7	12	0	0	-14
26	496.84	92786	1534	9	0	9	0.16	0.15	13	0.00	0	0	11	0	0	-15
27	496.83	92771	1534	-15	0	-15	0.00	0.00	0	0.06	0.10	10	11	0	0	-15
28	496.88	92845	1534	-7	1	-6	0.00	0.00	0	0.62	1	88	8	0	0	74
29	497.12	93198	1539	27	24	51	0.00	0.00	0	2.84	2	310	9	0	0	353
30	497.16	93257	1539	43	6	48	0.00	0.00	0	0.08	0	17	7	0	0	59
31	497.17	93272	1539	26	0	26	0.09	0.00	4	0.00	0	0	7	0	0	15
TOTAL				91	31	122	2.75	2.19	206	3.99	3.20	461	553	0	0	-177

Reservoir capacity = 254,000 acre-feet at 567 ft. elevation.

Direct reservoir inflow values may be negative due to inaccuracies of the evaporation coefficients (supplied by the USBR)

Evaporation and precipitation readings taken at approximately 8 a.m.

Monthly Evaporation Coefficients: Jan=0.65, Feb=0.77, Mar=0.76, Apr=0.80, May=0.81, Jun=0.82, Jul= Aug=0.81, Sep=0.76, Oct=0.75, Nov=0.72, Dec=0.66

CASITAS RESERVOIR OPERATION
FEBRUARY 2021

*figures in acre-feet except where otherwise noted

DATE	RESERVOIR (@ 0800 hrs.)			INFLOW			EVAPORATION			PRECIPITATION			RELEASES			STORAGE CHANGE
	Elevation (ft MSL)	Jan 31 st Storage	Surface Area (acres)	Direct	Ventura River Divers'n	Total	Pan @Dam (in)	Pan @Rec (in)	Lake Total (af)	at Dam (in)	at Rec (in)	Lake Total (af)	To Main System	To River	Spill	
1	497.17	93272	1539	-77	0	-77	0.16	0.16	16	0.00	0.00	0	7	0	0	0
2	497.16	93257	1539	12	0	12	0.18	0.18	18	0.00	0.00	0	9	0	0	-15
3	497.15	93242	1539	-1	0	-1	0.08	0.08	8	0.00	0.00	0	6	0	0	-15
4	497.16	93257	1539	38	2	41	0.14	0.14	14	0.00	0.00	0	10	0	0	15
5	497.16	93257	1539	6	0	6	0.03	0.03	3	0.00	0.00	0	6	0	0	0
6	497.16	93257	1539	13	0	13	0.07	0.07	7	0	0	0	6	0	0	0
7	497.15	93242	1539	-5	0	-5	0.02	0.02	2	0	0	0	8	0	0	-15
8	497.14	93227	1539	14	0	14	0.24	0.24	24	0	0	0	6	0	0	-15
9	497.14	93227	1539	18	0	18	0.17	0.02	9	0.00	0.00	0	8	0	0	0
10	497.13	93213	1539	3	0	3	0.10	0.05	7	0.00	0.00	0	9	0	0	-14
11	497.13	93213	1539	15	0	15	0.06	0.12	9	0.00	0.00	0	6	0	0	0
12	497.14	93227	1539	30	0	30	0.08	0.00	4	0	0	2	14	0	0	14
13	497.11	93183	1539	-21	0	-21	0.08	0.20	14	0.00	0.00	0	10	0	0	-44
14	497.11	93183	1539	19	0	19	0.04	0.09	6	0.00	0.00	0	12	0	0	0
15	497.05	93095	1537	-55	0	-55	0.14	0.33	23	0.00	0.00	0	10	0	0	-88
16	497.05	93095	1537	34	0	34	0.10	0.26	18	0.00	0.00	0	16	0	0	0
17	497.03	93065	1537	5	0	5	0.09	0.10	9	0	0	0	26	0	0	-30
18	497.01	93036	1537	0	0	0	0.01	0.10	5	0	0	0	23	0	0	-29
19	496.99	93006	1535	-3	0	-3	0.07	0.10	8	0	0	0	19	0	0	-30
20	496.98	92992	1535	39	0	39	0.17	0.38	27	0	0	0	26	0	0	-14
21	496.97	92977	1535	21	0	21	0.19	0.11	15	0	0	0	21	0	0	-15
22	496.95	92948	1535	11	0	11	0.22	0.18	20	0	0	0	21	0	0	-29
23	496.94	92933	1535	21	0	21	0.08	0.04	6	0	0	0	30	0	0	-15
24	496.91	92889	1535	6	0	6	0.00	0.24	12	0	0	0	38	0	0	-44
25	496.90	92874	1535	29	0	29	0.00	0.18	9	0	0	0	36	0	0	-15
26	496.87	92830	1534	5	0	5	0.16	0.13	14	0	0	0	35	0	0	-44
27	496.85	92801	1534	11	0	11	0.00	0.22	11	0	0	0	29	0	0	-29
28	496.83	92771	1534	12	0	12	0.00	0.21	10	0.00	0.00	0	31	0	0	-30
TOTAL				201	2	203	2.68	3.98	328	0.00	0.03	2	477	0	0	-501

Reservoir capacity = 237,761 acre-feet at 567 ft. elevation.

Direct reservoir inflow values may be negative due to inaccuracies of the evaporation coefficients (supplied by the USBR)

Evaporation and precipitation readings taken at approximately 8 a.m.

Monthly Evaporation Coefficients: Jan=0.65, Feb=0.77, Mar=0.76, Apr=0.80, May=0.81, Jun=0.82, Jul= Aug=0.81, Sep=0.76, Oct=0.75, Nov=0.72, Dec=0.66

CASITAS RESERVOIR OPERATION
MARCH 2021

*figures in acre-feet except where otherwise noted

DATE	RESERVOIR (@ 0800 hrs.)			INFLOW			EVAPORATION			PRECIPITATION			RELEASES			STORAGE CHANGE
	Elevation	Feb 28 th 92771 Storage	Surface Area	Ventura River			Pan @Dam	Pan @Rec	Lake Total	at Dam	at Rec	Lake Total	To Main System	To River	To Spill	
	(ft MSL)		(acres)	Direct	Divers'n	Total	(in)	(in)	(af)	(in)	(in)	(af)				
1	496.81	92742	1534	18	0	18	0.12	0.25	18	0	0	0	29	0	0	-29
2	496.79	92713	1532	8	0	8	0.07	0.18	12	0	0	0	25	0	0	-29
3	496.76	92669	1532	5	0	5	0.16	0.20	17	0	0	0	32	0	0	-44
4	496.75	92654	1532	27	0	27	0.10	0.00	5	0	0	0	37	0	0	-15
5	496.72	92610	1532	2	0	2	0.19	0.23	20	0	0	0	25	0	0	-44
6	496.71	92595	1532	25	0	25	0.20	0.06	13	0	0	0	28	0	0	-15
7	496.70	92581	1532	12	0	12	0.10	0.09	9	0	0	0	17	0	0	-14
8	496.69	92566	1530	-2	0	-2	0	0	1	0.00	0	1	13	0	0	-15
9	496.67	92537	1530	5	0	5	0.05	0.26	15	0	0	0	19	0	0	-29
10	496.72	92610	1532	15	0	15	0	0	0	0.51	0.60	71	13	0	0	73
11	496.73	92625	1532	-28	0.0	-28	0	0	0	0.41	0.39	51	8	0	0	15
12	496.74	92639	1532	4	0.0	4	0	0	0	0	0.15	16	6	0	0	14
13	496.73	92625	1532	-3	0.0	-3	0	0	10	0.07	0.00	4	6	0	0	-14
14	496.70	92581	1532	-22	0	-22	0	0	14	0.00	0.00	0	9	0	0	-44
15	496.66	92522	1530	-61	0	-61	0	0	3	0.19	0.00	12	7	0	0	-59
16	496.63	92478	1530	-36	0.0	-36	0	0	0	0.01	0.00	1	8	0	0	-44
17	496.62	92463	1530	7	0.0	7	0	0	14	0.00	0.00	0	8	0	0	-15
18	496.61	92449	1530	3	0.0	3	0	0	7	0.00	0.00	0	10	0	0	-14
19	496.59	92420	1529	-2	0.0	-2	0	0	21	0.00	0	0	6	0	0	-29
20	496.58	92405	1529	11	0.0	11	0.20	0.20	19	0	0	0	7	0	0	-15
21	496.56	92376	1529	-7	0.0	-7	0.20	0.06	13	0	0	0	10	0	0	-29
22	496.54	92346	1529	-5	0.0	-5	0.11	0.11	11	0	0	0	14	0	0	-30
23	496.52	92317	1529	38	0.0	38	0	1	44	0.00	0.00	0	23	0	0	-29
24	496.50	92288	1529	18	0.0	18	0.32	0.23	27	0	0	0	21	0	0	-29
25	496.47	92244	1527	-15	0.0	-15	0	0	9	0.00	0	0	20	0	0	-44
26	496.42	92171	1527	-22	0.0	-22	0.20	0.33	26	0.00	0	0	26	0	0	-73
27	496.41	92156	1527	33	0.0	33	0	0	20	0.00	0.00	0	28	0	0	-15
28	496.38	92113	1525	4	0.0	4	0.20	0.32	25	0	0	0	22	0	0	-43
29	496.36	92083	1525	3	0.0	3	0.15	0.20	17	0	0	0	16	0	0	-30
30	496.33	92040	1525	10	0.0	10	0	0	19	0.00	0.00	0	35	0	0	-43
31	496.31	92010	1525	36	0.0	36	0.37	0.37	36	0	0	0	30	0	0	-30
TOTAL				83	0	83	4.20	4.96	443	1.29	1.15	156	556	0	0	-761

Reservoir capacity = 237,761 acre-feet at 567 ft. elevation.

Direct reservoir inflow values may be negative due to inaccuracies of the evaporation coefficients (supplied by the USBR)

Evaporation and precipitation readings taken at approximately 8 a.m.

Monthly Evaporation Coefficients: Jan=0.65, Feb=0.77, Mar=0.76, Apr=0.80, May=0.81, Jun=0.82, Jul= Aug=0.81, Sep=0.76, Oct=0.75, Nov=0.72, Dec=0.66

CASITAS RESERVOIR OPERATION
APRIL 2021

*figures in acre-feet except where otherwise noted

DATE	RESERVOIR (@ 0800 hrs.)			INFLOW			EVAPORATION			PRECIPITATION			RELEASES			STORAGE CHANGE
	Elevation	Mar 31 st Surface	Area	Ventura River			Pan @Dam	Pan @Rec	Lake Total	at Dam	at Rec	Lake Total	To Main System	To River	To Spill	
	(ft MSL)	92010 Storage	(acres)	Direct	Divers'n	Total	(in)	(in)	(af)	(in)	(in)	(af)				
1	496.26	91937	1523	6	0	6	0.48	0.29	39	0	0	0	40	0	0	-73
2	496.23	91894	1523	15	0	15	0.17	0.33	25	0	0	0	33	0	0	-43
3	496.21	91865	1523	17	0	17	0.13	0.15	14	0	0	0	32	0	0	-29
4	496.19	91835	1522	12	0	12	0.20	0.15	18	0	0	0	25	0	0	-30
5	496.17	91806	1522	3	0	3	0.14	0.16	15	0	0	0	17	0	0	-29
6	496.15	91777	1522	20	0	20	0.17	0.21	19	0	0	0	30	0	0	-29
7	496.11	91719	1522	-4	0	-4	0.22	0.17	20	0	0	0	35	0	0	-58
8	496.05	91632	1520	-31	0	-31	0.17	0.20	19	0	0	0	37	0	0	-87
9	495.99	91545	1518	-37	0	-37	0.10	0.21	16	0	0	0	34	0	0	-87
10	495.96	91501	1518	19	0	19	0.20	0.21	21	0	0	0	42	0	0	-44
11	495.93	91457	1518	14	0	14	0.30	0.20	25	0	0	0	33	0	0	-44
12	495.92	91443	1518	19	0	19	0.15	0.14	15	0	0	0	18	0	0	-14
13	495.87	91370	1517	-41	0	-41	0.04	0.01	3	0	0	0	29	0	0	-73
14	495.83	91312	1517	-15	0	-15	0.04	0.11	8	0	0	0	36	0	0	-58
15	495.79	91254	1515	-7	0	-7	0.11	0.20	16	0	0	0	35	0	0	-58
16	495.75	91196	1515	5	0	5	0.36	0.11	24	0	0	0	39	0	0	-58
17	495.72	91153	1515	18	0	18	0.20	0.30	25	0	0	0	36	0	0	-43
18	495.69	91110	1513	9	0	9	0.20	0.20	20	0	0	0	32	0	0	-43
19	495.66	91066	1513	8	0	8	0.26	0.31	29	0	0	0	23	0	0	-44
20	495.62	91008	1513	-4	0	-4	0.10	0.26	18	0	0	0	36	0	0	-58
21	495.58	90951	1512	9	0	9	0.18	0.23	21	0	0	0	46	0	0	-57
22	495.55	90907	1512	7	0	7	0.16	0.14	15	0	0	0	36	0	0	-44
23	495.51	90849	1512	-5	0	-5	0.19	0.12	16	0	0	0	38	0	0	-58
24	495.49	90821	1510	19	0	19	0.14	0.11	13	0	0	0	35	0	0	-28
25	495.48	90806	1510	25	0	25	0.19	0.10	15	0	0	0	25	0	0	-15
26	495.44	90749	1510	-29	0	-29	0.10	0.09	10	0	0	0	18	0	0	-57
27	495.41	90705	1510	-2	0	-2	0.13	0.11	12	0	0	0	30	0	0	-44
28	495.37	90648	1508	2	0	2	0.15	0.20	18	0	0	0	41	0	0	-57
29	495.33	90590	1508	20	0	20	0.37	0.30	34	0	0	0	45	0	0	-58
30	495.29	90532	1506	9	0	9	0.24	0.28	26	0	0	0	41	0	0	-58
TOTAL				83	0	83	5.59	5.60	565	0.00	0.00	0	995	0	0	-1478

Reservoir capacity = 237,761 acre-feet at 567 ft. elevation.

Direct reservoir inflow values may be negative due to inaccuracies of the evaporation coefficients (supplied by the USBR)

Evaporation and precipitation readings taken at approximately 8 a.m.

Monthly Evaporation Coefficients: Jan=0.65, Feb=0.77, Mar=0.76, Apr=0.80, May=0.81, Jun=0.82, Jul= Aug=0.81, Sep=0.76, Oct=0.75, Nov=0.72, Dec=0.66

CASITAS RESERVOIR OPERATION
MAY 2021

*figures in acre-feet except where otherwise noted

DATE	RESERVOIR (@ 0800 hrs.)			INFLOW			EVAPORATION			PRECIPITATION			RELEASES			STORAGE CHANGE
	Elevation (ft MSL)	Apr 30 th Storage	Surface Area (acres)	Direct	Ventura River Divers'n	Total	Pan @Dam (in)	Pan @Rec (in)	Lake Total (af)	at Dam (in)	at Rec (in)	Lake Total (af)	To Main System	To River	Spill	
1	495.24	90461	1506	9	0	9	0.30	0.30	31	0	0	0	49	0	0	-71
2	495.21	90417	1506	13	0	13	0.20	0.04	12	0	0	0	45	0	0	-44
3	495.15	90331	1505	-23	0	-23	0.25	0.44	35	0	0	0	28	0	0	-86
4	495.10	90260	1505	-6	0	-6	0.19	0.24	22	0	0	0	43	0	0	-71
5	495.04	90174	1503	-20	0	-20	0.19	0.21	20	0	0	0	46	0	0	-86
6	495.00	90116	1503	25	0	25	0.30	0.32	31	0	0	0	52	0	0	-58
7	494.96	90059	1501	13	0	13	0.17	0.31	24	0	0	0	45	0	0	-57
8	494.92	90002	1501	-8	0	-8	0.12	0.03	8	0	0	0	41	0	0	-57
9	494.88	89944	1500	-4	0	-4	0.28	0.19	24	0	0	0	31	0	0	-58
10	494.86	89916	1500	14	0	14	0.10	0.22	16	0	0	0	25	0	0	-28
11	494.82	89859	1500	-12	0	-12	0.10	0.08	9	0	0	0	36	0	0	-57
12	494.79	89816	1498	-1	0	-1	0.06	0.12	9	0	0	0	33	0	0	-43
13	494.75	89759	1498	12	0	12	0.33	0.22	28	0	0	0	42	0	0	-57
14	494.72	89716	1498	11	0	11	0.21	0.15	18	0	0	1	37	0	0	-43
15	494.69	89673	1497	11	0	11	0.20	0.15	18	0	0	0	36	0	0	-43
16	494.66	89630	1497	-5	0	-5	0.10	0.11	11	0	0	0	28	0	0	-43
17	494.64	89602	1497	1	0	1	0.10	0.10	10	0	0	0	19	0	0	-28
18	494.60	89545	1497	-8	0	-8	0.20	0.14	17	0.00	0.00	0	32	0	0	-57
19	494.55	89473	1495	-12	0	-12	0.27	0.23	25	0	0	0	35	0	0	-72
20	494.52	89431	1495	19	0	19	0.21	0.12	17	0	0	0	44	0	0	-42
21	494.46	89345	1493	-13	0	-13	0.18	0.34	26	0	0	0	47	0	0	-86
22	494.42	89288	1493	4	0	4	0.30	0.14	22	0	0	0	39	0	0	-57
23	494.38	89232	1492	6	0	6	0.23	0.25	24	0	0	0	38	0	0	-56
24	494.36	89203	1492	11	0	11	0.20	0.18	19	0	0	0	21	0	0	-29
25	494.31	89132	1492	-9	0	-9	0.08	0.47	28	0	0	0	35	0	0	-71
26	494.27	89075	1490	21	0	21	0.30	0.24	27	0	0	0	51	0	0	-57
27	494.22	89005	1490	-3	0	-3	0.14	0.18	16	0	0	0	51	0	0	-70
28	494.18	88948	1489	1	0	1	0.14	0.19	17	0	0	0	42	0	0	-57
29	494.14	88891	1489	17	0	17	0.36	0.18	27	0	0	0	47	0	0	-57
30	494.11	88849	1489	9	0	9	0.20	0.16	18	0	0	0	33	0	0	-42
31	494.08	88806	1487	5	0	5	0.27	0.20	24	0	0	0	24	0	0	-43
TOTAL				80	0	80	6.28	6.25	633	0.02	0.00	1	1175	0	0	-1726

*Evaporation and Precipitation data from LCRA not logged; Casitas Dam data substituted

Reservoir capacity = 237,761 acre-feet at 567 ft. elevation.

Direct reservoir inflow values may be negative due to inaccuracies of the evaporation coefficients (supplied by the USBR)

Evaporation and precipitation readings taken at approximately 8 a.m.

Monthly Evaporation Coefficients: Jan=0.65, Feb=0.77, Mar=0.76, Apr=0.80, May=0.81, Jun=0.82, Jul= Aug=0.81, Sep=0.76, Oct=0.75, Nov=0.72, Dec=0.66

CASITAS RESERVOIR OPERATION
JUNE 2021

*figures in acre-feet except where otherwise noted

DATE	RESERVOIR (@ 0800 hrs.)			INFLOW			EVAPORATION			PRECIPITATION			RELEASES			STORAGE CHANGE
	Elevation	May 31 st 88806	Surface Area	Ventura River			Pan @Dam	Pan @Rec	Lake Total	at Dam	at Rec	Lake Total	To Main System	To River	To Spill	
	(ft MSL)	Storage	(acres)	Direct	Divers'n	Total	(in)	(in)	(af)	(in)	(in)	(af)				
1	494.05	88764	1487	17	0	17	0.22	0.22	22	0	0	0	37	0	0	-42
2	494.00	88693	1487	-7	0	-7	0.15	0.28	22	0	0	0	42	0	0	-71
3	493.94	88608	1485	-9	0	-9	0.27	0.20	24	0	0	0	52	0	0	-85
4	493.91	88566	1485	42	0	42	0.38	0.26	32	0	0	0	51	0	0	-42
5	493.85	88481	1484	-5	0	-5	0.33	0.22	28	0	0	0	52	0	0	-85
6	493.80	88411	1484	-13	0	-13	0.10	0.20	15	0	0	0	41	0	0	-70
7	493.75	88340	1482	-21	0	-21	0.19	0.19	19	0	0	0	31	0	0	-71
8	493.73	88312	1482	41	0	41	0.43	0.13	28	0	0	0	41	0	0	-28
9	493.69	88256	1481	3	0	3	0.08	0.25	17	0	0	0	42	0	0	-56
10	493.64	88186	1481	0	0	0	0.38	0.24	31	0	0	0	39	0	0	-70
11	493.64	88186	1481	72	0	72	0.32	0.24	28	0	0	0	44	0	0	0
12	493.60	88130	1481	31	0	31	0.51	0.29	40	0	0	0	46	0	0	-56
13	493.55	88059	1479	7	0	7	0.22	0.36	29	0	0	0	48	0	0	-71
14	493.53	88031	1479	35	0	35	0.21	0.28	25	0	0	0	39	0	0	-28
15	493.47	87947	1477	-8	0	-8	0.20	0.28	24	0	0	0	52	0	0	-84
16	493.41	87863	1477	16	0	16	0.29	0.35	32	0	0	0	68	0	0	-84
17	493.38	87821	1476	48	0	48	0.15	0.29	22	0	0	0	68	0	0	-42
18	493.33	87751	1476	17	0	17	0.34	0.28	31	0	0	0	56	0	0	-70
19	493.27	87668	1474	-16	0	-16	0.07	0.19	13	0	0	0	54	0	0	-83
20	493.23	87612	1474	11	0	11	0.19	0.28	24	0	0	0	43	0	0	-56
21	493.17	87528	1473	-32	0	-32	0.15	0.25	20	0	0	0	32	0	0	-84
22	493.11	87445	1473	-15	0	-15	0.20	0.31	26	0	0	0	42	0	0	-83
23	493.05	87361	1471	-12	0	-12	0.17	0.28	23	0	0	0	49	0	0	-84
24	492.98	87264	1469	-25	0	-25	0.17	0.25	21	0	0	0	51	0	0	-97
25	492.92	87181	1469	-18	0	-18	0.15	0.24	20	0	0	0	46	0	0	-83
26	492.87	87111	1468	4	0	4	0.32	0.22	27	0	0	0	47	0	0	-70
27	492.82	87042	1468	7	0	7	0.29	0.29	29	0	0	0	46	0	0	-69
28	492.76	86959	1466	-23	0	-23	0.20	0.34	27	0	0	0	33	0	0	-83
29	492.70	86876	1466	-14	0	-14	0.16	0.22	19	0	0	0	50	0	0	-83
30	492.63	86779	1464	-15	0	-15	0.28	0.27	28	0	0	0	54	0	0	-97
TOTAL				118	0	118	7.12	7.70	748	0.00	0.00	0	1397	0	0	-2027

Reservoir capacity = 237,761 acre-feet at 567 ft. elevation.

Direct reservoir inflow values may be negative due to inaccuracies of the evaporation coefficients (supplied by the USBR)

Evaporation and precipitation readings taken at approximately 8 a.m.

Monthly Evaporation Coefficients: Jan=0.65, Feb=0.77, Mar=0.76, Apr=0.80, May=0.81, Jun=0.82, Jul= Aug=0.81, Sep=0.76, Oct=0.75, Nov=0.72, Dec=0.66

CASITAS RESERVOIR OPERATION
JULY 2021

*figures in acre-feet except where otherwise noted

DATE	RESERVOIR (@ 0800 hrs.)			INFLOW			EVAPORATION			PRECIPITATION			RELEASES			STORAGE CHANGE
	Elevation (ft MSL)	Jun 30 th Storage	Surface Area (acres)	Direct	Ventura River Divers'n	Total	Pan @Dam (in)	Pan @Rec (in)	Lake Total (af)	at Dam (in)	at Rec (in)	Lake Total (af)	To Main System	To River	To Spill	
1	492.58	86711	1463	8	0	8	0.16	0.28	22	0	0	0	54	0	0	-68
2	492.52	86628	1463	6	0	6	0.43	0.25	34	0	0	0	55	0	0	-83
3	492.47	86559	1461	16	0	16	0.36	0.31	33	0	0	0	52	0	0	-69
4	492.42	86490	1461	12	0	12	0.36	0.28	32	0	0	0	50	0	0	-69
5	492.38	86435	1459	0	0	0	0.24	0.25	24	0	0	0	31	0	0	-55
6	492.32	86353	1459	-20	0	-20	0.20	0.32	26	0	0	0	36	0	0	-82
7	492.26	86271	1457	-12	0	-12	0.26	0.26	26	0	0	0	45	0	0	-82
8	492.20	86189	1457	1	0	1	0.27	0.34	30	0	0	0	53	0	0	-82
9	492.16	86134	1456	24	0	24	0.33	0.22	27	0	0	0	52	0	0	-55
10	492.09	86039	1454	-9	0	-9	0.20	0.32	26	0	0	0	60	0	0	-95
11	492.04	85970	1454	17	0	17	0.40	0.36	37	0	0	0	49	0	0	-69
12	491.98	85889	1452	-31	0	-31	0.18	0.18	18	0	0	0	32	0	0	-81
13	491.92	85807	1452	-2	0	-2	0.25	0.37	30	0	0	0	50	0	0	-82
14	491.85	85712	1451	-18	0	-18	0.21	0.20	20	0	0	0	57	0	0	-95
15	491.79	85630	1449	13	0	13	0.36	0.26	30	0	0	0	65	0	0	-82
16	491.73	85549	1449	7	0	7	0.29	0.28	28	0	0	0	60	0	0	-81
17	491.68	85481	1448	23	0	23	0.43	0.31	36	0	0	0	55	0	0	-68
18	491.61	85387	1448	-22	0	-22	0.20	0.27	23	0	0	0	49	0	0	-94
19	491.54	85292	1446	-46	0	-46	0.22	0.12	17	0	0	0	32	0	0	-95
20	491.49	85225	1444	17	0	17	0.32	0.40	35	0	0	0	49	0	0	-67
21	491.41	85117	1444	-11	0	-11	0.30	0.38	33	0	0	0	64	0	0	-108
22	491.34	85023	1443	-9	0	-9	0.20	0.35	27	0	0	0	58	0	0	-94
23	491.28	84943	1441	2	0	2	0.40	0.16	27	0	0	0	55	0	0	-80
24	491.21	84849	1441	-4	0	-4	0.24	0.37	30	0	0	0	60	0	0	-94
25	491.16	84782	1440	-3	0	-3	0.22	0.22	21	0	0	0	43	0	0	-67
26	491.10	84702	1440	-19	0	-19	0.28	0.32	29	0	0	0	32	0	0	-80
27	491.04	84622	1438	-9	0	-9	0.37	0.07	21	0	0	0	49	0	0	-80
28	490.97	84529	1436	-4	0	-4	0.34	0.21	27	0	0	0	62	0	0	-93
29	490.90	84437	1436	-3	0	-3	0.31	0.28	29	0	0	0	60	0	0	-92
30	490.84	84357	1435	-1	0	-1	0.18	0.26	21	0	0	0	58	0	0	-80
31	490.79	84291	1433	11	0	11	0.29	0.25	26	0	0	0	51	0	0	-66
TOTAL				-68	0	-68	8.80	8.45	844	0.00	0.00	0	1577	0	0	-2488

*Evaporation and/or Precipitation data from LCRA not logged; Casitas Dam data substituted

Reservoir capacity = 237,761 acre-feet at 567 ft. elevation.

Direct reservoir inflow values may be negative due to inaccuracies of the evaporation coefficients (supplied by the USBR)

Evaporation and precipitation readings taken at approximately 8 a.m.

Monthly Evaporation Coefficients: Jan=0.65, Feb=0.77, Mar=0.76, Apr=0.80, May=0.81, Jun=0.82, Jul= Aug=0.81, Sep=0.76, Oct=0.75, Nov=0.72, Dec=0.66

CASITAS RESERVOIR OPERATION
August 2021

*figures in acre-feet except where otherwise noted

DATE	RESERVOIR (@ 0800 hrs.)			INFLOW			EVAPORATION			PRECIPITATION			RELEASES			STORAGE CHANGE
	Elevation (ft MSL)	Jul 31 st Storage	Surface Area (acres)	Direct	Ventura River Divers'n	Total	Pan @Dam (in)	Pan @Rec (in)	Lake Total (af)	at Dam (in)	at Rec (in)	Lake Total (af)	To Main System	To River	To Spill	
1	490.74	84225	1433	15	0	15	0.29	0.29	28	0	0	0	53	0	0	-66
2	490.69	84159	1432	-7	0	-7	0.30	0.31	29	0	0	0	29	0	0	-66
3	490.63	84081	1432	-2	0	-2	0.23	0.30	26	0	0	0	50	0	0	-78
4	490.57	84002	1430	12	0	12	0.31	0.24	27	0	0	0	64	0	0	-79
5	490.51	83923	1430	3	0	3	0.23	0.28	25	0	0	0	57	0	0	-79
6	490.45	83844	1428	6	0	6	0.33	0.29	30	0	0	0	55	0	0	-79
7	490.39	83766	1427	5	0	5	0.24	0.25	24	0	0	0	60	0	0	-78
8	490.35	83713	1427	14	0	14	0.15	0.32	23	0	0	0	45	0	0	-53
9	490.30	83648	1427	6	0	6	0.43	0.25	33	0	0	0	39	0	0	-65
10	490.24	83570	1425	4	0	4	0.38	0.22	29	0	0	0	53	0	0	-78
11	490.18	83491	1424	4	0	4	0.16	0.28	21	0	0	0	62	0	0	-79
12	490.10	83387	1424	-12	0	-12	0.29	0.28	27	0	0	0	64	0	0	-104
13	490.04	83309	1422	15	0	15	0.23	0.27	24	0	0	0	69	0	0	-78
14	489.96	83205	1420	-11	0	-11	0.31	0.34	31	0	0	0	61	0	0	-104
15	489.90	83127	1420	-14	0	-14	0.24	0.16	19	0	0	0	44	0	0	-78
16	489.83	83036	1419	-23	0	-23	0.21	0.36	27	0	0	0	41	0	0	-91
17	489.76	82945	1417	-12	0	-12	0.15	0.23	18	0	0	0	61	0	0	-91
18	489.70	82868	1417	15	0	15	0.40	0.22	30	0	0	0	62	0	0	-77
19	489.63	82777	1416	-12	0	-12	0.15	0.17	15	0	0	0	63	0	0	-91
20	489.57	82699	1414	-10	0	-10	0.20	0.12	15	0	0	0	53	0	0	-78
21	489.50	82609	1414	-20	0	-20	0.19	0.28	22	0	0	0	47	0	0	-90
22	489.43	82519	1412	-31	0	-31	0.17	0.14	15	0	0	0	44	0	0	-90
23	489.40	82480	1412	8	0	8	0.17	0.20	18	0	0	0	29	0	0	-39
24	489.33	82390	1411	-14	0	-14	0.52	0.17	33	0	0	0	44	0	0	-90
25	489.28	82325	1409	13	0	13	0.24	0.21	21	0	0	0	56	0	0	-65
26	489.20	82222	1409	-19	0	-19	0.23	0.26	23	0	0	0	61	0	0	-103
27	489.11	82107	1408	-27	0	-27	0.26	0.19	21	0	0	0	66	0	0	-115
28	489.04	82017	1406	1	0	1	0.19	0.39	28	0	0	0	64	0	0	-90
29	488.97	81927	1404	-25	0	-25	0.19	0.15	16	0	0	0	49	0	0	-90
30	488.94	81889	1404	31	0	31	0.39	0.28	32	0	0	0	37	0	0	-38
31	488.82	81735	1403	-79	0	-79	0.16	0.27	20	0	0	0	55	0	0	-154
TOTAL				-167	0	-167	7.94	7.72	750	0	0	0	1639	0	0	-2556

Reservoir capacity = 237,761 acre-feet at 567 ft. elevation.

Direct reservoir inflow values may be negative due to inaccuracies of the evaporation coefficients (supplied by the USBR)

Evaporation and precipitation readings taken at approximately 8 a.m.

Monthly Evaporation Coefficients: Jan=0.65, Feb=0.77, Mar=0.76, Apr=0.80, May=0.81, Jun=0.82, Jul= Aug=0.81, Sep=0.76, Oct=0.75, Nov=0.72, Dec=0.66

CASITAS RESERVOIR OPERATION
SEPTEMBER 2021

*figures in acre-feet except where otherwise noted

DATE	RESERVOIR (@ 0800 hrs.)			INFLOW			EVAPORATION			PRECIPITATION			RELEASES			STORAGE CHANGE
	Elevation	Aug 30 th Surface	Surface	Ventura			Pan	Pan	Lake	at	at	Lake	To			
	(ft MSL)	81735	Area	Direct	Divers'n	Total	@Dam	@Rec	Total	Dam	Rec	Total	Main	To	Spill	
	Storage	(acres)				(in)	(in)	(af)	(in)	(in)	(af)	System	River			
1	488.76	81658	1401	3	0	3	0.08	0.15	10	0	0	0	70	0	0	-77
2	488.74	81633	1401	51	0	51	0.10	0.09	8	0	0	0	68	0	0	-25
3	488.66	81531	1400	-13	0	-13	0.41	0.27	30	0	0	0	59	0	0	-102
4	488.62	81479	1400	19	0	19	0.15	0.13	12	0	0	0	58	0	0	-52
5	488.57	81416	1398	6	0	6	0.24	0.31	24	0	0	0	45	0	0	-63
6	488.53	81365	1398	26	0	26	0.25	0.38	28	0	0	0	49	0	0	-51
7	488.47	81288	1396	2	0	2	0.36	0.22	26	0	0	0	53	0	0	-77
8	488.40	81199	1396	-4	0	-4	0.25	0.25	22	0	0	0	63	0	0	-89
9	488.34	81123	1395	13	0	13	0.25	0.20	20	0	0	0	70	0	0	-76
10	488.27	81034	1393	-2	0	-2	0.29	0.30	26	0	0	0	61	0	0	-89
11	488.22	80970	1393	12	0	12	0.12	0.20	14	0	0	0	62	0	0	-64
12	488.17	80907	1392	7	0	7	0.25	0.25	22	0	0	0	48	0	0	-63
13	488.13	80856	1392	10	0	10	0.22	0.23	20	0	0	0	41	0	0	-51
14	488.07	80780	1390	-11	0	-11	0.18	0.13	14	0	0	0	51	0	0	-76
15	488.05	80755	1390	57	0	57	0.17	0.17	15	0	0	0	67	0	0	-25
16	487.93	80603	1388	-73	0	-73	0.23	0.10	15	0	0	0	64	0	0	-152
17	487.88	80540	1387	6	0	6	0.08	0.30	17	0	0	0	52	0	0	-63
18	487.82	80464	1387	-12	0	-12	0.21	0.10	14	0	0	0	50	0	0	-76
19	487.75	80375	1385	-30	0	-30	0.24	0.18	18	0	0	0	40	0	0	-89
20	487.70	80312	1385	-12	0	-12	0.30	0.12	18	0	0	0	33	0	0	-63
21	487.67	80274	1384	26	0	26	0.16	0.19	15	0	0	0	48	0	0	-38
22	487.63	80224	1384	28	0	28	0.24	0.15	17	0	0	0	61	0	0	-50
23	487.53	80098	1382	-46	0	-46	0.18	0.25	19	0	0	0	61	0	0	-126
24	487.47	80023	1380	6	0	6	0.15	0.30	20	0	0	0	62	0	0	-75
25	487.43	79972	1380	16	0	16	0.15	0.10	11	0	0	0	56	0	0	-51
26	487.36	79884	1379	-22	0	-22	0.45	0.12	25	0	0	0	42	0	0	-88
27	487.31	79821	1379	-10	0	-10	0.15	0.21	16	0	0	0	38	0	0	-63
28	487.26	79759	1377	-8	0	-8	0.07	0.11	8	0	0	0	46	0	0	-62
29	487.27	79771	1377	80	0	80	0.15	0.06	9	0	0	0	58	0	0	12
30	487.20	79683	1377	-23	0	-23	0.17	0.20	16	0	0	0	49	0	0	-88
TOTAL				101	0	101	6.25	5.77	529	0.00	0.00	0	1624	0	0	-2052

Reservoir capacity = 237,761 acre-feet at 567 ft. elevation.

e = estimate

Direct reservoir inflow values may be negative due to inaccuracies of the evaporation coefficients (supplied by the USBR)

Evaporation and precipitation readings taken at approximately 8 a.m.

Monthly Evaporation Coefficients: Jan=0.65, Feb=0.77, Mar=0.76, Apr=0.80, May=0.81, Jun=0.82, Jul= Aug=0.81, Sep=0.76, Oct=0.75, Nov=0.72, Dec=0.66

Appendix E
Reservoir Elevation Data

Matilija Reservoir Lake Elevation

WATER YEAR OCTOBER 2020 THROUGH SEPTEMBER 2021

Daily mean elevation, feet above mean sea level

SPILL OVER DAM @ 1095.35 ELEVATION

Day	2020			2021								
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1085.89	1085.92	1085.94	1085.94	1097.44	1095.79	1096.14	1096.99	1096.90	1097.43	1097.68	1082.55
2	1085.89	1085.92	1085.94	1085.94	1097.56	1095.79	1096.18	1096.88	1096.95	1097.45	1097.57	1084.51
3	1085.89	1085.92	1085.94	1085.93	1096.66	1095.77	1096.14	1096.81	1096.96	1097.46	1096.99	1085.82
4	1085.90	1085.92	1085.95	1085.93	1095.74	1095.73	1096.12	1096.89	1096.97	1097.45	1096.25	1085.81
5	1085.90	1085.92	1085.95	1085.93	1095.77	1095.74	1096.11	1096.96	1096.96	1097.42	1095.43	1085.80
6	1085.91	1085.92	1085.95	1085.93	1095.83	1095.77	1096.08	1096.94	1096.94	1097.42	1094.55	1085.79
7	1085.91	1085.94	1085.94	1085.93	1095.89	1095.76	1096.08	1096.87	1096.90	1097.46	1093.49	1085.78
8	1085.91	1085.95	1085.94	1085.94	1095.89	1095.74	1096.10	1096.80	1096.85	1097.50	1092.18	1085.77
9	1085.91	1085.94	1085.94	1085.94	1091.91	1095.74	1096.16	1096.79	1096.88	1097.56	1091.03	1085.76
10	1085.91	1085.95	1085.95	1085.94	1095.56	1095.76	1096.21	1096.78	1096.92	1097.60	1089.81	1085.85
11	1085.90	1085.94	1085.95	1085.94	1095.58	1095.71	1096.21	1096.77	1096.97	1097.60	1088.07	1085.91
12	1085.90	1085.94	1085.94	1085.94	1095.60	1095.66	1096.15	1096.78	1097.02	1097.59	1083.14	1085.92
13	1085.90	1085.94	1085.93	1085.94	1095.61	1095.64	1096.09	1096.80	1097.06	1097.57	1082.91	1085.92
14	1085.90	1085.94	1085.94	1085.93	1095.62	1095.66	1096.03	1096.78	1097.13	1097.56	1082.85	1085.92
15	1085.90	1085.93	1085.94	1085.92	1095.63	1095.66	1096.01	1096.73	1097.31	1097.56	1082.80	1085.93
16	1085.90	1085.93	1085.94	1085.92	1095.63	1095.66	1096.03	1096.61	1097.45	1097.56	1082.75	1085.93
17	1085.90	1085.93	1085.94	1085.92	1095.64	1095.66	1096.06	1096.49	1097.43	1097.57	1082.72	1085.92
18	1085.91	1085.94	1085.94	1085.93	1095.65	1095.68	1096.15	1096.56	1097.42	1097.60	1082.70	1085.92
19	1085.91	1085.93	1085.94	1085.93	1095.65	1095.73	1096.26	1096.68	1097.38	1097.62	1082.67	1085.92
20	1085.91	1085.93	1085.94	1085.94	1095.66	1095.78	1096.30	1096.70	1097.37	1097.66	1082.65	1085.92
21	1085.91	1085.93	1085.94	1085.93	1095.66	1095.78	1096.22	1096.67	1097.34	1097.67	1082.64	1085.91
22	1085.89	1085.93	1085.94	1085.94	1095.70	1095.79	1096.12	1096.60	1097.33	1097.68	1082.63	1085.90
23	1085.89	1085.94	1085.95	1085.94	1095.76	1095.79	1096.09	1096.60	1097.35	1097.66	1082.61	1085.91
24	1085.89	1085.94	1085.95	1085.94	1095.80	1095.79	1096.10	1096.75	1097.34	1097.62	1082.60	1085.92
25	1085.89	1085.94	1085.95	1085.94	1095.80	1095.79	1096.09	1096.98	1097.34	1097.59	1082.59	1085.92
26	1085.90	1085.94	1085.94	1085.94	1095.78	1095.76	1096.04	1096.99	1097.38	1097.56	1082.58	1085.91
27	1085.91	1085.95	1085.94	1085.94	1095.79	1095.79	1096.04	1096.94	1097.43	1097.54	1082.58	1085.92
28	1085.92	1085.95	1085.96	1087.89	1095.79	1095.87	1096.13	1096.90	1097.46	1097.62	1082.57	1085.91
29	1085.93	1085.95	1085.94	1096.90	---	1095.99	1096.37	1096.87	1097.45	1097.68	1082.56	1085.91
30	1085.93	1085.94	1085.94	1097.26	---	1096.05	1096.76	1096.84	1097.42	1097.68	1082.56	1085.92
31	1085.93	---	1085.94	1097.35	---	1096.07	---	1096.84	---	1097.68	1082.56	---

Data logger malfunctioning. Data estimated using downstream gage and observational measurements.

Appendix F

System Delivery Data for Mire Monte Well and Ojai Water System

Mira Monte Well

Calendar Year 2021

Month	Acre Feet
Jan – 21	7.61
Feb – 21	8.15
Mar – 21	9.29
Apr – 21	5.97
May – 21	19.73
Jun – 21	23.86
Jul – 21	27.22
Aug – 21	26.99
Sep – 21	24.76
Oct – 21	15.90
Nov – 21	14.90
Dec – 21	6.02
Total:	190.40 AF

Mira Monte Well

Water Year 2020 – 2021

Month	Acre Feet
Oct – 20	24.10
Nov – 20	17.96
Dec – 20	13.18
Jan – 21	7.61
Feb – 21	8.15
Mar – 21	9.29
Apr – 21	16.32
May – 21	19.73
Jun – 21	23.86
Jul – 21	27.22
Aug – 21	26.99
Sep – 21	24.76
Total:	219.17 AF

OJAI WATER SYSTEM SOURCES AND DELIVERIES 2020 - 2021 WATER YEAR

figures in acre-feet except where otherwise noted

MONTH	YEAR	SYSTEM DELIVERIES	SOURCE	
			WELL - FIELD PRODUCTION	SURFACE WATER
OCT	2020	178	125	53
NOV	2020	142	93	49
DEC	2020	131	119	12
JAN	2021	94	94	0
FEB	2021	47	46	1
MAR	2021	100	99	1
APR	2021	135	124	11
MAY	2021	154	103	51
JUN	2021	170	94	76
JUL	2021	189	118	71
AUG	2021	196	117	80
SEP	2021	176	98	78
TOTAL		1714	1229	484

Appendix G
Ambient Air Temperature Data

**HISTORICAL TEMPERATURES
CMWD CASITAS DAM WEATHER STATION
(Degrees F.)**

YEAR	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE			JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	max	min	avg	max	min	avg	max	min	avg	max	min	avg	max	min	avg	max	min	avg	max	min	avg	max	min	avg	max	min	avg	max	min	avg	max	min	avg	max	min	avg
1960	77	24	48	75	29	52	85	35	56	90	37	59	88	35	61	93	45	63	106	46	69	95	44	66	102	44	69	93	37	62	82	31	55	83	25	51
1961	88	26	54	85	30	54	84	31	54	99	33	52	88	35	57	104	40	62	97	47	68	95	39	68	99	37	65	103	37	62	90	31	55	81	30	52
1962	89	25	52	74	31	50	80	29	50	91	37	60	90	38	57	82	42	62	89	47	65	92	47	68	100	45	65	93	41	62	89	32	56	87	22	54
1963	78	16	50	90	39	60	84	30	54	83	33	54	78	39	60	85	42	62	87	45	66	91	44	68	109	48	72	90	43	65	88	33	58	85	30	54
1964	82	28	50	82	29	50	85	32	50	94	34	66	84	35	66	87	42	61	94	45	67	95	48	62	100	44	66	99	44	66	88	28	54	77	28	53
1965	82	29	54	85	29	68	81	35	54	92	31	57	88	37	59	83	40	61	90	47	65	103	49	70	95	45	65	99	40	66	83	34	58	80	28	51
1966	79	28	50	78	30	48	88	29	56	96	38	60	81	43	60	88	42	65	89	46	66	94	49	70	98	44	68	98	39	66	96	34	58	78	27	53
1967	81	29	52	86	30	55	79	31	54	71	33	50	98	37	61	88	39	61	93	52	68	108	54	74	98	51	70	98	40	65	88	33	60	80	26	50
1968	82	27	51	84	36	57	90	35	58	85	34	56	102	37	60	88	42	62	97	48	68	90	46	65	102	40	67	85	32	58	98	42	64	81	20	49
1969	86	28	52	71	30	49	86	31	53	83	36	58	87	42	60	90	42	62	90	49	67	104	47	70	96	48	67	91	37	62	91	33	58	80	24	54
1970	70	24	53	81	34	51	81	33	58	87	32	55	99	37	61	100	45	64	103	48	68	97	48	68	102	43	65	102	35	61	82	35	56	78	30	50
1971	87	23	52	91	30	53	80	24	54	90	35	55	85	38	57	91	39	62	99	48	68	98	50	72	111	41	68	103	25	60	89	31	54	71	24	46
1972	78	23	49	81	25	53	92	30	57	84	31	56	97	37	61	90	45	63	104	47	70	106	48	70	99	43	67	96	30	61	85	32	55	81	22	49
1973	79	24	48	75	33	53	73	31	51	81	36	56	94	39	61	104	42	66	96	44	66	98	46	67	99	45	64	96	39	63	81	31	54	82	30	53
1974	75	24	49	81	30	51	78	32	53	85	35	57	97	34	58	98	46	64	94	46	69	84	45	66	98	46	67	103	39	62	92	31	56	79	23	51
1975	86	31	52	79	27	51	74	31	52	79	32	52	78	35	58	88	42	61	91	45	66	94	45	66	104	46	68	98	35	72	92	25	55	90	23	52
1976	90	23	54	86	31	53	85	29	55	89	33	54	89	42	60	104	43	66	90	48	68	102	47	68	92	50	68	97	37	65	97	26	60	83	29	53
1977	80	29	52	88	30	56	80	29	51	87	34	58	77	37	57	88	43	64	104	64	68	90	49	70	94	43	66	92	38	62	94	32	61	83	32	56
1978	76	29	54	82	31	53	88	35	57	78	34	55	99	39	64	92	46	66	106	45	67	94	46	68	108	43	70	92	43	65	92	30	54	77	20	49
1979	70	24	49	77	28	55	86	32	55	81	34	58	97	38	62	104	44	67	99	46	67	92	44	68	109	47	72	86	38	64	84	27	57	89	26	55
1980	79	30	55	84	32	57	80	29	54	86	36	58	82	36	58	97	42	64	94	47	68	95	48	69	95	44	64	95	36	64	88	29	57	88	31	56
1981	82	32	55	88	29	56	80	35	54	94	36	59	87	41	62	105	50	70	99	47	70	104	47	70	95	45	67	95	32	60	91	33	58	81	32	55
1982	78	26	50	85	33	56	76	31	53	85	32	57	80	41	60	78	40	61	94	47	68	102	47	70	101	41	67	95	41	64	85	32	55	74	27	51
1983	89	28	54	81	32	54	85	35	56	85	34	56	92	39	62	82	47	64	101	48	70	105	49	74	106	51	73	97	45	68	90	29	57	76	29	53
1984	84	31	56	83	31	55	88	35	59	94	34	59	105	41	67	94	46	60	98	52	74	96	53	74	108	51	77	91	39	63	82	32	55	74	29	51
1985	76	28	51	88	26	54	84	31	55	91	40	61	85	38	57	98	44	67	105	52	73	101	49	71	94	40	68	99	34	65	88	30	55	82	25	55
1986	85	35	57	90	31	57	88	38	58	92	38	59	88	41	61	92	47	65	89	49	68	103	50	70	86	41	63	92	40	63	89	36	61	80	32	54
1987	82	24	50	82	29	54	81	30	56	93	38	62	92	42	64	91	47	65	92	46	66	101	47	69	101	49	69	107	49	68	87	31	57	80	24	50
1988	82	29	53	87	30	57	97	33	60	92	38	59	96	39	62	91	40	64	93	51	71	92	48	69	108	46	67	102	42	65	88	31	57	86	26	52
1989	84	26	51	86	28	51	89	32	59	103	38	63	84	40	61	99	46	66	100	50	70	93	48	68	100	46	68	95	35	62	94	29	60	87	28	55
1990	84	27	52	84	23	52	91	30	56	89	42	61	102	39	61	106	45	68	104	50	73	96	49	71	97	50	69	96	42	65	94	30	60	85	15	50
1991	83	28	54	85	35	58	77	31	52	88	37	59	91	40	59	83	44	62	85	50	67	96	48	68	95	48	69	105	36	66	93	33	60	79	28	53
1992	84	31	54	87	35	57	81	39	57	91	44	64	81	49	65	87	45	66	97	49	71	101	50	73	98	50	69	95	46	65	90	34	59	78	27	50
1993	80	28	52	76	36	52	85	36	59	89	41	61	92	40	63	94	43	67	89	52	68	93	52	70	103	45	68	100	44	65	95	32	57	81	29	52
1994	86	30	54	79	29	52	89	36	58	89	40	59	84	43	61	102	48	68	96	52	68	102	51	73	95	46	69	97	39	63	82	28	52	78	26	52
1995	83	32	53	91	41	61	82	36	58	89	38	59	78	40	59	90	43	65	106	50	70	103	47	71	101	46	70	97	40	65	88	40	61	81	34	56
1996	86	28	54	87	30	57	84	34	58	94	40	63	89	44	64	102	47	67	103	52	71	101	50	72	93	47	69	84	34	62	93	34	59	75	33	54
1997	80	33	54	87	35	56	95	33	60	94	36	61	98	45	68	84	50	67	96	50	70	110	51	74	104	50	75	102	37	66	100	40	60	81	26	52
1998	76	29	54	75	35	52	85	33	57	86	36	57	80	43	60	82	46	65	96	51	71	108	51	75	106	48	69	93	38	63	82	35	56	84	23	51
1999	81	30	54	83	29	55	82	34	54	93	30	57	89	40	61	84	42	67	95	48	71	98	47	69	103	43	67	100	43	68	88	33	59	85	31	56
2000	79	28	55	81	36	54	84	34	57	89	40	62	90	43	65	91	46	69	104	49	70	97	52	72	103	45	71	89	40	62	81	30	53	81	30	55
2001	67	35	51	64	39	52	71	46	58	71	44	57	77	55	66	82	54	68	82	56	69	85	55	70	85	54	70	79	51	65	69	46	58	65	37	51
2002	80	28	51	90	27	56	84	31	55	87	38	58	94	40	61	90	45	66	98	48	69	90	49	69	109	46	70	99	41	61	91	39	58	72	33	52
2003	91	34	59	76	30	54	90	36	59	87	37	63	95	43	62	87	49	65	97	50	73	101	37	74	101	50	69	100	45	68	83	30	55	76	27	51
2004	79	25	52	75	31	52	94	37	63	102	37																									

HISTORICAL TEMPERATURES
CMWD CASITAS RECREATION AREA WEATHER STATION
 (Degrees F.)

YEAR	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE			JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	max	min	avg	max	min	avg	max	min	avg	max	min	avg	max	min	avg	max	min	avg	max	min	avg	max	min	avg	max	min	avg	max	min	avg	max	min	avg	max	min	avg
1960	75	22	48	73	29	51	84	34	56	89	33	59	92	35	62	99	43	66	107	46	72	98	44	69	107	41	71	92	35	62	84	33	56	81	27	52
1961	89	26	54	85	30	54	83	31	54	100	39	59	87	37	58	112	41	62	103	49	72	100	48	72	102	44	66	106	35	64	91	30	55	80	31	51
1962	88	24	50	75	25	50	79	28	50	92	34	60	87	39	58	94	43	63	95	45	67	101	45	72	99	43	68	96	40	61	87	31	57	84	19	53
1963	78	16	48	88	37	58	85	29	52	78	33	53	84	39	58	89	42	62	95	46	69	99	46	70	107	52	74	89	41	64	88	31	56	82	27	53
1964	80	25	49	82	27	50	82	27	49	83	32	54	82	34	57	10	42	62	97	46	70	94	46	69	98	41	66	100	43	62	85	27	54	75	25	52
1965	82	28	52	84	25	51	77	31	52	89	30	54	92	28	58	91	38	58	96	41	66	102	47	71	93	40	62	97	37	61	84	33	56	83	26	50
1966	80	26	49	76	28	48	95	27	55	92	37	59	85	41	60	96	42	65	93	41	68	94	50	72	97	42	62	96	37	64	95	32	56	79	25	52
1967	79	25	50	82	28	53	80	30	52	89	32	54	96	36	60	87	38	60	92	49	70	105	54	75	96	50	70	97	41	65	91	33	60	79	25	49
1968	80	25	50	85	35	56	84	32	56	86	31	57	99	34	60	93	35	62	95	36	72	96	42	62	98	38	62	96	40	62	87	27	56	87	21	48
1969	84	26	50	87	29	49	85	28	52	81	31	56	86	38	60	90	45	61	92	46	68	101	43	71	92	41	62	87	32	59	88	31	58	79	23	52
1970	68	20	52	76	32	50	79	31	56	87	30	47	96	35	60	97	44	67	100	48	71	102	42	69	102	42	66	99	34	62	86	33	55	76	29	49
1971	90	24	51	87	28	52	85	25	52	88	33	54	81	38	56	88	40	62	95	48	68	98	49	72	109	42	68	99	26	60	86	30	44	68	22	46
1972	77	24	43	82	26	54	90	30	58	85	30	58	96	31	62	93	38	65	100	40	71	103	44	71	95	32	67	92	33	60	83	33	55	80	23	51
1973	80	20	47	75	32	53	69	30	50	79	35	56	96	38	61	101	42	68	94	48	67	96	44	69	95	40	64	92	40	63	81	31	53	81	28	53
1974	75	23	49	79	28	51	78	32	54	87	35	56	97	35	58	96	41	65	95	48	70	89	46	68	95	45	68	97	41	60	90	30	56	79	24	49
1975	86	24	52	77	29	51	74	31	53	78	30	52	85	35	58	83	44	62	95	45	68	96	42	68	100	47	70	95	35	61	85	27	54	83	25	53
1976	87	21	53	79	32	51	82	28	54	86	35	54	94	43	61	104	42	67	96	49	67	92	49	67	92	50	69	94	36	63	95	28	59	82	27	52
1977	82	23	51	86	32	54	78	28	50	84	32	57	81	39	57	85	39	63	100	47	69	94	49	70	96	44	65	90	38	62	92	31	58	78	33	56
1978	74	28	51	88	30	54	88	37	57	75	33	55	99	40	63	90	42	66	109	48	69	96	47	67	109	41	69	96	42	65	86	29	53	76	22	49
1979	69	26	48	76	28	50	84	35	54	79	35	57	95	40	60	102	44	66	98	45	69	89	48	68	105	44	72	90	37	63	82	25	56	87	25	54
1980	76	31	54	82	30	56	76	34	54	91	36	58	89	34	58	95	42	65	110	49	73	96	49	70	104	36	66	104	37	64	90	28	58	89	30	56
1981	82	33	56	88	30	57	79	36	55	94	36	59	88	40	62	102	42	72	93	49	71	102	47	73	95	48	68	93	34	60	89	34	58	84	25	54
1982	80	26	51	83	31	56	76	32	52	85	31	57	83	38	60	87	42	61	95	47	70	104	48	72	106	46	69	94	36	63	84	34	56	75	28	52
1983	90	29	55	79	32	55	82	31	55	79	32	55	89	21	59	86	39	64	96	43	68	96	40	73	103	41	72	93	33	62	86	NA	NA	75	NA	67
1984	80	30	53	80	28	52	81	34	56	86	34	57	100	40	65	94	48	65	96	52	73	94	52	72	101	50	74	90	37	60	78	30	53	71	28	50
1985	72	27	48	85	25	51	80	30	51	87	38	58	85	38	57	98	42	66	105	33	73	100	50	69	91	42	65	96	42	61	84	30	53	84	26	53
1986	84	33	57	85	30	55	82	38	57	87	35	57	88	39	59	88	49	65	89	50	68	94	53	71	87	42	61	88	38	61	86	33	59	76	28	52
1987	75	22	48	80	28	52	78	31	53	88	34	60	91	40	63	89	48	65	91	47	63	94	44	68	101	45	68	102	48	66	83	28	55	74	20	47
1988	80	26	50	80	28	54	93	30	57	89	34	58	94	36	61	87	40	64	91	52	70	92	49	68	104	44	66	96	41	63	86	28	55	82	26	50
1989	80	24	48	80	27	50	82	30	56	96	36	61	86	40	59	94	46	64	102	38	69	90	46	67	102	45	67	95	34	61	91	27	58	90	27	51
1990	84	24	50	81	20	50	86	31	54	86	39	59	98	37	58	110	41	67	98	48	71	96	44	69	99	46	68	92	38	62	89	25	56	82	8	45
1991	78	24	49	82	29	56	80	28	49	84	32	56	90	33	57	90	40	61	95	46	66	96	44	67	90	44	68	101	30	65	90	30	57	78	22	50
1992	80	24	50	82	30	53	76	32	53	90	36	60	NA	NA	NA	NA	NA	NA	NA	NA	NA	98	50	73	NA	NA	NA	97	44	64	87	31	57	74	23	48
1993	79	24	49	78	31	50	81	32	56	84	38	59	NA	NA	NA	102	40	66	95	50	66	90	50	70	100	46	70	97	42	66	90	34	58	85	30	54
1994	89	32	56	82	30	52	87	35	59	82	39	59	86	43	61	100	48	68	96	52	70	100	53	75	92	46	70	95	40	64	88	30	55	85	28	54
1995	78	33	53	92	40	61	78	34	56	87	40	60	83	40	61	91	39	65	104	51	71	97	50	75	100	48	71	NA	NA	NA	87	42	62	84	36	56
1996	90	29	55	NA	NA	NA	84	33	57	92	41	62	92	46	64	96	48	67	97	54	73	99	52	74	92	49	69	99	38	64	95	38	60	71	43	57
1997	82	32	54	86	34	57	94	34	59	92	36	61	94	46	68	82	52	67	91	42	69	102	55	74	99	52	75	NA	NA	NA	100	41	60	84	29	54
1998	83	31	54	72	37	51	83	35	56	84	36	55	77	38	58	81	40	61	94	43	69	105	44	75	105	45	68	89	40	62	81	35	56	85	22	52
1999	81	30	55	78	27	53	81	33	52	32	88	56	38	86	58	86	42	63	97	50	69	100	49	69	100	44	65	100	43	68	90	34	58	83	31	55
2000	79	30	54	79	35	53	81	35	55	84	39	59	99	40	64	91	48	68	96	48	69	98	51	72	104	47	67	88	41	61	86	30	54	81	31	55
2001	82	28	49	89	30	49	82	35	56	78	36	55	90	42	64	92	48	67	89	50	69	95	51	70	96	46	68	99	43	64	80	32	59	81	31	52
2002	81	24	50	72	35	54	80	30	53	90	38	61	90	43	64	94	49	69	94	49	69	96	48	68	101	44	72	97	40	61	89	38	59	71	29	51
2003	84	32	57	81	28	52	87	31	55	86	31	53	92	39	60	62	38	61	96	43	72	98	50	71	99	38	69	99	43	67	82	28	53	78	24	51
2004	78	28	49	71	29	49	90	35	59	99	31	56	99	41	62	86</																				

Appendix H
Historical Hydrology Data

CASITAS RESERVOIR INVENTORY ANNUAL SUMMARY

(CALENDAR YEAR - ALL VALUES IN ACRE-FEET UNLESS OTHERWISE NOTED)

YEAR	RESERVOIR DATA (START OF YEAR- Last Day of Previous Month)		INFLOW FOR YEAR			RELEASES FOR YEAR			SPILL FOR YEAR	EVAP FOR YEAR	RAINFALL ON LAKE SURFACE	STORAGE VOLUME	
	ELEVATION (FT ABOVE MSL)	STORAGE	DIRECT	VENTURA RIVER DIVERSION	TOTAL	TO CONV. SYSTEM	DOWN RIVER	TOTAL				MAXIMUM FOR YEAR	MINIMUM FOR YEAR
1959	350.00	-	2,305	5,105	7,410	586	72	658	-	728	59	7,022	574
1960	366.66	5,908	1,322	24	1,346	1,277	80	1,357	-	1,068	372	6,846	5,201
1961	363.28	5,201	967	32	999	1,625	18	1,643	-	819	133	5,201	3,642
1962	355.46	3,870	26,428	21,915	48,343	1,988	55	2,043	-	3,505	1,014	51,977	3,845
1963	477.68	47,679	2,114	2,939	5,053	4,445	72	4,517	-	3,498	1,664	51,524	46,381
1964	446.13	46,381	1,841	354	2,195	6,024	72	6,096	-	3,406	1,293	46,381	38,606
1965	438.57	40,373	15,279	21,439	36,718	7,631	72	7,703	-	2,957	2,421	68,851	39,718
1966	469.42	68,851	11,941	25,323	37,264	7,162	73	7,235	-	5,030	1,915	95,765	70,068
1967	490.62	95,765	12,961	35,172	48,133	8,759	72	8,831	-	6,214	3,840	138,996	108,511
1968	513.22	132,333	1,677	1,070	2,747	13,729	74	13,803	-	6,593	2,133	132,549	116,818
1969	504.25	116,818	55,379	50,349	105,728	14,040	73	14,113	-	8,413	7,625	216,790	116,418
1970	548.94	207,694	7,112	15,859	22,971	16,417	72	16,489	-	9,841	5,395	217,656	207,214
1971	549.78	207,729	3,758	10,957	14,715	16,392	24	16,416	-	9,552	3,433	214,692	193,686
1972	546.52	201,908	813	1,718	2,531	17,878	73	17,951	-	8,758	1,706	202,690	179,435
1973	536.70	179,435	22,262	39,588	61,850	13,963	33	13,996	-	8,937	4,520	239,330	224,519
1974	555.75	224,519	5,240	11,732	16,972	17,400	23	17,423	-	9,394	5,423	238,096	217,063
1975	553.99	220,096	5,352	12,988	18,340	15,937	73	16,010	-	8,870	2,813	235,437	216,370
1976	552.49	216,370	3,031	3,438	6,469	18,371	104	18,475	-	9,142	3,782	219,324	198,885
1977	545.29	199,003	1,590	1,094	2,684	18,035	70	18,105	-	8,821	3,352	200,062	175,359
1978	536.10	178,113	49,376	28,695	78,071	12,390	2,677	15,067	1,572	9,622	9,879	255,307	178,025
1979	561.68	239,802	7,584	8,845	16,429	13,072	32	13,104	1,193	9,963	5,395	255,116	237,183
1980	560.75	237,365	28,923	2,717	31,640	16,283	73	16,356	16,855	9,900	7,393	260,034	233,286
1981	559.18	233,286	3,112	5,772	8,884	20,242	73	20,315	-	9,412	4,002	240,222	216,395
1982	552.52	216,444	5,206	9,933	15,139	14,739	73	14,812	-	8,339	5,645	223,208	206,564
1983	551.56	214,078	44,548	22,131	66,679	15,757	73	15,830	17,877	8,844	11,699	259,264	213,562
1984	565.49	249,931	2,878	2,087	4,965	23,007	73	23,080	-	10,637	2,924	249,958	220,748
1985	555.15	223,006	4,220	3,015	7,235	20,219	73	20,292	-	9,149	2,637	223,208	196,404
1986	545.97	200,605	18,711	39,316	58,027	17,797	73	17,870	742	9,700	5,589	254,926	200,558
1987	560.16	235,828	-988	1,614	626	21,775	73	21,848	-	9,117	3,142	236,063	208,711
1988	549.35	208,687	1,431	9,154	10,585	21,974	73	22,047	-	9,005	3,715	216,543	191,890
1989	542.25	191,936	1,086	524	1,610	26,180	73	26,253	-	9,010	1,399	192,259	159,729
1990	527.43	159,688	-1,115	-	-1,115	21,494	73	21,567	-	8,353	1,447	159,688	130,141
1991	511.99	130,141	12,114	17,620	29,734	15,416	73	15,489	-	7,481	4,496	156,765	127,786
1992	518.58	142,203	20,483	44,202	64,685	12,042	73	12,114	-	8,704	5,620	201,197	142,203
1993	542.12	191,637	43,435	34,685	78,120	11,990	73	12,063	13,395	10,054	7,849	258,362	191,637
1994	562.58	242,177	1,806	3,504	5,310	16,345	73	16,418	-	10,347	3,458	245,810	224,141
1995	555.60	224,141	52,239	1,323	53,562	11,621	72	11,693	27,499	10,287	10,895	262,625	239,122
1996	561.42	239,122	6,883	5,371	12,254	15,902	23	15,925	-	10,489	6,897	244,346	224,898
1997	558.63	231,866	11,745	11,896	23,641	20,482	-	20,482	-	11,062	4,304	248,616	223,132
1998	557.06	227,839	51,727	6,338	58,065	13,411	-	13,411	34,907	9,503	12,632	267,542	227,743
1999	561.85	240,250	1,313	-	1,313	20,121	-	20,121	-	10,224	2,295	240,205	213,513
2000	551.33	213,513	13,541	4,482	18,023	21,506	-	21,506	-	9,801	5,134	227,132	205,434
2001	548.00	205,434	21,919	15,527	37,446	17,809	-	17,809	-	8,379	6,693	242,359	204,837
2002	555.24	223,233	-403	-	-403	22,092	-	22,092	-	8,286	2,718	223,183	194,359
2003	543.65	195,172	3,429	1,571	5,000	16,571	-	16,571	-	7,985	3,583	197,199	178,563
2004	536.62	179,219	9,006	2,853	11,859	20,214	-	20,214	-	7,783	4,897	182,113	157,595
2005	531.47	167,988	53,115	26,906	80,021	17,673	-	17,673	-	7,242	7,798	250,736	169,160
2006	558.25	230,891	9,382	12,091	21,473	17,253	-	17,253	-	7,649	5,534	252,651	231,585
2007	559.06	232,975	-1,450	-	-1,450	21,326	-	21,326	-	8,571	2,253	232,950	203,810
2008	547.35	203,882	15,470	9,927	25,397	18,325	-	18,325	-	8,753	5,538	231,071	203,595
2009	548.89	207,574	-580	506	-74	17,259	-	17,259	-	8,025	3,646	207,719	185,543
2010	539.59	185,881	12,419	10,926	23,345	14,637	-	14,637	-	6,898	7,051	199,945	182,049
2011	543.46	194,731	11,054	17,847	28,901	14,841	-	14,841	-	7,576	4,267	221,751	194,731
2012	548.02	205,482	-837	87	-750	16,244	-	16,244	-	8,263	3,165	205,482	183,746
2013	538.48	183,389	-1,649	-	-1,649	20,402	-	20,402	-	7,858	1,021	183,389	154,501
2014	524.88	154,501	217	1,018	1,235	18,811	-	18,811	-	7,678	2,353	154,501	131,511
2015	512.81	131,600	-1,810	-	-1,810	17,246	-	17,246	-	6,162	736	131,600	107,119
2016	498.22	107,119	-1,707	-	-1,707	14,151	-	14,151	-	4,311	2,394	107,759	89,317
2017**	486.02	89,344	14,074	6,091	20,165	12,214	-	12,214	-	5,435	3,020	111,640	82,919
2018	489.74	82,919	3,547	829	4,376	11,633	-	11,633	-	5,242	1,859	85,050	72,255
2019	481.10	72,278	15,366	21,230	36,596	7,668	-	7,668	-	5,434	4,023	107,663	72,149
2020	501.48	99,795	3,288	5,478	8,766	10,820	-	10,820	-	6,201	1,763	107,237	93,316
2021	497.29	93,449	2,766	2,034	4,800	12,468	-	12,468	-	5,704	2,407	93,434	76,737
2022	489.48	82,583											
AVG:	522.27	167,277	11,559	10,464	22,024	15,001	81	15,082	1,810	7,682	4,096	185,667	157,849
MAX:	525.05	249,931	55,379	50,349	105,728	26,180	2,677	26,253	34,907	11,062	12,632	267,542	239,122
MIN:	350.00		-1,810	-	-1,810	586	-	658	-	728	59	5,201	574

*Total water supply delivered to Casitas System during 1991 includes 1240 a.f. state project water into system and 450 a.f. delivered to Santa Barbara out of system.

**Reservoir storage rating table updated and adopted 01 Oct, 2017. Storage volumes after this date reported using 2017 Rating Table.

**HISTORICAL RAINFALL
CASITAS MUNICIPAL WATER DISTRICT**

WATER YEAR	CASITAS DAM	CASITAS RECREATION	MATILIJA DAM	3 - STATION MEAN	THACHER SCHOOL
1958-59	10.22	11.84	16.62	12.89	11.34
59-60	15.79	14.70	14.45	14.98	13.26
1960-61	8.77	8.42	13.24	10.14	9.48
61-62	37.75	33.96	39.21	36.97	28.74
62-63	18.70	17.54	20.07	18.77	16.87
63-64	13.62	12.04	16.13	13.93	12.79
64-65	23.26	22.77	22.83	22.95	17.42
65-66	25.23	25.23	30.30	26.92	24.59
66-67	34.43	32.30	44.78	37.17	31.14
67-68	16.61	16.44	15.20	16.08	12.62
68-69	46.57	47.55	69.94	54.69	46.93
69-70	16.70	16.52	18.98	17.40	N/A
1970-71	19.72	19.71	22.65	20.69	20.72
71-72	11.94	13.72	15.49	13.72	10.83
72-73	34.79	34.56	45.91	38.42	30.14
73-74	19.95	18.43	22.16	20.18	18.91
74-75	23.83	24.05	26.83	24.90	22.37
75-76	17.90	17.23	20.85	18.66	15.24
76-77	12.90	11.98	13.75	12.88	11.42
77-78	49.05	49.66	63.04	53.92	50.04
78-79	25.80	25.64	28.66	26.70	25.45
79-80	34.06	35.15	42.43	37.21	30.58
1980-81	16.24	16.99	21.88	18.37	15.53
81-82	19.35	20.34	25.35	21.68	21.44
82-83	51.14	48.22	58.65	52.67	52.17
83-84	17.91	16.63	19.34	17.96	14.83
84-85	17.30	15.93	19.00	17.41	12.68
85-86	33.49	32.20	41.32	35.67	27.27
86-87	10.86	9.83	11.44	10.71	9.01
87-88	18.62	18.40	21.58	19.53	20.87
88-89	11.73	11.85	13.65	12.41	12.27
89-90	9.46	8.86	12.48	10.27	8.61
1990-91	24.43	23.59	26.01	24.68	21.78
91-92	29.75	28.53	34.27	30.85	34.25
92-93	41.20	43.31	60.38	48.30	45.71
93-94	16.08	14.69	16.27	15.68	15.60
94-95	49.84	49.04	58.17	52.35	46.89
95-96	18.80	16.91	22.78	19.50	17.71
96-97	24.37	25.27	27.80	25.81	22.12
97-98	59.54	58.78	64.27	60.86	52.29
98-99	12.68	10.67	12.56	11.97	12.92
99-00	24.35	21.94	26.79	24.36	19.73
2000-01	29.36	27.86	33.45	30.22	30.55
01-02	9.28	8.77	10.10	9.38	8.27
02-03	24.83	23.69	30.58	26.37	21.35
03-04	17.03	14.33	18.84	16.73	13.04
04-05	54.66	51.28	74.44	60.13	52.90
05-06	26.52	25.84	34.58	28.98	26.00
06-07	8.60	7.15	9.23	8.33	7.65
07-08	26.19	24.58	33.62	28.13	23.89
08-09	14.82	12.91	16.56	14.76	13.62
09-10	31.13	28.48	36.54	32.05	24.35
2010-11	35.99	34.04	40.28	36.77	31.18
11-12	15.11	13.18	14.21	14.17	12.09
12-13	10.99	10.11	11.85	10.98	9.11
13-14	9.90	9.52	14.76	11.39	11.30
14-15	11.65	10.06	17.57	13.09	14.91
15-16	14.64	14.33	16.20	15.06	11.07
16-17	31.53	29.56	35.46	32.18	28.50
17-18	11.49	12.09	17.03	13.54	13.60
18-19	29.49	28.63	39.75	32.62	28.10
19-20	19.30	18.70	29.91	22.64	19.41
20-21	7.07	7.22	6.48	6.92	5.82
AVERAGE	23.24	22.44	27.92	24.82	21.70
MAXIMUM	59.54	58.78	74.44	60.86	52.90
MINIMUM	7.07	7.15	6.48	6.92	5.82

*RAINFALL IN INCHES, WATER YEAR OCTOBER 1 THRU SEPTEMBER 30
BOLD NUMBERS INDICATE RECORD MAX/MIN RAINFALL AMOUNTS FOR THE PERIOD

NOTE: Matilija Dam Rainfall records after 2005-06 season obtained from the Ventura County Watershed Protection District

g:\enr.wks\hydrology\rainfall\historical\rainhist.xls

HISTORICAL MONTHLY RAINFALL LAKE CASITAS DAM

Note: This data is in combination with VCWPD data and may differ from what is reported for annual averages

W. YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1959/1960	0	0	1.18	5.61	4.78	0.65	3.57	0	0	0	0	0	15.79
1961	0.01	5.27	0.45	2.06	0	0.79	0.16	0	0	0	0	0.03	8.77
1962	0	5.62	1.89	3.07	25.49	1.61	0	0.07	0	0	0	0	37.75
1963	0.70	0.01	0.09	1.09	7.78	4.08	2.75	0.15	0.63	0	0	1.42	18.70
1964	0.73	4.83	0	3.11	0	2.50	2.10	0.07	0.18	0	0.10	0	13.62
1965	0.82	2.46	8.65	0.60	0.31	1.45	8.36	0.02	0	0	0	0.59	23.26
1966	0	14.37	7.04	2.43	1.19	0.12	0	0.03	0	0	0	0.05	25.23
1967	0	4.36	10.18	9.29	0.24	3.87	6.35	0	0	0	0	0.14	34.43
1968	0	5.62	1.40	1.75	1.68	5.01	1.13	0	0	0	0.02	0	16.61
1969	1.09	0.91	2.29	26.59	12.12	1.24	2.12	0	0	0.21	0	0	46.57
1969/1970	0	3.77	0.15	3.50	3.45	5.83	0	0	0	0	0	0	16.70
1971	0.03	7.74	6.18	1.56	1.31	0.99	0.83	1.08	0	0	0	0	19.72
1972	0.10	0.43	10.46	0.31	0.38	0	0.19	0.02	0	0	0	0.05	11.94
1973	0.27	6.31	1.23	8.94	14.86	3.17	0.01	0	0	0	0	0	34.79
1974	0.52	2.44	2.04	9.82	0	4.87	0.20	0	0	0	0	0	19.89
1975	0.74	0.15	10.00	0	4.95	6.50	1.48	0	0	0	0	0.01	23.83
1976	0.19	0	0.08	0	6.99	2.05	0.70	0	0.15	0.15	0	7.59	17.90
1977	0	0.53	0.95	6.11	0.25	1.93	0	2.70	0	0	0.43	0	12.90
1978	0	0.14	6.41	10.35	11.55	16.55	2.86	0	0	0	0.02	1.17	49.05
1979	0.06	2.77	2.28	5.86	5.35	8.39	0	0	0.01	0	0	0.63	25.35
1979/1980	0.61	1.10	2.02	8.89	15.92	4.62	0.62	0.22	0	0	0	0.06	34.06
1981	0.02	0	2.10	3.67	2.06	7.87	0.52	0	0	0	0	0	16.24
1982	0.59	2.99	0.76	3.38	1.03	6.74	2.86	0.02	0	0	0	0.98	19.35
1983	0.76	6.63	5.44	13.62	8.92	8.47	5.40	0.21	0	0	1.08	0.60	51.13
1984	4.94	6.02	4.85	0.12	0.01	0.49	0.08	0	0	0.25	0.13	1.06	17.95
1985	0.49	4.72	7.18	1.13	1.87	1.85	0	0	0	0.02	0	0.04	17.30
1986	0.64	7.00	0.99	3.51	10.71	6.96	1.96	0	0	0	0	1.33	33.10
1987	0	1.92	0.50	2.58	2.23	3.50	0.11	0	0.02	0.02	0	0	10.88
1988	1.50	1.48	4.05	3.60	2.57	1.45	3.82	0	0.15	0	0	0	18.62
1989	0	1.24	4.40	0.74	3.92	0.90	0.25	0.18	0	0	0	0.10	11.73
1989/1990	0.52	0.31	0	3.85	3.59	0.02	0.13	1.02	0	0	0	0.01	9.45
1991	0	0.33	0	2.10	3.50	18.30	0	0	0.18	0.01	0.01	0	24.43
1992	0.58	0.23	4.89	3.33	11.54	5.90	0.07	0.49	0	0.37	0	0	27.40
1993	1.43	0	6.91	14.02	11.59	6.44	0	0.17	0.64	0	0	0	41.20
1994	0.09	1.32	2.03	0.75	8.58	2.04	0.53	0.24	0	0	0	0.08	15.66
1995	0.90	1.81	1.22	29.05	2.17	12.30	0.44	1.47	0.48	0	0	0	49.84
1996	0	0.19	3.19	1.67	10.34	1.96	1.14	0.31	0	0	0	0	18.80
1997	4.58	3.04	9.13	7.54	0.08	0	0	0	0.12	0	0	0	24.49
1998	0.01	3.42	7.09	4.48	31.14	6.58	2.59	3.83	0.08	0	0	0.33	59.55
1999	0	1.36	0.86	2.77	1.12	3.46	2.49	0	0.15	0	0	0.18	12.39
1999/2000	0	1.17	0	2.77	12.27	3.77	4.22	0	0	0	0	0.09	24.29
2001	2.85	0	0.05	8.59	7.66	8.58	1.61	0	0	0.02	0	0	29.36
2002	0.42	4.18	2.22	1.15	0.44	0.49	0.08	0.19	0	0	0	0.11	9.28
2003	0	6.17	6.12	0	4.31	4.43	1.79	2.49	0.14	0	0	0	25.45
2004	0	3.40	2.96	0.96	9.07	0.64	0	0	0	0	0	0	17.03
2005	6.98	0.06	10.68	20.41	9.84	4.70	0.75	0.91	0	0	0	0.33	54.66
2006	0.95	0.78	1.46	5.46	3.51	4.52	8.51	1.33	0	0	0	0	26.52
2007	0.12	0.27	1.28	3.54	2.07	0.03	0.82	0	0	0	0	0.47	8.60
2008	0.51	0.09	4.46	18.24	2.74	0	0.06	0.03	0	0	0.06	0	26.19
2009	0.15	3.12	3.37	0.64	6.13	1.16	0.21	0	0.04	0	0	0	14.82
2009/2010	6.00	0	5.33	8.88	6.45	0.49	3.76	0.22	0	0	0	0	31.13
2011	2.25	1.91	15.79	0.79	5.40	8.39	0.04	1.21	0.21	0	0	0	35.99
2012	1.90	3.10	0.30	1.88	0.07	4.60	3.21	0	0	0.02	0.01	0.02	15.11
2013	0.06	3.50	3.86	2.07	0.28	1.22	0	0	0	0	0	0	10.99
2014	0.09	0.90	0.63	0	4.56	3.17	0.48	0.01	0	0	0.06	0	9.90
2015	0	1.28	5.51	2.12	0.77	0.46	0.38	0.25	0.19	0.37	0	0.32	11.65
2016	0.41	0.09	0.40	7.20	2.18	3.77	0.53	0.06	0	0	0	0	14.64
2017	0.71	0.83	4.15	10.88	12.91	1.27	0.53	0.14	0	0	0	0.11	31.53
2018	0	0.03	0	2.83	0.14	8.43	0.02	0.04	0	0	0	0	11.49
2019	0.14	3.11	1.16	9.07	9.56	4.37	0.06	2.02	0	0	0	0	29.49
2019/2020	0	1.86	6.93	0.82	0.17	4.97	4.46	0.08	0.01	0	0	0	19.30
2021	0.01	0.19	1.69	3.99	0	1.29	0	0.02	0	0	0	0	7.19
AVG	0.75	2.40	3.53	5.24	5.42	3.91	1.41	0.34	0.05	0.02	0.03	0.29	23.40
MAX	6.98	14.37	15.79	29.05	31.14	18.30	8.51	3.83	0.64	0.37	1.08	7.59	59.55
MIN	0	0	0	0	0	0	0	0	0	0	0	0	7.19

Rainfall in inches, water year October 1 through September 30

HISTORICAL MONTHLY RAINFALL LAKE CASITAS RECREATION AREA (STA #204)

W. YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1959/1960	0	0	1.25	5.40	4.29	0.78	2.98	0	0	0	0	0	14.70
1961	0	5.08	0.48	1.90	0	0.63	0.23	0.06	0	0	0	0.04	8.42
1962	0	5.47	1.78	2.56	22.65	1.45	0	0.05	0	0	0	0	33.96
1963	0.49	0.01	0.05	1.35	6.85	3.59	2.61	0.39	0.51	0	0	1.69	17.54
1964	0.48	4.57	0	2.53	0	1.84	2.17	0.11	0.13	0	0.21	0	12.04
1965	0.84	3.39	8.33	0.67	0.38	1.59	7.29	0.01	0.01	0	0	0.26	22.77
1966	0	14.19	7.07	2.51	1.11	0.04	0	0.10	0	0	0	0.21	25.23
1967	0.02	4.80	9.71	7.80	0.27	3.53	5.82	0	0	0	0	0.35	32.30
1968	0	5.03	1.15	1.53	1.51	4.76	1.13	0	0	0	0	0	15.11
1969	1.23	0.91	2.62	26.58	12.81	1.26	2.01	0.01	0	0.12	0	0	47.55
1969/1970	0	3.52	0.19	3.68	3.70	5.43	0	0	0	0	0	0	16.52
1971	0	6.36	6.94	1.51	0	0.71	0.55	0.03	0	0	0	0	16.10
1972	0.15	0.62	11.02	0.33	0.58	0	0.16	0	0.02	0	0	0.14	13.02
1973	0.13	6.75	1.20	9.14	14.17	3.16	0	0	0	0	0	0	34.55
1974	0.65	1.94	1.43	9.40	0	4.82	0.09	0	0	0	0	0	18.33
1975	0.67	0.12	10.26	0	4.96	6.50	1.54	0	0	0	0	0	24.05
1976	0.23	0	0.13	0	6.43	2.10	0.71	0	0.25	0	0.06	7.32	17.23
1977	0.01	0.63	0.71	4.96	0.25	2.27	0	2.76	0	0	0.39	0	11.98
1978	0.02	0.09	6.57	11.35	13.04	14.71	2.53	0	0	0	0	1.35	49.66
1979	0	2.57	2.48	6.00	5.90	7.83	0	0	0	0	0	0.86	25.64
1979/1980	0.64	0.95	1.96	9.56	16.93	4.04	0.75	0.32	0	0	0	0	35.15
1981	0	0	2.21	4.59	2.15	7.45	0.59	0	0	0	0	0	16.99
1982	0.67	2.64	0.78	4.20	0.90	6.85	2.81	0	0	0	0	1.49	20.34
1983	0.71	5.87	4.60	12.59	8.48	9.13	4.86	0.18	0	0	1.18	0.62	48.22
1984	4.88	5.57	5.14	0.09	0	0.55	0.05	0	0	0	0.08	1.06	17.42
1985	0.41	4.21	6.91	1.42	1.71	1.62	0.02	0	0	0	0	0	16.30
1986	0.55	6.28	1.15	3.97	11.09	6.26	1.74	0	0	0	0	1.25	32.29
1987	0	1.66	0.49	2.16	2.06	3.32	0.12	0	0.03	0	0	0	9.84
1988	1.52	1.14	4.10	3.53	2.63	1.75	3.08	0	0	0	0	0.07	17.82
1989	0	1.18	3.91	0.48	4.74	0.87	0.34	0.22	0	0	0	0.11	11.85
1989/1990	0.61	0.47	0	3.67	2.92	0.01	0.18	0.93	0.03	0	0	0.04	8.86
1991	0	0.36	0	2.03	3.85	17.19	0	0	0.16	0	0	0	23.59
1992	0.62	0.25	4.52	2.90	13.83	5.79	0.05	0.32	0	0.25	0	0	28.53
1993	1.53	0	7.58	14.97	11.88	6.22	0	0.19	0.94	0	0	0	43.31
1994	0.08	1.27	1.69	0.69	8.14	2.02	0.48	0.27	0	0	0	0.05	14.69
1995	0.69	1.48	0.96	27.61	2.29	14.03	0.29	1.29	0.40	0	0	0	49.04
1996	0.11	2.49	1.92	9.37	1.54	1.03	0.45	0	0	0	0	0	16.91
1997	4.06	2.92	7.99	10.21	0.09	0	0	0	0	0	0	0	25.27
1998	0	3.59	8.32	4.59	30.12	6.54	2.19	3.21	0.06	0	0	0.16	58.78
1999	0	1.27	0.84	2.74	0.81	2.38	2.19	0	0.17	0	0	0.27	10.67
1999/2000	0	1.00	0	2.34	11.96	3.24	3.28	0	0	0	0	0.12	21.94
2001	2.75	0	0.03	8.48	7.02	8.02	1.56	0	0	0	0	0	27.86
2002	0.41	4.37	1.60	1.10	0.36	0.53	0.08	0.23	0	0	0	0.02	8.70
2003	0	5.63	5.10	0	3.97	4.98	1.27	2.74	0	0	0	0	23.69
2004	0.05	2.68	2.13	0.79	8.08	0.60	0	0	0	0	0	0	14.33
2005	7.09	0.02	10.37	17.30	10.22	4.47	0.90	0.60	0	0	0	0.31	51.28
2006	0.97	0.87	0.79	4.93	3.73	4.87	8.21	1.47	0	0	0	0	25.84
2007	0.22	0.10	1.03	2.68	1.66	0.10	1.01	0	0	0	0	0.35	7.15
2008	0.46	0.04	3.40	17.93	2.49	0	0.09	0.06	0	0	0.11	0	24.58
2009	0.16	3.19	2.64	0.43	5.43	0.84	0.19	0	0	0	0	0	12.88
2009/2010	6.91	0	4.33	8.71	5.47	0.37	2.39	0.30	0	0	0	0	28.48
2011	2.14	1.91	13.09	0.90	5.32	9.42	0.11	0.94	0.21	0	0	0	34.04
2012	1.69	2.64	0.30	1.22	0.27	3.89	3.16	0	0	0	0	0.01	13.18
2013	0.15	3.74	3.15	1.91	0.10	0.81	0.25	0	0	0	0	0	10.11
2014	0.03	0.77	0.44	0	4.31	3.49	0.42	0	0	0	0.06	0	9.52
2015	0	0.96	5.41	1.44	0.82	0.25	0.2	0.3	0.14	0.32	0	0.22	10.06
2016	0.40	0	0.36	6.72	2.35	4.00	0.50	0	0	0	0	0	14.33
2017	0.71	1	3.79	10.45	11.75	1.30	0.48	0	0	0	0	0	29.56
2018	0	0.05	0	4.14	0.07	7.67	0.02	0.14	0	0	0	0	12.09
2019	0.11	2.47	1.73	8.12	10.64	3.66	0.02	1.88	0	0	0	0	28.63
2019/2020	0	1.59	6.07	0.57	0.67	5.25	4.46	0.08	0.01	0	0	0	18.70
2021	0	0.19	2.65	3.20	0.03	1.15	0	0	0	0	0	0	7.22
AVG	0.75	2.30	3.34	5.22	5.19	3.76	1.27	0.31	0.05	0.01	0.03	0.30	22.53
MAX	7.09	14.19	13.09	27.61	30.12	17.19	8.21	3.21	0.94	0.32	1.18	7.32	58.78
MIN	0	0	0	0	0	0	0	0	0	0	0	0	7.15

Rainfall in inches, water year October 1 through September 30

Surrogate data used from Casitas Dam due missing data

**CASITAS MUNICIPAL WATER DISTRICT
MEMORANDUM**

TO: BOARD OF DIRECTORS
FROM: MICHAEL FLOOD, GENERAL MANAGER
SUBJECT: HYDROLOGIC STATUS REPORT FOR MAY 2022
DATE: JUNE 22, 2022

RECOMMENDATION:

This item is presented for information only and no action is required. Data are provisional and subject to revision.

DISCUSSION:

Rainfall Data

	Casitas Dam	Matilija Dam	Thacher School
This Month	0.00"	0.00"	0.14"
Water Year (WY: Oct 01 – Sep 30)	17.74"	21.54"	15.93"
Average station rainfall to date	22.72"	27.52"	20.86"

Ojai Water System Data

Wellfield production	131.80 AF
Surface water supplement	19.27 AF
Static depth to water surface – Mutual #5	125.80 feet
Change in static level from previous month	- 22.4 feet

Robles Fish Passage and Diversion Facility Diversion Data

Diversion this month	0 AF
Diversion days this month	0
Total Diversions WY to date	2,521 AF
Diversion days this WY	27

Casitas Reservoir Data

Water surface elevation as of end of month	487.32 feet AMSL
Water storage last month	81,161 AF
Water storage as of end of month	79,884 AF
Net change in storage	- 1,277 AF
Change in storage from same month last year	- 8,972 AF

AF = Acre-feet

AMSL = Above mean sea level

WY = Water year