OTAY WATER DISTRICT

BOARD OF DIRECTORS MEETING
DISTRICT BOARDROOM

2554 SWEETWATER SPRINGS BOULEVARD
SPRING VALLEY, CALIFORNIA

WEDNESDAY
September 3, 2014
3:30 P.M.

AGENDA

1. ROLL CALL

2. PLEDGE OF ALLEGIANCE

3. APPROVAL OF AGENDA

4. APPROVE THE MINUTES OF THE REGULAR BOARD MEETINGS OF JULY 2, 2014 AND AUGUST 6, 2014

5. PUBLIC PARTICIPATION – OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO SPEAK TO THE BOARD ON ANY SUBJECT MATTER WITHIN THE BOARD'S JURISDICTION BUT NOT AN ITEM ON TODAY'S AGENDA

RECESS TO CLOSED SESSION

6. CLOSED SESSION

   a) CONFERENCE WITH LABOR NEGOTIATORS [GOVERNMENT CODE §54957.6]

      AGENCY DESIGNATED REPRESENTATIVES: PRESIDENT LOPEZ AND DIRECTOR THOMPSON

      EMPLOYEE ORGANIZATION: OTAY WATER DISTRICT EMPLOYEES' ASSOCIATION

      AND

      ALL REPRESENTED AND UNREPRESENTED PERSONNEL INCLUDING MANAGEMENT AND CONFIDENTIAL EMPLOYEES

b) PUBLIC EMPLOYEE PERFORMANCE EVALUATION [GOVERNMENT CODE §54957.6

TITLE: GENERAL MANAGER

RETURN TO OPEN SESSION

REPORT ON ANY ACTIONS TAKEN IN CLOSED SESSION. THE BOARD MAY ALSO TAKE ACTION ON ANY ITEMS POSTED IN CLOSED SESSION

7. ADOPT RESOLUTION NO. 4242 TO APPROVE THE MEMORANDUM OF UNDERSTANDING (MOU) BETWEEN THE OTAY WATER DISTRICT AND THE OTAY WATER DISTRICT EMPLOYEES' ASSOCIATION EFFECTIVE JULY 1, 2014 THROUGH JUNE 30, 2017, FOR THE FIELD EMPLOYEES AND ADMINISTRATIVE EMPLOYEES BARGAINING UNITS AND APPROVE EXTENDING THE SAME COST-OF-LIVING ADJUSTMENTS AND RELATED BENEFITS FOR THE MANAGEMENT AND CONFIDENTIAL EMPLOYEES; AND ADOPT ORDINANCE NO. 547 TO AMEND THE EMPLOYER-EMPLOYEE LABOR RELATIONS PROVISIONS OF THE CODE OF ORDINANCES (WILLIAMSON)

8. APPROVE A NEW AGREEMENT WITH THE GENERAL MANAGER WITH A TERM ENDING SEPTEMBER 3, 2017 AND PROVIDING A 2.5% COST-OF-LIVING ADJUSTMENT

9. LEGISLATIVE UPDATE (CHRIS FRAHM AND ROSANNA CARVACHO, BROWNSTEIN HYATT FARBER AND SCHRECK)

CONSENT CALENDAR

10. ITEMS TO BE ACTED UPON WITHOUT DISCUSSION, UNLESS A REQUEST IS MADE BY A MEMBER OF THE BOARD OR THE PUBLIC TO DISCUSS A PARTICULAR ITEM:

a) AWARD TWO (2) PROFESSIONAL AS-NEEDED ENGINEERING DESIGN SERVICES CONTRACTS TO ARCADIS AND PSOMAS, EACH IN AN AMOUNT NOT-TO-EXCEED $300,000 FOR FISCAL YEARS 2015 AND 2016. THE TOTAL AMOUNT TO BE AWARDED OVER THE DURATION OF THE CONTRACT WILL NOT EXCEED $300,000 WITHOUT ADDITIONAL BOARD AUTHORIZATION

b) REQUEST AUTHORIZATION TO EXECUTE AND RECORD GRANT DEEDS NECESSARY TO PERFECT TITLE ON THE OTAY WATER DISTRICT (APN 597-041-50-00) AND THE GORE (APN 597-041-51-00) PROPERTIES

c) ADOPT RESOLUTION NO. 4240, FIXING TERMS AND CONDITIONS FOR THE ANNEXATION OF CERTAIN REAL PROPERTIES OWNED BY

THE OTAY LAND CO., LLC, APNs: 644-070-12, 14, 16, 17 AND 19-00 INTO THE OTAY WATER DISTRICT IMPROVEMENT DISTRICT NOS. 22 AND 27

d) APPROVE THE ADOPTION OF A MITIGATED NEGATIVE DECLARATION FOR THE 870-1 RESERVOIR ACCESS ROAD PAVING PROJECT

ACTION ITEMS

11. ADMINISTRATION, FINANCE AND INFORMATION TECHNOLOGY

a) ADOPT ORDINANCE NO. 545 AMENDING SECTION 9, ANNEXATIONS AND DETACHMENTS 9.04 B AND C.4; SECTION 28 CONNECTION FEES AND CHARGES FOR POTABLE OR RECYCLED WATER SERVICE 28.01 A AND B; SECTION 53, CONDITIONS FOR SEWER SERVICE 53.03 A.1; AND APPENDIX A OF THE DISTRICT'S CODE OF ORDINANCES WHICH WILL INCORPORATE THE FOLLOWING CHANGES: (BELL)

i. UPDATE THE CURRENT WATER CAPACITY FEE (INCLUDING THE TRIAD FEE) AND NEW WATER SUPPLY FEE TO REFLECT THE VALUE OF THE DISTRICT'S CURRENT AND FUTURE ASSETS
ii. UPDATE THE WATER ANNEXATION FEE TO REFLECT THE UPDATED "BUY-IN" FOR NEW CUSTOMERS ANNEXING INTO THE OTAY WATER DISTRICT BOUNDARIES
iii. MODIFY THE SEWER CAPACITY FEE TO A NEW "COMBINED" METHODOLOGY OF CHARGING CAPACITY FEES WHICH IS CONSISTENT WITH THE METHODOLOGY USED FOR WATER, WHICH REFLECTS THE VALUE OF THE DISTRICT'S CURRENT AND FUTURE ASSETS

12. BOARD

a) DISCUSSION OF THE 2014 BOARD MEETING CALENDAR

INFORMATIONAL ITEM

13. THE FOLLOWING ITEMS ARE PROVIDED TO THE BOARD FOR INFORMATIONAL PURPOSES ONLY. NO ACTION IS REQUIRED ON THE FOLLOWING AGENDA ITEMS:

a) FISCAL YEAR 2014 FOURTH QUARTER CAPITAL IMPROVEMENT PROGRAM REPORT (MARTIN)

b) INFORMATIONAL REPORT ON THE DISTRICT'S INTENT TO REDESIGN THE CURRENT DISTRICT WEBSITE (KERR)

REPORTS

14. GENERAL MANAGER'S REPORT

    a) SAN DIEGO COUNTY WATER AUTHORITY UPDATE

15. DIRECTORS' REPORTS/REQUESTS

16. PRESIDENT'S REPORT/REQUESTS

17. ADJOURNMENT

All items appearing on this agenda, whether or not expressly listed for action, may be deliberated and may be subject to action by the Board.

The Agenda, and any attachments containing written information, are available at the District's website at www.otaywater.gov. Written changes to any items to be considered at the open meeting, or to any attachments, will be posted on the District's website. Copies of the Agenda and all attachments are also available through the District Secretary by contacting her at (619) 670-2280.

If you have any disability which would require accommodation in order to enable you to participate in this meeting, please call the District Secretary at (619) 670-2280 at least 24 hours prior to the meeting.

Certification of Posting

I certify that on August 29, 2014, I posted a copy of the foregoing agenda near the regular meeting place of the Board of Directors of Otay Water District, said time being at least 72 hours in advance of the regular meeting of the Board of Directors (Government Code Section §54954.2).

Executed at Spring Valley, California on August 29, 2014.

/s/ Susan Cruz, District Secretary

AGENDA ITEM 10a

STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	September 3, 2014
SUBMITTED BY:	Stephen Beppler Senior Civil Engineer Bob Kennedy Engineering Manager	PROJECT:	Various DIV. NO. All
APPROVED BY:	☒ Rod Posada, Chief, Engineering ☒ German Alvarez, Assistant General Manager ☒ Mark Watton, General Manager		
SUBJECT:	Award of Two (2) As-Needed Engineering Design Services Contracts for Fiscal Years 2015 and 2016		

GENERAL MANAGER'S RECOMMENDATION:

That the Otay Water District (District) Board of Directors (Board) award two (2) professional As-Needed Engineering Design Services contracts to Arcadis and Psomas and authorize the General Manager to execute two agreements with Arcadis and Psomas, each in an amount not-to-exceed $300,000 for Fiscal Years 2015 and 2016. The total amount of the two contracts will not exceed $300,000.

COMMITTEE ACTION:

Please see Attachment A.

PURPOSE:

To obtain Board authorization for the General Manager to enter into professional As-Needed Engineering Design Services contracts with Arcadis and Psomas, with each contract in an amount not-to-exceed $300,000 for Fiscal Years 2015 and 2016. The total amount of the two contracts will not exceed $300,000.

Historically, a single firm has been selected to provide as-needed consulting services. However, staff is looking for ways to increase production and value for the District. Selecting multiple engineering firms will allow the District to solicit task proposals from the two firms and evaluate the value to the District based on the design team strength, schedule to complete the task, and

ultimately the cost for the design effort. This is a pilot selection program and the effectiveness of selecting multiple consulting firms will be evaluated to determine if this should be done for other design disciplines in the future.

ANALYSIS:

The District will require the services of a professional engineering design consultant on an as-needed basis in support of Capital Improvement Program (CIP) projects for Fiscal Years 2015 and 2016. It is more efficient and cost effective to issue an as-needed contract for engineering design which will provide the District with the ability to obtain consulting services in a timely and efficient manner. This concept has also been used in the past for other disciplines such as construction management, geotechnical, electrical, and environmental services.

The District staff will identify tasks and request cost proposals from the two consultants during the contract period. Each consultant will prepare a detailed scope of work, schedule, and fee for each task order, with the District evaluating the proposals based upon qualifications and cost. The District will enter into negotiations with the consultants, selecting the proposal that has the best value for the District. Upon written task order authorization from the District, the selected consultant shall then proceed with the project as described in the scope of work.

The CIP projects that are estimated to require engineering design services for Fiscal Years 2015 and 2016, at this time, are listed below:

CIP	DESCRIPTION	ESTIMATED COST
P2453	SR-11 Utility Relocations	$50,000
P2551	Blossom Lane Interconnection	$25,000
P2552	South Barcelona Interconnection	$25,000
R2048	Otay Mesa Distribution Pipelines	$15,000
R2116	14-inch Recycled Forcemain Assessment and Repair	$35,000
R2117	RWCWRF Contact Basin Expansion PDR	$75,000
S2033	Sewer System Rehabilitation	$50,000
	TOTAL:	**$275,000**

The engineering design services scopes for the above projects are estimated from preliminary information and past projects. Staff believes that a $300,000 cap on each of the As-Needed Engineering Design Services contracts is adequate, while still providing a buffer.

Fees for professional services will be charged to the CIP projects or to the Fiscal Year Operations budget.

The As-Needed Engineering Design Services contracts do not commit the District to any expenditure until a task order is approved to perform the work. The District does not guarantee work to the consultants, nor does the District guarantee to the consultants that it will expend all of the funds authorized by the contract on professional services.

The District solicited engineering design services by placing an advertisement on the Otay Water District's website on April 25, 2014 and with various other publications including the San Diego Daily Transcript. Thirteen (13) firms submitted a Letter of Interest and a Statement of Qualifications. The Request for Proposal (RFP) for Engineering Design Services was sent to all thirteen (13) firms resulting in six (6) proposals received on June 12, 2014. They are as follows:

- Arcadis (Carlsbad, CA)
- J.C. Heden / Dudek (San Diego, CA/Encinitas, CA)
- Lee & Ro (San Diego, CA)
- NV5 (Nolte Associates) (San Diego, CA)
- Psomas (San Diego, CA)
- Tran Consulting Engineers (San Diego, CA)

Firms that submitted Letters of Interest, but did not propose, were Atkins, Landmark, Nasland, KEH, CivilSource and Rick Engineering.

In accordance with the District's Policy 21, Staff evaluated and scored all written proposals and interviewed the top six (6) firms on July 14, 2014. Arcadis and Psomas received the highest scores based on their experience, understanding of the scope of work, proposed method to accomplish the work, and their composite hourly rate. Arcadis and Psomas were the most qualified consultants with the best overall proposal. The District has not previously worked with Psomas on any project, but they are a highly rated company, provide similar services to other local agencies, and are readily available to provide the services required. A summary of the complete evaluation is shown in Attachment B.

Arcadis and Psomas submitted the Company Background Questionnaire as required by the RFP and staff did not find any significant issues. In addition, staff checked their references and performed an internet search on the company. Staff found the references to be excellent and did not find any outstanding issues with the internet search.

FISCAL IMPACT: ☒ Joe Beachem, Chief Financial Officer

The funds for this contract will be expended from a variety of projects, as previously noted above. The fees for professional services requested herein are available in the authorized CIP project budgets. This contract is for as-needed professional services based on the District's need and schedule, and expenditures will not be made until a task order is approved by the District for the consultant's services on a specific CIP project.

Based on a review of the financial budget, the Project Manager anticipates that the budgets will be sufficient to support the professional as-needed consulting services required for the CIP projects noted above.

The Finance Department has determined that the funds to cover this contract are available as budgeted for these projects.

STRATEGIC GOAL:

This Project supports the District's Mission statement, "To provide high value water and wastewater services to the customers of the Otay Water District in a professional, effective, and efficient manner" and the District's Vision, "A District that is innovative in providing water services at affordable rates, with a reputation for outstanding customer service."

LEGAL IMPACT:

None.

SB/BK:jf
P:\WORKING\As Needed Services\Engineering Design\FY 2015-2016\Staff Report\BD_09-03-14_Staff Report_Award of As-Needed Engineering Design Services (SB-BK).docx
Attachments: Attachment A – Committee Action
Attachment B – Summary of Proposal Rankings

ATTACHMENT A

SUBJECT/PROJECT:	
Various	Award of Two (2) As-Needed Engineering Design Services Contracts for Fiscal Years 2015 and 2016

COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee (Committee) reviewed this item at a meeting held on August 14, 2014, and the following comments were made:

- Staff recommended that the Board award two (2) professional As-Needed Engineering Design Services contracts to Arcadis and Psomas and authorize the General Manager to execute two agreements with Arcadis and Psomas, each in an amount not-to-exceed $300,000 for Fiscal Years 2015 and 2016. The total amount of the two contracts will not exceed $300,000.

- Staff stated that the District has always selected a single firm to provide as-needed consulting services. However, staff looked at other alternatives to increase production and value for the District while maintaining responsiveness. Staff believes that selecting multiple engineering firms will allow the District to solicit task proposals from the two firms and evaluate the value to the District based on the design team strength, schedule to complete the task, and ultimately the cost for the design effort. It was noted that this action is a pilot program and the effectiveness of selecting multiple consulting firms will be evaluated to determine if this should be done for other design disciplines in the future.

- Consultants will provide professional engineering design services in support of the District’s Capital Improvement Program (CIP) projects including sewer replacements, interjurisdictional water system interconnections, utility relocations, and improvements at the Ralph W. Chapman Water Reclamation Facility.

- It was indicated that the District will identify tasks and request cost proposals from the two consultants during the contract period. The District will evaluate the proposals based upon qualifications and cost and then enter into negotiations with the consultants, selecting the proposal that has the best value for the District. Upon written task order authorization from the District, the selected consultant shall then proceed with the project as describe in the scope of work.

- Staff stated that a list of possible CIP projects is provided on Page 2 of the staff report. It was noted that a buffer of approximately $25,000 is included in the contract amounts.

- The selection process was discussed, which staff indicated that six (6) proposals were received by the District. Staff evaluated, interviewed, and scored all proposals in accordance with Policy 21. Results of the selection process are provided in Attachment B of the staff report.

- Staff indicated that Arcadis and Psomas received the highest overall scores based on their experience, proposed method to accomplish the work, and their combined hourly rate. Fees were evaluated by comparing billing rates for the following 7 positions:

    - Principal Engineer
    - Associate Principal Engineer
    - Project Manager
    - Project Engineer II
    - Project Engineer I
    - Technician/Drafter
    - Office Support

- It was discussed that the District has not previously worked with Psomas on any projects, but they are a highly rated company and provide similar services to other local agencies including the City of La Mesa. Arcadis has provided services for the District in the past, including the Wastewater Management Plan and Rancho Del Rey Water Treatment Plant Support Services. Both firms are readily available to provide the services required.

- The Committee supported to work with Arcadis again and also work with Psomas for as-needed engineering design services. This is an advantage to the District because if one firm is not available or suitable for a project, the District has the option to assign it to the other firm.

Upon completion of the discussion, the committee received staffs' report and supported presentation to the full board as a consent item.

ATTACHMENT B
SUMMARY OF PROPOSAL RANKINGS
As-Needed Engineering Design - FY2015-16

		WRITTEN								ORAL							REFERENCES
		Qualifications of Team	Responsiveness and Project Understanding	Technical and Management Approach	**INDIVIDUAL SUBTOTAL - WRITTEN**	**AVERAGE SUBTOTAL - WRITTEN**	Proposed Rates*	Consultant's Commitment to DBE	**TOTAL - WRITTEN**	Additional Creativity and Insight	Strength of Project Manager	Presentation and Communication Skills	Responses to Questions	INDIVIDUAL TOTAL - ORAL	AVERAGE TOTAL ORAL	**TOTAL SCORE**	
MAXIMUM POINTS		**30**	**25**	**30**	**85**	**85**	**15**	**Y/N**	**100**	**15**	**15**	**10**	**10**	**50**	**50**	**150**	**Poor/Good/ Excellent**
Arcadis	*Howard Almgren*	25	19	23	67	74	1	Y	75	11	13	9	9	42	45	120	Excellent
	Kevin Cameron	28	23	27	78					13	14	9	8	44			
	Bob Kennedy	27	23	27	77					13	14	9	8	44			
	Dan Martin	27	23	27	77					14	14	10	9	47			
	Kent Payne	27	24	22	73					14	14	9	9	46			
Lee & Ro	*Howard Almgren*	21	19	23	63	62	2	Y	64	11	10	8	7	36	34	98	
	Kevin Cameron	20	17	19	56					10	9	7	6	32			
	Bob Kennedy	23	20	23	66					10	11	7	6	34			
	Dan Martin	22	20	22	64					11	10	7	7	35			
	Kent Payne	19	20	21	60					8	12	8	4	32			
Psomas	*Howard Almgren*	28	21	28	77	76	6	Y	82	13	14	8	8	43	44	126	Excellent
	Kevin Cameron	28	24	28	80					13	14	10	9	46			
	Bob Kennedy	26	22	25	73					13	14	9	8	44			
	Dan Martin	27	23	28	78					14	14	9	9	46			
	Kent Payne	21	23	27	71					13	14	8	8	43			
J.C. Heden / Dudek	*Howard Almgren*	28	24	28	80	77	5	Y	82	11	11	7	6	35	35	117	
	Kevin Cameron	27	24	27	78					13	12	7	5	37			
	Bob Kennedy	27	23	27	77					11	12	7	6	36			
	Dan Martin	27	23	27	77					11	12	7	7	37			
	Kent Payne	27	23	22	72					8	10	7	5	30			
NV5	*Howard Almgren*	23	19	23	65	68	7	Y	75	13	14	8	8	43	43	118	
	Kevin Cameron	25	23	25	73					13	13	9	8	43			
	Bob Kennedy	25	21	25	71					12	13	8	7	40			
	Dan Martin	25	20	25	70					14	13	9	9	45			
	Kent Payne	19	20	24	63					14	13	9	8	44			
Tran Consulting	*Howard Almgren*	21	23	24	68	66	15	Y	81	12	12	7	7	38	35	116	
	Kevin Cameron	22	20	23	65					12	13	6	5	36			
	Bob Kennedy	24	20	23	67					10	11	7	5	33			
	Dan Martin	23	21	24	68					12	12	6	6	36			
	Kent Payne	19	21	24	64					10	11	5	5	31			

RATES SCORING CHART

Consultant	Rate	Position	Score	Consultant	Rate	Position	Score
Arcadis	$1,116	lowest	1				
Lee & Ro	$1,079	fifth	2				
Psomas	$960	third	6				
J.C. Heden / Dudek	$985	fourth	5				
NV5	$925	second	7				
Tran Consulting	$660	highest	15				

**The fees were evaluated by comparing rates for seven positions. The sum of these rates are noted on the table to the left.*
Note: Review Panel does not see or consider rates when scoring other categories. Rates are scored by the PM, who is not on Review Panel.

AGENDA ITEM 10b

STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	September 3, 2014
SUBMITTED BY:	Dan Martin Engineering Manager	PROJECT:	DIV. NO. 5
APPROVED BY:	☒ Rod Posada, Chief of Engineering ☒ German Alvarez, Assistant General Manager ☒ Mark Watton, General Manager		
SUBJECT:	Request Authorization for the General Manager to Execute and Record Grant Deeds Necessary to Perfect Title on the Otay Water District (APN 597-041-50-00) and the Gore (APN 597-041-51-00) Properties		

GENERAL MANAGER'S RECOMMENDATION:

That the Otay Water District (District) Board of Directors (Board) authorize the General Manager to execute and record grant deeds necessary to perfect Title on the District (APN 597-041-50-00) and Gore (APN 597-041-51-00) properties in substantially the same form as shown in Exhibits B1 through B4 attached.

COMMITTEE ACTION:

Please see Attachment A.

PURPOSE:

To exchange property and finalize the boundary adjustments established with Certificates of Compliance between the District and Gore recorded with the County of San Diego on October 14, 2004 through the execution and recordation of grant deeds.

ANALYSIS:

The District purchased a parcel of land located at the northeast corner of Highway 94 and Hillside Drive in Jamul (APN 597-041-50-00) in 1993 from Crossroads Development. In May of 2000, the District subdivided this land and sold a parcel to a Mr. and Mrs. Gore (Gore)

(APN 597-041-51-00). The location of these parcels is shown in Exhibits A1 and A2.

In February 2004, District staff discovered and confirmed an administrative error in the grant deed to Gore that has resulted in Gore building residential improvements that encroached on the District's property. The District approved staff to correct the administrative error and resolve the encroachment issue by processing a Boundary Adjustment Plat and Certificate of Compliance (B/C Plat No. 04-0192) with the San Diego County Department of Planning and Land Use (Exhibit C). The Certificate of Compliance was recorded with the County on October 14, 2004. As part of the process to perfect the Title of the subject properties, the County of San Diego requires that parties exchange grant deeds after Certificates of Compliance are recorded to finalize the boundary adjustment process. As staff reviewed the District's property (APN 597-041-50-00) in preparation to surplus the property, staff discovered that grant deeds were never exchanged between Gore and the District. As a result, the boundary adjustment process for these properties has not been finalized.

Staff has prepared the grant deeds (Exhibits B1 through B4) necessary to finalize the boundary adjustment as included in the recorded Certificate of Compliance between the District and Gore. The boundary adjustment between the District and Gore will be an equal land trade of 0.24 acres. The grant deeds shown as Exhibits B1 and B2 complete the exchange of property between the District and Gore, respectively. The grant deeds shown as Exhibits B3 and B4 memorialize the Lot Line Adjustment as contained in the recorded Certificate of Compliance and will finalize the boundary adjustment.

Staff contacted the County appraiser for the Gore property and inquired about any impacts that may result through the completion of this process. The County Appraiser informed staff that the Gore property would not be reassessed at the time the boundary adjustment with certificate of compliance is finalized.

Staff has reached out to Mr. Gore and sent draft copies of the grant deeds. Mr. Gore is currently reviewing the information. Staff also contacted the County appraiser for the Gore property and inquired about any impacts that may result through the completion of this process. The County Appraiser informed staff that the Gore property would not be reassessed at the time the boundary adjustment with certificate of compliance is finalized.

FISCAL IMPACT: ☒ Joe Beachem, Chief Financial Officer

No fiscal impact.

STRATEGIC GOAL:

This item supports the District's strategic goals to ensure financial health through formalized policies, prudent investing, and efficient operations.

LEGAL IMPACT:

None.

DM/RP:jf
P:\Public-s\STAFF REPORTS\2014\BD 09-03-14\BD 09-03-14, Staff Report, Hillside Grant Deed Exchange Report, (DM-RP).docx

Attachments: Attachment A – Committee Action
Exhibits A1 and A2 - Location Maps
Exhibit B1 – Grant Deed (District exchange to Gore)
Exhibit B2 – Grant Deed (Gore exchange to District)
Exhibit B3 – Grant Deed (District Lot Line Adjustment)
Exhibit B4 – Grant Deed (Gore Lot Line Adjustment)
Exhibit C – B/C Plat No. 04-0192

ATTACHMENT A

SUBJECT/PROJECT:	Request Authorization for the General Manager to Execute and Record Grant Deeds Necessary to Perfect Title on the Otay Water District (APN 597-041-50-00) and the Gore (APN 597-041-51-00) Properties

COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee (Committee) reviewed this item at a Committee Meeting held on August 14, 2014, and the following comments were made:

- Staff recommended that the Board authorize the General Manager to execute and record grant deeds necessary to perfect Title on the District (APN 597-041-50-00) and Gore (APN 597-041-51-00) properties in substantially the same form as shown in Exhibits B1 through B4 attached to the staff report.

- Staff stated that the District subdivided its land in May of 2000 and sold a parcel to Mr. and Mrs. Gore. In 2004, the District discovered and confirmed an administrative error in the grant deed to Gore that has resulted in Gore building residential improvements that encroached on the District's property.

- On October 14, 2004, a Certificate of Compliance was recorded with the County to correct the administrative error and resolve the encroachment issue. See Exhibit C for details.

- It was indicated that the County required parties to exchange grant deeds after Certificates of Compliance are recorded to finalize the boundary adjustment process. Staff discovered that the grant deeds were never exchanged between the District and Gore. As a result, the boundary adjustment process for these properties has not been finalized in the eyes of the County of San Diego.

- Staff prepared the grand deeds (Exhibits B1 through B4) necessary to finalize the boundary adjustment as included in the recorded Certificate of Compliance between the District and the Gores. It was noted that the boundary adjustment will be an equal land trade of 0.24 acres.

- The grant deeds shown as Exhibits B1 and B2 complete the exchange of property between the District and Gore, respectively. The grant deeds shown as Exhibits B3 and B4 memorialize the Lot Line Adjustment as contained in the recorded Certificate of Compliance and will finalize the boundary adjustment.

- It was noted that the District reached out to Mr. Gore and sent copies of the grant deeds and he is currently reviewing the information. It was also noted that the County Appraiser informed staff that the Gore property would not be reassessed at the time the boundary adjustment with certificate of compliance is finalized.

- Staff highlighted that this action would complete a process that was started in 2004 to perfect the title as requested by the County of San Diego and prepare the property for sale.

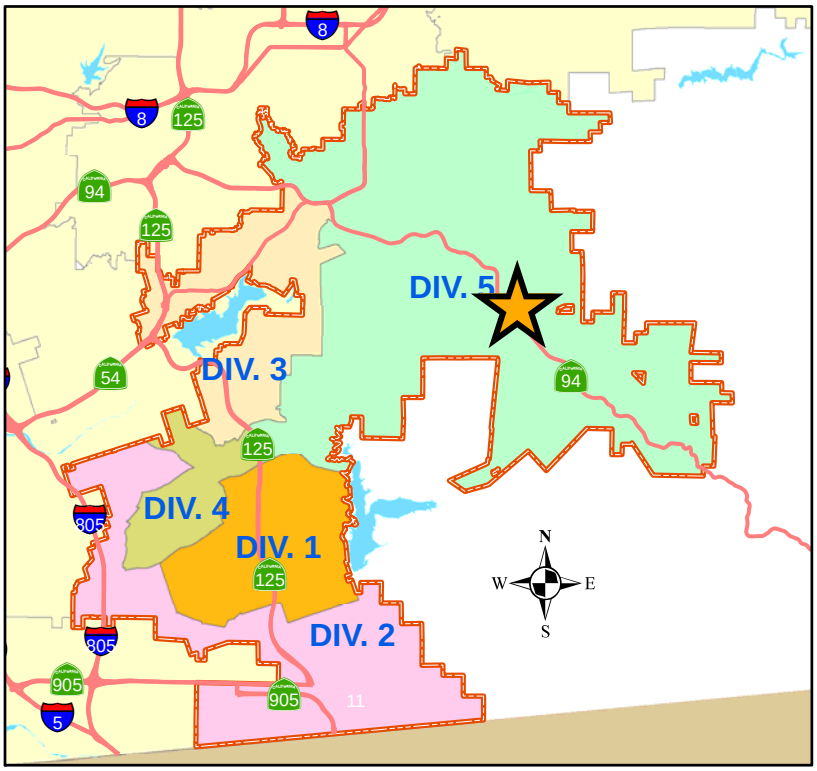
Upon completion of the discussion, the committee received staffs' report and supported presentation to the full board as a consent item.

Exhibit A1
Hillside Drive & Campo Road

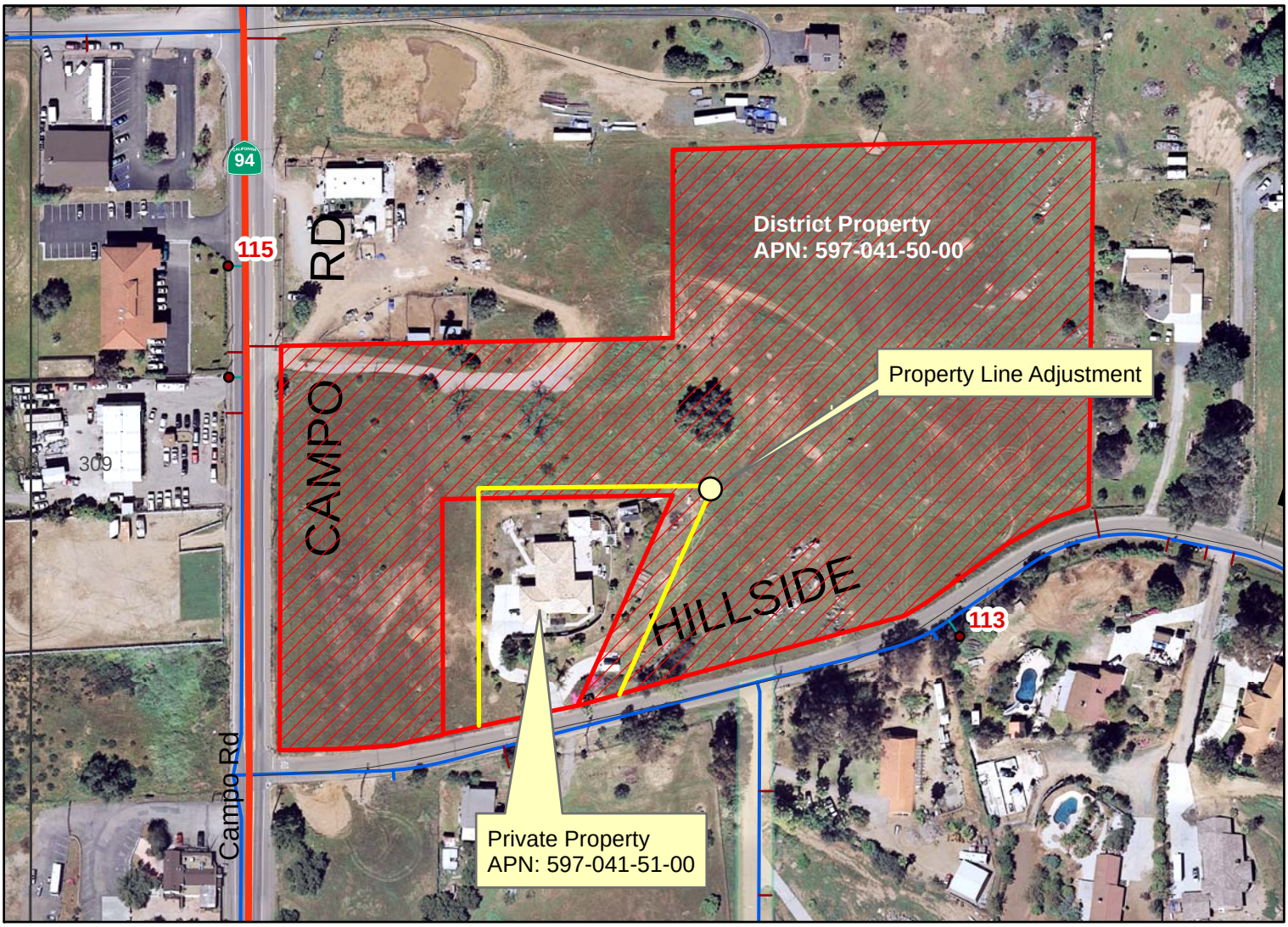
DEVELOPER:	N/A
PROJECT#:	N/A
APN:	597-041-50-00
AREA:	7.82 Acres
ADDRESS:	0 Campo Rd, Jamul CA 91935
OWNER:	Otay Water District
DIR:	DIV. 5
WID:	ID 9
DATE:	8/6/2014

0 70 140 280 420 560 Feet

VICINITY MAP



LOCATION MAP



LOCATION MAP
Exhibit A2
Hillside Drive & Campo Road

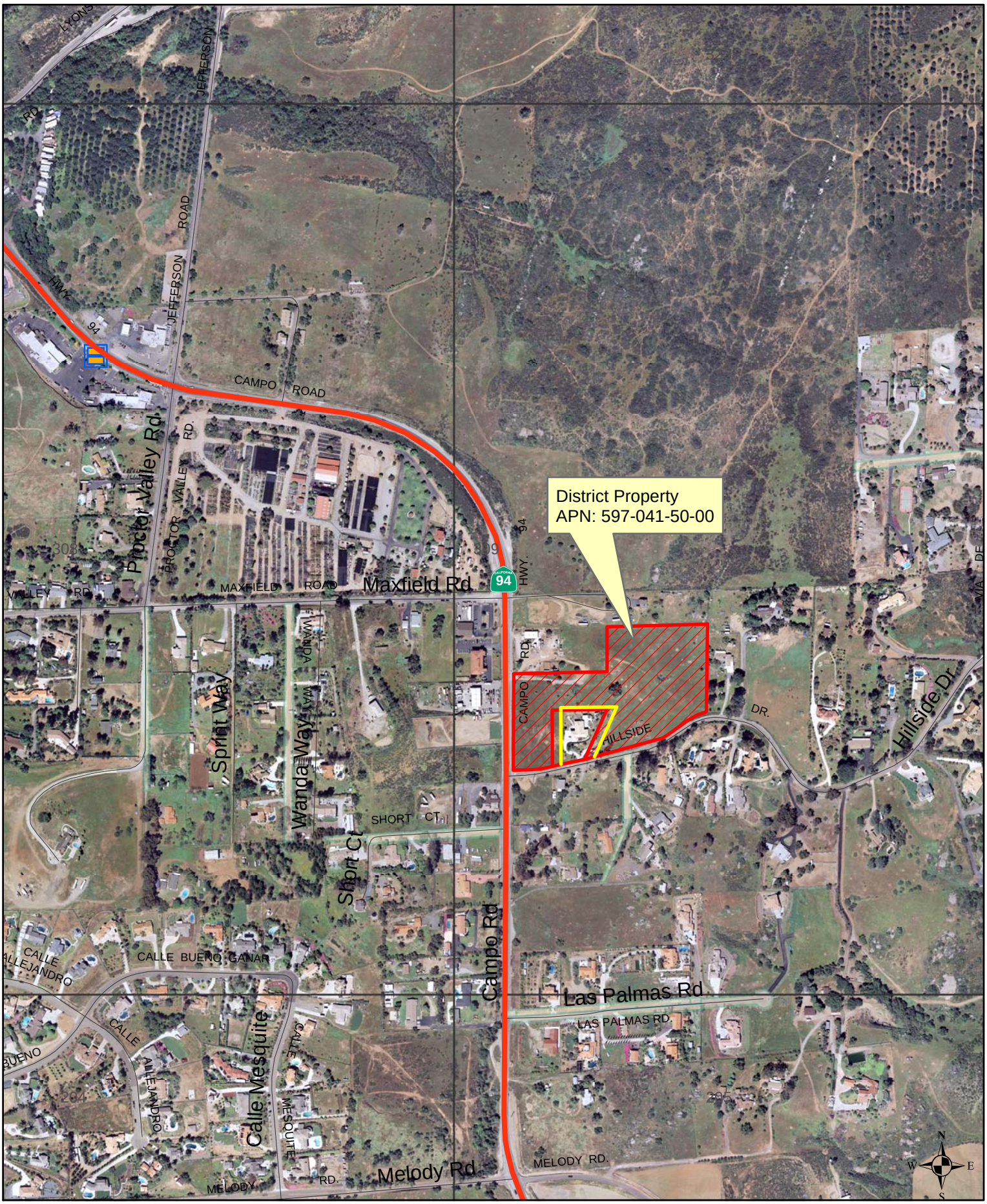


EXHIBIT B1

RECORDING REQUESTED BY:
Otay Water District
2554 Sweetwater Springs Blvd.
Spring Valley, Ca 91978

WHEN RECORDED RETURN TO:
Otay Water District
2554 Sweetwater Springs Blvd.
Spring Valley, Ca 91978

APN No. 597-041-50-00

(Space above this line reserved for Recorder's use only)

GRANT DEED
FOR LOT LINE ADJUSTMENT PURPOSES

The undersigned grantor(s) declare(s):
Documentary transfer tax is $_____ City Tax is $ EXEMPT
( ) computed on full value of property conveyed, or
( ) computed on full value less value of liens and encumbrances remaining at the time of sale.
( ) Unincorporated area: _____ ( ) City of _____
(X) Realty not sold.

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, Otay Water District, hereby GRANTS to Judy Gore, the following described real property in the County of San Diego, State of California:

SEE **EXHIBIT "A" & "B"** ATTACHED HERETO AND MADE A PART HEREOF

This grant deed is recorded pursuant to California Government Code Section 66412 (d) and is not intended to create a separate parcel, but rather to be merged with the Grantee's contiguous property to create a single legal parcel within the meaning of California Civil Code Section 1093 all as a result of that certain Lot Line Adjustment B\C 04-0192 approved by the San Diego County Department of Planning and Land Use, recorded as Certificate of Compliance numbers 2004-0976196 and 2004-0976197, both recorded on October 14, 2004.

_____ Dated:_____

By: Mark Watton
General Manager
Otay Water District

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

GRANTOR'S SIGNATURE ACKNOWLEDGEMENT

State of California)
) ss
County of _____)

On _____ before me, _____
DATE NAME, TITLE OF OFFICER - E.G., "JANE DOE, NOTARY PUBLIC"

personally appeared

_____
NAME(S) OF SIGNER(S)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) , or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Signature of Notary Public (Notary Seal)

EXHIBIT "A"

THAT PORTION OF LOT 3 IN SECTION 10, TOWNSHIP 17 SOUTH, RANGE 1 EAST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, AS SHOWN ON RECORD OF SURVEY MAP NO. 11539, RECORDED MARCH 24, 1988 AS FILE NO. 88-134295 OF OFFICIAL RECORDS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF LAND DESCRIBED IN DEED TO JUDY GORE, RECORDED NOVEMBER 13, 2012, AS DOCUMENT NO. 2012-0705614, OF OFFICIAL RECORDS, SAID POINT ALSO BEING ON THE NORTHERLY RIGHT OF WAY LINE OF HILLSIDE DRIVE AS SHOWN ON SAID RECORD OF SURVEY MAP NO. 11539;

THENCE LEAVING SAID RIGHT OF WAY LINE AND ALONG THE EASTERLY LINE OF SAID GORE PROPERTY, NORTH 24°04'31" EAST A DISTANCE OF 235.35 FEET;

THENCE LEAVING SAID EASTERLY LINE AND ALONG THE NORTHELRY LINE OF SAID GORE PROPERTY, SOUTH 87°27'56" WEST A DISTANCE OF 200.02 FEET;

THENCE LEAVING SAID NORTHERLY LINE, NORTH 00°16'58" EAST A DISTANCE OF 10.33 FEET;

THENCE NORTH 87°27'56" EAST A DISTANCE OF 244.73 FEET;

THENCE SOUTH 24°04'31" WEST A DISTANCE OF 235.35 FEET TO SAID RIGHT OF WAY LINE;

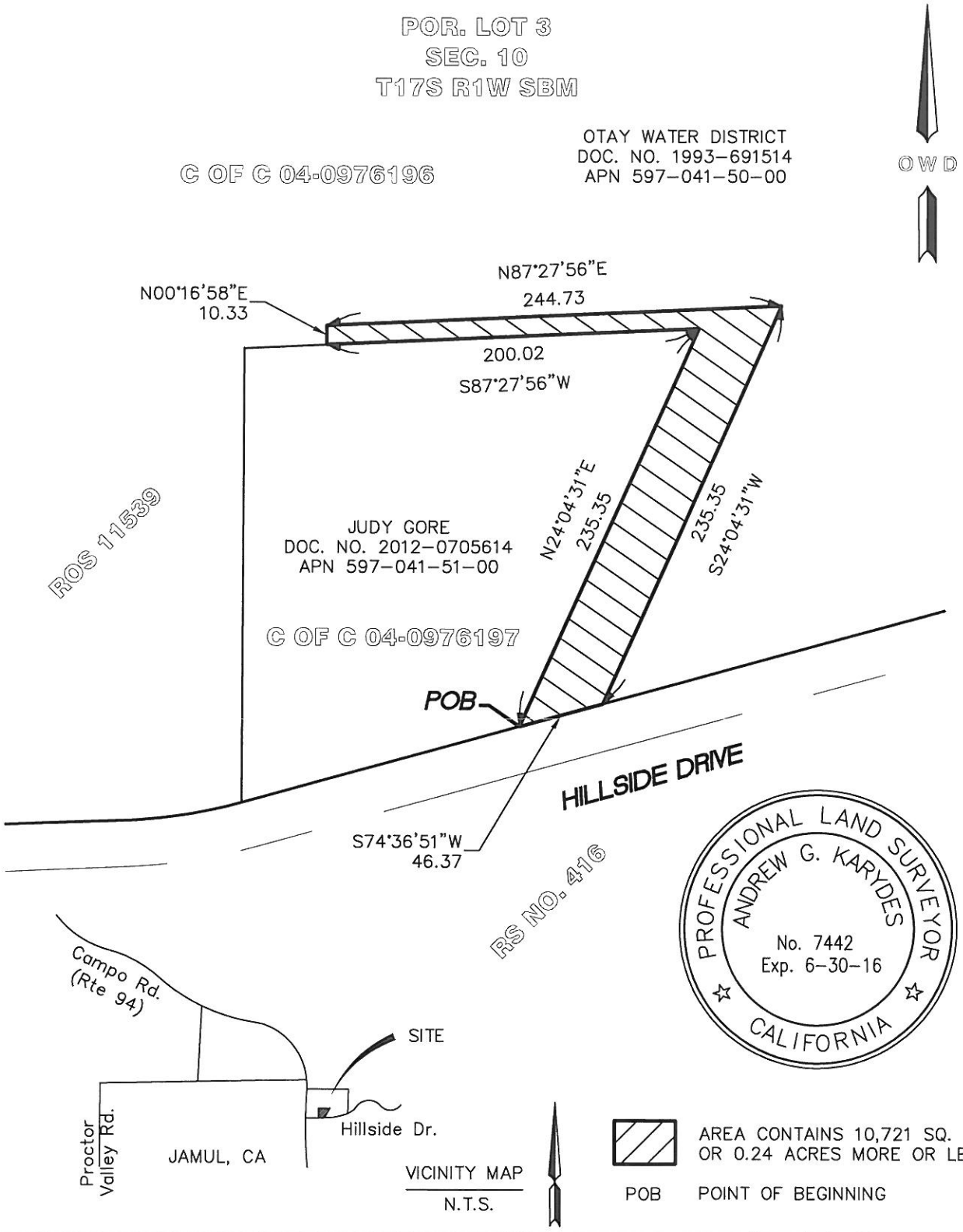
THENCE ALONG SAID RIGHT OF WAY LINE, SOUTH 74°36'51" WEST A DISTANCE OF 46.37 FEET TO THE **POINT OF BEGINNING**.

THE ABOVE DESCRIBED PARCEL CONTAINS 10,721.46 SQUARE FEET OR 0.24 ACRES, MORE OR LESS.

8/06/14

ANDREW G. KARYDES, L.S. 7442 DATED
EXP. 06/30/16

EXHIBIT "B"



OTAY WATER DISTRICT

2554 SWEETWATER SPRINGS BLVD.
SPRING VALLEY, CA 91978

SCALE:	1'=80'
DRAWN BY:	MO
CIP/DEV NO.:	N/A
DATE:	08/06/2014

EXHIBIT B2

RECORDING REQUESTED BY:
Otay Water District
2554 Sweetwater Springs Blvd.
Spring Valley, Ca 91978

WHEN RECORDED RETURN TO:
Otay Water District
2554 Sweetwater Springs Blvd.
Spring Valley, Ca 91978

APN No. 597-041-51-00

(Space above this line reserved for Recorder's use only)

GRANT DEED
FOR LOT LINE ADJUSTMENT PURPOSES

The undersigned grantor(s) declare(s):
Documentary transfer tax is $_____ City Tax is $ EXEMPT
( ) computed on full value of property conveyed, or
( ) computed on full value less value of liens and encumbrances remaining at the time of sale.
( ) Unincorporated area: _____ ( ) City of _____
(X) Realty not sold.

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, Judy Gore, hereby GRANTS to Otay Water District, the following described real property in the County of San Diego, State of California:

SEE **EXHIBIT "A" & "B"** ATTACHED HERETO AND MADE A PART HEREOF

This grant deed is recorded pursuant to California Government Code Section 66412 (d) and is not intended to create a separate parcel, but rather to be merged with the Grantee's contiguous property to create a single legal parcel within the meaning of California Civil Code Section 1093 all as a result of that certain Lot Line Adjustment B\C 04-0192 approved by the San Diego County Department of Planning and Land Use, recorded as Certificate of Compliance numbers 2004-0976196 and 2004-0976197, both recorded on October 14, 2004.

_____ Dated:_____

By: Judy Gore

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

GRANTOR'S SIGNATURE ACKNOWLEDGEMENT

State of California)
) ss
County of _____)

On _____ before me, _____
DATE NAME, TITLE OF OFFICER - E.G., "JANE DOE, NOTARY PUBLIC"

personally appeared

_____
NAME(S) OF SIGNER(S)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) , or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Signature of Notary Public (Notary Seal)

DISTRICT CERTIFICATE OF ACCEPTANCE

This is to certify that the interest in real property conveyed by the Deed or Grant to Otay Water District dated _____, _____ from _____ to OTAY WATER DISTRICT, a municipal water district, is hereby accepted by order of the Board of Directors pursuant to the authority conferred by Resolution No. 1829, adopted on February 23, 1981, and the grantee consents to recordation thereof by its duly authorized officer.

Dated:_____

By:_____
Susan Cruz, District Secretary
Otay Water District

EXHIBIT "A"

THAT PORTION OF LOT 3 IN SECTION 10, TOWNSHIP 17 SOUTH, RANGE 1 EAST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, AS SHOWN ON RECORD OF SURVEY MAP NO. 11539, RECORDED MARCH 24, 1988 AS FILE NO. 88-134295 OF OFFICIAL RECORDS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF LAND DESCRIBED IN DEED TO JUDY GORE RECORDED NOVEMBER 13, 2012, AS DOCUMENT NO. 2012-0705614, OF OFFICIAL RECORDS, SAID POINT ALSO BEING ON THE NORTHERLY RIGHT OF WAY LINE OF HILLSIDE DRIVE AS SHOWN ON SAID RECORD OF SURVEY MAP NO. 11539;

THENCE LEAVING SAID RIGHT OF WAY LINE AND ALONG THE WESTERY LINE OF SAID GORE PROPERTY, NORTH 00°16'58" EAST A DISTANCE OF 245.28 FEET;

THENCE LEAVING SAID WESTERLY LINE AND ALONG THE NORTHERLY LINE OF SAID GORE PROPERTY, NORTH 87°27'56" EAST A DISTANCE OF 44.71 FEET;

THENCE LEAVING SAID NORTHELRY LINE, SOUTH 00°16'58" WEST A DISTANCE OF 234.95 FEET TO SAID RIGHT OF WAY LINE;

THENCE ALONG SAID RIGHT OF WAY LINE, SOUTH 74°36'51" WEST A DISTANCE OF 46.37 FEET TO THE **POINT OF BEGINNING.**

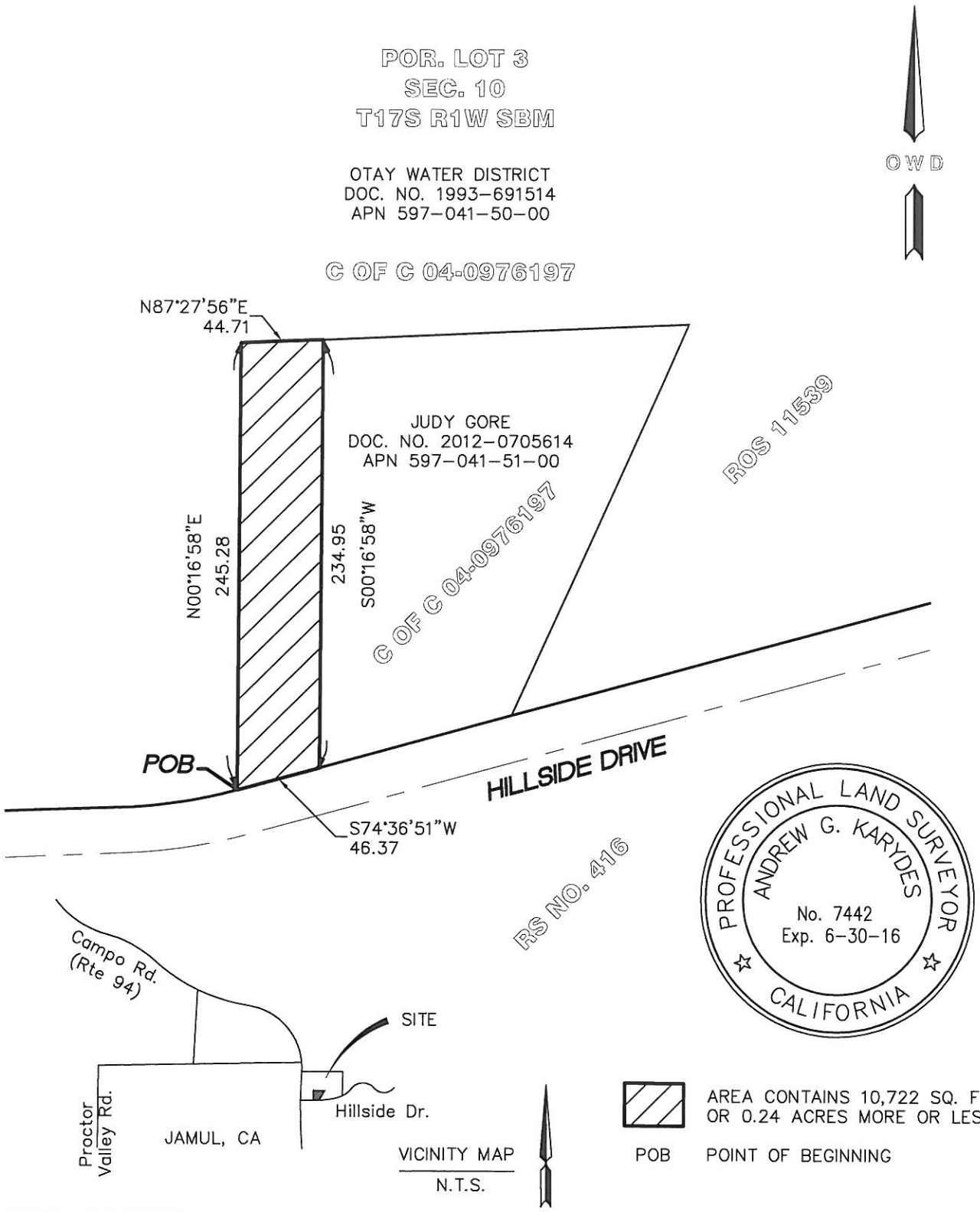
THE ABOVE DESCRIBED PARCEL CONTAINS 10,722.53 SQUARE FEET OR 0.24 ACRES, MORE OR LESS.

PROFESSIONAL LAND SURVEYOR
ANDREW G. KARYDES
No. 7442
Exp. 6-30-16
CALIFORNIA

8/06/14

ANDREW G. KARYDES, L.S. 7442 DATED
EXP. 06/30/16

EXHIBIT "B"



OTAY WATER DISTRICT

2554 SWEETWATER SPRINGS BLVD.
SPRING VALLEY, CA 91978

SCALE: 1'=80'	
DRAWN BY: MO	
CIP/DEV NO.: N/A	
DATE: 08/06/2014	

EXHIBIT B3

RECORDING REQUESTED BY:
Otay Water District
2554 Sweetwater Springs Blvd.
Spring Valley, Ca 91978

WHEN RECORDED RETURN TO:
Otay Water District
2554 Sweetwater Springs Blvd.
Spring Valley, Ca 91978

APN No. 597-041-50-00

(Space above this line reserved for Recorder's use only)

GRANT DEED
FOR LOT LINE ADJUSTMENT PURPOSES

The undersigned grantor(s) declare(s):
Documentary transfer tax is $_____ City Tax is $ EXEMPT
( ) computed on full value of property conveyed, or
( ) computed on full value less value of liens and encumbrances remaining at the time of sale.
( ) Unincorporated area: _____ ( ) City of _____
(X) Realty not sold.

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

Otay Water District (Grantor),

hereby GRANTS to

Otay Water District (Grantee),

the following described real property in the County of San Diego, State of California:

Parcel "A" of that certain Certificate of Compliance recorded October 14, 2004 as Document No. 04-0976196 in the Official Records of the San Diego County Recorder, a copy of which is attached hereto as **Exhibit "A"** and made a part hereof.

This grant deed is recorded pursuant to California Government Code Section 66412 (d) and is intended to memorialize that certain Lot Line Adjustment B/C 04-0192 approved by the San Diego County Department of Planning and Land Use, recorded as Certificate of Compliance numbers 2004-0976196 and 2004-0976197, both recorded on October 14, 2004, and to effectuate the adjustment of lot lines for property held in common ownership.

_____ Dated:_____

By: Mark Watton
General Manager
Otay Water District

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

GRANTOR'S SIGNATURE ACKNOWLEDGEMENT

State of California)
) ss
County of _____)

On _____ before me, _____
DATE NAME, TITLE OF OFFICER - E.G., "JANE DOE, NOTARY PUBLIC"

personally appeared

_____
NAME(S) OF SIGNER(S)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) , or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Signature of Notary Public (Notary Seal)

EXHIBIT "A"

DOC # 2004-0976196

RECORDING REQUESTED BY
AND WHEN RECORDED MAIL TO:

COUNTY OF SAN DIEGO
Department of Planning and Land Use
Attn: ZONING COUNTER
5201 Ruffin Road
San Diego, CA 92123-1666

Mail Station 0650

8240

OCT 14, 2004 10:25 AM

OFFICIAL RECORDS
SAN DIEGO COUNTY RECORDER'S OFFICE
GREGORY J. SMITH, COUNTY RECORDER
FEES: 16.00
PAGES: 4

2004-0976196

SPACE ABOVE THIS LINE FOR RECORDER'S USE

CERTIFICATE OF COMPLIANCE
(Section 66499.35 of the Government Code)

Not Approved for Development

The Director of Planning and Land Use has determined that the two parcels of real property described below have been divided or have resulted from a division in compliance with the Subdivision Map Act and with provisions of the San Diego County Code adopted pursuant hereto.

This Certificate of Compliance does NOT, however, guarantee that San Diego County will issue a building permit or grant any approval necessary to develop this property. Before San Diego County will issue any permit or grant any approval to develop this property, several conditions, including but not limited to, the following must be met:

1. The Department of Environmental Health must approve the use of a septic system, or the local sewer district must agree to provide sewer service to this parcel.

Owner: PARCEL A: OTAY MUNICIPAL WATER DISTRICT
PARCEL C: JAYAPALA L. SIRIMANNE (A SINGLE MAN)

Description: See Exhibit "A", attached.

NOTE: The description in Exhibit "A", attached, has been provided by the owner of the property and neither the County of San Diego nor any of its officers or employees assume responsibility for the accuracy of said description.

This Certificate of Compliance shall in no way affect the requirements of any other County, State, Federal, or local agency that regulates development of real property.

Date: October 14, 2004

DPL Case No.: C04-0192BA(C)12

Assessor's Parcel No.: 597-041-49, 50

DEPT. OF PLANNING AND LAND USE
GARY L. PRYOR, DIRECTOR

BY:
Susan Porter, Planning Manager

SP:JR:jr

Attachment

DPLU# 344A (Rev. 9/20/99)

EXHIBIT "A"

PARCEL A

A portion of that land in Lot 3 of Section 10, Township 17 South, Range 1 East, San Bernardino Meridian shown on Record of Survey Map No. 11539, in the County of San Diego, State of California, described as follows:

Commencing at the point of intersection of the northerly line of said Lot 3 with the easterly right-of-way line of Campo Road (State Highway 94); thence along said right-of-way line S 0°16'58'' W, 350.00 feet to a point in the southerly line of a parcel of land described in deed to Kenneth P. Rupe, recorded April 18,1986, as file no. 86-151549 of Official Records, said point being the **TRUE POINT OF BEGINNING**; thence leaving said right-of-way, along the southerly line of said Rupe land, N 88°18'28" E 199.98 feet; thence leaving said southerly line N 88°18'28" E 217.93 feet; thence N 0°16'58" E 200.00 feet to the northerly line of land described in deed to Laurence and Helen Van Norman, recorded February 18, 1983 as file no. 83-053734 of Official Records; thence along said northerly line N 88°18'28" E 452.07 feet to the Northeasterly corner of said Van Norman land; thence along the easterly line thereof S 0°16'58" W 394.86 feet to a point in the northerly right-of-way of Hillside Drive, being a point in a curve concave southeasterly having a radius of 224.79 feet, a radial line through said point bears N 10°53'21"W; thence southwesterly along said northerly right-of-way 92.78 feet though a central angle of 23°38'52"; thence S 55°27'47" W 105.72 feet to the beginning of a 175.23 foot radius curve concave northwesterly, thence 58.55 feet along said curve though a central angle of 19°08'35"; thence S 74°36'22" W 287.37 feet; thence leaving said northerly right-of-way N 24°04'31"E 235.35 feet; thence S 87°27'56"W 244.73 feet; thence S 0°16'58"W 245.28 feet to said northerly right-of-way; thence along said right-of-way S 74°36'22" W 46.38 feet to the beginning of a 275.00 foot radius curve concave northerly; thence 65.76 feet along said curve through a central angle of 13°42'01"; thence S 88°18'23" W 109.58 feet to the easterly right-of-way of Campo Road; thence along said Campo Road right-of-way N 0°16'58" E 432.07 feet to the **TRUE POINT OF BEGINNING.**

LICENSED LAND SURVEYOR
GARY C. RUSH
NO. L6983
STATE OF CALIFORNIA

Gary C. Rush L.S. 6983
Expiration: 09/30/05

P:\Working\WO 30120\Survey-2004\Legal desc for 7.84 acres.doc
Last printed 8/23/2004 1:54 PM

EXHIBIT "A"

PARCEL C

A portion of that land in Lot 3 of Section 10, Township 17 South, Range 1 East, San Bernardino Meridian shown on Record of Survey Map No. 11539, in the County of San Diego, State of California, described as follows:

Commencing at the point of intersection of the northerly line of said Lot 3 with the easterly right-of-way line of Campo Road (State Highway 94); thence along said right-of-way line S 0°16'58'' W, 350.00 feet to point "A", which is a point in the southerly line of a parcel of land described in deed to Kenneth P. Rupe, recorded April 18,1986, as file no. 86-151549 of Official Records; thence leaving said right-of-way, along said southerly line, N 88°18'28" E 199.98 feet to the **TRUE POINT OF BEGINNING**; thence leaving said southerly line N 88°18'28" E 217.93 feet; thence N 0°16'58" E 200.00 feet to the northerly line of land described in deed to Laurence and Helen Van Norman, recorded February 18, 1983 as file no. 83-053734 of Official Records; thence along said northerly line S 88°18'28" W 217.93 feet to the easterly line of said Rupe land; thence along said easterly line S 00°16'58"W 200.00 feet to the **TRUE POINT OF BEGINNING**

TOGETHER WITH a non-exclusive 30 foot wide easement for road and utilities over a portion of said Lot 3, the northerly line of which is described as follows:

Beginning at the above described point "A"; thence along the southerly line of said Rupe land, N 88°18'28" E 199.98 feet; thence along the southerly line of the above-described parcel "C" N 88°18'28" E 217.93 feet to the point of terminus.

The southerly line of said 30-foot wide strip shall be lengthened or shorted so as to begin in the easterly sideline of Highway 94 and end in the southerly prolongation of the easterly line of the above-described Parcel "C".

LICENSED LAND SURVEYOR
GARY C. RUSH
NO. L6983
STATE OF CALIFORNIA

Gary C. Rush L.S. 6983
Expiration: 09/30/05

EXHIBIT B4

RECORDING REQUESTED BY:
Otay Water District
2554 Sweetwater Springs Blvd.
Spring Valley, Ca 91978

WHEN RECORDED RETURN TO:
Otay Water District
2554 Sweetwater Springs Blvd.
Spring Valley, Ca 91978

APN No. 597-041-51-00

(Space above this line reserved for Recorder's use only)

GRANT DEED
FOR LOT LINE ADJUSTMENT PURPOSES

The undersigned grantor(s) declare(s):
Documentary transfer tax is $_____ City Tax is $ EXEMPT
( ) computed on full value of property conveyed, or
( ) computed on full value less value of liens and encumbrances remaining at the time of sale.
( ) Unincorporated area: _____ ( ) City of _____
(X) Realty not sold.

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

Judy Gore (Grantor),

hereby GRANTS to

Judy Gore (Grantee),

the following described real property in the County of San Diego, State of California:

Parcel "B" of that certain Certificate of Compliance recorded October 14,2004 as Document No. 2004-0976197 in the Official Records of the San Diego County Recorder, a copy of which is attached hereto as **Exhibit "A"** and made a part hereof.

This grant deed is recorded pursuant to California Government Code Section 66412 (d) and is intended to memorialize that certain Lot Line Adjustment B/C 04-0192 approved by the San Diego County Department of Planning and Land Use, recorded as Certificate of Compliance numbers 2004-0976196 and 2004-0976197, both recorded on October 14, 2004, and to effectuate the adjustment of lot lines for property held in common ownership.

_____ Dated:_____

By: Judy Gore

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

GRANTOR'S SIGNATURE ACKNOWLEDGEMENT

State of California)
) ss
County of _____)

On _____ before me, _____
DATE NAME, TITLE OF OFFICER - E.G., "JANE DOE, NOTARY PUBLIC"

personally appeared

_____
NAME(S) OF SIGNER(S)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) , or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Signature of Notary Public (Notary Seal)

EXHIBIT "A"

DOC # 2004-0976197

RECORDING REQUESTED BY
AND WHEN RECORDED MAIL TO:

COUNTY OF SAN DIEGO
Department of Planning and Land Use
Attn: ZONING COUNTER
5201 Ruffin Road
San Diego, CA 92123-1666

Mail Station 0650

8244

OCT 14, 2004 10:25 AM

OFFICIAL RECORDS
SAN DIEGO COUNTY RECORDER'S OFFICE
GREGORY J. SMITH, COUNTY RECORDER
FEES: 10.00
PAGES: 2

2004-0976197

SPACE ABOVE THIS LINE FOR RECORDER'S USE

CERTIFICATE OF COMPLIANCE
(Section 66499.35 of the Government Code)

The Director of Planning and Land Use has determined that the one parcel of real property described below has been divided or has resulted from a division in compliance with the Subdivision Map Act and with provisions of the San Diego County Code adopted pursuant hereto.

Owner: PARCEL B: TERRELL GORE (AN UNMARRIED MAN) AND JUDY GORE, TRUSTEE OF THE JUDY GORE REVOCABLE TRUST DATED JULY 29, 1999

Description: See Exhibit "A", attached.

NOTE: The description in Exhibit "A", attached, has been provided by the owner of the property and neither the County of San Diego nor any of its officers or employees assume responsibility for the accuracy of said description.

This Certificate of Compliance shall in no way affect the requirements of any other County, State, Federal, or local agency that regulates development of real property.

Date: October 14, 2004

DEPT. OF PLANNING AND LAND USE
GARY L. PRYOR, DIRECTOR

DPL Case No.: C04-0192BA(C)1

Assessor's Parcel No.: 597-041-51

BY:
Susan Porter, Planning Manager

SP:JR:rj

Attachment

DPLU# 344 (Rev. 9/20/99)

EXHIBIT "A"

PARCEL B

A portion of that land in Lot 3 of Section 10, Township 17 South, Range 1 East, San Bernardino Meridian shown on Record of Survey Map No. 11539, in the County of San Diego, State of California, described as follows:

Commencing at the point of intersection of the northerly line of said Lot 3 with the easterly right-of-way line of Campo Road (State Highway 94); thence along said right-of-way line S 0°16'58'' W, 150.00 feet to a point in the northerly line of a parcel of land described in deed to Kenneth P. Rupe, recorded April 18,1986, as file no. 86-151549 of Official Records; thence leaving said right-of-way, along the northerly line of said Rupe land, N 88°18'28" E 199.98 feet; thence along the northerly line of land described in deed to Laurence and Helen Van Norman, recorded February 18, 1983 as file no. 83-053734 of Official Records N 88°18'28" E 670.00 feet to the northeasterly corner of said Van Norman land; thence along the easterly line thereof S 0°16'58"W 394.86 feet to a point in the northerly right-of-way of Hillside Drive, being a point in a curve concave southeasterly having a radius of 224.79 feet, a radial line through said point bears N 10°53'21"W; thence southwesterly along said northerly right-of-way 92.78 feet though a central angle of 23°38'52"; thence S 55°27'47"W 105.72 feet to the beginning of a 175.23 foot radius curve concave northwesterly, thence 58.55 feet along said curve though a central angle of 19°08'35"; thence S 74°36'22"W 287.37 feet to the **TRUE POINT OF BEGINNING**; thence leaving said northerly right-of-way N 24°04'31"E 235.35 feet; thence S 87°27'56"W 244.73 feet; thence S 0°16'58"W 245.28 feet to said northerly right-of-way; thence along said right-of-way N 74°36'22"E 155.27 feet to the **TRUE POINT OF BEGINNING**

LICENSED LAND SURVEYOR
GARY C. RUSH
NO. L6983
STATE OF CALIFORNIA

Gary C. Rush L.S. 6983
Expiration: 09/30/05

P:\Working\WO 30120\Survey-2004\LEGAL DESC LOT 4.doc
Last printed 8/23/2004 1:54 PM

EXHIBIT C

PLAT

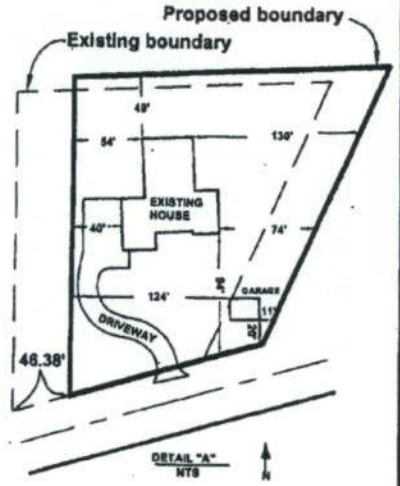
371

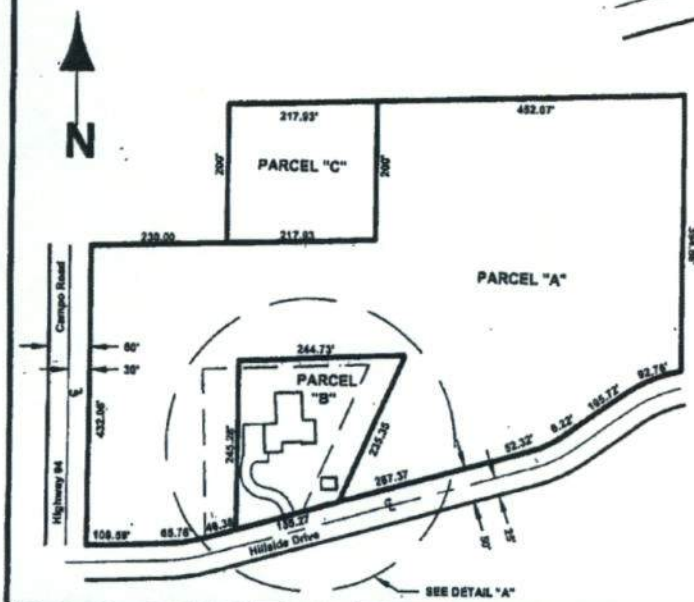
SCALE: 1 in. = 200'

PARCEL "A":
NET AC.: 8.02 ACRES
APN NO(S): 597-041-50
ZONING: RR1 (Min. Lot Size 1 AC)
LEGAL: (EX ST/ DOCS 00-67066, 00-264505) DOC 93-691514 IN LOT 3 SEC. 10-17S-1E

PARCEL "B":
NET AC.: 1.02
APN NO(S): 597-041-51
ZONING: RR1 (Min. Lot Size 1 AC)
LEGAL: (EX ST) DOC 00-264505 IN LOT 3 SEC 10-17S-1E

PARCEL "C":
NET AC.: 1.00
APN NO(S): 597-041-49
ZONING: RR1 (Min. Lot Size 1 AC)
LEGAL: DOC 00-67066 IN LOT 3 SEC 10-17S-1E





VICINITY MAP
N.T.S.

HEATH DEPARTMENT CERTIFICATION (IF NEC.)

Parcel A & C - Exempt from certification, per SD. Zoning Ordinance, Section 6903 (h). Not approved for development without engineering to demonstrate site can support development based on the use of a Substitute Sewage disposal system.
Parcel B - Existing SFD with existing septic system.
6/26/04 Marvin Ortega

NOTE:
PROPOSED BOUNDARY:
EXISTING BOUNDARY:
DIFFERENT ZONES:

CHECK LIST:

OPTIONAL USE AREA:

LICENSED LAND SURVEYOR
GARY C. RUSH
NO. L6983
Exp 9-30-05
STATE OF CALIFORNIA

Gary C Rush

PARCEL A: OWNERS OTAY WATER DISTRICT
MARK WATTON, GENERAL MANAGER
ADDRESS 2554 SWEETWATER SPRINGS BLVD.
CITY SPRING VALLEY ZIP 91978 PHONE 619-670-2222

PARCEL B: OWNER(S) JUDY GORE REVOCABLE TRUST
TERRELL GORE
ADDRESS 14022 HILLSIDE DRIVE
CITY SAN DIEGO ZIP 91935 PHONE 619-669-0775 619-497-6192

THE PLAT WAS PREPARED WITH MY OWN KNOWLEDGE AND CONSENT (OWNER SIGN HERE)

PARCEL C: OWNER(S) (OR APPLICANT) JAYAPALA L. SIRIMANNE
ADDRESS 13966 CAMPO ROAD (HIGHWAY 94 EAST)
CITY JAMUL ZIP 91935 PHONE 619993-9009

MAP PREPARED BY: GARY RUSH LS# 6983
ADDRESS 2554 SWEETWATER SPRINGS BLVD.
CITY SPRING VALLEY ZIP 91978 PHONE 619-670-2793

DATE FILED 8-26-2004
REC'D BY: M. Chan
PRELIMINARY ACTION DATE: 9/8/04
SIGNED BY:
FINAL ACTION DATE: 10-14-04
SIGNED BY:

PLAT NO. B/C 04-0192

DPLU#239(1/98)

AGENDA ITEM 10c

STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	September 3, 2014
SUBMITTED BY:	Dan Martin Engineering Manager	PROJECT: Various	DIV. NO. ALL
APPROVED BY:	☒ Rod Posada, Chief of Engineering ☒ German Alvarez, Assistant General Manager ☒ Mark Watton, General Manager		
SUBJECT:	Otay Ranch Village 8 West Water Annexation Request into Improvement Districts (IDs) 22 and 27 (APNs 644-070-12, 14, 16, 17, & 19-00)		

GENERAL MANAGER'S RECOMMENDATION:

Adopt Resolution No. 4240, fixing terms and conditions for the annexation of certain real properties owned by the Otay Land Co., LLC, APNs: 644-070-12, 14, 16, 17, and 19-00 into the Otay Water District Improvement District Nos. 22 and 27 (see Exhibit C for location).

COMMITTEE ACTION:

See Attachment A.

PURPOSE:

The purpose of the proposed annexation is to provide water service to parcels owned by Otay Land Co., LLC. (APNs 644-070-12, 14, 16, 17, and 19-00.)

ANALYSIS:

A written request and Petition signed by Mr. Jeff O'Connor, Otay Land Co., LLC, has been received for the annexation of APNs (APNs: 644-070-12, 14, 16, 17, and 19-00) into Improvement District Nos. 22 and 27 for water service. The total acreage to be annexed is

299.37 acres. The properties are within the sphere of influence of Otay Water District and will be part of Improvement Districts 22 and 27 after the Board of Directors approve this request. The properties are located at Rock Mountain Road & Magdalena Avenue in the City of Chula Vista in the County of San Diego.

The annexation of the Otay Ranch Village 8 West parcels will create two island parcels inside Improvement Districts 22 and 27 (see Exhibit C). Assessor Parcel Number 644-241-06-00 is owned by the United States Government and is currently being used by the Federal Aviation Administration. This parcel has an area of 51.65 acres. Assessor Parcel Number 644-070-13-00 is owned by the City of San Diego and contains an active 15 million gallon reservoir called Lower Otay Reservoir. Due to the complexity of securing ownership approvals to annex these parcels and in consideration of their current uses, the annexation of these parcels into Improvement Districts 22 and 27 has been deferred to a future date.

FISCAL IMPACT: ☒ Joseph Beachem, Chief Financial Officer

The property owners will pay the District's Annexation processing fee of $763.83, which is subject to annual adjustment in accordance with the District Code of Ordinances. At the time a water meter is purchased, the owners will pay the then current meter and capacity fees based on water meter size. The owner will continue to pay availability fees based on the current acres of 299.37 until such time that the property is subdivided at which time the fees will be based on $10 per parcel or $30 per acre. Because these parcels are already within the Otay Water District boundaries, no annexation fees will be charged for these parcels.

STRATEGIC GOAL:

Provide water service to meet increasing customer needs.

LEGAL IMPACT:

No legal impact.

DM/RP:jf
\\owd-fp1\engrplan\public-s\annexation requests\2014\village 8 west\draft staff report, otay ranch village 8 west water annexation 8-4-14.doc

Attachments: Attachment A - Committee Action
Attachment B - Resolution
Exhibit A - Legal Description
Exhibit B - Legal Map
Exhibit C – GIS Map

ATTACHMENT A

SUBJECT/PROJECT:	Otay Ranch Village 8 West Water Annexation Request into Improvement Districts (IDs) 22 and 27 (APNs 644-070-12, 14, 16, 17 & 19-00)
Various	

COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee (Committee) reviewed this item at a Committee Meeting held on August 14, 2014, and the following comments were made:

- Staff recommended that the Board Adopt Resolution No. 4240, fixing terms and conditions for the annexation of certain real properties owned by the Otay Land Co., LLC, APNs: 644-070-12, 14, 16, 17, and 19-00 into the Otay Water District Improvement District Nos. 22 and 27.

- Staff stated that the Otay Ranch Village 8 West project will consist of approximately 2050 units of mixed density residential development, school sites, retail commercial, a community purpose facility, parks and open spaces.

- It was noted that the project proposes an estimated potable water demand of over 725,000 gallons per day which will equate to approximately 1,450 EDU's for the District.

- Staff anticipates that the project will be constructed in three (3) Phases from the north end of the project to the south end of the project.

- A written request and Petition signed by Mr. Jeff O'Connor, with Otay Land Co., LLC, has been received for the annexation of parcels 12, 14, 16, 17, and 19 into Improvement District (ID) Nos. 22 and 27 for water service.

- The property is within the sphere of Otay Water District and will be part of IDs 22 and 27 upon approval by the Board.

- Staff noted that the annexation of the parcels will create two island parcels within ID Nos. 22 and 27 as shown in Exhibit C. The Northern island parcel is owned by the US Government and is being used by the Federal Aviation Administration (FAA). The parcel located in the middle of the area proposed for annexation is owned by the City of San Diego and contains an active 15 MG reservoir. The annexation of these parcels has been deffered to a future date due to the complexity of securing ownership approvals to annex these parcels.

- In response to a question by the Committee, staff stated that no water is being used in the northern island and the parcel is exempt from availibity fees since the Federal Government owns the parcel.

Upon completion of the discussion, the committee received staffs' report and supported presentation to the full board as a consent item.

ATTACHMENT B

RESOLUTION NO. 4240

A RESOLUTION OF THE BOARD OF DIRECTORS OF OTAY WATER DISTRICT APPROVING THE ANNEXATION TO OTAY WATER DISTRICT IMPROVEMENT DISTRICT NOS. 22/27 OF THOSE LANDS DESCRIBED AS "OTAY RANCH VILLAGE 8 WEST WATER ANNEXATION REQUEST TO IMPROVEMENT DISTRICTS (IDs) 22 AND 27" (FILE NO. ENG70-10-142/DIV. 1)

WHEREAS, a letter has been submitted by OTAY LAND COMPANY, LLC, C/O JEFF O'CONNOR, the owner and party that has an interest in the land described in Exhibit "A," attached hereto, for annexation of said land to Otay Water District Improvement District Nos. 22/27 pursuant to California Water Code Section 72670 et seq.; and

WHEREAS, pursuant to Section 72680.1 of said Water Code, the Board of Directors may proceed and act thereon without notice and hearing.

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE OTAY WATER DISTRICT FINDS, RESOLVES, ORDERS AND DETERMINES as follows:

1. A depiction of the area proposed to be annexed, and the boundaries of IDs 22/27 following the annexation, is set forth on a map in Exhibit "B" filed with the Secretary of the District, which map shall govern for all details as to the area proposed to be annexed.

2. The purpose of the proposed annexation is to make water service available to the area to be annexed, which availability constitutes a benefit to said area.

3. The Board finds and determines that the area proposed to be annexed to IDs 22/27 will be benefited by such annexation and that the property currently within IDs 22/27 will also be

benefited and not injured by such annexation because after the annexation a larger tax base will be available to finance the water facilities and improvements of IDs 22/27.

4. The Board of Directors hereby declares that the annexation of said property is subject to the owners complying with the following terms and conditions:

(a) The petitioners for said annexation shall pay to Otay Water District the following:

(1) The annexation processing fee at the time of application;

(2) State Board of Equalization filing fees in the amount of $2,300;

(3) The water annexation fee at the time of connection to the Otay Water District water system;

(4) Yearly assessment fees will be collected through the County Tax Assessor’s office in the amount of $30 for APNs 644-070-12, 14 16, 17 and 19-00;

(5) In the event that water service is to be provided, Petitioners shall pay all applicable water meter fees per Equipment Dwelling Unit (EDU) at the time the meter is purchased; and

(6) Payment by the owners of APNs 644-070-12, 14, 16, 17 and 19-00 of all other applicable local or state agency fees or charges.

(b) The property to be annexed shall be subject to taxation after annexation thereof for the purposes of the improvement district, including the payment of principal and interest on bonds and other obligations of the improvement district, authorized and outstanding at the time of annexation, the same as if the annexed property had always been a part of the improvement district.

5. The Board hereby declares the property described in Exhibit "A" shall be considered annexed to IDs 22/27 upon passage of this resolution.

6. The Board of Directors further finds and determines that there are no exchanges of property tax revenues to be made pursuant to California Revenue and Taxation Code Section 95 et seq., as a result of such annexation.

7. The annexation of APNs 644-070-12, 14, 16, 17 and 19-00 to the District’s Improvement Districts 22/27 is hereby designated as the “OTAY RANCH VILLAGE 8 WEST WATER ANNEXATION”.

8. Pursuant to Section 57202(a) of the Government Code, the effective date of the OTAY RANCH VILLAGE 8 WEST WATER ANNEXATION shall be the date this Resolution is adopted by the Board of Directors of the Otay Water District.

9. The General Manager of the District and the Secretary of the District, or their respective designees, are hereby ordered to take all actions required to complete this annexation.

PASSED, APPROVED AND ADOPTED by the Board of Directors of the Otay Water District at a regular meeting held this 3rd day of September, 2014.

_____
President

ATTEST:

_____
District Secretary

EXHIBIT "A"

ANNEXATION TO OTAY IMPROVEMENT DISTRICT NO. 22 – 27

GEOGRAPHIC DESCRIPTION

ALL THAT CERTAIN REAL PROPERTY, BEING ALL OF LOT 27 AND A PORTION OF LOT 28, OF MAP NO. 862, SITUATED IN THE OTAY RANCHO, CITY OF CHULA VISTA, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE CENTERLINE OF LA MEDIA ROAD, A 128.00 FOOT WIDE PUBLIC ROAD, AND THE NORTHERLY BOUNDARY OF SAID LOT 28, ALSO BEING THE EXISTING OTAY WATER DISTRICT BOUNDARY;

THENCE, (1) ALONG SAID BOUNDARIES, NORTH 71°57'53" EAST, 1187.30 FEET;

THENCE, (2) SOUTH 89°36'53" EAST, 204.71 FEET;

THENCE, (3) NORTH 00°23'07" EAST, 68.18 FEET;

THENCE, (4) NORTH 71°57'53" EAST, 258.68 FEET;

THENCE, (5) SOUTH 18°39'53" EAST, 91.75 FEET;

THENCE, (6) SOUTH 04°57'58" WEST, 17.75 FEET;

THENCE, (7) SOUTH 71°20'12" WEST, 8.88 FEET

THENCE, (8) SOUTH 18°39'48" EAST, 73.28 FEET;

THENCE, (9) SOUTH 41°02'36" EAST, 18.38 FEET;

THENCE, (10) SOUTH 18°39'52" EAST, 824.08 FEET;

THENCE, (11) SOUTH 05°33'45" EAST, 18.25 FEET;

THENCE, (12) SOUTH 27°49'11" EAST, 52.00 FEET;

THENCE, (13) NORTH 62°10'49" EAST, 50.51 FEET;

THENCE, (14) SOUTH 18°40'02" EAST, 4197.53 FEET;

(CONTINUED)

EXHIBIT "A"

ANNEXATION TO OTAY IMPROVEMENT DISTRICT NO. 22 – 27

GEOGRAPHIC DESCRIPTION

(CONTINUED)

THENCE, (15) SOUTH 71°58'11" WEST, 2641.60 FEET;

THENCE, (16) NORTH 18°39'11" WEST, 5280.16 FEET TO SAID NORTHERLY BOUNDARY OF LOT 28, ALSO BEING SAID EXISTING OTAY WATER DISTRICT BOUNDARY;

THENCE, (17) ALONG SAID BOUNDARIES, NORTH 71°57'53" EAST, 933.50 FEET TO THE **POINT OF BEGINNING**.

EXCEPTING THEREFROM THAT CERTAIN PARCEL OF LAND GRANTED TO THE CITY OF SAN DIEGO PER DEED RECORDED JANUARY 9, 2009 AS DOCUMENT NO. 2009-0010329 OF OFFICIAL RECORDS, DESCRIBED AS FOLLOWS:

BEGINNING AT THE CORNER WHICH IS COMMON TO SAID LOTS 27 AND 28, SAID CORNER BEING THE MOST SOUTHEASTERLY CORNER OF SAID LOT 28;

THENCE (18) ALONG THE SOUTHERLY LINE OF SAID LOT 28, SOUTH 71°58'14" WEST, 553.16 FEET TO THE **TRUE POINT OF BEGINNING** OF SAID EXCEPTION;

THENCE (19) LEAVING SAID SOUTHERLY LINE, SOUTH 19°03'43" EAST, 267.98 FEET;

THENCE (20) SOUTH 25°56'17" WEST, 28.28 FEET;

THENCE (21) SOUTH 70°56'17" WEST, 754.24 FEET;

THENCE (22) NORTH 74°03'43" WEST, 34.87 FEET;

THENCE (23) NORTH 39°03'43" WEST, 314.14 FEET TO THE BEGINNING OF A 1,936.00 FOOT RADIUS CURVE, CONCAVE NORTHEASTERLY, A RADIAL LINE TO WHICH BEARS SOUTH 50°56'17" WEST;

THENCE (24) NORTHWESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 16°58'10" AN ARC DISTANCE OF 573.39 FEET;

(CONTINUED)

EXHIBIT "A"

ANNEXATION TO OTAY IMPROVEMENT DISTRICT
NO. 22 – 27

GEOGRAPHIC DESCRIPTION

(CONTINUED)

THENCE (25) NORTH 25°56'17" EAST, 28.28 FEET;

THENCE (26) NORTH 70°56'17" EAST, 984.29 FEET;

THENCE (27) SOUTH 64°03'43" EAST, 28.28 FEET;

THENCE (28) SOUTH 19°03'43" EAST, 587.02 FEET TO THE **TRUE POINT OF BEGINNING** OF SAID EXCEPTION.

CONTAINING, 299.37 ACRES, MORE OR LESS.

DISCLAIMER: FOR ASSESSMENT PURPOSES ONLY. THIS DESCRIPTION IS NOT A LEGAL PROPERTY DESCRIPTION AS DEFINED IN THE SUBDIVISION MAP ACT AND MAY NOT BE USED AS THE BASIS FOR AN OFFER FOR SALE OF THE LAND DESCRIBED.

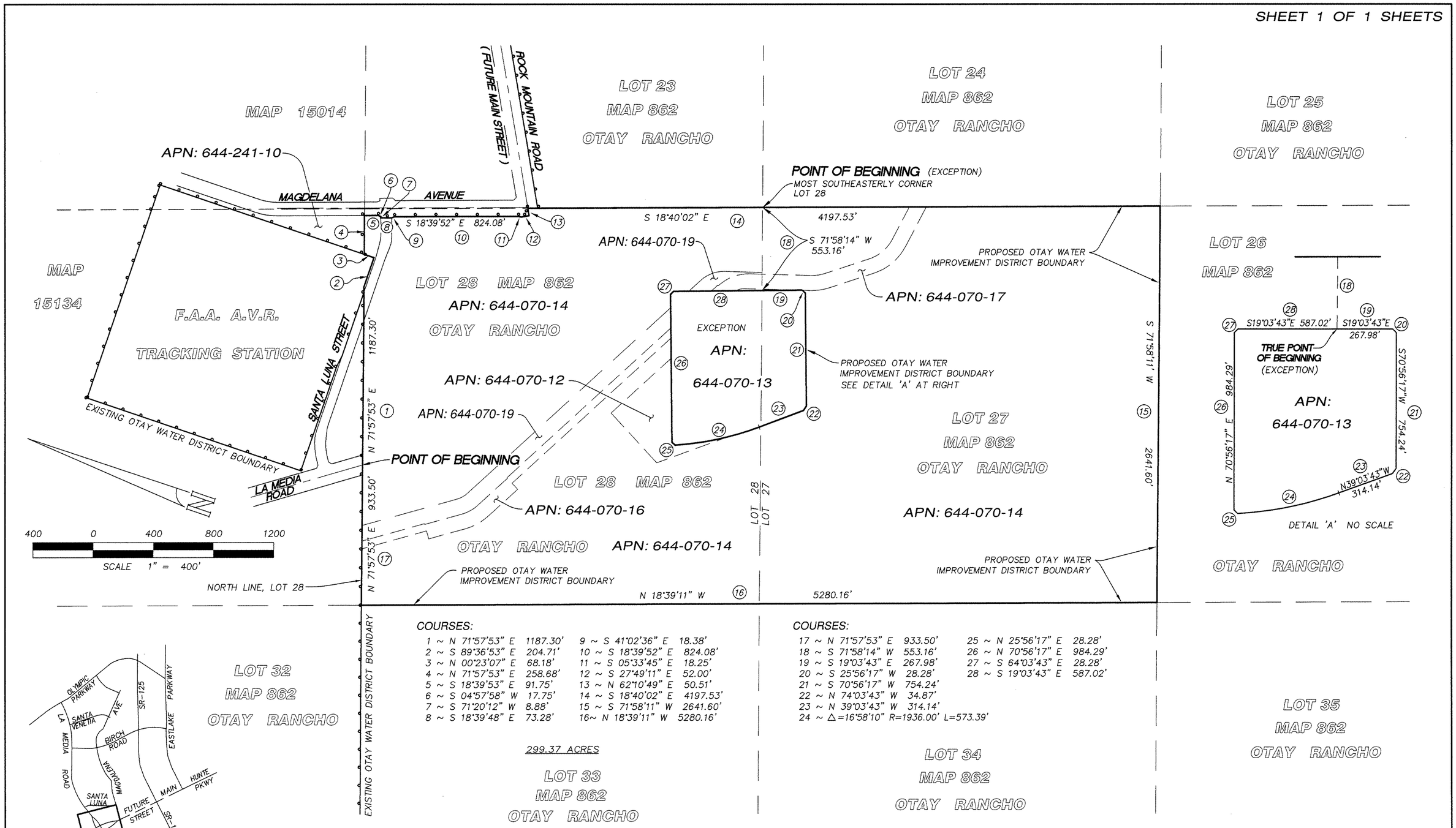
Dale C Gross 6/20/2014

DALE C. GROSS, PLS DATE

LICENSED LAND SURVEYOR
DALE C. GROSS
7632
STATE OF CALIFORNIA

EXHIBIT "B"

SHEET 1 OF 1 SHEETS



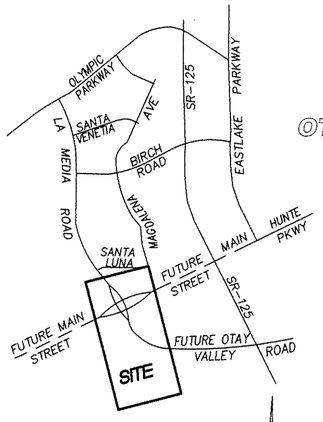
COURSES:

1 ~ N 71°57'53" E 1187.30'	9 ~ S 41°02'36" E 18.38'
2 ~ S 89°36'53" E 204.71'	10 ~ S 18°39'52" E 824.08'
3 ~ N 00°23'07" E 68.18'	11 ~ S 05°33'45" E 18.25'
4 ~ N 71°57'53" E 258.68'	12 ~ S 27°49'11" E 52.00'
5 ~ S 18°39'53" E 91.75'	13 ~ N 62°10'49" E 50.51'
6 ~ S 04°57'58" W 17.75'	14 ~ S 18°40'02" E 4197.53'
7 ~ S 71°20'12" W 8.88'	15 ~ S 71°58'11" W 2641.60'
8 ~ S 18°39'48" E 73.28'	16~ N 18°39'11" W 5280.16'

COURSES:

17 ~ N 71°57'53" E 933.50'	25 ~ N 25°56'17" E 28.28'
18 ~ S 71°58'14" W 553.16'	26 ~ N 70°56'17" E 984.29'
19 ~ S 19°03'43" E 267.98'	27 ~ S 64°03'43" E 28.28'
20 ~ S 25°56'17" W 28.28'	28 ~ S 19°03'43" E 587.02'
21 ~ S 70°56'17" W 754.24'	
22 ~ N 74°03'43" W 34.87'	
23 ~ N 39°03'43" W 314.14'	
24 ~ Δ=16°58'10" R=1936.00' L=573.39'	

299.37 ACRES



VICINITY MAP
NO SCALE

EXISTING OTAY WATER DISTRICT BOUNDARY
PROPOSED OTAY WATER DISTRICT BOUNDARY
EXISTING PARCELS

DISCLAIMER:
"FOR ASSESSMENT PURPOSES ONLY. THIS DESCRIPTION OF LAND IS NOT A LEGAL PROPERTY DESCRIPTION AS DEFINED IN THE SUBDIVISION MAP ACT AND MAY NOT BE USED AS THE BASIS FOR AN OFFER FOR SALE OF THE LAND DESCRIBED."

LICENSED LAND SURVEYOR DALE C. GROSS 7632 STATE OF CALIFORNIA

ASSESSOR'S PARCEL NUMBERS:	LAFCO RESOLUTION NO:	ACREAGE:	DATE:	SCALE:
644-070-12,14,16,17&19	N / A	299.37	6/16/2014	1" = 400'

CITY OF CHULA VISTA TRACT NO. 09-04

BEING A PORTION OF THE OTAY RANCHO
IN THE CITY OF CHULA VISTA , CA.
IN THE COUNTY OF SAN DIEGO , CA.

HALE ENGINEERING
7910 CONVOY COURT
SAN DIEGO, CA 92111
(858) 715-1420
(858) 715-1424 FAX

EXHIBIT C
OTAY RANCH VILLAGE 8 WEST ANNEXATION

DEVELOPER: Otay Land Company, LLC

PROJECT#: D0790-090165

APN: 644-070-12, 14, 16, 17 & 19

AREA: 299.37

OWNER: Otay Land Company, LLC

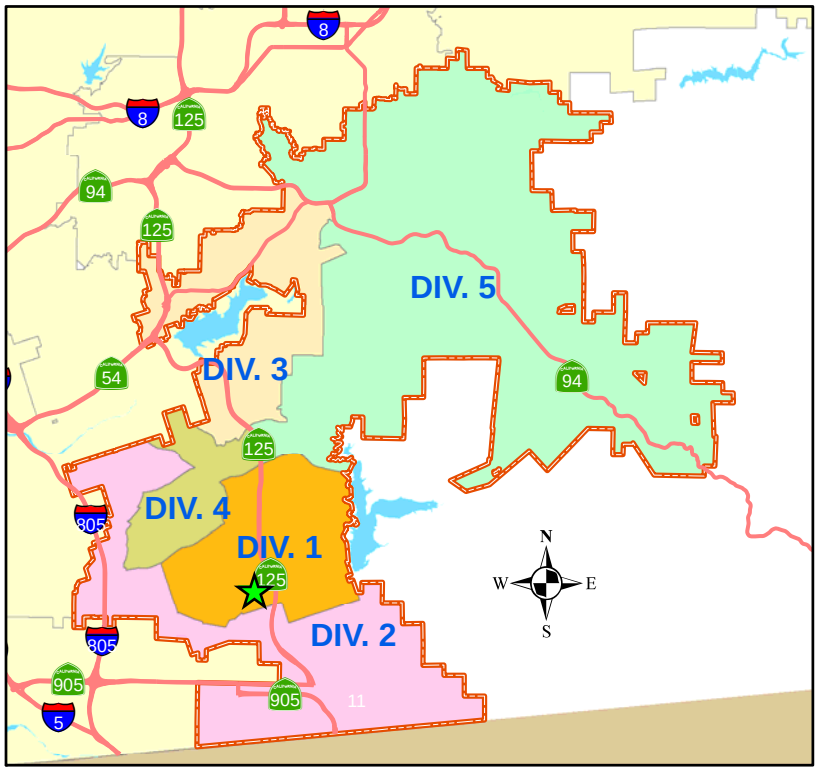
DIR: DIV 1

WID: 22/27

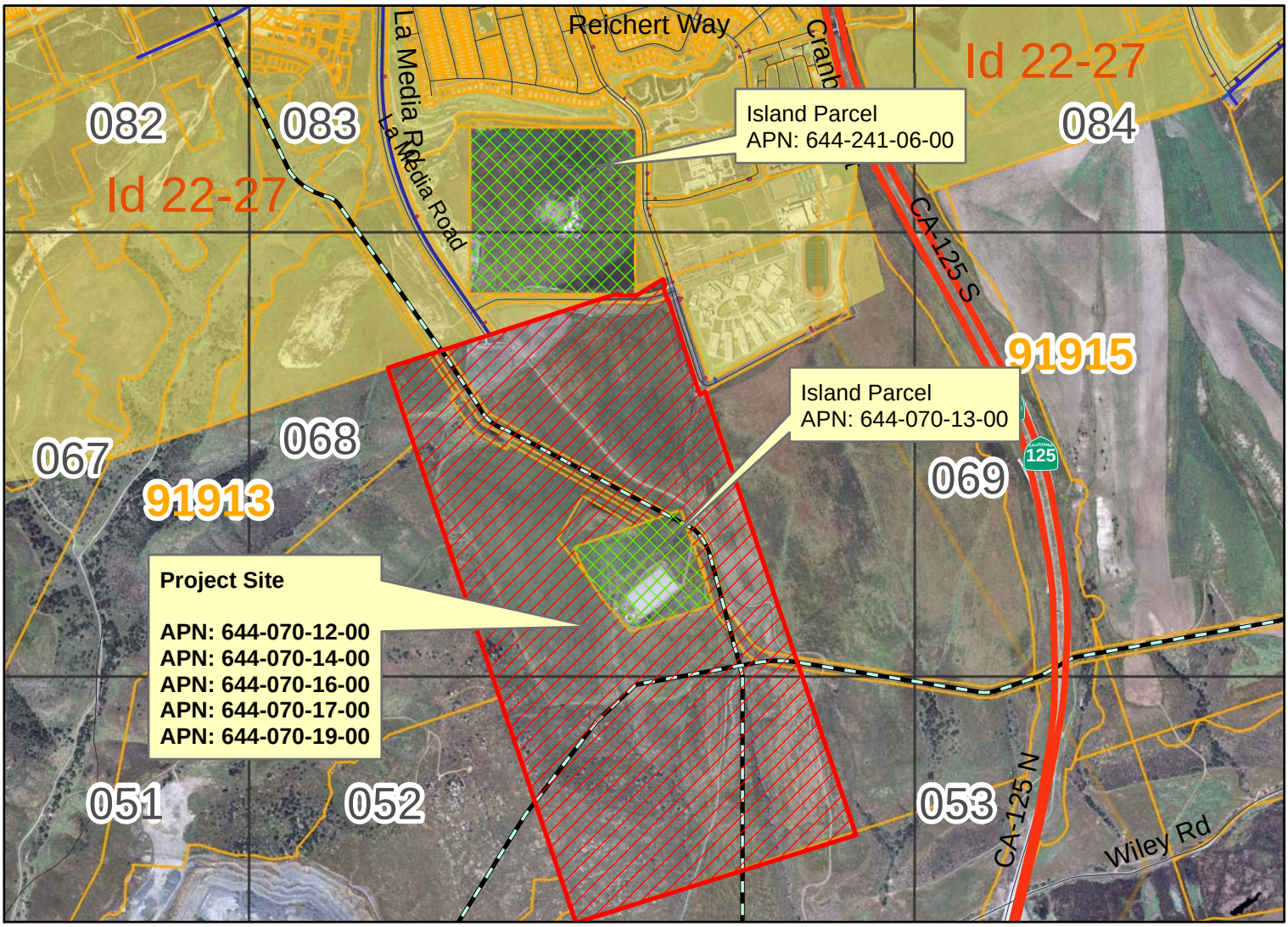
DATE: 6/26/2014

0 550 1,100 2,200 3,300 4,400 Feet

VICINITY MAP



LOCATION MAP



AGENDA ITEM 10d

STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	September 3, 2014
SUBMITTED BY:	Lisa Coburn-Boyd Environmental Compliance Specialist Bob Kennedy Engineering Manager	PROJECT:	P2515-001101 DIV. NO. 2
APPROVED BY:	☒ Rod Posada, Chief, Engineering ☒ German Alvarez, Assistant General Manager ☒ Mark Watton, General Manager		
SUBJECT:	Adoption of a Mitigated Negative Declaration for the 870-1 Reservoir Access Road Paving Project		

GENERAL MANAGER'S RECOMMENDATION:

That the Otay Water District (District) Board of Directors (Board) approves the adoption of a Mitigated Negative Declaration for the 870-1 Reservoir Access Road Paving Project (see Exhibit A for Project location).

COMMITTEE ACTION:

Please see Attachment A.

PURPOSE:

To obtain Board approval for the adoption of a Mitigated Negative Declaration (MND) for the 870-1 Reservoir Access Road Paving Project.

ANALYSIS:

The Otay Water District (District) is proposing to pave an existing dirt access road that surrounds the 870-1 potable water reservoir facility. The paving of this road will provide year-round access to the Reservoir and reduce the maintenance requirements of the dirt road. The road is approximately 2,100 feet long and approximately 10 to 12 feet wide, covering a total area of approximately 21,000 square feet (0.48 acre). The road starts at the south access gate and

encircles the reservoir, it is between the reservoir and a chain-link fence that surrounds the reservoir site.

All planned construction activities would take place within previously developed areas (the existing dirt road). The road would be paved with asphalt concrete and require the use of construction equipment that includes a grader, dozer, roller, dump truck and backhoe. Staging of any construction equipment will occur in disturbed areas. The construction activity would occur within a two month time period and also occur outside of the migratory bird breeding season.

District staff prepared the draft MND for the project with the aid of ICF Jones & Stokes, the As-needed Environmental Services consultant, who produced the technical studies that support the findings of the MND. Based on the findings of these documents, and with proper mitigation measures taken, as outlined in the draft MND, the Project will not have a significant effect on the environment. The Initial Study and Draft MND were submitted for the 20-day review period on June 13, 2014. Two comment letters were received from the County of San Diego, and the San Diego County Archaeological Society. The two letters and the responses to their comments are presented in the Final MND (see Attachment B). The mitigation, monitoring, and reporting plan (MMRP) that will be in place for the Project is included with the Final MND.

FISCAL IMPACT: ☒ Joe Beachem, Chief Financial Officer

None.

STRATEGIC GOAL:

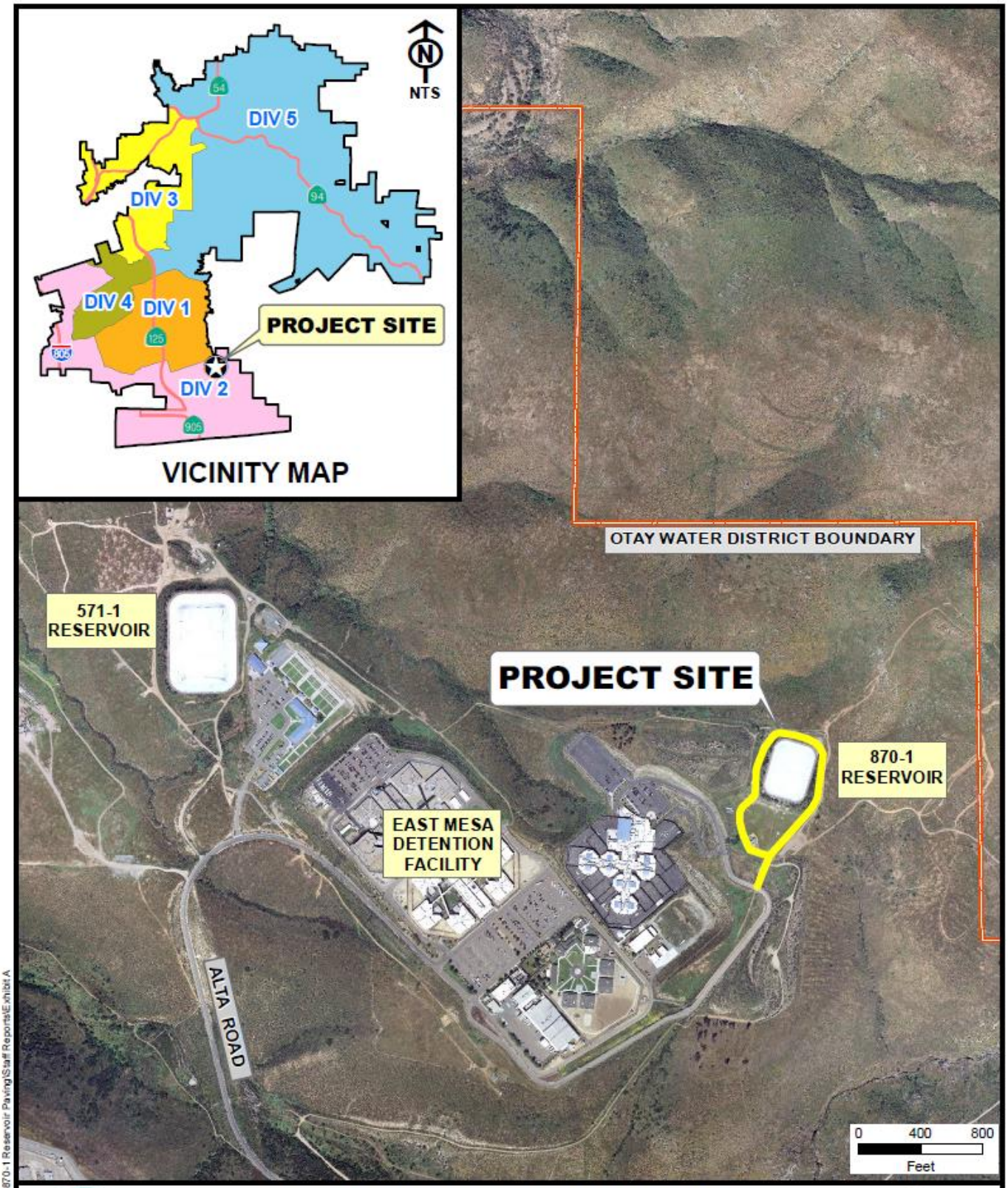
This Project supports the District's Mission statement, "To provide high value water and wastewater services to the customers of the Otay Water District in a professional, effective, and efficient manner" and the General Manager's Vision, "A District that is at the forefront in innovations to provide water services at affordable rates, with a reputation for outstanding customer service."

LEGAL IMPACT:

None.

LC-B/BK:jf
P:\WORKING\CIP P2515 - 870-1 Reservoir Paving\Staff Reports\BD 09-03-14, Staff Report, 870-1 Reservoir Access Road Paving Project MND

Attachments: Exhibit A – Project Location Map
Attachment A – Committee Action
Attachment B – Budget Detail
Attachment C – Final MND and MMRP



OTAY WATER DISTRICT

870-1 RESERVOIR PAVING
LOCATION MAP

CIP P2515

P:\working\CIP P2515-870-1 Reservoir Paving\Staff Reports\Exhibit A

EXHIBIT A

ATTACHMENT A

SUBJECT/PROJECT: P2515-001101	Adoption of a Mitigated Negative Declaration for the 870-1 Reservoir Access Road Paving Project

COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee (Committee) reviewed this item at a Committee Meeting held on August 14, 2014, and the following comments were made:

- Staff recommended that the Board approves the adoption of a Mitigated Negative Declaration (MND) for the 870-1 Reservoir Access Road Paving Project (see Exhibit A for Project location).

- It was discussed that this project is the paving of an existing dirt and gravel access road around the 870-1 Reservoir located in Otay Mesa. The paving of this road will allow for better access to the site by District staff.

- Staff indicated that to avoid impacts to the biological resources, the paving will avoid all vegetation at the site and will occur outside of bird breeding season.

- Based on the findings of the initial study and the MND, and with the proper mitigation measures taken, the project will not have a significant effect on the environment.

- It was noted that because the MND did not require any review by state agencies, a 20-day notice period for review was provided per the CEQA guidelines. Two (2) comment letters were received from the San Diego Archaeological Society and the County of San Diego Planning and Development Services Department. The comment letter form the County of San Diego required a slight change in the MND to address stormwater runoff from the site. This change is noted in the final MND.

Upon completion of the discussion, the committee received staffs' report and supported presentation to the full board as a consent item.

ATTACHMENT B – Budget Detail

SUBJECT/PROJECT: P2515-001101	Adoption of a Mitigated Negative Declaration for the 870-1 Reservoir Access Road Paving Project

Project Budget Detail
P2515-870-1 Reservoir Paving

Level	Title1	Committed	Expenditures	Outstanding Commitment	Projected Final Cost	Vendor	Project Phase
Planning	Consultant Contracts	$19,889.83	$19,889.83	$0.00	$19,889.83	JONES & STOKES ASSOCIATES INC	Planning
	Regulatory Agency Fees	$50.00	$50.00	$0.00	$50.00	PETTY CASH CUSTODIAN	Planning
	Service	$125.40	$125.40	$0.00	$125.40	SAN DIEGO DAILY TRANSCRIPT	Planning
	Contracts	$115.31	$115.31	$0.00	$115.31	THE STAR-NEWS PUBLISHING CO	Planning
	Standard Salaries	$30,351.71	$30,351.71	$0.00	$30,351.71		Planning
	Total	$50,532.25	$50,532.25	$0.00	$50,532.25		
Design	Consultant	$7,615.00	$7,615.00	$0.00	$7,615.00	MTGL INC	Design
	Contracts	$2,716.00	$2,716.00	$0.00	$2,716.00	AIRX UTILITY SURVEYORS INC	Design
		$1,425.00	$1,425.00	$0.00	$1,425.00	ALTA LAND SURVEYING INC	Design
	Service	$2,376.00	$0.00	$2,376.00	$2,376.00	MAYER REPROGRAPHICS INC	Design
	Contracts	$12.42	$12.42	$0.00	$12.42	FIRST AMERICAN DATA TREE LLC	Design
		$1,300.00	$1,300.00	$0.00	$1,300.00	INLAND AERIAL SURVEYS INC	Design
	Standard Salaries	$101,322.82	$101,322.82	$0.00	$101,322.82		Design
	Total	$116,767.24	$114,391.24	$2,376.00	$116,767.24		
Construction	Standard Salaries	$2,523.35	$2,523.35	$0.00	$2,523.35		Construction
	Total	$2,523.35	$2,523.35	$0.00	$2,523.35		
Budget	$550,000.00						
Total		$169,822.84	$167,446.84	$2,376.00	$169,822.84		

ATTACHMENT C – Final MND and MMRP

SUBJECT/PROJECT: P2515-001101	Adoption of a Mitigated Negative Declaration for the 870-1 Reservoir Access Road Paving Project

Otay Water District

870-1 Reservoir Access Road
Paving Project

Final
Initial Study / Mitigated Negative Declaration

Prepared By:
Otay Water District
2554 Sweetwater Springs Blvd.
Spring Valley, CA 91978

Introduction

A draft version of this Mitigated Negative Declaration (draft MND) was circulated for a 20-day public review between May 1, 2014 and May 31, 2014 and the Notice of Intent to Adopt the MND (NOI) was posted with the San Diego County Clerk. The Otay Water District (District) determined that a 20-day public review period was appropriate for the MND pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15073 because the project does not require the approval of any State agencies which would have required a 30-day review period. The draft MND was available for public review at the Otay Water District, 2554 Sweetwater Springs Blvd., Spring Valley, CA 91978, and on the District's website, www.otaywater.gov.

This chapter provides the persons, organizations, and public agencies that commented during this public review period. The District has evaluated the comments on environmental issues received from those agencies/parties and has prepared written responses to each pertinent comment relating to the adequacy of the environmental analysis contained within the draft MND. These responses are provided following each individual comment letter. The comments did not require any revisions to the draft MND. A Mitigation Monitoring and Reporting Program (MMRP) is provided as Attachment B to this final MND.

Agency and Organization Comments

The District received two comment letters on the MND during the 20-day public review period. The letters received included:

- County of San Diego, Planning and Development Services (PDS), and
- San Diego County Archaeological Society (SDCAS),

County of San Diego

MARK WARDLAW
DIRECTOR
PHONE (858) 694-2962
FAX (858) 694-2555

PLANNING & DEVELOPMENT SERVICES
5510 OVERLAND AVENUE, SUITE 310, SAN DIEGO, CA 92123
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DARREN GRETLER
ASSISTANT DIRECTOR
PHONE (858) 694-2962
FAX (858) 694-2555

July 3, 2014

Ms. Lisa Coburn-Boyd
Environmental Compliance Specialist
Otay Water District
2554 Sweetwater Springs Boulevard
San Diego, California 91978

COMMENTS ON NOTICE OF AVAILABILITY OF THE DRAFT MITIGATED NEGATIVE DECLARATION FOR THE OTAY WATER DISTRICT 870-1 RESERVOIR ACCESS ROAD PAVING PROJECT

Dear Ms. Coburn-Boyd:

The County of San Diego (County) has received and reviewed the Otay Water District's Notice of Availability (NOA) of the Draft Initial Study (IS) and Mitigated Negative Declaration (MND) for the Otay Water District 870-1 Reservoir Access Road Paving Project dated June 13, 2014. We appreciate the opportunity to comment. County Department of Public Works (DPW) staff have completed their review and have the following comments on the content of the Draft IS and MND:

1. The project proposes the paving of an existing dirt and gravel access road that is approximately 2,100 feet long and approximately 10 to 12 feet wide, covering a total area of approximately 21,000 square feet (0.48 acre). Under the current County Standard Urban Stormwater Mitigation Plan (SUSMP) the project is considered a Priority Development Project (PDP) because it falls under the category of *"streets, roads, highways, and freeways. Any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles"*. A PDP requires the preparation of a Major Storm Water Management Plan (SWMP) with Treatment Control BMPs. The Major SWMP form is available in the following link: http://www.sdcounty.ca.gov/dpw/watersheds/susmp/susmppdf/susmp_appendix_c_2012.pdf. 1-1

2. On Page 2-26, the discussion on whether there are any violations of any water quality standards or waste discharge requirements focuses only on construction Best Management Practices (BMPs). This discussion needs to include post-construction BMPs as well. The post-construction BMPs listed in the discussion need to match the ones listed in the Major SWMP. 1-2

Ms. Lisa Coburn-Boyd
July 3, 2014

The County appreciates the opportunity to participate in the environmental review process for this project. If you have any questions regarding this comment, please contact Sheri McPherson, Land Use Environmental Planner, at (858) 694-3064 or email sheri.mcpherson@sdcounty.ca.gov.

Sincerely,

TODD SNYDER, Chief
Advance Planning Division
Planning & Development Services

Cc:

Michael De La Rosa, Policy Advisor, Board of Supervisor, District 1
Megan Jones, Group Program Manager, LUEG
Rene Vidales, Project Coordinator, Department of Public Works
Sheri McPherson, Land Use and Environmental Planner, Planning & Development Services

Letter 1: County of San Diego, Planning and Development Services

2-1 The comment states that the project is considered a Priority Development Project (PDP) as described in the County's current Standard Urban Stormwater Mitigation Plan (SUSMP) and requires the preparation of a storm water management plan (SWMP) with treatment control BMP's. Comment is noted and acknowledged on page 41 of the draft MND that the construction plans will include BMP's that comply with the County of San Diego Watershed Protection, Stormwater Management, and Discharge Control Ordinance. The District is not required to submit a SWMP to the County for approval or permitting but will prepare a stormwater management plan for the project. No changes to the draft MND are necessary in response to this comment.

2-2 The comment states that the discussion of the effects on water quality in the MND focuses only on construction BMP's and that the discussion should include post-construction BMP's as well. In response to this comment, a discussion about the post-construction BMP's that are incorporated in the project design has been added to the draft MND. Changes are shown in strikeout/underline format in the draft MND (see Attachment A). (Please note, consistent with 15073.5(c)(4), new information added to the document for clarification does not constitute grounds for recirculation of the draft MND.)

OTAY WATER DISTRICT

San Diego County Archaeological Society, Inc.

Environmental Review Committee

24 June 2014

To: Ms. Lisa Coburn-Boyd
Environmental Compliance Specialist
Otay Water District
2554 Sweetwater Springs Boulevard
Spring Valley, California 91978

Subject: Draft Mitigated Negative Declaration
870-1 Reservoir Access Road Paving Project

Dear Ms. Coburn-Boyd:

I attempted to download the subject DMND for review on behalf of this committee of the San Diego County Archaeological Society, but was unable to locate it on the District's website. A Google search also failed to find the DMND. I then used the link on the District's website to try to email you, but the address provided is apparently incorrect. 2-1

Based on the information contained in the Notice of Availability, though, it seems unlikely that paving an existing dirt and gravel road would result in significant impacts to cultural resources. 2-2

Thank you for sending SDCAS the Notice of Availability.

Sincerely,

James W. Royle, Jr., Chairperson
Environmental Review Committee

cc: SDCAS President
File

P.O. Box 81106 San Diego, CA 92138-1106 (858) 538-0935

Letter 2: San Diego County Archaeological Society

2-1 The San Diego County Archaeological Society had difficulty accessing the draft MND. The link to the document was corrected and contact was made to provide access to the document.

2-2 The San Diego County Archaeological Society concurs with the impact determinations contained with the draft MND that no impacts to cultural resources are expected and that no mitigation measures would be necessary. No changes to the draft MND are necessary in response to this comment.

Attachment A

Draft Mitigated Negative Declaration

Otay Water District

870-1 Reservoir Access Road
Paving Project

Draft
Initial Study / Mitigated Negative Declaration

Prepared By:
Otay Water District
2554 Sweetwater Springs Blvd.
Spring Valley, CA 91978

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Table of Contents

Otay Water District 870-1 Reservoir Access Road Paving Project

Page

Section 1 Project Background 1-1
1.1 Project Purpose and Objectives 1-1
1.2 Project Location 1-1
1.3 Project Description 1-1
1.4 Surrounding Land Use and Setting 1-2
1.5 Authority to Prepare a Mitigated Negative Declaration 1-2
1.6 Preparer of the Mitigated Negative Declaration 1-2

Section 2 Initial Study/Environmental Checklist Form 2-3
2.1 Aesthetics 2-6
2.2 Agricultural and Forest Resources 2-7
2.3 Air Quality 2-9
2.4 Biological Resources 2-11
2.5 Cultural Resources 2-15
2.6 Geology and Soils 2-17
2.7 Greenhouse Gas Emissions 2-20
2.8 Hazards and Hazardous Materials 2-22
2.9 Hydrology and Water Quality 2-25
2.10 Land Use and Planning 2-29
2.11 Mineral Resources 2-31
2.12 Noise 2-32
2.13 Population and Housing 2-34
2.14 Public Services 2-35
2.15 Recreation 2-37
2.16 Transportation and Traffic 2-38
2.17 Utilities and Service Systems 2-40
2.18 Mandatory Findings of Significance 2-42
2.19 Earlier Analysis 2-44

Appendices

Appendix A: Air Quality & Greenhouse Gases Letter Report for the 870-1 Reservoir Paving Project, ICF International, June 2014.

Appendix B: Biological Resources Letter Report for the 870-1 Reservoir Paving Project, ICF International, October, 2013.

Appendix C: Cultural Resources Letter Report for the 870-1 Reservoir Paving Project, ICF International, October 2013.

Appendix D: Subsurface Investigation, CIP 2515 870-1 Reservoir Paving, MTGL, June 2013.

Appendix E: Noise Analysis Letter Report for the 870-1 Reservoir Paving Project, ICF International, June 2013.

Figures

Figure 1: Vicinity Map after1-1
Figure 2: Location Map after1-1

Section 1

Project Description

1.1 Project Purpose and Objectives

The Otay Water District (District) is proposing to pave an existing dirt access road that surrounds their 870-1 potable water reservoir facility. The paving of this road will provide year-round access to the Reservoir and reduce the maintenance requirements of the dirt road. The current unpaved road is approximately 2,100 feet long and approximately 10 to 12 feet wide. The road starts at the south access gate to the reservoir site and encircles the reservoir.

1.2 Project Location

The District's 870-1 Reservoir is located at the northern terminus of Alta Road, northeast of the East Mesa George F. Bailey Detention Facility in the unincorporated community of Otay, San Diego County, California (Figure 1). The facilities consist of the reservoir, a dirt access road, and support facilities, including a small building containing instrumentation and disinfection equipments, concrete vaults and drain pipes, and stacks of construction materials. The project site is located on the Otay Mesa U.S. Geological Survey (USGS) 7.5-minute series Otay Mesa Quadrangle.

1.3 Project Description

The District is proposing the paving of an existing dirt and gravel access road that encircles the 870-1 Reservoir facilities in order to provide year-round access and reduce on-going road maintenance activities (Figure 2). The currently unpaved road is approximately 2,100 feet long and approximately 10 to 12 feet wide, covering a total area of approximately 21,000 square feet (0.48 acre). The road starts at the south access gate and encircles the reservoir, it is between the reservoir and a chain-link fence that surrounds the reservoir site.

All planned construction activities would take place within previously developed areas (the existing dirt road). The road would be paved with asphalt concrete and require the use construction equipment that includes a grader, dozer, roller, dump truck and backhoe. Staging of any construction equipment will occur in disturbed areas. BMP's will be used during construction to ensure that all materials generated during construction are contained and/or disposed of properly. There will be no impact to vegetation at the site which generally occurs between the inner edge of the access road and the outer edge of the reservoir. Temporary construction fencing will be installed around patches of vegetation that could be potentially impacted by construction activities so that the Contractor is aware of the limits of construction. It has been determined that the construction activity would occur within a two month time period and will occur outside of the migratory bird breeding season.

The project consists solely of the paving of the existing access road. There are no other structures included in the project and no new lighting. The operations aspect of the project will not change after project completion. Currently, District Operations staff visits the site once per day with the potential of one other maintenance staff visit per week. The operations component of the project will remain the same after paving is completed.

P:\WORKING\CIP P2515\Graphics\Exhibits-Figures\6-11-Fig.1

Figure 1

870-1 Reservoir Access Road Paving Project

CIP P2515

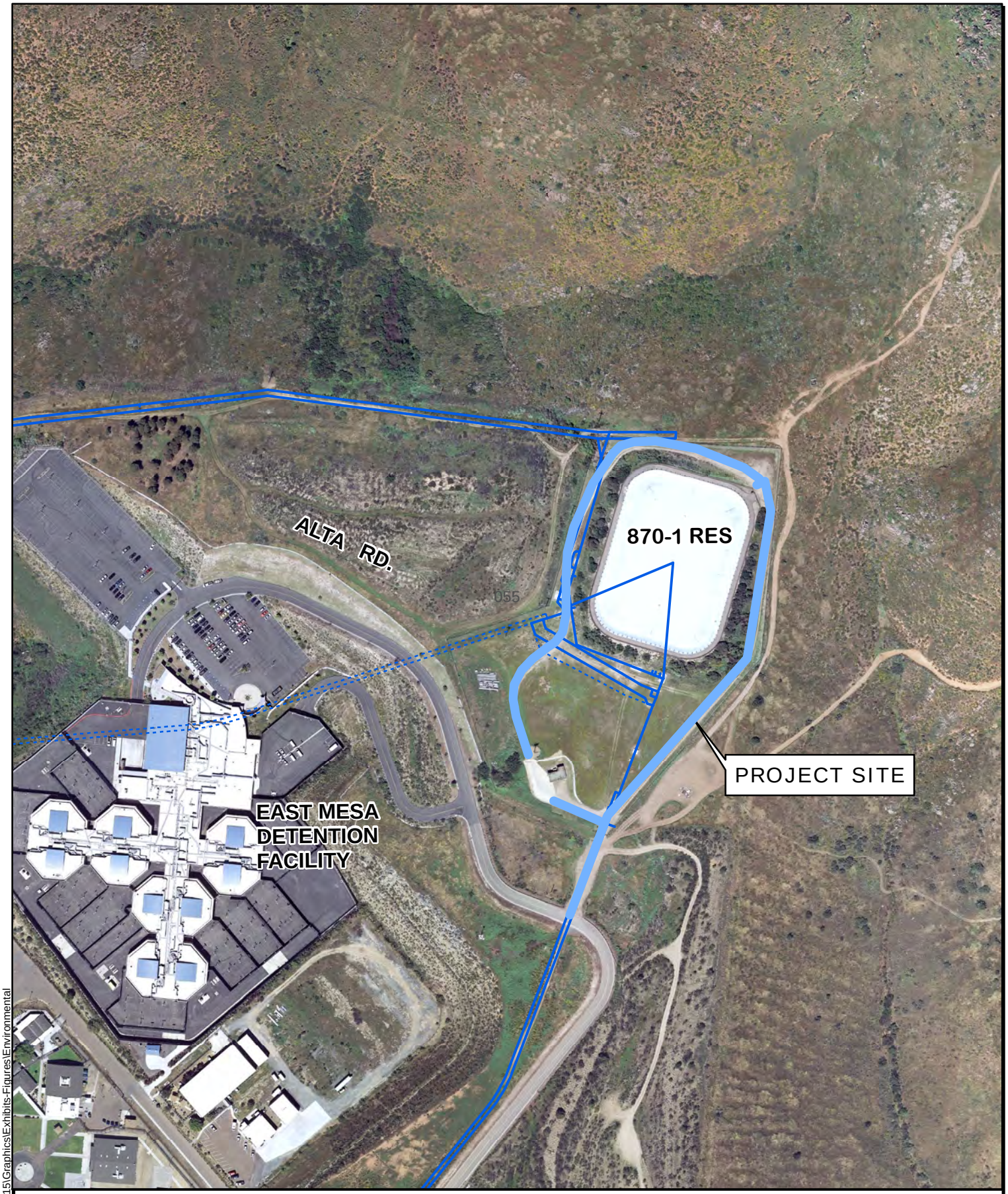

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Figure 2
870-1 Reservoir Access Road Paving Project
CIP P2515

1.4 Surrounding Land Use and Setting

The project vicinity is largely undeveloped. The project site is bounded to the northwest, northeast, and southeast by the Otay County Open Space Preserve. The closest developed land use to the Project is the East Mesa Detention Complex, which is located to the southwest. This is a complex of four county- and privately-operated detention facilities. The project site is more than two miles from the closest major highway or airport. The project site is wholly contained within Otay Water District property that contains a below ground Reservoir and is surrounded by a chain-link fence.

1.5 Authority to Prepare a Mitigated Negative Declaration

As provided in California Environmental Quality Act (CEQA) Section 15070 (Title 14 – California Code of Regulations), an MND may be prepared for a project subject to CEQA when an Initial Study has identified potentially significant effects on the environment, but when revisions to the project have been made so that no significant effect on the environment would result from project implementation. The District is the lead agency and is responsible for planning, constructing, and operating the training facility. Based on the findings of the Initial Study/Environmental Checklist Form prepared for this project, the District has determined that preparation of the MND is the appropriate method to present environmental review of the proposed project in compliance with CEQA. Section 2 of this MND provides the Initial Study/ Environmental Checklist Form.

1.6 Preparer of the Mitigated Negative Declaration

This MND was prepared by Lisa Coburn-Boyd, Environmental Compliance Specialist, Otay Water District, 2554 Sweetwater Springs Blvd., Spring Valley, California, 91978.

Section 2
Initial Study/Environmental Checklist Form

1.	**Project Title:**	Otay Water District 870-1 Reservoir Access Road Paving Project
2.	**Lead Agency Name and Address:**	Otay Water District 2554 Sweetwater Springs Boulevard Spring Valley, CA 91978-2004
3.	**Contact Person and Phone Number:**	Lisa Coburn-Boyd, Environmental Compliance Specialist (619) 670-2219
4.	**Project Location:**	The Access road would extend from the Otay Water District's Regulatory Site at 11880 Campo Road, Spring Valley, CA 91978, to the County of San Diego Sheriff Station that is under construction and to a secondary access road that connects to SR-94. The access road would extend through parcel 506-140-13-00. The site's regional location is shown in Figure 1.
5.	**Project Sponsor's Name and Address:**	Otay Water District 2554 Sweetwater Springs Boulevard Spring Valley, CA 91978-2004
6.	**General Plan Designation:**	Rural Lands 40 and Public/Semi-Public
7.	**Zoning:**	S90 Holding Area

8. Description of Project:

The District is proposing the paving of an existing dirt and gravel access road that encircles the 870-1 Reservoir facilities in order to provide year-round access and reduce on-going road maintenance activities (Figure 2). The currently unpaved road is approximately 2,100 feet long and approximately 10 to 12 feet wide, covering a total area of approximately 21,000 square feet (0.48 acre). The road starts at the south access gate and encircles the reservoir, it is between the reservoir and a chain-link fence that surrounds the reservoir site.

All planned construction activities would take place within previously developed areas (the existing dirt road). The road would be paved with asphalt concrete and require the use construction equipment that includes a grader, dozer, roller, dump truck and backhoe. Staging of any construction equipment will occur in disturbed areas. BMP's will be used during construction to ensure that all materials generated during construction are contained and/or disposed of properly. There will be no impact to vegetation at the site which generally occurs between the inner edge of the access road and the outer edge of the reservoir.

The project consists solely of the paving of the existing access road. There are no other structures included in the project and no new lighting. The operations aspect of the project will not change after project completion. Currently, District Operations staff visits the site once per day with the potential of one other maintenance staff visit per week. The operations component of the project will remain the same after paving is completed.

9. Surrounding Land Uses and Setting:

The project vicinity is largely undeveloped. The project site is bounded to the northwest, northeast, and southeast by the Otay County Open Space Preserve. The closest developed land use to the Project is the East Mesa Detention Complex, which is located to the southwest. This is a complex of four county- and privately-operated detention facilities. The project site is more than two miles from the closest major highway or airport. The project site is wholly contained within Otay Water District property that contains a below ground Reservoir and is surrounded by a chain-link fence.

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Environmental Factors Potentially Affected:

The environmental factors checked below would potentially be affected by this project (i.e., the project would involve at least one impact that is a "Potentially Significant Impact"), as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agricultural Resources	☐ Air Quality
☒ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Hazards and Hazardous Materials	☐ Hydrology/Water Quality	☐ Land Use/Planning
☐ Mineral Resources	☐ Noise	☐ Population/Housing
☐ Public Services	☐ Recreation	☐ Transportation/Traffic
☐ Utilities/Service Systems	☐ Mandatory Findings of Significance	

Determination:

On the basis of this initial evaluation:

☐ I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed Project MAY have an impact on the environment that is "potentially significant" or "potentially significant unless mitigated" but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards and (2) has been addressed by mitigation measures based on the earlier analysis, as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the Project, nothing further is required.

Lisa Coburn-Boyd
Signature

June 12, 2014
Date

Lisa Coburn-Boyd
Printed Name

Otay Water District
For

Environmental Checklist

Aesthetics

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
1.	**AESTHETICS.** Would the project:				
a.	Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	☐	☐	☐	☒
c.	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
d.	Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	☐	☒

Discussion

a) Have a substantial adverse effect on a scenic vista?

No Impact.

The paving of the access road would not have an adverse effect on scenic vistas because there are no designated scenic vistas in the area. The work will occur within the same area as the existing dirt access road and will not affect any vistas. No impact will occur as a result of the project.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?

No Impact.

There are no scenic highways in the area of the project. No impact will occur as a result of the project.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

No Impact.

The paving of the access road around the reservoir will occur in the same footprint as the existing dirt access road that surrounds a public water supply reservoir, and is not accessible to the general public. There will not be any impact to the vegetation or alteration of the terrain adjacent to the road. Therefore, there will be no impact as a result of the project.

d) Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

No Impact.

The paving of the access road design does not include any lighting facilities. No impact will occur as a result of the project.

Agricultural and Forest Services

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
2.	**AGRICULTURAL AND FOREST RESOURCES.** In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation. Would the project:				
a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b.	Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?	☐	☐	☐	☒
c.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526)?	☐	☐	☐	☒
d.	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest to non-forest use?	☐	☐	☐	☒

Discussion

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact.

According to the maps prepared by the Farmland Mapping and Monitoring Program of the California Dept. of Conservation, Land Resources Division, the project site does not contain any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance and, therefore will not convert any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. No impact will occur as a result of the project.

b) Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?

No Impact.

The project does not contain an agricultural zoning designation and is not associated with a Williamson Act contract. Therefore, there will be no impact as a result of the project.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526)?

No Impact.

The project site does not contain any forest lands or timberland. Therefore, the project will not cause any rezoning of these lands and no impact will occur as a result of the project.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact.

The project site does not contain any forest lands, therefore there is not any possibility for the loss of forest lands or for conversion of forest lands to a non-forest use. No impact will occur as a result of the project.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest to non-forest use?

No Impact.

There are no farmland on or adjacent to the access road paving project site so that the construction would not cause any conversion of farmland to non-agricultural or non-forest uses. Therefore, there will be no impact as a result of the project.

Air Quality

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
3.	**AIR QUALITY.** When available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a.	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d.	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e.	Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Discussion

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Impact.

The project site is in the San Diego Air Basin (SDAB) which is contiguous with San Diego County. Within San Diego County, the San Diego Air Pollution Control District (SDAPCD) has the primary responsibility for the development and implementation of rules and regulations designed to attain national and state ambient air quality standards, as well as the permitting of new or modified sources, development of air quality management plans, and adoption and enforcement of air pollution regulations. The SDAPCD is the local agency responsible for the administration and enforcement of air quality regulations in San Diego County. The San Diego Regional Air Quality Strategy (RAQS) is the region's plan for improving regional air quality while attaining state standards, while the State Implementation Plan (SIP) is the region's plan for improving regional air quality while attaining federal standards. The SDAPCD develops a set of emissions control measures that reduce emissions within the basin, in an effort to attain NAAQS and CAAQS. These emission controls are adopted as local air quality rules and regulations.

ICF International completed an air quality analysis (Appendix A) which estimated the air quality emissions for the project. Based on the results of this analysis, it is expected that there would be less than significant short term construction impacts and no long-term operational impacts on air quality due to the proposed project. Additionally, the RAQS also relies on information from the San Diego Association of Governments (SANDAG) regarding projected growth in the county, which is based in part on local general plans. The proposed Project would not result in a change of land uses and is therefore consistent with the County of San Diego General Plan. Therefore, because the project would be consistent with the County of San Diego General Plan, which was used in the formulation of the RAQS and SIP, the project is considered consistent with the RAQS and SIP and would not conflict or obstruct with their implementation.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less than Significant Impact.

The Proposed Project would pave an existing dirt and gravel service road that encircles a small reservoir in order to facilitate improved access around the reservoir. Construction of the project would result in emissions as a result of ground disturbance, off-road construction vehicle exhaust, emissions from employee and asphalt delivery travel, and off-gassing from paving activities. Emissions would vary from day to day, depending on the level of activity, the specific type of construction activity occurring, and, for fugitive dust, prevailing weather conditions. The ICF international air quality analysis (Appendix A) estimated the project's construction emissions which were compared to SDAPCD air quality impact analysis (AQIA) trigger levels, (SDAPCD Rule 20.2 and 20.3) Based on this analysis it was determined that the levels would be far below AQIA trigger levels. Therefore there would be a less than significant impact as a result of the project.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

Less than Significant Impact.

See **3. b)** above. The construction activity and project operation would not have any impacts on air quality so there would be a less than significant impact as a result of the project.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact.

Construction of the access road would create emissions and fugitive dust which has the potential to impact any nearby sensitive receptors. BMPs will be used to limit fugitive dust emissions from construction activities and adherence to SDAPCD Rules 50, 51, and 55 would limit emissions that may be capable of impacting any nearby receptors. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations and the project will have a less than significant impact for this issue.

e) Create objectionable odors affecting a substantial number of people?

Less than Significant Impact.

Project-related odor emissions would be limited to the construction period and may include odors from the construction equipment and the asphalt paving. These odors would not affect a substantial number of people because there are no residential areas near the project site. There would be no permanent impacts since any odor generation would terminate upon completion of the construction phase of the project. Therefore, there will be a less than significant impact with regards to odors from the project.

Biological Resources

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
4.	**BIOLOGICAL RESOURCES.** Would the project:				
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c.	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f.	Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less than Significant Impact with Mitigation Incorporated.

ICF International staff performed biological surveys and prepared a Biological Letter Resources Report (Biological Letter) in the spring and summer of 2013 to analyze potential effects of the proposed project on sensitive biological resources. The report is provided as Appendix B. The biological surveys included a general biological survey, focused surveys for Quino checkerspot butterfly and dry season sampling for listed fairy shrimp.

Vegetation Communities

The access road is currently unpaved and maintained free of vegetation. Within the 300 foot survey buffer surrounding the project alignment, there are seven different vegetation communities. Diegan Coastal Sage Scrub, Disturbed Diegan Coastal Sage Scrub, Non-native Grassland, Disturbed Southern Willow Scrub, Disturbed Mule Fat Scrub, Disturbed Habitat, and Developed.

Sensitive Plant and Wildlife Species

Field surveys and a search of the California Natural Diversity Database (CNDDB) and California Native Plant Species (CNPS) identified 30 special-status plant species that occur or have the potential to occur in the project vicinity (refer to Attachment B of the Biological Letter). Field surveys and a search of the CNDDB also identified 22 special-status wildlife species that occur or have the potential to occur in the project vicinity (refer to Attachment C of the Biological Letter).

Focused surveys were conducted for Quino checkerspot butterfly. No adult or larval Quino were detected during the survey. One western spadefoot tadpole was found occupying a ponded road-rut. The basin containing this and other road ruts was sampled for San Diego and Riverside Fairy Shrimp during the dry season. The results of this sampling were negative, the full report is attached in Appendix B.

Impacts

The project does not include any removal of vegetation from the site so there will be no impact to native vegetation habitats. Temporary construction fencing will be installed around the vegetation close to the project site to ensure that no impacts occur.

Prior to the start of construction, it is possible that direct impacts would result from vehicle traffic on the access road when ponded water is present. In order to avoid direct impacts to western spadefoot, Mitigation Measure Bio-1 will be implemented. This measure consists of pre-construction surveys by a qualified biologist when suitable conditions are present to determine if the species is present. If present, the species will be removed from the impact area.

Increased noise levels during construction could result in indirect impacts on the coastal California gnatcatcher (or other special-status birds/raptor species or species protected by the Federal Migratory Bird Treaty Act [MBTA]), if construction would occur during the breeding season. Because project construction activities could result in impacts on the coastal California gnatcatcher or other special-status birds/raptor species or species protected by the MBTA, this would be a potentially significant impact. Implementation of Mitigation Measure BIO-2 would reduce the project's potential direct and indirect adverse impacts from short-term construction noise on coastal California gnatcatcher, special-status birds/raptor species, or species protected by the MBTA to a less-than-significant level.

Mitigation Measure BIO-1: Pre-Construction Biological Survey for Western Spadefoot. Due to the observed presence of one western spadefoot tadpole, a qualified biologist will conduct pre-construction surveys to determine if this species is present. If present, the species will be removed from the project site.

Mitigation Measure BIO-2: Construction Not to Occur during Coastal California Gnatcatcher Breeding Season. Prior to any construction activity, all contractual agreements with the District will ensure that the following project requirements regarding sensitive wildlife species are completed.

- No clearing, grubbing, grading of vegetation will occur between February 15 and August 31, the breeding season of the coastal California gnatcatcher. However, if construction is proposed during the breeding season for the gnatcatcher, the following requirements will have to be met to the satisfaction of the County:
  - U.S. Fish and Wildlife Service protocol surveys will be required in order to determine species' presence or absence.
  - If no gnatcatchers are detected within 300 feet of the proposed grading/construction, then no restriction on grading will be necessary.
  - If gnatcatchers are present, measures to minimize noise impacts will be required and should include temporary noise walls and/or berms.
  - If the survey is not performed and construction is proposed during the species' breeding season, presence will be assumed and a temporary wall/berm will be required.
  - Noise levels from grading/construction activities during the breeding season should not exceed 60 dBA hourly LEQ at the edge of the occupied habitat, or the ambient noise level if noise levels already exceed 60 dBA hourly LEQ.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less than Significant Impact.

As discussed in the Biological Resources Letter Report (Appendix B), the project will not impact any vegetation. Due to the location of potentially sensitive riparian habitats adjacent to the road, standard BMP's will be used to contain any runoff from construction activity reducing the potential impact to less than significant. Therefore, the impact of the project for this issue will be less than significant.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than Significant Impact.

See response **4. b)** above.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact.

The proposed project is the paving of an existing dirt and gravel access road on District property that is entirely contained within a barbed-wire topped, chain-link fence enclosure. As such, the presence of a paved

road would not alter the permeability to wildlife of this site. The proposed road will support limited vehicular traffic and will not include structures or physical barriers that would impede or discourage wildlife movement across the road. Therefore, no impact would occur as a result of the project.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact.

The project is the paving of an existing dirt and gravel access road surrounding a reservoir. As a result, the proposed project would not be in conflict with any local policies or ordinances protecting biological resources. Therefore, no impact would occur as a result of the project.

f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?

No Impact.

The project is not located within an area with an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. Therefore, there will be no impact as a result of the project.

Cultural Resources

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
5.	**CULTURAL RESOURCES.** Would the project:				
a.	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☐	☒
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☐	☒
c.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d.	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Discussion

a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

No Impact.

A project site reconnaissance and record search was conducted by ICF International archaeologists and the results are documented in a letter report to the District, dated April 18, 2013 (Appendix C). Based on the results of the cultural resources survey, no historical resources as defined in Section 15064.5 were identified within the project site. Therefore, the proposed project would not cause an adverse change to a historical resource and there would be no impact as a result of the project.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

No Impact.

The cultural resources survey conducted for the project site (ICF Intl., April, 2013) found no archaeological resources located on the project site. There would be no impact as a result of the project.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact.

A geotechnical report of the site was conducted by MTGL in June, 2013 (Appendix C). The subsurface exploration done for the study indicated that the access road site consists of 4.5 foot to 5.5 foot of undocumented fill, deposited when the reservoir was constructed. The project will remove approximately 9 inches of this fill for the paving of the road. Native soils will not be disturbed by the paving of the road. Therefore, there is no possibility for the destruction of a unique paleontological resource or site or unique geologic feature. There would be no impact as a result of the project.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant Impact.

The cultural resources survey for the site found no evidence of human remains or cultural resources in the project site. However, there is a possibility that human remains could be found at the site. In the event that human remains are discovered during Project activities, the procedures outlined in Section 7050.5 of the California Health and Human Safety Code would be followed. Therefore, impacts on human remains would be less than significant.

Geology and Soils

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
6.	**GEOLOGY AND SOILS.** Would the project:				
a.	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
	2. Strong seismic groundshaking?	☐	☐	☒	☐
	3. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
	4. Landslides?	☐	☐	☒	☐
b.	Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c.	Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d.	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Discussion

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less than Significant Impact.

An investigation of the geologic conditions of the site was prepared for the District by MTGL Inc. in June, 2013 (Appendix D). The site is not located within the Alquist-Priolo Earthquake Fault Zone. Per the findings in the geotechnical analysis, the site is not within an earthquake fault zone. Therefore, potential impacts from surface rupture of an active fault would be less than significant.

2) Strong seismic groundshaking?

Less than Significant Impact.

As with most southern California regions, the project site would be subject to strong ground shaking in the event of a major earthquake. Although the site is not within an earthquake fault zone, the nearest known active fault likely to generate the highest ground accelerations at the site is the Rose Canyon Fault, located about 15 miles northwest of the site. Therefore, the project site could experience ground motion during its design life as a result of regional seismic activity. Potential for ground shaking during earthquakes and engineering design measures would be a part of the proposed access road. With incorporation of standard measures, potential impacts on the proposed access road from seismic groundshaking would be less than significant.

3) Seismic-related ground failure, including liquefaction?

Less than Significant Impact.

The geotechnical report prepared by MTGL Inc. in June, 2013 found that the site has relatively dense subsurface soils and that there is no groundwater table present. Under these conditions, the potential for liquefaction at the site is negligible. Therefore, the proposed project would have a less than significant impact to seismic-related ground failure, including liquefaction.

4) Landslides?

Less than Significant Impact.

The geotechnical report found that the potential for the site to be impacted by landslides and debris flows is considered to be very low due to the shallow depth to formation materials and the relative density of the materials.

b) Result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact.

The project site has been relatively disturbed by the development of the existing reservoir and the existing dirt and gravel access road. The grading that will be done to prepare the road for paving could disturb soil that would potentially be exposed to wind and water erosion for a short period of time. During the grading activities the project will be required to implement Best Management Practices (BMPs) for the short-term erosion impacts associated with the construction activities. With the implementation of the BMPs, potential impacts associated with soil erosion would be less than significant.

c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less than Significant Impact.

Based on the information contained in the above-referenced geotechnical report, the potential impact to the proposed project from unstable geologic units would be less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less than Significant Impact.

Based on the information contained in the above-referenced geotechnical report, the access road paving would not be impacted by expansive soils. Additionally, according to County sources the proposed project is not within an area of potential expansive soils (County of San Diego, 2011). Based on this information, the potential impact to the proposed project from expansive soils would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?

No Impact.

The project is the paving of a dirt access road around a potable water reservoir. It does not propose the use of septic tanks or alternative wastewater disposal systems. Therefore, no impact would occur as a result of the project.

Greenhouse Gas Emissions

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
7.	**GREENHOUSE GAS EMISSIONS.** Would the project:				
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b.	Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Discussion

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact.

Construction of the proposed project would result in GHG emissions as a result of off-road construction equipment exhaust and from employee and asphalt delivery travel. Total GHG emissions would vary depending on the level of activity, the specific type of construction activity occurring, and the amount of time each equipment or vehicle is in use. ICF International completed an air quality and greenhouse gas analysis for the project (Appendix A) and estimated the GHG emissions for the project based on an earlier analysis done for a similar, but larger District road paving project, the Regulatory Site Access Road Project. The GHG analysis for the Regulatory Site Access Road included an estimation of construction GHG emissions using CalEEMod. Emissions were summed over the entire construction period, added to annual operational emissions, and compared to the CAPCOA screening threshold. Emissions were found to be far below the CAPCOA screening threshold and were considered to be less than significant. Activity associated Regulatory Site Access Road construction is expected to be greater than expected for this proposed project. Therefore, because this proposed project would result in less activity over a shorter duration, total GHG emissions from construction are anticipated to be of similar or less quantity than for the Regulatory Site Access Road. Therefore, GHG emissions from this proposed project are considered to be less than significant.

b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant Impact.

The District has yet to adopt a qualified plan, policy, or regulation to reduce GHG emissions. Therefore, the most applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions is Assembly Bill 32, which codified the state's GHG emissions reduction targets for the future. The County of San Diego has recently adopted a Climate Action Plan and thresholds of significance for various types of projects. As discussed in the response to 7a, the combined construction and operations GHG emissions would not exceed the County's 2,500 $MTCO_2e$ bright line threshold. Long-term operations would not change from before the implementation of the project and would be minimal, one motor vehicle trip per day. Therefore, because the

project would result in construction emissions below relevant threshold and since the project would not result in additional trip generation during long term operation, the proposed project would not hinder implementation of statewide or regional plans, policies, or regulations adopted for the purpose of reducing GHG emissions. The impact of the project for this issue would be less than significant.

Hazards and Hazardous Materials

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
8.	**HAZARDS AND HAZARDOUS MATERIALS.** Would the project:				
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c.	Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d.	Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e.	Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f.	Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h.	Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Discussion

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact.

The project is the construction of a paved access road around a potable water reservoir. During the project construction phase, construction equipment would use diesel fuel and other petroleum-based products. The use of diesel fuel and petroleum-based products would be temporary, and standard BMPs (see discussion section **9. b)** for a list of BMPs) would be applied to ensure that all hazards potentially occurring during this phase of the project would not create a significant hazard to the public. Therefore, impacts during construction would be less than significant.

During the operations phase of the project, a portion of the paved road will be used on infrequent occasions to deliver sodium hypochlorite to a disinfection facility located on the south end of the reservoir site. Deliveries of this chemical occur once or twice per year for emergency disinfection of the reservoir. Transport of this material is regulated by the California Health and Safety Code and any transport would comply with all mandatory regulations to ensure prevention of hazardous conditions. The District has set forth standard and mandatory safety procedures for the delivery, storage, and use of hypochlorite in HMS 101.21, "Sodium and Calcium Hypochlorite Safety Procedure," which lays out safe work practices to protect employees and container, delivery, and disposal procedures to protect the environment and other people who may be in proximity to these chemicals. The infrequent use and adherence to mandatory safety procedures ensure that the project's impacts due to any project-related presence of hazardous materials would be less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact.

See response to **8. a)** above. Therefore, impacts of the project for this issue would be less than significant.

c) Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact.

There are no schools located within one-quarter mile of the project site. Therefore, no impact would occur as a result of the project.

d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact.

The project site is not included on a list of hazardous materials site pursuant to Government Code Section 65962.5 (Envirostor Database, DTSC). Therefore, no impact would occur as a result of the project.

e) Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?

No Impact.

The proposed project site is not located within two miles of a public airport. Therefore, no impact would occur as a result of the project.

f) Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area?

No Impact.

The proposed project site is not located within the vicinity of a private airstrip. Therefore, no impact would occur as a result of the project.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact.

The project is the paving of an access road around a potable water reservoir and would not impact traffic on any nearby roadway. There would be no interference with an adopted emergency response plan or emergency evacuation plan. Therefore, there would be no impact as a result of the project.

h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact.

The proposed project is the paving of an existing access road around a potable water reservoir in a rural setting. Therefore, the project will not expose people or structures to the potential risk of wildland fires and there would be no impact as a result of the project.

Hydrology and Water Quality

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
9.	**HYDROLOGY AND WATER QUALITY.** Would the project:				
a.	Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite?	☐	☐	☐	☒
d.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite?	☐	☐	☒	☐
e.	Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f.	Otherwise substantially degrade water quality?	☐	☐	☒	☐
g.	Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h.	Place within a 100-year flood hazard area structures that would impede or redirect floodflows?	☐	☐	☐	☒
i.	Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
j.	Contribute to inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion

a) Violate any water quality standards or waste discharge requirements?

Less than Significant Impact.

The proposed project is the paving of an existing dirt and gravel road wholly contained within District property. Project construction is small-scale and not located adjacent to any natural water bodies. The District's construction contract documents will include a list of BMPs that would be required during project construction in order to eliminate any opportunity of sediment and/or pollutants being discharged from the construction impact area. The BMPs are:

- Sediment Control with Fiber rolls.
- Sediment Control with Gravel Bags Berm
- Stabilized Construction Exit to Prevent Offsite Tracking of Sediment
- Street Sweeping to Prevent Offsite Tracking of Sediment
- Runoff Velocity Control with Energy Dissipator
- Site Management with Sanitary Waste Management
- Site Management with Vehicle and Equipment Fueling
- Site Management with Vehicle and Equipment Maintenance.

Post Construction Impacts

With implementation of the project, an area characterized by a dirt road would be converted to paved roadway. As a result, runoff would flow from the paved road at greater velocities than associated with the existing conditions. The District proposes to incorporate permanent BMPs listed below into the access road design to ensure that stormwater runoff from the paved road does not result in increased erosion or impacts on water quality. The work area would be clearly delineated for the construction of the road and all areas outside of these limits of work would remain undisturbed.

- Minimize erosion from slopes.
- Disturb existing slopes only when necessary.
- Direct flows leaving the road by the use of berms and direct these flows into a berm outlet with energy dissipator.

Implementation of standard BMPs ~~identified in the SWPPP~~ would minimize potential impacts from construction activities. By the use of construction BMPs and the incorporation of permanent BMPs in the project design, the project would be consistent with the County of San Diego's Watershed Protection, Stormwater Management, and Discharge Control Ordinance. Therefore, the proposed project would not violate any water quality standards or waste discharge requirements and impacts would be less than significant. ~~Therefore, impacts from the project for this issue would be less than significant.~~

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

No Impact.

Paving of the existing access road would not require the consumption of groundwater supplies or interfere with groundwater recharge. Potable water would be supplied to the construction area. Therefore, no impacts would occur as a result of the project.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite?

No Impact.

Paving of the access road would follow the alignment of the existing dirt road around the reservoir and would not involve any substantial changes to the topography of the area. Therefore, the proposed project would not substantially alter the existing drainage pattern of the project area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on or off the site. Therefore, there would be no impact as a result of the project.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite?

Less than Significant Impact.

See responses to 9a and 9c. Although the proposed access road would increase the extent of impervious surfaces from that associated with the existing dirt road, the design of the road would allow the water to drain from the road so that any increase in stormwater runoff would be absorbed within the surrounding area and would not result in flooding on or off the site. Therefore, impacts would be less than significant.

e) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less than Significant Impact.

See responses to 9a and 9c. Impacts would be less than significant.

f) Otherwise substantially degrade water quality?

Less than Significant Impact.

See responses to **9. a)** and **9. c)**. Impacts would be less than significant.

g) Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps for San Diego County, the entire area of the access road is mapped as being outside the 100-year floodplain, meaning that

there is a very low chance that damaging floods would occur on the site (FEMA 1999). In addition, the proposed project does not include the construction of any housing units. Therefore, the project would not place housing within a 100-year flood hazard area, and no impact would occur as a result of the project.

h) Place within a 100-year flood hazard area structures that would impede or redirect floodflows?

No Impact.

See response to 9g. The entire area proposed for the access road is mapped as being outside the 100-year floodplain (FEMA 1999). Therefore, no impact would occur as a result of the project.

i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

No Impact.

As discussed above, the access road is not in an area that is prone to flooding events. The proposed project would not expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam, because there are no levees or dams in the project vicinity. No impact would occur as a result of the project.

j) Contribute to inundation by seiche, tsunami, or mudflow?

No Impact.

The project site is greater than 13 miles east of the Pacific Ocean. The closest body of water is the Otay Reservoir, approximately 1.4 miles north of the project site. No impacts associated with inundation by seiche, tsunami, or mudflow would occur as a result of the project.

Land Use and Planning

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
10.	**LAND USE AND PLANNING.** Would the project:				
a.	Physically divide an established community?	☐	☐	☐	☒
b.	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c.	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Discussion

a. Physically divide an established community?

No impact.

The proposed access road would generally follow the alignment of an existing dirt access road. The project does not propose the introduction of new infrastructure such as major roadways, water supply systems, or utilities to the area. The access road is in an unincorporated area in East Otay Mesa, adjacent to the County of San Diego's George F. Bailey Detention Facility. The proposed access road is wholly contained within District property and would not divide any established community. Therefore, construction of the access road on the site would not divide an established community and there would be no impact as a result of the project.

b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No impact.

The Project site is wholly contained within District property. As a Special District, local land use plans or policies are not applicable to the District. In addition, as discussed in other sections of this initial study, there will be no direct impacts on biological resources associated with the project. No other significant impacts on the environment have been identified. As a result, there would be no impact as a result of the project.

c. Conflict with any applicable habitat conservation plan or natural community conservation plan?

No impact.

The proposed project would be located on the District's property surrounding their 870-1 potable water reservoir and is limited to the paving of an existing access road. As a result, the project would not conflict with any habitat conservation plans or natural community conservation plans and no impact would occur as a result of the project.

Mineral Resources

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
11.	MINERAL RESOURCES. Would the project:				
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b.	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Discussion

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact.

The project site is located within a relatively disturbed area surrounding a potable water reservoir. The project site is not identified as containing significant mineral resources. Based on the geotechnical report prepared by MTGL (Appendix D), the project site is not utilized for mineral resources mining or processing activity, nor is the site located in close proximity to such uses. Therefore, there would be no impact as a result of the project.

b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No Impact.

See response to **11. a)**. The access road project is wholly contained within Otay Water District property. There are no locally important mineral resource recovery sites delineated on any local general plan, specific plan, or other land use plan within the vicinity of the project. Therefore, there would be no impact as a result of the project.

Noise

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
12.	**NOISE.** Would the project:				
a.	Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?	☐	☐	☒	☐
b.	Expose persons to or generate excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c.	Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d.	Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e.	Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f.	Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion

a) Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?

Less than Significant Impact.

ICF International completed a noise analysis for the project. (Appendix E) Noise from the project is not expected to exceed County of San Diego Noise Ordinance Limits. The project is a short-term construction project that will not introduce any new noise-sensitive land uses and will not create new operations that could generate ongoing noise levels at existing noise sensitive land uses. The noise analysis found that the main source of noise associated with the project is construction activity and that construction noise levels would not exceed the applicable County noise standard of 75 dBA. Construction activity would not occur between the hours of 7:00 p.m. and 7:00 a.m, or at any time on a Sunday or holiday. Therefore, with these time and day restrictions, the project would have a less than significant impact for this issue.

b) Expose persons to or generate excessive groundborne vibration or groundborne noise levels?

Less-than-Significant Impact.

The proposed project is not expected to create excessive groundborne vibrations or groundborne noise levels. During construction, there could be a potential for the creation of short-term vibrations related to the use of construction equipment in the project area. However, because high-impact type methods would not be used (i.e., no pile-driving or blasting), the potential for excessive groundborne vibrations and noise levels would be significantly reduced. The contractor for the project would comply with all construction activity time limits required by the County Noise Ordinance. In addition, the closest noise- and vibration-sensitive land uses are approximately 450 feet from the project site. Vibrations dissipate relatively quickly through typical soils. As a result, vibration from construction activities would be well below thresholds of perceptibility at the nearest noise- and vibration-sensitive land uses. Therefore, the impact from construction groundborne vibration and groundborne noise would be less than significant.

c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

No impact.

The paving of the access road will not produce a substantial permanent increase in ambient noise levels since the sole noise generating component of the project is the construction of the paved access road. The use of the road remains the same as before the project would be implemented. Therefore, there would be no impact as a result of the project.

d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less-than-Significant Impact.

See response to **12. a)**.

e) Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?

No Impact.

The project site is not within an airport land use plan area or within 2 miles of a public airport or public use airport. Therefore, no impact would occur as a result of the project.

f) Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels?

No Impact.

There are no private airstrips in the project vicinity, so no one residing or working in the project area would be exposed to excessive noise levels. Therefore, no impact would occur as a result of the project.

Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
POPULATION AND HOUSING. Would the project:				
a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	☒
b. Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c. Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

a) **Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?**

No Impact.

The proposed project is the paving of an existing dirt and gravel road to improve access to an existing potable water reservoir. The project would not induce population growth directly or indirectly. Therefore, there would be no impact as a result of the project.

b) ***Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?***

No Impact.

There are no existing housing units on the proposed project site. The project would not displace existing housing, and there would be no impact as a result of the project.

c) ***Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?***

No Impact.

The proposed project would not displace a substantial number of people because there are no residential uses on the project site. Therefore, there would be no impact as a result of the project.

Public Services

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
14.	**PUBLIC SERVICES.** Would the project:				
a.	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
	Fire protection?	☐	☐	☐	☒
	Police protection?	☐	☐	☐	☒
	Schools?	☐	☐	☐	☒
	Parks?	☐	☐	☐	☒
	Other public facilities?	☐	☐	☐	☒

Discussion

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:

Fire protection?

No Impact.

The proposed project is the paving of an existing dirt and gravel road to provide improved access to an existing potable water reservoir. The project does not include any extraordinary uses or operations that would create additional demand for public services. Therefore, there would be no impact to public services as a result of the project.

Police protection?

No Impact.

The proposed project is the paving of an existing dirt and gravel road to provide improved access to an existing potable water reservoir. The project does not include any extraordinary uses or operations that would create additional demand for public services. Therefore, there would be no impact to public services as a result of the project.

Schools?

No Impact.

The access road would not generate a demand for public school services. There would be no impact as a result of the project.

Parks?

No Impact.

Implementation of the proposed project would not generate a demand for parks or park services. Therefore, no impacts would occur as a result of the project.

Other public facilities?

No Impact.

No other public facilities would be affected. No impact would occur would occur as a result of the project.

Recreation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
15.	**RECREATION.** Would the project:				
a.	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b.	Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion

a. **Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

No Impact.

The proposed access road would not provide access to existing neighborhood parks, regional parks, or other recreational facilities. Therefore, substantial physical deterioration of these facilities would not occur or be accelerated. No impact would occur as a result of the project.

b. **Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?**

No Impact.

The proposed project does not include the construction of new recreational facilities or the expansion of existing recreational facilities. The construction or expansion of recreational facilities would not be required. No impact would occur as a result of the project.

Transportation and Traffic

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
16.	**TRANSPORTATION/TRAFFIC.** Would the project:				
a.	Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒
b.	Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c.	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d.	Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e.	Result in inadequate emergency access?	☐	☐	☐	☒
f.	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

Discussion

a) Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less than Significant Impact.

The project would not generate a considerable amount of traffic during the temporary construction period or during ongoing operation. The main route for construction traffic would be from I-905 to Alta Road or the SR-125 to Alta Road. Because of the small scale of the project, construction would require a very limited amount of materials and workers and would not exceed the capacity of the existing circulation system. A recent traffic

study for the District's Otay Mesa Conveyance and Disinfection Project (VRPA Technologies, June 2014) analyzed the existing traffic impacts on roads from the I-905 and SR-125 to Alta Road and following Alta Road to the vicinity of this project. The addition of the construction and worker vehicles needed for the proposed project would not exceed the capacity of the existing circulation system. Additionally, the operation of the project would not change from before the implementation of the project. Therefore, the project would have a less than significant impact for this issue.

b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less than Significant Impact.

See **15. a)** above. The project would not generate traffic of a great enough volume to conflict with any applicable congestion management programs for designated roads or highways. The level of service on the roads and highways that lead to the project site will not be impacted by the addition of the construction traffic. Operation traffic at the site will remain the same as before the proposed project. Therefore, the project would have a less than significant impact for this issue.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact.

The proposed access road would not create any change in air traffic patterns. No impact would occur.

d) Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less-than-Significant Impact.

The proposed paving of the access road is being built to allow for better access to the reservoir. In addition the access road would replace an existing dirt road with a paved roadway. Therefore, construction of the access road would not create new hazards associated with any design features. There would be ni impact as a result of the project.

e) Result in inadequate emergency access?

No Impact.

Impacts of the project on emergency access would be beneficial. The proposed paving of the access road would allow for easier access by Fire Protection vehicles than the dirt road that is currently in place. Therefore there would be no impact as a result of the project.

f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

No Impact.

Use of the proposed access road would not change or impede any established policies, plans, or programs that support alternative forms of transportation. Therefore, there would be no impact as a result of the project.

Utilities and Service Systems

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
17.	**UTILITIES AND SERVICE SYSTEMS.** Would the project:				
a.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c.	Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?	☐	☐	☐	☒
e.	Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g.	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No Impact.

No utilities would be extended within the proposed access road. Therefore, no impact related to wastewater treatment requirements would occur as a result of the project.

b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less-than-Significant Impact.

No utilities would be extended within the proposed access road. Therefore, no impact related to the construction of new water or wastewater treatment facilities would occur as a result of the project.

c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less-than-Significant Impact.

The proposed paving of an existing access road would not include new storm water drainage facilities or an expansion of any existing facilities. The construction plans for the project would include BMPs that comply with requirements of the County of San Diego Watershed Protection, Stormwater Management, and Discharge Control Ordinance. Therefore, construction of the access road would not result in significant environmental impacts.

d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?

No Impact.

No utilities would be extended within the proposed access road. Therefore, no impact related to water supplies would occur as a result of the project.

e. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact.

No utilities would be extended within the proposed access road. Therefore, no impact related to wastewater treatment requirements would occur as a result of the project.

f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less-than-Significant Impact.

Solid waste would be generated during construction of the access road that would be disposed of in accordance with the appropriate regulations. No long-term waste disposal would be associated with operation of the proposed access road. Therefore, no impact related to landfill capacity would occur as a result of the project.

g. Comply with federal, state, and local statutes and regulations related to solid waste?

Less-than-Significant Impact.

See response to **17. f)**.

Mandatory Findings of Significance

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
18.	**MANDATORY FINDINGS OF SIGNIFICANCE.**				
a.	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b.	Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☒	☐	☐
c.	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

Less than Significant with Mitigation Incorporated.

Based on evaluations, technical studies, and discussions in this Initial Study, the proposed project does not have the potential to degrade the quality of the environment. In order to reduce potential impacts on biological resources to less than significant levels, the project would implement mitigation measures to protect sensitive vegetation communities and wildlife (see Section 4, "Biological Resources"). Therefore, with mitigation incorporated, the proposed project would not significantly affect the quality of the environment.

b) Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less than Significant with Mitigation Incorporated.

The proposed project could result in cumulative impacts on biological resources; however, mitigation measures presented below are proposed to reduce all impacts to below a level of significance. With implementation of the proposed mitigation, impacts from the project would be less than significant.

Biological Resources

Mitigation Measure BIO-1: Pre-Construction Biological Survey for Western Spadefoot. Due to the observed presence of one western spadefoot tadpole, a qualified biologist will conduct pre-construction surveys to determine if this species is present. If present, the species will be removed from the project site.

Mitigation Measure BIO-2: Construction Not to Occur during Migratory Bird Breeding Season. Prior to any construction activity, all contractual agreements with the District will ensure that the following project requirements regarding sensitive wildlife species are completed.

- No clearing, grubbing, or grading of vegetation will occur between February 15 and August 31, the breeding season of the coastal California gnatcatcher. However, if construction is proposed during the breeding season for the gnatcatcher, the following requirements will have to be met to the satisfaction of the County:
  - U.S. Fish and Wildlife Service protocol surveys will be required in order to determine species' presence or absence.
  - If no gnatcatchers are detected within 300 feet of the proposed grading/construction, then no restriction on grading will be necessary.
  - If gnatcatchers are present, measures to minimize noise impacts will be required and should include temporary noise walls and/or berms.
  - If the survey is not performed and construction is proposed during the species' breeding season, presence will be assumed and a temporary wall/berm will be required.
  - Noise levels from grading/construction activities during the breeding season should not exceed 60 dBA hourly LEQ at the edge of the occupied habitat, or the ambient noise level if noise levels already exceed 60 dBA hourly LEQ.

***c)* Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?**

Less than Significant with Mitigation Incorporated.

Construction and operation of the proposed project would be wholly contained within the District-owned property designated for such uses. As discussed further in this Initial Study, the proposed project would not have environmental effects that would cause direct or indirect adverse effects on humans. As discussed above, in the response to **18. b)**, the proposed project could result in cumulative impacts on biological resources; however, mitigation measures are proposed to reduce all impacts to below a level of significance. With implementation of the proposed mitigation, impacts from the project would be less than significant.

19. EARLIER ANALYSIS. Earlier analyses may be used where, pursuant to tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a discussion should identify the following on attached sheets:

a) Earlier analyses used. Identify earlier analyses and state where they are available for review.

b) Impact adequately addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in the earlier document pursuant to applicable legal standards and state whether such effects were addressed by mitigation measures based on the earlier analysis.

c) Mitigation measures. For effects that are "potentially significant unless mitigated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

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a) Earlier analyses used. Identify earlier analyses and state where they are available for review.

Final Mitigated Negative Declaration for the Otay Water District, Regulatory Site Access Road Improvements (***SCH#2012121948***) 2012. This document is available for review at the Otay Water District, 2554 Sweetwater Springs Boulevard, Spring Valley, California 91978.

Final Mitigated Negative Declaration for the San Miguel Regional Training Facility (SCH#2010081058). 2010. This document is available for review at the Otay Water District, 2554 Sweetwater Springs Boulevard, Spring Valley, California 91978.

b) Impact adequately addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in the earlier document pursuant to applicable legal standards and state whether such effects were addressed by mitigation measures based on the earlier analysis.

Not Applicable.

c) Mitigation measures. For effects that are "potentially significant unless mitigated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

Not Applicable.

Appendix A

Air Quality and Greenhouse Gases Letter Report

June 3, 2014

Lisa Coburn-Boyd
Environmental Compliance Specialist
Otay Water District
2554 Sweetwater Springs Road
Spring Valley, California 91978-2096

Subject: Otay Water District East Mesa Reservoir Road Paving Project – Air Quality and Greenhouse Gases

Dear Ms. Coburn-Boyd:

Please be advised that ICF International (ICF) has completed an air quality and greenhouse gas (GHG) analysis for the Otay Water District (OWD) East Mesa Reservoir Road Paving Project (Project). A summary of the analysis is presented below.

Project Overview

The OWD East Mesa Reservoir is located at the northern terminus of Alta Road, northeast of the East Mesa Detention Facility in the unincorporated community of Otay, San Diego County, California, approximately 10 kilometers east-southeast of Chula Vista, California (Figure 1). Specifically, the Project is located within the NE ¼ of Section 19 of Township 18 South, Range 1 East of the San Bernardino Base Meridian, as depicted on the United States Geological Survey Mesa, California 7.5-minute series quadrangle (1955 [photorevised 1971, photoinspected 1975]) (Figure 2). OWD plans to pave a dirt and gravel service road that encircles a small reservoir in order to facilitate improved access around the reservoir. The road is located between the reservoir and a chain-link fence that encompasses the facility. The Project area consists of the road and the area within 7.5 meters of each side of the road (Figure 3).

Existing Conditions

The Project vicinity is largely undeveloped. The Project site is bounded to the northwest, northeast, and southeast by the Otay County Open Space Preserve. The closest developed land use to the Project is the East Mesa Detention Complex, which is located to the southwest. This a complex of four county- and privately-operated detention facilities. The Project site is more than two miles from the closest major highway or airport and background noise levels are generally quite low except for operational noise from the Detention Complex which includes prisoners in the exercise yards and officers training at an outdoor firing range located at the northwest edge of the complex (approximately 2,500 feet from the Project site).

The Project site is in the San Diego Air Basin (SDAB), which is contiguous with San Diego County. Within San Diego County, the San Diego Air Pollution Control District (SDAPCD) has the primary responsibility for the development and implementation of rules and regulations designed to attain national and state ambient air quality standards, as well as the permitting of new or modified sources, development of air quality management plans, and adoption and enforcement of air pollution regulations. The SDAPCD is the local agency responsible for the administration and enforcement of air quality regulations in San Diego County. The San Diego Regional Air Quality Strategy (RAQS) is the region's plan for improving regional air quality while attaining state standards, while the State Implementation Plan (SIP) is the region's plan for improving regional air quality while attaining federal standards. The SDAPCD develops a set of emissions control measures that reduce emissions within the basin, in an effort to attain NAAQS and CAAQS. These emission controls are adopted as local air quality rules and regulations.

Air Quality and Greenhouse Gas Thresholds

Air quality standards for the County are based on the SDAPCD's Air Quality Impact Analysis (AQIA) trigger levels for new or modified stationary sources (APCD Rules 20.2 and 20.3). These trigger levels are used as a screening criterion for potential significance of air quality impacts and have been adopted to ensure reduced air quality violations. Any project would be considered to have a potentially significant air quality impact if the project's emission levels were to exceed any of the criteria presented in Table1 below.

Table 1. SDAPCD Air Quality Impact Analysis Trigger Levels

	Emission Rate		
Air Contaminant	**(pounds/hour)**	**(pounds/day)**	**(tons/year)**
PM10	--	100	15
PM2.5[1]	--	55	10
NOX	25	250	40
SOX[2]	25	250	40
CO	100	550	100
Pb[3]	--	3.2	0.6
VOC[4]	--	75	13.7

Source: County of San Diego 2007.

[1] Rule 20.2 and 20.3 do not include a PM2.5 threshold level. PM2.5 threshold level also used by the South Coast Air Quality Management District.

[2] Oxides of sulfur.

[3] Lead and lead compounds.

[4] The County of San Diego's CEQA Significance Determination Threshold for VOC threshold is based on South Coast Air Quality Management District (SCAQMD) levels and the Monterey Bay Air Pollution Control District (APCD), which has similar Federal and State attainment status as San Diego.

In addition, the following County of San Diego criteria are used to determine whether the project would expose sensitive receptors to substantial pollutant concentrations.

- Would the project place sensitive receptors near CO "hotspots" or create CO "hotspots" near sensitive receptors?
- Would the project result in exposure to TACs resulting in a maximum incremental cancer risk greater than 1 in 1 million without application of Toxics Best Available Control Technology, or a health hazard index greater than 1, and thus be deemed as having a potentially significant impact?
- Would project either generate objectionable odors or place sensitive receptors next to existing objectionable odors, which would affect a considerable number of persons or the public?

With regards to GHGs and climate change, the County of San Diego formally adopted guidelines in 2013 for evaluating the significance of GHG and climate change impacts. The guidelines identify a tiered approach to determining significance of project-related GHG emissions. Two bright-light numeric thresholds were adopted for annual emissions: 10,000 metric ton carbon dioxide equivalent ($MTCO_2e$) for stationary source projects and 2,500 $MTCO_2e$ for other development projects (County of San Diego 2013). These County's guidelines were formally adopted after the Regulatory Site Access Road MND (ICF 2011) was completed. The analysis in the Regulatory Site Access Road MND utilized the 900 metric ton $MTCO_2e$ screening threshold within the California Air Pollution Control Officers Association (CAPCOA) report *CEQA & Climate Change* (CAPCOA 2008).

Impact Analysis

Generation of Criteria Pollutant Emissions

Construction of the proposed project would result in criteria pollutant emissions as a result of ground disturbance, off-road construction vehicle exhaust, emissions from employee and asphalt delivery travel, and as a result of off-gassing from paving activities. Emissions would vary from day to day, depending on the level of activity, the specific type of construction activity occurring, and, for fugitive dust, prevailing weather conditions.

The air quality analysis for the Regulatory Site Access Road included an estimation of construction emissions using the California Emissions Estimator Model (CalEEMod) emissions estimation software. Emissions were summed daily and compared to SDAPCD and were determined to be far below AQIA trigger levels. Activity associated Regulatory Site Access Road construction is expected to be greater than expected for the Proposed Project.

For example, construction of the Regulatory Site Access Road was estimated to include approximately 43,200 square feet (ft^2) of grading and paving (roadway dimensions of 1,800 feet long by 24 feet wide) over a 12-month period. By comparison, construction of the Proposed Project is expected to include approximately 21,000 ft^2 of grading and paving (roadway dimensions of 2,100 feet long by 10 feet wide) over a 2-month period. Based on information from the District, the anticipated equipment fleet for the grading and paving phases would be similar to that anticipated for the Regulatory Site Access Road. However, because the project encompasses less area, there would be less ground disturbance and fewer asphalt delivery truck trips. Therefore, because there would be less activity, less are a disturbed and paved, and fewer truck deliveries, it is anticipated

that construction activity would be similar or in less quantities than for the Regulatory Site Access Road. Thus, similar to construction of the Regulatory Site Access Road, the Proposed Project is not expected to result in an impact on air quality.

Generation of Toxic Air Contaminants

Diesel Particulate Matter (DPM), which is classified as a carcinogenic toxic air contaminant by CARB, is the primary pollutant of concern with regards to health risks to sensitive receptors. Diesel-powered construction equipment and heavy duty on-road vehicles operating on- and off-site during construction will emit diesel exhaust, which can be inhaled by nearby sensitive receptors. The only sensitive land uses near the project area is the detention facility, located approximately 450 feet to the southwest of the nearest portion of the project area. Construction activities would occur over an approximately 2-month period, which is much shorter than the assumed 70-year exposure period used to estimate lifetime cancer risks. Onsite heavy duty truck idling would be minimal, limited to a maximum of 5 minutes per truck, consistent with the CARB's Heavy Duty Idling Reduction Program. The Proposed Project may create a nuisance for nearby residents of the detention facility during hours of construction, as diesel trucks could create occasional exposure to exhaust, but this would be minimal. Additionally, adherence to SDAPCD Rules 50, 51, 55, and 67.7 would limit dust and VOC emissions that could impact nearby receptors. Therefore, the potential human health impact is considered to be minimal. In addition, the project would not create congestion at nearby roadways or intersection, as the project is not expected to generate additional trips. Thus, the exposure to elevated CO concentrations is considered minimal. This impact is less than significant.

Consistency with Air Quality Plan

The Proposed Project would pave an existing dirt and gravel service road that encircles a small reservoir in order to facilitate improved access around the reservoir. The Proposed Project would not result in a change of land uses and is therefore consistent with the County of San Diego General Plan. As discussed above, short-term construction emissions are expected to be minimal. In addition, the proposed project is not expected to generate additional motor vehicle trips to the project area. Thus, because the project would be consistent with the County of San Diego General Plan, which was used in the formulation of the RAQS and SIP, the project is therefore considered consistent with the RAQS and SIP.

In addition, the primary construction-related pollutant in terms of the SDAB is PM10 and PM2.5 as well as precursors to ozone (VOC and NO_X). Grading and paving activities would be subject to SDAPCD rules and regulations, including Rule 50 (Visible Emissions), Rule 51 (Nuisance), and Rule 55 (Fugitive Dust Control) (SDAPCD 2014). The principal sources of PM emissions would be fugitive dust from earthmoving activities and vehicle travel on unpaved and paved surfaces. The requirements of Rules 50, 51, and 55 can be met by the implementation of standard construction best management practices (BMPs) for dust control. In addition, the project would be subject to the requirements of SDAPCD Rule 67.7, which sets provisions on the application and sale of emulsified asphalt materials. The standard construction measures utilized by the Water District during recent construction projects that will be included as part of the Project include the following:

- Dust prevention to eliminate amounts of dust that could damage property, cultivated vegetation, or domestic animals, or cause a nuisance to persons living in or occupying buildings in the vicinity of the site
- Measures to enclose, cover, water (as needed), or apply nontoxic soil binders according to manufacturer's specifications on material piles (i.e., gravel, sand, dirt) with a silt content of 5% or greater
- Application of water or non-toxic soil stabilizers to maintain adequate dust control for active or inactive construction areas

Project paving and grading activities would also be required to adhere to these dust control measures, and would thereby adhere to applicable SDAPCD rules and regulations. Impacts on sensitive receptors are considered to be less than significant.

Generation of GHG Emissions

Construction of the proposed project would result in GHG emissions as a result of off-road construction equipment exhaust and from employee and asphalt delivery travel. Total GHG emissions would vary depending on the level of activity, the specific type of construction activity occurring, and the amount of time each equipment or vehicle is in use.

Similar to the criteria pollutant analysis discussed above, the GHG analysis for the Regulatory Site Access Road included an estimation of construction GHG emissions using CalEEMod. Emissions were summed over the entire construction period, added to annual operational emissions, and compared to the CAPCOA screening threshold. Emissions were found to be far below the CAPCOA screening threshold and were considered to be less than significant. As discussed above, activity associated Regulatory Site Access Road construction is expected to be greater than expected for the Proposed Project. Therefore, because the Proposed Project would result in less activity over a shorter duration, total GHG emissions from construction are anticipated to be of similar or less quantity than for the Regulatory Site Access Road. Therefore, GHG emissions from Proposed Project are considered to be less than significant. Further, because the project would result in construction emissions below relevant threshold and since the project would not result in additional trip generation during long term operation, the Proposed Project would not hinder implementation of statewide or regional plans, policies, or regulations adopted for the purpose of reducing GHG emissions.

Conclusions

Project construction is not anticipated to result in impacts related to air quality and GHG emissions. Construction emissions would be minimal, sporadic, and reduced due to adherence with applicable SDAPCD rules and regulations. There would be no long-term operational emissions, as there would be no increase in motor vehicle trip generation. Therefore, all impacts related to air quality and GHG emissions are considered less than significant.

References

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Figure 1 - Project Regional Location
Otay Water District
East Mesa Reservoir Road Paving Project

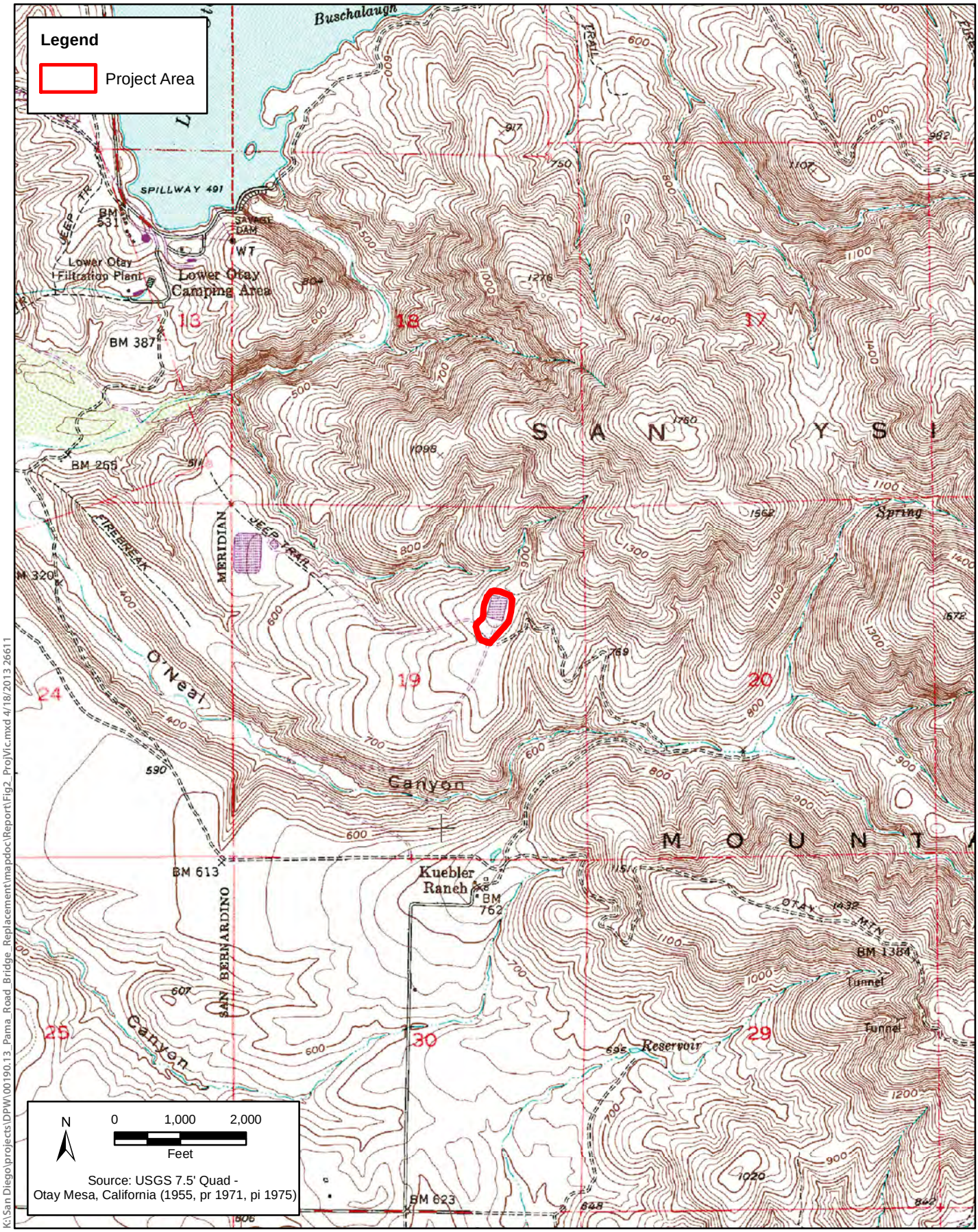

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Figure 2 - Project Vicinity
Otay Water District
East Mesa Reservoir Road Paving Project

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Figure 3 - Project Area
Otay Water District
East Mesa Reservoir Road Paving Project

Appendix B

Biological Resources Letter Report

October 15, 2013

Ms. Lisa Coburn-Boyd
Environmental Compliance Specialist
Otay Water District
2554 Sweetwater Springs Road
Spring Valley, California 91978-2096

Subject: Otay Water District – 870-1 Reservoir Paving Task

Dear Ms. Coburn-Boyd:

ICF International/Jones & Stokes (ICF) was retained to conduct biological surveys and prepare a Biological Resources Letter Report for the Otay Water District (OWD) 870-1 (East Mesa) Reservoir Paving Project. This letter report analyzes the potential effects on sensitive biological resources associated with paving an existing access road at the 870-1 Reservoir.

1.0 Project Description, Location, and Setting

1.1 Project Location

The OWD 870-1 Reservoir is located at the northern terminus of Alta Road, northeast of the East Mesa Detention Facility in the unincorporated community of Otay, San Diego County, California (Attachment A). The facilities consist of the reservoir, a dirt access road, and support facilities, including small buildings, concrete vaults and drain pipes, and stacks of construction materials. The project site is located on the Otay Mesa U.S. Geological Survey (USGS) 7.5-minute series Otay Mesa Quadrangle.

1.2 Project Description

OWD is proposing to pave an existing dirt access road that encircles the 870-1 Reservoir facilities in order to provide year-round access and limit on-going maintenance activities. The currently unpaved road is approximately 2,100 feet long and approximately 10 feet wide, covering a total area of approximately 21,000 square feet (0.48 acre). The road starts at the south access gate and encircles the reservoir.

1.3 Existing Conditions

The access road is currently unpaved and maintained free of vegetation. The access road is approximately 2,100 feet long and 10 feet wide and consists of compacted soil, gravel, or concrete

depending on the location. The road is mostly without signs of erosion, although there is road rut in the southeastern section of the property where water ponds. A chain-link fence encloses the road, and vegetation is maintained by mowing within the fenced area and outside of the fence to a distance of 40 to 80 feet depending on the location around the reservoir. Although there are some patches of habitat in the vicinity of the road, all planned paving activities would take place within previously developed areas and no additional habitat would be directly impacted.

1.4 Environmental Setting

The survey area, which includes the project site and a 300-foot buffer, ranges in elevation from 840 feet above mean sea level (MSL) near the entrance to 875 feet above MSL north of the reservoir. Soils in the vicinity of the road consist of Huerhuero loam, 2 to 9 percent slopes to the south and west of the reservoir, and Huerhuero loam, 2 to 15 percent slopes to the north and east (Bowman 1973). Soils in the Huerhuero Series are a moderately drained loam that have clay subsoil. Steeper sloped soils of this series have a moderate erosion hazard.

The project area is adjacent to a portion of a San Diego Multiple Species Conservation Program (MSCP) preserve, with a portion of the reservoir road crossing the MSCP hardline preserve boundaries (Attachment B). The site is located on the foothills of Otay Mountain, and the surrounding lands support expansive areas of native habitat, as well as developed areas. Developed areas in the vicinity of the project area include the East Mesa Detention Center to the southwest and another OWD reservoir facility to the west.

2.0 Regulatory Setting

No specific OWD documents are currently available for guidance related to infrastructure maintenance and environmental management of the 870-1 Reservoir facilities. For general environmental guidance on the federal environmental requirements, the Federal Endangered Species Act (FESA), the Clean Water Act (CWA), and Migratory Bird Treaty Act (MBTA) were consulted. For State guidance, The California Environmental Quality Act (CEQA) and California Endangered Species Act (CESA) were reviewed for relevant guidance on potential environmental impacts. The Porter-Cologne Water Quality Control Act was reviewed for potential impacts to waters and wetlands that might occur within the vicinity of the road. The Native Plant Protection Act (NPPA) was reviewed for potential impacts to special status plants that may be present within the project area. The South County Segment of the San Diego MSCP Subarea Plan was reviewed for consistency with the MSCP. The Biological Opinion (BO; 1-6-98-FW-03), issued by the U.S. Fish and Wildlife Service (USFWS), was also reviewed.

2.1 Federal Environmental Requirements

FESA and its subsequent amendments provide guidance for the conservation of endangered and threatened species and the ecosystems upon which they depend. Section 9 of the Act lists all activities that are prohibited by ESA. The “take” of any listed species is prohibited by the Act. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to

engage in any such conduct. Section 7 of the Act requires federal agencies to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species. For non-marine environments, USFWS is responsible for administering the Act. Regulations governing interagency cooperation under Section 7 are found in 50 CFR Part 402. The opinion issued at the conclusion of consultation will include a statement authorizing take that may occur incidental to an otherwise legal activity.

The federal Clean Water Act (CWA) provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 404 of the CWA establishes a permit program administered by the U.S. Army Corps of Engineers (Corps) regulating the discharge of dredged or fill material into waters of the United States (U.S.), including wetlands. Implementation regulations by Corps are found at 33 CFR Parts 320-330. Guidelines for implementation are referred to as Section 404 (b)(1) Guidelines and were developed by the Environmental Protection Agency (EPA) in conjunction with Corps (40 CFR Parts 230). The Guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

MBTA is a treaty with Canada, Mexico, Russia, and Japan that makes it unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, or kill migratory birds. The law applies to the removal of nests occupied by migratory birds during the breeding season. Migratory birds as defined the MBTA include most native birds in North America except galliformes (a group of birds containing turkeys, grouse, chickens, quails, and pheasants) and a few others (e.g., wrentit). Permitted activities are allowed under USFWS regulations for hunting and for actions to prevent or minimize risks to human safety.

2.2 State Environmental Requirements

CESA establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. It prohibits the “take” of any species that the California Department of Fish and Wildlife (CDFW) determines to be a threatened or endangered species and mandates that state agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available. There is no state agency consultation under CESA, however for projects that affect a state and federal listed species, compliance with the federal ESA will satisfy CESA if the CDFW determines that the federal incidental take authorization is “consistent” under Fish and Game Code(FGC) Section 2080.1.

Fish and Game Code Sections 3511, 4700, 5050, and 5515 designate “fully protected” species that provide protection to wildlife that were rare or faced possible extinction, and prohibit any state agency from issuing incidental take permits except for necessary scientific research.

Fish and Game Code Sections 3503, 3503.5, 3505, 3800, and 3801.6 protects all native birds, birds of prey, and all nongame birds including eggs and nests, that are not already listed as fully protected and which occur naturally within the state.

Fish and Game Code Section 1600-1616 mandates protection of wetlands and waterways that include ephemeral, intermittent, and perennial watercourses, and further extends into habitats adjacent to watercourses. Water features such as vernal pools and other seasonal swales, where the defined bed and bank are absent and the feature is not contiguous or closely adjacent to other jurisdictional features, are generally not asserted to fall within state jurisdiction. The CDFW also has authority to regulate work that will deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

Under Section 401 of the CWA, an applicant for a Section 404 permit must obtain a certificate from the appropriate state agency stating that the intended dredging or filling activity is consistent with the state's water quality standards and criteria. In California, the authority to grant water quality certification is delegated by the State Water Resources Control Board to the nine Regional Water Quality Control Boards (RWQCB). Each of the RWQCBs must prepare and periodically update a basin plan for water quality control in accordance with the Porter-Cologne Water Quality Control Act. Each basin plan establishes water quality standards for surface water and groundwater and specifies actions to control nonpoint and point sources of pollution. These actions are intended to achieve and maintain the basin plan's water quality standards.

Basin plans represent an opportunity to protect wetlands by establishing water quality objectives. Under the Porter-Cologne Water Quality Control Act, wetlands and drainages that are considered waters of the United States by USACE are also classified as waters of the state. More recently, the appropriate RWQCB has also generally taken jurisdiction over "waters of the state" that are not subject to USACE jurisdiction under the federal CWA, in cases where USACE has determined that certain features do not fall under its jurisdiction. Mitigation typically must require no net loss of wetlands functions and values of waters of the state pursuant to Executive Order W-59-93, "State Wetland Conservation Policy."

Portions of the road area also fall within the boundaries of the South County Segment of the County of San Diego MSCP South County Subarea Plan. Land use within the preserve is generally limited; however, exemptions to prohibited activities include existing uses, including any annual clearing, maintenance and replacement of existing facilities, roads and structures (§§ 1.9.1.B). For new and existing roads within the South County Segments (§§ 1.9.3.2), the MSCP South County Subarea Plan states:

Take of covered species from the construction of new or modification of existing circulation element road corridors (within all segments of the Subarea Plan) which are identified on the County's circulation element road map dated September 17, 1997 (GPA 97-CE) is based on the County making the following findings for the project:

- The project is consistent with adopted community or subregional plans, and the MSCP and Subarea Plans.
- All feasible mitigation measures have been incorporated into the project and there are no feasible, less environmentally damaging locations, alignments or non-structural alternatives that would meet project objectives;

- When the project encroaches into a wetland or floodplain, mitigation measures have been incorporated into the project that result in a net gain in wetland and/or riparian habitat;
- Where the project encroaches into steep slopes, native vegetation will be used to revegetate and landscape cut and fill areas;
- No mature riparian woodland will be destroyed or reduced in size due to otherwise allowed encroachments;

All Critical Populations of Sensitive Plant Species within the County's Subarea (Attachment C of Biological Mitigation Ordinance (BMO)), Rare Narrow Endemic Animal Species within the County's Subarea (Attachment D of BMO), Narrow endemic Plan Species within the County's Subarea (Attachment E of BMO), and San Diego County Sensitive Plant Species (as defined by BMO), will be avoided as required and consistent with the Subarea Plan and BMO.

3.0 Methods

This section provides information regarding the methods used during surveys conducted for this project, including the general biological survey, focused surveys for Quino checkerspot butterfly (*Euphydryas editha quino*; Quino), and dry sampling for listed fairy shrimp. The survey area was defined as the project alignment and a 300-foot buffer, except for the Quino surveys, which included a 500-foot buffer.

Prior to conducting any fieldwork, searches of available literature and databases were conducted to determine sensitive species previously observed, detected, or with potential to occur within the survey area as well as the physical characteristics of the site and surrounding areas. Available data that were reviewed included: the California Natural Diversity Database (CNDDB) database (CDFW 2013; Otay Mesa quadrangle); California Native Plant Society (CNPS) Online Plant Inventory (CNPS 2013); the USDA soil survey of the area (Bowman 1973); and USGS topographic maps to identify potential stream courses and other notable topographic features.

Survey dates and weather conditions for all surveys conducted are summarized in Table 1.

Table 1. Survey Dates and Times

Date	Survey Type	Time	Weather Conditions	Surveyor
5-Mar-13	General Survey	0900-1130	58/59°F, 1-4 mph, cloudy to partially cloudy skies	G. Kinoshita, E. Eidson
15-Mar-13	Quino #1	1040-1200	72/75°F, 0-4 mph, clear skies w/haze	C. Dunn, D. Allen, K. Davis, I. Cain
22-Mar-13	Quino #2	1245-1415	70/72°F, 1-6 mph, clear skies	C. Dunn, J. Hickman
29-Mar-13	Quino #3	1400-1530	73/72°F, 1-5 mph, clear skies w/ haze	C. Dunn, J. Hickman
3-Apr-13	Quino #4	1200-1340	77/79°F, 0-1 mph, few scattered clouds	E. Eidson, J. Hickman
9-Apr-13	Quino #5	1200-1330	67/69°F, 1-8 mph (gusts of 10 mph), few scattered clouds	E. Eidson
11-Jun-13	Fairy Shrimp Soil Collection	0900-1030		D. Allen
5-Aug-13	Fairy Shrimp Soil Collection	1000-1130		D. Ritenour

3.1 General Biological Survey

The OWD 870-1 Reservoir site was surveyed on March 5, 2013 by ICF biologists Glen Kinoshita and Erika Eidson from 9:00 a.m. through 11:30 a.m. Temperatures at the time of the survey were between 58°F and 59°F, winds were approximately 1 to 4 mph under cloudy to partially-cloudy skies. The purpose of the visit was to assess the current condition of the road and inventory biological resources in the surrounding habitat. The road and surrounding habitat were surveyed on foot out to a distance of 300 feet and scanned with binoculars if areas were inaccessible. Photographs were taken of representative habitat and global positioning system (GPS) points were taken where sensitive resources were located.

The survey area was traversed by walking meandering transects in an effort to accurately categorize vegetation communities and to identify the locations of any sensitive species readily detectable. Vegetation communities occurring in the survey area were mapped according to Holland categories (Holland 1986); with subsequent modifications by Oberbauer et al. (2008), as described in the County of San Diego's Guidelines for Determining Significance (County of San Diego 2010b). Vegetation communities were mapped on a "one-inch equals 250 feet" aerial photograph of the project area in the field and later digitized into a geographic information system (GIS) coverage using ArcGIS software. All plants and wildlife species detected were recorded. Plants that could not be identified in the field were identified later using taxonomic keys including Beauchamp (1986) and Baldwin et al. (2012). Wildlife species were detected visually, aurally, and through sign (e.g., scat and tracks). Potentially suitable bat roosting habitat such as structures and other built facilities around the survey area were checked for bats or bat sign (guano and/or culled insect parts, urine stains, vocalizations, and/or odor). Complete lists of the plant and wildlife species observed within

the survey area are listed on Attachments C and D. Representative photos of the site are included on Attachment E.

Survey limitations include the timing of the surveys. Nocturnal wildlife species would not have been readily detected as only daytime surveys were conducted. Special-status annual plant species may not have been detected as the survey was conducted during a time of year when annual plants were developing and were not identifiable at this time.

3.2 Quino Checkerspot Butterfly

ICF biologists Erika Eidson (TE-051236), Cindy Dunn (TE-29658A-0), and Doug Allen (TE-837448-4) and supervised surveyors Kimberly Davis, Ian Cain, and James Hickman conducted surveys for adult Quino on March 15, 22, and 29, and April 3 and 9, 2013. These surveys were conducted on a weekly basis under acceptable weather conditions as defined in the USFWS protocol (Table 1) (USFWS 2002a). Each survey involved slowly walking transects throughout all non-excluded portions of the survey area and stopping periodically to scan for butterfly activity. All host plants detected were recorded and mapped. All flowering plants that provide potential nectar sources for Quino were recorded. The surveys were conducted at an average rate of no more than 9 acres per hour. The surveyor stopped periodically to scan adjacent areas for moving butterflies. The 2013 focused survey report is provided as Attachment F.

3.3 Dry Season Fairy Shrimp Sampling

On June 11, 2013, ICF vernal pool biologist Doug Allen conducted the field portion of the dry-season protocol in accordance with the Guidelines (USFWS 1996). Mr. Allen collected 10 soil samples when the road ponding feature (road rut) was dry. A hand trowel was used to collect approximately one liter volume sample of soil from the top 1-3 centimeters of sediment within the road rut. Whenever possible, soil samples were collected in chunks and the trowel was used to pry up intact chunks of sediment. The soil was not loosened by raking or shoveling or any other method that could damage fairy shrimp cysts.

The ten soil samples were labeled, stored, and analyzed individually. Each label included information necessary to identify the specific sample location within the road rut. The stored samples were kept out of direct sunlight in order to avoid excessive heating.

Soil samples were processed by Dale Ritenour (TE-58888A-0) in accordance with the Guidelines (USFWS 1996). The ten soil samples were measured into individual plastic containers. These samples were hydrated in tap water then washed through a set of sieves. Material passing through a Number 45 (0.0139") USA Standard Testing Sieve, A.S.T.M.E.-11 specification and caught on a Number 70 (0.0083") Sieve was rinsed into a container with approximately 100 milliliters of a saturated brine solution to float organic material, including fairy shrimp cysts. The material floating on the brine was decanted onto a paper filter on a wire strainer, and water was removed through the filter paper by gravity into a collection basin. The material left on the paper was examined under a Cambridge Instruments Stereo Zoom 5 Microscope.

Due to discrepancies in interpretations of Mr. Ritenour's permit authorizations, ICF contracted USFWS-approved listed branchiopod cyst identifier, Dr. Chuck Black of Ecological Restoration Service (TE-835549-8), to process additional soil samples from the basin for presence or absence of fairy shrimp cysts. On August 5, 2013, Mr. Ritenour recollected one liter of soil from the basin, following methods above, for processing by Dr. Black.

No distinctive *Branchinecta* cysts, no *Streptocephalus* cysts, and no cladoceran ephippia were found in any of the samples processed and analyzed by Mr. Ritenour or Dr. Black. The 2013 focused survey report is provided as Attachment J.

4.0 Results

4.1 Habitat and Vegetation Communities

A total of seven vegetation communities were mapped within the survey area, including Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, non-native grassland, disturbed southern willow scrub, disturbed mule fat scrub, disturbed habitat, and developed areas (Table 2, Attachment G).

Table 2: Habitat types within the 870-1 Reservoir Road Survey Area

Habitat Type	Area (Acres)
Diegan Coastal Sage Scrub	12.27
Disturbed Diegan Coastal Sage Scrub	1.96
Non-native Grassland	1.57
Disturbed Southern Willow Scrub	0.14
Disturbed Mule Fat Scrub	0.33
Disturbed Habitat	6.23
Developed	5.69
Total	**28.18**

4.1.1 Diegan Coastal Sage Scrub

Two forms of coastal sage scrub were mapped in the survey area; Diegan coastal sage scrub and disturbed Diegan coastal sage scrub. All forms of coastal sage scrub are considered sensitive by local, state, and federal agencies and these habitats are known to support the federally-listed coastal California gnatcatcher.

Diegan coastal sage scrub is a vegetation community typically characterized by low, woody subshrubs that grow up to 3 ft in height (Oberbauer et al. 2008). Dominant species within the survey area included California buckwheat (*Eriogonum fasciculatum*), laurel sumac (*Malosma laurina*), California sagebrush (*Artemisia californica*), and San Diego County viguiera (*Bahiopsis laciniata*). This type of habitat can be found on the slopes surrounding the reservoir, as well as less disturbed

areas to the north and east. The Diegan coastal sage scrub in the survey area is predominated by native species and provides suitable habitat for several wildlife species, including coastal California gnatcatcher. Furthermore, habitat present in the survey area is contiguous with a larger area of Diegan coastal sage scrub.

Disturbed Diegan coastal sage scrub is distinguished from undisturbed Diegan coastal sage scrub by the abundance of non-native species and the sparse distribution of typically dominant shrub species (Oberbauer et al. 2008). Patches of disturbed Diegan coastal sage scrub can be found to the south and west of the reservoir. Native plant species detected include California buckwheat, California sagebrush, and laurel sumac. Non-native species detected included black mustard (*Brassica nigra*), shortpod mustard (*Hirschfeldia incana*), fennel (*Foeniculum vulgare*), and non-native grasses (*Bromus* and *Avena* spp.). Disturbed Diegan coastal sage scrub in the survey area supports an abundance of non-native plant species but is contiguous to the more expansive areas of undisturbed Diegan coastal sage scrub.

4.1.2 Non-native Grassland

Non-native grassland is a dense to sparse cover of grasses with flowering culms 6" to 18" high; often associated with numerous species of showy-flowered, native annual forbs ("wildflowers") (Oberbauer et al. 2008). In some areas, depending on past disturbance and annual rainfall, annual forbs may be the dominant species; however, it is presumed that grasses will soon dominate. Germination occurs within the onset of the late fall rains; growth, flowering, and seed-set occur from winter through spring. With few exceptions, the plants are dead through the summer-fall dry season, persisting as seeds. Remnant native species are variable. Areas of non-native grassland can be found to the east of the reservoir and adjacent to the access road close to the fence line. Native species detected include coastal goldenbush (*Isocoma menziesii*) and San Diego popcornflower (*Plagiobothrys collinus* var. *gracilis*). Non-native species detected include wild oat (*Avena fatua*), compact brome (*Bromus madritensis*), and redstem filaree (*Erodium cicutarium*). Non-native grassland in the survey area provides habitat for small mammals and foraging habitat for raptor species.

4.1.3 Disturbed Southern Willow Scrub

Disturbed southern willow scrub is a dense, broadleaved, winter-deciduous riparian thicket dominated by *Salix* species (Oberbauer et al. 2008). This is distinguished from undisturbed southern willow scrub by the abundance of non-native species. This habitat type consists of a small patch of habitat occurring in the northwest portion of the survey area. Native plant species detected include red willow (*Salix laevigata*) and mule fat (*Baccharis salicifolia*). Non-native species include salt cedar (*Tamarix ramosissima*) and fennel. This habitat type is supported by water that is released from an outlet northwest of the water tank.

4.1.4 Disturbed Mule Fat Scrub

Disturbed mule fat scrub is a depauperate, tall, herbaceous riparian scrub strongly dominated by mule fat and is maintained by frequent flooding (Oberbauer et al. 2008). This is distinguished from

undisturbed mule fat scrub by the abundance of non-native species. This habitat can be found in the northwest portion of the survey area near the disturbed southern willow scrub. The primary native plant species detected was mule fat. Non-native species include fennel and salt cedar. This habitat type is supported by water that is released from an outlet northwest of the water tank.

4.1.5 Disturbed Habitat

Disturbed habitat refers to areas that are subject to high levels of physical disturbance and are no longer recognized as a native or naturalized vegetation association (Oberbauer et al. 2008). Within the survey area, disturbed habitat is dominated by areas that appear to receive periodic mowing and have a groundcover dominated by short non-native and native annual herbs (*Erodium cicutarium*, *Urtica urens*, *Crassula connata, Centaurea melitensis*), and these areas appear to be mowed and maintained regularly. This type of habitat is the primary habitat within the fence line of the reservoir and alongside the road. Vegetation is kept low through regular maintenance. Disturbed habitat also describes areas of bare ground including unvegetated areas that are not developed, but appear to have been cleared for restoration or landscaping because of its proximity to other vegetated areas and lack of other evidence of further development. A strip of this type of habitat can be found along the paved section of Alta Road, northeast of the East Mesa Detention Facility. Disturbed habitat in the survey provides potential habitat for small mammals and foraging habitat for raptors.

4.1.6 Developed

Developed areas are areas that have been physically altered to an extent that native vegetation is not longer supported or areas with buildings or paved areas (Oberbauer et al. 2008). Developed land is characterized by permanent or semi-permanent structures, pavement, or hardscape, and landscaped areas that often require irrigation. Within the survey area, the road surrounding the reservoir is considered developed, along with the reservoir and accompanying infrastructure.

4.2 Special-Status Species

The following section discusses special-status species detected within the survey area. A special - status plant species is one that is listed by federal or state agencies as threatened, endangered, or rare, or is listed by CDFW on the California Rare Plant Ranking (CRPR) (1, 2, 3, and 4). A special-status wildlife species is one that is listed by federal or state agencies as threatened, endangered or species of special concern.

Special-status plant species detected within the 300-foot survey area include San Diego barrel cactus (*Ferocactus viridescens*), ashy spike-moss (*Selaginella cinerascens*), and San Diego County viguiera (*Bahiopsis laciniata*). Special-status wildlife species detected include western spadefoot (*Spea hammondii*), northern harrier (*Circus cyaneus*), and coastal California gnatcatcher (*Polioptila californica californica*). Locations of these species are presented on Attachment G. There were no sign of bats using any of the structures found on site.

4.2.1 Special-Status Plant Species

The CNDDB search, CNPS search, and field survey identified 30 sensitive plant species that have the potential to occur in the project vicinity (Attachments B and H). During the general biological survey, three special-status plant species were detected in the survey area: San Diego barrel cactus, ashy spike-moss, and San Diego County viguiera. Discussions of the plant species incorporate information from Reiser 1994 and CNPS 2013.

4.2.1.1 Special-Status Species Observed

San Diego Barrel Cactus (*Ferocactus viridescens*)

CRPR 2B.1

The optimal habitat for San Diego barrel cactus optimal is Diegan sage scrub hillsides; often at the crest of slopes and growing in cobbles. It is occasionally found on the periphery of vernal pools and mima mound topography at Otay Mesa, sometimes in considerable numbers (Reiser 1994). The blooming period for this species is from May through June. Three clusters of 3-6 individuals were mapped within 300-feet of the access road (Attachment G); none were found within the impact area.

Ashy Spike-Moss (*Selaginella cinerascens*)

CRPR 4.1

Ashy spike-moss is a spike-moss found in undisturbed chaparral and Diegan coastal sage scrub as a prostrate perennial groundcover (Reiser 1994). It is a good indicator of if a site is disturbed as it rarely inhabits disturbed soils. Because this species is a fern, it has no blooming period. This plant species could be found in areas of less disturbed Diegan coastal sage scrub to the east and north of the road within the 300-foot buffer survey area, usually under larger shrubs and near rock piles, and was too widespread in these areas to justify mapping. No individuals were found within the impact area.

San Diego County Viguiera (*Bahiopsis laciniata*)

CRPR 4.2

San Diego County viguiera is typically found in arid Diegan coastal sage scrub, and is often a co-dominant of the shrub community where it occurs (Reiser 1994). The blooming period for this species is from February to June. This species could be found primarily on the slopes surrounding the reservoir (Attachment G), with scattered individuals outside the fence line within the 300-foot survey area, and was generally too widespread to mapping. No individuals were found within the impact area.

4.2.2 Special-Status Wildlife Species

The CNDDB search and field survey identified 22 special-status wildlife species that have potential to occur in the survey area (Attachments B and I). Focused surveys were conducted for Quino checkerspot butterfly and dry season surveys were conducted to determine the presence or

absence of listed fairy shrimp. Western spadefoot (*Spea hammondii*), northern harrier (*Circus cyaneus*), and coastal California gnatcatcher (*Polioptila californica californica*) were detected on-site. Five additional special-status wildlife species have been determined to have a high potential to occur on site based on field observations and habitat requirements. These include: four reptiles: orangethroat whiptail (*Aspidoscelis hyperythra*), San Diego horned lizard (*Phrynosoma blainvillii*), coast patch-nosed snake (*Salvadora hexalepis virgultea*), and two-striped garter snake (*Thamnophis hammondii*); and one mammal: San Diego black-tailed jackrabbit (*Lepus californicus bennettii*).

4.2.2.1 Special-Status Species Observed

Western Spadefoot (*Spea hammondii*)

State Species of Special Concern

Western spadefoot is distinguished from other toads by their cat-like eyes (vertically elliptical pupils), the single black sharp-edged "spade" on each hind foot, teeth in their upper jaw, and rather smooth skin (Stebbins 2003). The eggs are found in irregular cylindrical clusters of 10 to 42 eggs attached to plant stems or other submerged objects in temporary pools (Stebbins 2003). Spadefoot larvae can reach 2.8 inches in length (Storer 1925) and their eyes are set close together and situated well inside the outline of the head when viewed from above, with the body broadest just behind the eyes (Storer 1925). Historically this species has ranged throughout the Central Valley, the Coast Ranges, and Coastal lowlands from San Francisco Bay to Mexico in California (Jennings and Hayes 1994). The species currently occurs mostly below 3,000 feet in elevation. The specific food habits of western spadefoot larvae are unknown; however, they have been reported to prey on fairy shrimp (e.g., *Branchinecta* spp.) . Adult spadefoots will forage on a variety of insects, worms, and other invertebrates . Western spadefoot breeds from January to May in temporary pools and drainages that form following winter or spring rains. Water temperatures in these pools must be between 48°F and 86°F for spadefoots to reproduce . Oviposition does not occur until water temperatures are at a minimum of 48°F (Jennings and Hayes 1994). Depending on temperature regime and annual rainfall, oviposition may occur between late February and late May (Storer 1925, Stebbins 2003). Eggs hatch in 1 to 6 days depending on temperature and larval development can be completed in 3 to 11 weeks depending on food sources and temperature, but must be completed before pools dry. Recently metamorphosed juveniles emerge from water and seek refuge in the immediate vicinity of natal ponds, and spend several hours to several days near these ponds before dispersing (Weintraub 1980).

A single western spadefoot tadpole was observed in a water-filled road rut located in the southeastern section of the access road (Attachments E and G). The feature was approximately 6 feet long by 2 feet wide and approximately 2 inches in depth. No other wildlife or native or non-native plant species were co-occurring in the road rut at the time of observation.

Northern Harrier (*Circus cyaneus*)

State Species of Special Concern

Northern harriers prefer open meadows, pastures, prairies, grasslands, and riparian woodlands and occurs year round within California. They forage in a variety of open habitats and nest on the

ground, mostly within patches of dense vegetation in undisturbed areas (MacWhirter and Bildstein 1996). The breeding season is from March through August (Loughman and McLandress 1994). One adult northern harrier was observed soaring over the Diegan coastal sage scrub habitat to the north of the survey area, outside the 300-foot buffer. The open, treeless landscape of surrounding the road is suitable foraging habitat for this species. No breeding habitat is present on site.

Coastal California Gnatcatcher (Polioptila californica californica)

Federally Threatened, State Species of Special Concern

Coastal California gnatcatcher is a small resident insectivorous bird species that is strongly associated with sage scrub habitats found throughout southern California into northern Baja California, Mexico. The USFWS listed this species as threatened in 1993. Although California gnatcatchers have a close association with sage scrub, this species has also been documented using open coastal sage-chaparral scrub, chamise chaparral, and other habitat types (Campbell et al. 1998, Bontrager 1991). The breeding season extends from mid-February through mid-August.

One coastal California gnatcatcher was detected aurally during the March 5, 2013 general survey in Diegan coastal sage scrub approximately 100 feet north of the survey area. Diegan coastal sage scrub in the survey area contains scattered California sagebrush, which is the primary shrub selected by this species for nest building. The Diegan coastal sage scrub is contiguous to large areas of open space. The survey area provides suitable nesting habitat for this species.

4.2.2.2 Special-Status Wildlife Species with High Potential to Occur

San Diego Fairy Shrimp (*Branchinecta sandiegoensis*)

Federally Endangered

San Diego fairy shrimp are small freshwater crustaceans that are found in shallow vernal pools and other ephemeral basins (USFWS 2002b). San Diego fairy shrimp is found in southwestern coastal California and extreme northwestern Baja California, Mexico, with all known localities below 700 m (2,300 ft) and within 65 kilometers (km) (40 miles [mi]) of the Pacific Ocean, from Santa Barbara County south to northwestern Baja California (USFWS 1997, 2002b). These species can also occur in road ruts and ditches that provide suitable conditions for the species. Water temperature is an important factor for this fairy shrimp. The water must not get too hot (above 86°F [30°C]) or too cold (below 41°F [4°C]) for this species to occur (USFWS 2002b). One water-filled road rut was observed in the southeastern section of the access road (Attachments E and G). San Diego fairy shrimp were historically prevalent in vernal pool complexes across Otay Mesa (USFWS 2008). A CNDDB search for this species documented occurrence of this species within one mile of the project site. The presence of potentially suitable habitat, along with a co-occurring species (Western spadefoot toad), and the close proximity of a historical location of this species indicate that this species had high potential to occur within the impact area. Therefore, ICF conducted dry season surveys in accordance with USFWS survey guidelines (USFWS 1996) as described previously. No fairy shrimp cysts were found in the two sets of soil samples collected from the road rut in 2013.

After analysis of the soil samples, ICF had several discussions with USFWS regarding the results of the dry season survey, the site conditions, and geographic isolation of the rut. In summary, while the road rut occurs on a soil series (Hueroheuro) that is known to support vernal pools (Bauder 1996), the topography is gently to greatly sloping (2 to 9, to 9 to 30 percent), which would preclude the occurrence of pool complexes. The site is entirely fenced and gated, reducing the vehicular access to the site and the resultant chance of vectoring of shrimp cysts in mud on truck tires into the road rut onsite. While the site is approximately 0.8 mile from an extant, occupied vernal pool complex, the site is isolated by development (East Mesa Detention Center) and is not on a landform position suitable for the formation of vernal pools. ICF is confident the feature was adequately sampled during dry-season surveys and the resulting soil analysis was accurate, rendered no fairy shrimp cysts. Without cysts, it is highly unlikely the feature supports fairy shrimp let alone a viable population. ICF received confirmation that it was acceptable for ICF vernal pool biologists to forego wet-season surveys during the winter of 2013 due to the lack of vernal pool habitat on-site and adjacent to the site and two negative dry samples (Susan Wynn, email communication September 19, 2013).

Quino Checkerspot Butterfly (*Euphydrayas editha quino)*

Federally Endangered

Quino checkerspot butterfly (Quino) is a subspecies of Edith's checkerspot (*E. editha*) and is a member of the *Nymphalidae* family, and the Melitaeinae subfamily, checkerspots and fritillaries. Primary host plants for the Quino are dot-seed plantain (*Plantago erecta*), thred-leaved bird's beak (*Cordylanthus rigidus*), and white snapdragon (*Antirrhinum coulterianum*). Larval Quino may also use other species of plantain (*Plantago* spp.) and annuals owl's clover (*Castilleja exerta*) as primary or secondary host plants and will diapauses in or near the base of native shrubs, such as California buckwheat (*E. fasiculatum*). Quino are generally found in open areas and ecotone situations which may occur in a number of plant communities, and optimal habitat appears to contain little or no invasive exotic vegetation, and densely vegetated areas are not known to support Quino (Mattoni et al. 1997). Habitat patch suitability is determined primarily by larval host plant density, topographic diversity, nectar resource availability, and climatic conditions (Service 2003).

The life cycle of Quino begins with adult quino during flight season between late February and May, when adult butterflies move about to search for nectar sources and mates. Eggs hatch in about 10 days and larvae begin to feed immediately and migrate in search of additional plants to consume (USFWS 2003). When plants dry out, and the larvae are in their third or fourth instar of development, they enter an obligatory diapause. Diapause is a low-metabolic resting state that may last a year or more depending on conditions, and enables larvae to survive seasonal climatic extremes and times of extended adverse conditions, such as drought. The time between diapause termination and pupation can range from two weeks to three months. Sufficient rainfall is required to break diapause, which normally occurs during November or December. After diapause, larvae become active and feed until they enter their pupae stage. Within two to six weeks they transform into adults and emerge as butterflies. Adults live for approximately 10 to 14 days.

No Quino were observed at the time of the general biological survey; however, its preferred host plant, dot-seed plantain, was observed in the survey area (Attachment G), and Quino was sighted

during the 2013 flight season less than one mile west of the survey area (Lisa Coburn-Boyd, pers. comm.). Focused surveys were conducted in March 2013 to determine presence/absence of this species in the habitat surrounding the road. The results of the 2013 focused surveys were negative for Quino. The impact area does not support the primary constituent elements of Quino habitat and provides limited to no existing potential to support this species (i.e., it lacks larval host plants and nectar sources and consists of an unvegetated compacted soil and gravel road that is well-maintained and frequently used).

Orangethroat Whiptail (*Aspidoscelis hyperthrya*)

State Species of Special Concern

The orangethroat whiptail is an uncommon to fairly common species in Orange, Riverside, and San Diego counties (Bostic 1965), occurring at elevations ranging from sea level to 3,310 ft (1040 m) (Jennings and Hayes 1994). It inhabits coastal scrub, chamise chaparral, and mixed chaparral habitats. They forage actively for a variety of small arthropods (Stebbins 2003), and are active from early spring to late-summer, with breeding activities beginning in April and egg laying until mid-July. Hatchlings emerge August-September from clutches of 2-3 eggs. Orangethroat whiptail has high potential to occur within the impact area due to the close proximity of suitable habitat, primarily the rocky Diegan coastal sage scrub found to the east and north of the survey area.

San Diego Horned Lizard (*Phrynosoma blainvillii*)

State Species of Special Concern

The San Diego horned lizard is endemic to southern California and northern Baja California, Mexico, distributed predominately throughout the Peninsular Ranges in San Diego County (Reeve 1952). They are a usually solitary animal, relying on camouflage in open areas and is known to bury itself in fine, loose soil (Stebbins 2003). They are found in a variety of habitats including coastal sage scrub, chaparral, grassland, conifer forest, oak woodlands, riparian habitats, and the margins of deserts (Jennings and Hayes 1994). They are insectivorous, primarily feeding on native harvester ants (*Pogonmyrmex* sp.), but will also feed on other insects including termites, beetles, flies, wasps, and grasshoppers (Reeve 1952; Stebbins 2003; Jennings and Hayes 1994). Clutches of 6-17 eggs are laid between May and early July (Stebbins 1985; Jennings and Hayes 1994), and hatch after approximately two months, with young appearing in July to early August (Jennings and Hayes 1994). San Diego horned lizard has high potential to occur within the impact area due to the close proximity of suitable habitat, primarily the Diegan coastal sage scrub found to the east and north of the survey area.

Coast Patch-nosed Snake (Salvadora hexalepis virgultea)

State Species of Special Concern

Coast patch-nosed snake occurs in California from the northern Carrizo Plains in San Luis Obispo County, south through the coastal zones of central and southern California, west of the deserts, and into coastal northern Baja California, Mexico (Stebbins 2003). They can be found in semi-arid chaparral in canyons, rocky hillsides, and plains. This species is active in the daytime and can

burrow in loose soil. They eat lizards, small mammals, and possibly other small snakes, nestling birds, and amphibians (Stebbins 2003). Mating takes place from April through June and eggs are laid from May to August in clutches of 5-6 eggs (Fitch 1970). Coast patch-nosed snake has high potential to occur within the impact area due to the close proximity of suitable habitat, primarily the Diegan coastal sage scrub found to the east and north of the survey area.

Two-striped Garter Snake (*Thamnophis hammondii*)

State Species of Special Concern

Two-striped garter snake can be found Monterey County to southern California where it ranges east through the Transverse and Peninsular Ranges into northern Baja California, Mexico (Jennings and Hayes 1994). It is associated with densely vegetated riparian pools and creeks with permanent to semi-permanent waters, often in rocky areas, and associated with oak woodlands, chaparral, and coniferous forests (Rathburn et al. 1993). They feed on fishes and their eggs, amphibians and their larvae, and other invertebrates and small mammals (Rathburn et al. 1993). Mating occurs in the spring, with young born alive in late summer (Rossman et al. 1996). Two-striped garter snake has a high probability of occurring in the vicinity of the disturbed southern willow scrub and disturbed mule fat scrub in the northwestern portion of the survey area, as there was flowing water from a culvert that empties on the northwestern side of the road within suitable vegetation.

San Diego Black-tailed Jackrabbit (*Lepus californicus intermedia*)

State Species of Special Concern

San Diego black-tailed jackrabbit is a subspecies of black-tailed jackrabbit that occurs only on the coastal side of the southern California mountains (Stephenson and Calcarone 1999). It is a generalist species, occurring in open to semi-open habitat, typically grasslands, agricultural fields, or sparse coastal scrub (Bond 1977). Breeding for this species can occur year round, with gestation lasting approximately 40 days (Best 1996). The number of young per litter varies from year to year depending on environmental conditions (Best 1996). It has been reported that a one-year-old female can produce 14 or more young per year (Ingles 1965). Potentially suitable habitat for San Diego black-tailed jackrabbit occurs in the open areas within the Diegan coastal sage scrub surrounding the road, but is not expected to occur within the disturbed habitat within the fence line.

4.3 Jurisdictional Wetlands and other Features

Sensitive wetland and potentially jurisdictional communities occurring within the vicinity of the road include disturbed southern willow scrub and disturbed mule fat scrub, which occur in the northwest portion of the road (Attachment G). Waters of the U.S., including wetlands, and waters of the State are regulated by the CDFW pursuant to Section 1600 of the California Fish and Game Code, by the USACE pursuant to Section 404 of the CWA, and by the RWQCB pursuant to Section 401 of the CWA and pursuant to the State Porter Cologne Act.

The water-filled road rut observed along the access road was approximately 6 feet long by 2 feet wide and approximately 2 inches in depth. The feature appears to have been formed by a combination of local micro-topography and compaction by vehicles when the soil surface in this

section of road was damp or saturated (Attachment E). A single spadefoot toad tadpole was observed in the ponded water. No other wildlife (ostracods, fairy shrimp, etc.) was observed and no plants (vernal pool, riparian, or upland) were associated with the feature. This man-made feature would not be regulated waters of the U.S. or state because it was constructed in the uplands and is isolated from any potentially jurisdictional features such as a stream or larger vernal pool complex.5.0 Project Impacts and Proposed Mitigation

Potential impacts to vegetation communities, special-status plants, special-status wildlife, and other sensitive resources are discussed in this section as well as an analysis of the significance of the impact, and anticipated mitigation requirements. The proposed project has been designed to minimize impacts to biological resources by placing the proposed road alignment along existing roads.

When evaluating potential impacts to biological resources related to road paving activities at this location, Appendix G the State CEQA Guidelines (CCR §§15000-15387) were used as a guide. According to these guidelines, a significant impact to biological resources would occur if the project would:

- Have a substantial adverse effect, either directly or indirectly through habitat modifications, or any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direction removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with local policies or ordinances protecting biological resources, such as tree preservation policies or ordinances.
- Conflict with the provision of an adopted Habitat Conservation Plan (HCP), Natural Communities Conservation Plan (NCCP), or other approved local, regional, or state HCP.

5.1 Impact Definitions

Biological resource impacts can be considered direct, indirect, or cumulative and either permanent or temporary in nature.

- Direct: Occur when biological resources are altered, disturbed, or destroyed during project implementation. Examples include clearing vegetation, encroaching into wetland buffers, diverting surface water flows, and the loss of individual species or their habitats.
- Indirect: Occur when project-related activities affect biological resources in a manner that is not direct. Examples include elevated noise and dust levels, increased human activity, decreased water quality, and the introduction of invasive wildlife (i.e., domestic cats and dogs) and plants.

- Cumulative: Occur when multiple direct and indirect impacts to a biological resource affect the resource additively over time. Individual direct and indirect impacts may not be individually significant, but the additive effect when viewed in connection with the impacts of past, present and future projects may cause the significant loss or degradation of a resource.
- Temporary: Temporary impacts can be direct or indirect and are considered reversible. Examples include the removal of vegetation from areas that will be revegetated, elevated noise levels, and increased levels of dust.
- Permanent: Permanent impacts can be direct or indirect and are not considered reversible. Examples include the removal of vegetation from areas that will have permanent structures or pavement placed on them or landscaping an area with non-native plant species.

5.2 Analysis of Project Effects

Direct and permanent impacts would result from the paving the proposed access road (Attachment G). The project would result in direct and permanent impacts to a total of 0.48 acre of developed areas. There will be no temporary impacts as all work will occur within the permanent impact area.

5.2.1 Sensitive Vegetation Communities

The proposed project has been designed such that paving and other construction activities will take place only along the existing dirt access road. As all project activities will take place within previously developed areas and will not directly or indirectly impact any sensitive vegetation communities.

5.2.2 Special-Status Plants

All project activities will take place within previously developed areas and no direct or indirect impacts to any special-status plant species will occur.

5.2.3 Special-Status Wildlife

The project will not result in direct impacts to any native vegetation habitat, and as such, no direct impacts to sensitive wildlife species occupying these habitats should occur.

The proposed impact area does not support the primary constituent elements of Quino habitat and provides limited to no existing potential to support this species (i.e., it lacks larval host plants and nectar sources and consists of an unvegetated compacted soil and gravel road that is well-maintained and regularly used). The focused surveys were negative and there will be no direct or indirect impacts from the project.

A single western spadefoot tadpole was observed in ponded water on the road. Spadefoot toads are opportunistic breeders that will lay their eggs in temporary rain pools that they encounter. Direct impacts to this species are not expected to occur as outside of the rainy season adult toads would move out of the impact footprint and within the rainy season, adults would need to find this basin and lay eggs again for the species to be present in following years. This road is already developed and is highly disturbed. In addition, this species is still fairly common in San Diego County and the

individual detected does not represent a regionally significant population. Impacts will be less than significant.

Coastal California gnatcatcher was detected in the Diegan coastal sage scrub habitat north of the project area within the 300-foot buffer. As no vegetation will be removed for this project, no direct impacts to this species are anticipated to occur. Indirect impacts from noise may occur during the breeding season (February 15-August 31) if a nest is located within 300 feet of the impact area and hourly noise levels meet or exceed the 60dBA hourly LEQ threshold.

San Diego fairy shrimp was determined to have a high-potential to occur within the road rut within the project footprint. A protocol dry-season survey was conducted and determined that the basin was not occupied by fairy shrimp. The USFWS concurred that one dry-season survey was sufficient to determine absence of fairy shrimp from this road rut. As the species is not present in the road rut, the project would not impact this species.

Other wildlife that were not observed, but have a high potential to occur in the vicinity of the project area due to the vicinity of suitable habitat including orangethroat whiptail, San Diego horned lizard, coast patch-nosed snake, two-striped garter snake, burrowing owl, and San Diego black-tailed jackrabbit. All of these species are motile and if present on the site, would avoid construction activities. As no vegetation will be removed for this project, no impacts to any of these species are anticipated. The proposed project is entirely within a barbed-wire topped, chain-link fence enclosure. As such, the presence of a paved road would not alter the permeability to wildlife of this site. The proposed road will support limited vehicular traffic and will not include structures or physical barriers that would impede or discourage wildlife movement across the road.

5.2.4 Jurisdictional Waters, Wetlands and Other Aquatic Features

As stated before, no streams or wetlands will be impacted by planned road paving activities. No permits will be required for this project provided that construction only takes place within the previously developed area of the existing access road. The road rut that is present within the impact area would not be jurisdictional.

5.2.5 Other Project Impacts

A portion of the road is also within the San Diego MSCP South County Segment preserve area (Attachment B). Approximately 500 square feet of the road in the preserve area would be impacted by paving activities. As the road will remain in a developed state and serve an identical function when paved, no preserve area within the MSCP will be impacted by construction activities. Impacts to MSCP preserve habitat are expected to be less-than-significant.

5.3 Mitigation Measures and Design Considerations

5.3.1 Sensitive Vegetation Communities

The proposed project has been designed such that paving and other construction activities will take place only along the existing dirt access road. No vegetation clearing is anticipated; therefore, no direct impacts to sensitive vegetation communities would .

5.3.2 Special-Status Plants

The proposed project would not result in impacts to regionally significant populations of San Diego barrel cactus, ashy spike-moss, or San Diego County viguiera, and no sensitive plants were determined to have a high-potential to occur within the project area; therefore, no mitigation measures are required.

5.3.3 Special-Status Wildlife

The proposed project would not result in direct or indirect impacts to San Diego fairy shrimp, Quino Checkerspot butterfly, northern harrier, orangethroat whiptail, San Diego horned lizard, coast patch-nosed snake, two-striped garter snake, or San Diego black-tailed jackrabbit; therefore, no mitigation measures are required.

Western Spadefoot

One western spadefoot tadpole was found occupying a ponded road-rut, direct impacts to this species are not anticipated to occur from project implementation. Scheduling construction activities while the ponded area is dry would eliminate the potential for direct impacts to western spadefoot. However, if construction takes place during the breeding season (January-May) and ponded water exists within the impact area, a qualified biologist should conduct a pre-construction survey to check the impact area, including suitable ponded road-ruts for this species. If any tadpoles, or other sensitive amphibians are found, the biologist could then move them to other suitable habitat, reducing their direct impact to less-than-significant. Other direct impacts to western spadefoot or other amphibians occurring on the road could be reduced by controlling vehicle speed and conducting environmental training for any workers at the site to increase awareness and avoidance of this and other sensitive species that may be present. These species are mobile and would normally move away from the road when disturbed; however, they may not always move aside and they may need to be removed from the impact area. A qualified biologist should conduct the training and be available if the need arises to remove this or other species from the impact area. No impacts to western spadefoot are anticipated, thus, no mitigation is required for this species.

Coastal California Gnatcatcher

No impacts to vegetation suitable for coastal California gnatcatcher are anticipated, and as such, no direct impacts to this species are expected. Indirect impacts to coastal California gnatcatcher could result from increased noise levels from construction during the breeding season for this species (February 15-August 31). Indirect impacts to this species shall be minimized by conducting all

construction activities outside the breeding season. If construction activities are proposed during the breeding season for the gnatcatcher, measures to minimize indirect noise impacts would be required and could include temporary noise walls/berms. Noise levels from construction activities during the breeding season should not exceed 60dBA hourly LEQ at the edge of the occupied habitat, or ambient noise level if noise levels already exceed 60dBA LEQ.

5.3.4 Nesting Birds

Impacts to nesting birds protected by the MBTA and similar provisions of the FGC can occur if work is conducted during the breeding season (February 15 – August 31). There is potential for raptors and other early nesting species such as hummingbirds to initiate nests as early as January. However, in general, the peak nesting season is February through August. All vegetation, native or non-native, provides habitat that may be used for nesting.

No direct impacts to nesting birds from vegetation removal are anticipated as no vegetation removal activities are planned for this project. However, due to the close proximity of suitable habitat to the access road and the presence of coastal California gnatcatcher, a pre-construction nesting bird survey shall be conducted if construction activities are planned during the combined breeding season for birds (February 15-August 31) to determine if nesting birds occur in the vicinity of the impact area.

The pre-construction nesting bird survey would be conducted by a qualified biologist no more than 5 days prior to commencing project activities. If a nest is found, a qualified biologist would identify and flag an appropriate buffer around the nest, and no construction activities would occur within the buffer until the young have fledged or the nest is no longer active. The specific buffer width would be determined by a qualified biologist at the time of discovery and would vary according to the avian species, site conditions, and the type of work activities to be conducted.

5.3.5 Jurisdictional Waters, Wetlands and Other Aquatic Resources

No direct impacts to jurisdictional waters, including wetlands are anticipated, as all construction activities will take place on previously developed areas. Sensitive aquatic resource habitats occur adjacent to the road including disturbed southern willow scrub and disturbed mule fat scrub. Indirect impacts due to construction runoff will be contained through the use of standard best management practices (BMPs) which will reduce these impacts to less-than-significant.

5.4 Cumulative Impacts

A cumulative impact analysis is an assessment of how the proposed project, whose impact may not be individually significant, could contribute significantly to the total impacts to sensitive resources occurring in the project vicinity. The proposed project has been designed to minimize impacts to biological resources by placing the proposed road alignment entirely within existing unpaved roads. No native vegetation will be impacted as a result of this project. Therefore, the proposed access road would not contribute to any potentially significant cumulative impact to biological resources in the project vicinity.

6.0 Conclusions

The planned project will pave 0.48 acre of unpaved, unvegetated access road. No impacts to native vegetation habitats are anticipated by this project, as all planned impacts will take place in previously developed areas currently devoid of habitat. The project will not result in impacts to any regionally significant populations of special-status plants. No direct impacts to Quino checkerspot butterfly are anticipated due to the negative survey results for the 2013 flight season. No direct impacts to San Diego fairy shrimp are anticipated due to the negative survey results for the dry season sampling. No direct or indirect impacts to orangethroat whiptail, San Diego horned lizard, coast patch-nosed snake, two-striped garter snake, burrowing owl, and San Diego black-tailed jackrabbit are anticipated as no suitable habitat will be impacted by construction activities.

Direct impacts to western spadefoot would result from vehicle traffic on the road when ponded water with western spadefoot tadpoles is present. To avoid direct impacts, a pre-construction survey by a qualified biologist when suitable conditions are present will determine if this species is present, and will remove this species from the impact area.

No direct impacts to coastal California gnatcatcher are anticipated to occur as no vegetation will be removed. Indirect impacts to coastal California gnatcatcher could result from increased noise levels during construction. Indirect impacts to this species shall be minimized by conducting all project related activities outside of the breeding season (February 15 – August 31). If construction activities are proposed during the breeding season for the gnatcatcher, measures to minimize noise impacts would be required and could include temporary noise walls/berms. Noise levels from construction activities during the breeding season should not exceed 50dBA hourly LEQ at the edge of the occupied habitat, or the ambient noise level if noise levels already exceed 60dBA hourly LEQ.

In order to avoid impacts to other nesting birds, a pre-construction nesting bird survey shall be conducted to locate any nests in the vicinity of the project if construction takes place during nesting season (February 15-August 31). If a nest is found, methods need to be implemented to avoid impacts. This would consist of a no-work buffer zone placed around the nest until the adults are no longer using it or the young have fledged. The specific buffer width would be determined by a qualified biologist at the time of discovery. These would vary based on site conditions and type of work to be conducted.

No direct impacts to sensitive riparian habitats are planned for this project and no permits will be required. However, due to the location of potentially sensitive riparian habitats adjacent to the access road, containment of construction runoff using standard BMPs would reduce these impacts to less-than-significant.

If you have any questions regarding the contents of this letter report, please contact me at (858) 444-3958.

Sincerely,

Senior Biologist

Attachments:

Attachment A – Regional Location Map

Attachment B – Site Map with CNDDB Species

Attachment C – Plant Species Detected Table

Attachment D – Wildlife Species Detected Table

Attachment E – Photos of OWD 870-1 Reservoir Project

Attachment F – Quino Checkerspot Focused Survey Report

Attachment G – Vegetation Map

Attachment H – Sensitive Plant Potential to Occur Table

Attachment I – Sensitive Wildlife Potential to Occur Table

Attachment J - Focused Dry Season Fairy Shrimp Report

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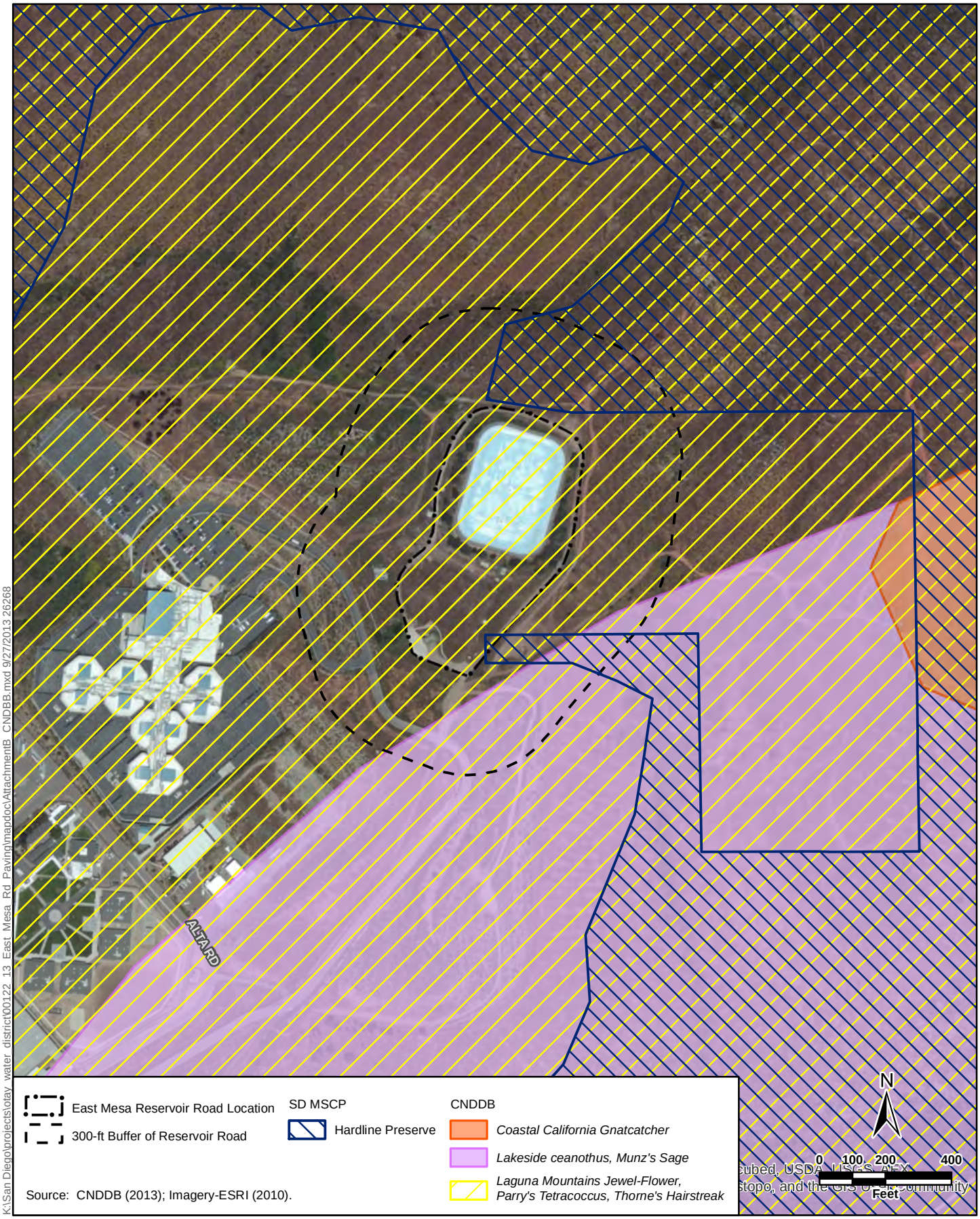
Attachment A
Regional Location
OWD 870-1 Reservoir Paving Project



Attachment B
MSCP Preserve and CNDDB Results
OWD 870-1 Reservoir Paving Project

Attachment C. Plant Species Detected Table

Scientific Name	Common Name	Special Status
LYCOPHYTES		
Selaginellaceae - Spike-moss family		
Selaginella cinerascens	Ashy spike-moss	CRPR 4.1
EUDICOTS		
Anacardiaceae - Sumac Or Cashew family		
Malosma laurina	Laurel sumac	
Rhus integrifolia	Lemonade berry	
* *Schinus molle*	Pepper tree	
Apiaceae - Carrot family		
* *Foeniculum vulgare*	Fennel	
Sanicula arguta	Sharptooth blacksnakeroot	
Asteraceae - Sunflower family		
Artemisia californica	California sagebrush	
Baccharis pilularis	Coyote brush	
Baccharis salicifolia ssp. salicifolia	Mule fat	
Baccharis sarothroides	Broom baccharis	
Bahiopsis laciniata	San Diego County viguiera	CRPR 4.2
* *Centaurea melitensis*	Tocalote	
Corethrogyne filaginifolia	Common sand aster	
* *Glebionis coronaria*	Garland or crown daisy	
Gutierrezia sarothrae	Matchweed	
* *Helminthotheca echioides*	Bristly ox-tongue	
Heterotheca grandiflora	Telegraph weed	
Isocoma menziesii	Coastal goldenbush	
Lasthenia gracilis	Common goldfields	
* *Pseudognaphalium luteoalbum*	Jersey cudweed	
* *Silybum marianum*	Blessed milkthistle	
Boraginaceae - Borage family		
Pectocarya linearis ssp. ferocula	Narrow-toothed pectocarya	
Plagiobothrys collinus var. gracilis	San Diego popcornflower	
Brassicaceae - Mustard family		
* *Brassica nigra*	Black mustard	
Brassica sp.	Mustard	
* *Hirschfeldia incana*	Shortpod mustard	
Lepidium nitidum	Shining pepperweed	
Cactaceae - Cactus family		

Scientific Name	Common Name	Special Status
Ferocactus viridescens	San Diego barrel cactus	CRPR 2.1
Opuntia oricola	Chaparral prickly-pear	
Chenopodiaceae - Goosefoot family		
* *Atriplex semibaccata*	Australian saltbush	
Convolvulaceae - Morning-glory family		
Calystegia macrostegia	Island false bindweed	
Crassulaceae - Stonecrop family		
Crassula connata	Pygmy-weed	
Cucurbitaceae - Gourd family		
Marah macrocarpa	Chilicothe	
Euphorbiaceae - Spurge family		
* *Ricinus communis*	Castorbean	
Fabaceae - Legume family		
Acmispon glaber	Deerweed, California broom	
* *Melilotus officinalis*	Yellow sweetclover	
Geraniaceae - Geranium family		
* *Erodium cicutarium*	Redstem filaree	
Lamiaceae - Mint family		
* *Marrubium vulgare*	Horehound	
Salvia apiana	White sage	
Malvaceae - Mallow family		
Malacothamnus fasciculatus var. fasciculatus	Chaparral mallow	
Sidalcea malviflora	Checkerbloom, checkermallow	
Myrsinaceae - Myrsine family		
* *Anagallis arvensis*	Scarlet pimpernel	
Nyctaginaceae - Four O'clock family		
Mirabilis laevis	Desert wishbone-bush	
Onagraceae - Evening Primrose family		
Epilobium canum ssp. canum	Hummingbird trumpet	
Plantaginaceae - Plantain family		
Plantago erecta	Dotseed plantain	
Polygonaceae - Buckwheat family		
Eriogonum fasciculatum var. fasciculatum	Coastal California buckwheat	
Primulaceae - Primrose family		
Dodecatheon sp.	Shooting star	
Rhamnaceae - Buckthorn family		
Rhamnus crocea	Spiny redberry	
Rubiaceae - Madder family		
Galium aparine	Goose grass	

Scientific Name	Common Name	Special Status
Salicaceae - Willow family		
Salix laevigata	Red willow	
Solanaceae - Nightshade family		
Solanum douglasii	Greenspot nightshade	
Tamaricaceae - Tamarisk family		
* *Tamarix ramosissima*	Saltcedar	
Urticaceae - Nettle family		
* *Urtica urens*	Dwarf nettle	
Violaceae - Violet family		
Viola pedunculata	Johnny-jump-up	
MONOCOTS		
Agavaceae - Century Plant family		
Chlorogalum parviflorum	Smallflower soap plant	
Poaceae - Grass family		
* *Avena fatua*	Wild oat	
* *Bromus madritensis*	Compact brome	
Bromus sp.	Brome	
* *Cortaderia selloana*	Pampas grass	
* *Lamarckia aurea*	Goldentop grass	
* *Schismus barbatus*	Common mediterranean grass	
Themidaceae - Brodiaea family		
Dichelostemma capitatum	Blue dicks	

Legend

*= Non-native or invasive species

Special Status:

CRPR – California Rare Plant Rank
1A. Presumed extinct in California
1B. Rare or Endangered in California and elsewhere
2. Rare or Endangered in California, more common elsewhere
3. Plants for which we need more information - Review list
4. Plants of limited distribution - Watch list

Threat Ranks
.1 - Seriously endangered in California
.2 – Fairly endangered in California

Attachment D. Wildlife Species Detected Table

Scientific Name	Common Name	Special Status
INVERTEBRATES		
Moths, Skippers and Butterflies		
Pontia protodice	Checkered White	
**Pieris rapae*	Cabbage White	
Anthocharis sara	Pacific Orangetip	
Callophrys affinis	Western Green Hairstreak	
Brephidium exile	Western Pygmy-Blue	
Glaucopsyche lygdamus	Silvery Blue	
Apodemia virgulti	Behr's Metalmark	
Speyeria callippe	Callippe Fritillary	
Chlosyne gabbii	Gabb's Checkerspot	
Vanessa cardui	Painted Lady	
Vanessa annabella	West Coast Lady	
Coenonympha tullia	Common Ringlet	
Erynnis funeralis	Funereal Duskywing	
VERTEBRATES		
Amphibians		
Spea hammondii	Western Spadefoot	CSC
Birds		
Circus cyaneus	Northern Harrier	CSC
Buteo jamaicensis	Red-tailed Hawk	
Charadrius vociferus	Killdeer	
**Columba livia*	Rock Pigeon	
Zenaida macroura	Mourning Dove	
Geococcyx californianus	Greater Roadrunner	
Calypte anna	Anna's Hummingbird	
Tyrannus vociferans	Cassin's Kingbird	
Corvus corax	Common Raven	
Psaltriparus minimus	Bushtit	
Salpinctes obsoletus	Rock Wren	
Polioptila californica californica	Coastal California Gnatcatcher	FT, CSC
Mimus polyglottos	Northern Mockingbird	
Dendroica coronata	Yellow-rumped Warbler	

Scientific Name	Common Name	Special Status
Melozone crissalis	California Towhee	
Zonotrichia leucophrys	White-crowned Sparrow	
Sturnella neglecta	Western Meadowlark	
Carpodacus mexicanus	House Finch	
Carduelis psaltria	Lesser Goldfinch	
Mammals		
Sylvilagus audubonii	Desert Cottontail	
Spermophilus beecheyi	California Ground Squirrel	

Legend

*= Non-native or invasive species

Special Status:

Federal:
FE = Endangered
FT = Threatened

State:
SE = Endangered
ST =Threatened
CSC = California Species of Special Concern

Attachment E

OWD 870-1 Reservoir Project Photos taken March 2013

Photo 1: view of typical disturbed habitat within the vicinity of the reservoir road. Note most this area is mowed. Photo facing north.	Photo 2: view of the south access entrance to the reservoir road with a typical concrete vault structure in the ground. Photo facing south.
Photo 3: view of slope around the reservoir vegetated with Diegan coastal sage scrub species. Photo facing northeast.	Photo 4: view of non-native grassland habitat outside the fence on the east side. Photo facing north.
Photo 5: view of a cluster of San Diego barrel cactus in Diegan coastal sage scrub habitat to the north of the reservoir road. Photo facing south.	Photo 6: view of water filled road rut found along east side of reservoir road. Photo facing north.

Attachment E

Photo 7: close up view of western spadefoot toad tadpole found in water filled road rut. Photo facing northeast.	Photo 8: view of ground squirrel burrows near the south entrance of the reservoir. Photo facing south.
Photo 9: view of drainage rip-rap and disturbed southern willow scrub habitat on the other side of the fence in the northwestern portion of the reservoir road. Photo facing northwest.	Photo 10: view of disturbed southern willow scrub found on the outside of the fence line in the northwestern portion of the road. Photo facing east.
Photo 11: view of disturbed mule fat scrub found on the outside of the fence line in the northwestern portion of the road. Photo facing northeast.	Photo 12: view of Diegan coastal sage scrub habitat vegetated slopes outside the fence line in the southern portion of the reservoir road. Photo facing west.

Attachment F: Quino Checkerspot Butterfly Focused Survey Report

Results of Quino Checkerspot Butterfly Surveys for the East Mesa Reservoir Road Paving Project, San Diego County, California

Prepared for:

Otay Water District
2554 Sweetwater Springs Blvd.
Spring Valley, California 91978-2096

Prepared by:

ICF International
9775 Businesspark Avenue
San Diego, CA 92131
Contact: Cindy Dunn
(858) 578-8964

May 2013

ICF International. 2013. Results of Quino Checkerspot Butterfly Surveys for the East Mesa Reservoir Road Paving Project. May. (ICF 00122.13.) San Diego, CA. Prepared for Otay Water District, San Diego, California.

Contents

		Page
	Summary	**S-1**
Chapter 1	**Introduction**	**1-1**
	Physical Characteristics	1-1
Chapter 2	**Methods**	**2-1**
Chapter 3	**Results**	**3-1**
Chapter 4	**Certification**	**4-1**
Chapter 5	**References**	**5-1**
Attachment 1	**Field Notes**	

Tables and Figures

Table		On Page
1	Survey Conditions	2-2
2	Butterfly Observed Within the Survey Area	3-1

Figure		Follows Page
1	Regional Vicinity	1-1
2	Project Location	1-1
3	Quino Checkerspot Butterfly Survey Area	1-1

Summary

ICF International (ICF) was retained by the Otay Water District (OWD) to conduct protocol surveys for the Quino checkerspot butterfly (*Euphydryas editha quino*; Quino) for the East Mesa Reservoir Road Paving Project (project). The project site is located in the unincorporated community of Otay, in San Diego County, California (Figure 1). The OWD East Mesa Reservoir is located at the northern terminus of Alta Road, northeast of the East Mesa Detention Facility. A dirt and gravel service road encircles the reservoir within a chain-link fence that encompasses the East Mesa Reservoir facility. OWD plans to pave this road to facilitate and improve access around the reservoir (Figure 2).

The project footprint comprises the approximately 815-foot long service road occurring within the fenced facility. The project footprint consists of developed areas mostly containing an unpaved road. The survey area includes the project footprint and a 150-foot buffer around the unpaved road (Figure 3). Areas of Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, disturbed southern willow scrub, disturbed mule-fat scrub, non-native grassland, disturbed habitat, bare ground, and developed areas occur within 150 feet of the project footprint.

A total of five weekly surveys were conducted between March 15 and April 9, 2013. Surveys for adult Quino were conducted by ICF biologists C. Dunn (TE-29658A-0), E. Eidson (TE-051236-1), and D. Allen (TE-837448-4). All surveys were conducted according to the U.S. Fish and Wildlife Service (USFWS) Year 2002 Protocol (USFWS 2002).

Suitable Quino nectaring and larval habitat was present within the survey area. Several patches of dot-seed plantain (*Plantago erecta*), a Quino primary host plant, were detected in the eastern and northeastern portion of the survey area. Nectar sources were most abundant outside of the fenced area in the eastern and northern portions of the survey area. Overall the survey area provides habitat ranging from low to high suitability for Quino. The highest suitability occurred in the northeastern corner of the survey area, outside of the project footprint, with suitability increasing as distance from the project footprint increased.

Quino were not observed during the 2013 protocol surveys for this project. Based on the conditions on the project site, the information provided for the reference populations, and ICF's findings at the site northwest of the East Mesa Detention Facility, the 2013 surveys were timed correctly and Quino would have been detected during the focused surveys if it occurred in the survey area. These surveys were conducted according to the survey protocol by qualified, permitted biologists during favorable climatic conditions, and this survey report documents absence of the species during the 2013 flight season.

Chapter 1
Introduction

ICF International (ICF) conducted protocol surveys to determine the presence/absence of the Quino checkerspot butterfly (*Euphydryas editha quino*) (Quino) for Otay Water District's (OWD's) East Mesa Reservoir Road Paving Project (project). The project site is located in the unincorporated community of Otay, in San Diego County, California (Figure 1). The OWD East Mesa Reservoir is located at the northern terminus of Alta Road, northeast of the East Mesa Detention Facility. A dirt and gravel service road encircles the reservoir within a chain-link fence that encompasses the East Mesa Reservoir facility. OWD plans to pave this road to facilitate and improve access around the reservoir (Figure 2).

In its entirety, the project includes an approximately 815-foot long service road. For the purposes of this report, the term "project footprint" refers to the service road occurring within the fenced facility.

The project footprint comprises developed areas primarily consisting of the unpaved road. The survey area includes the project footprint and a 150-foot buffer around the unpaved road (Figure 3). The survey area covers approximately 15.9 acres. Areas of Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, disturbed southern willow scrub, disturbed mule-fat scrub, non-native grassland, disturbed habitat, bare ground, and developed areas occur within 150 feet of the project footprint. This report documents the results of the 2013 focused surveys within the survey area for this project.

Physical Characteristics

The survey area is surrounded by undeveloped areas supporting native and nonnative vegetation (Figure 3). The survey area ranges in elevation from 815 feet above mean sea level (AMSL) at the southwestern portion of the survey area to 890 feet AMSL in the northeastern portion.

Soils in the survey area consist of Huerhuero loam (2 to 9 percent slopes, 9 to 15 percent slopes, and 15 to 30 percent slopes, eroded), San Miguel-Exchequer rocky silt loams (9 to 70 percent slopes), and Stockpen gravelly clay loam (2 to 5 percent slopes) (NRCS 2013). Soils in the Huerhuero series consist of moderately well drained loams that have a clay subsoil. These soils developed in sandy marine sediment. The San Miguel-Exchequer complex is about 50% San Miguel silt loam and 40% Exchequer silt loam with 10% rock outcrops. Soils in the San Miguel series consist of well-drained, shallow to moderately deep silt loams that have a clay subsoil. Soils in the Exchequer series consist of shallow and very shallow, well-drained silt loams that formed in material weathered from hard metabasic rock. Soils in the Stockpen series consist of moderately well drained, moderately deep, gravelly clay loams (Bowman 1973).

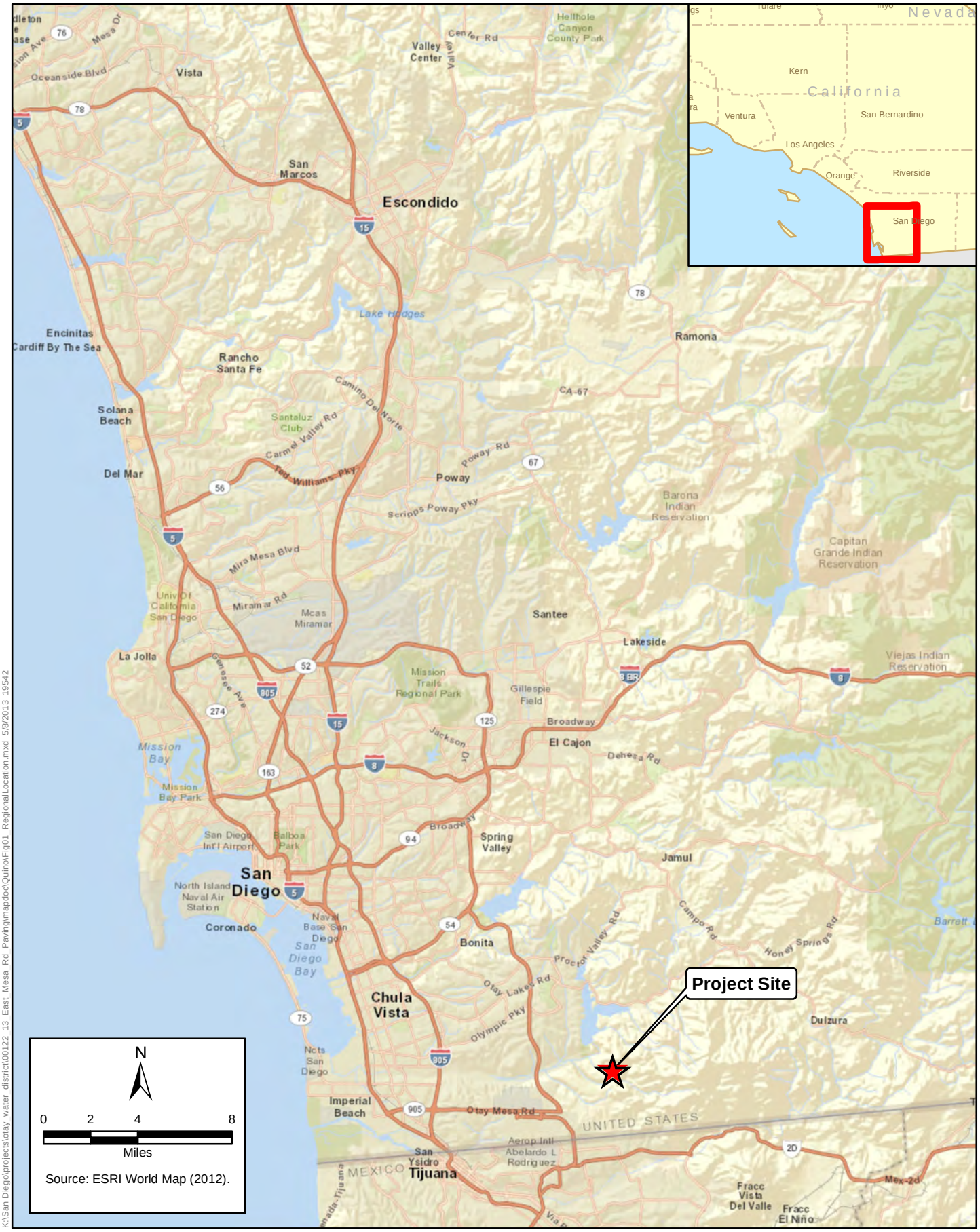


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Figure 1
Regional Location
East Mesa Reservoir Road Paving Project

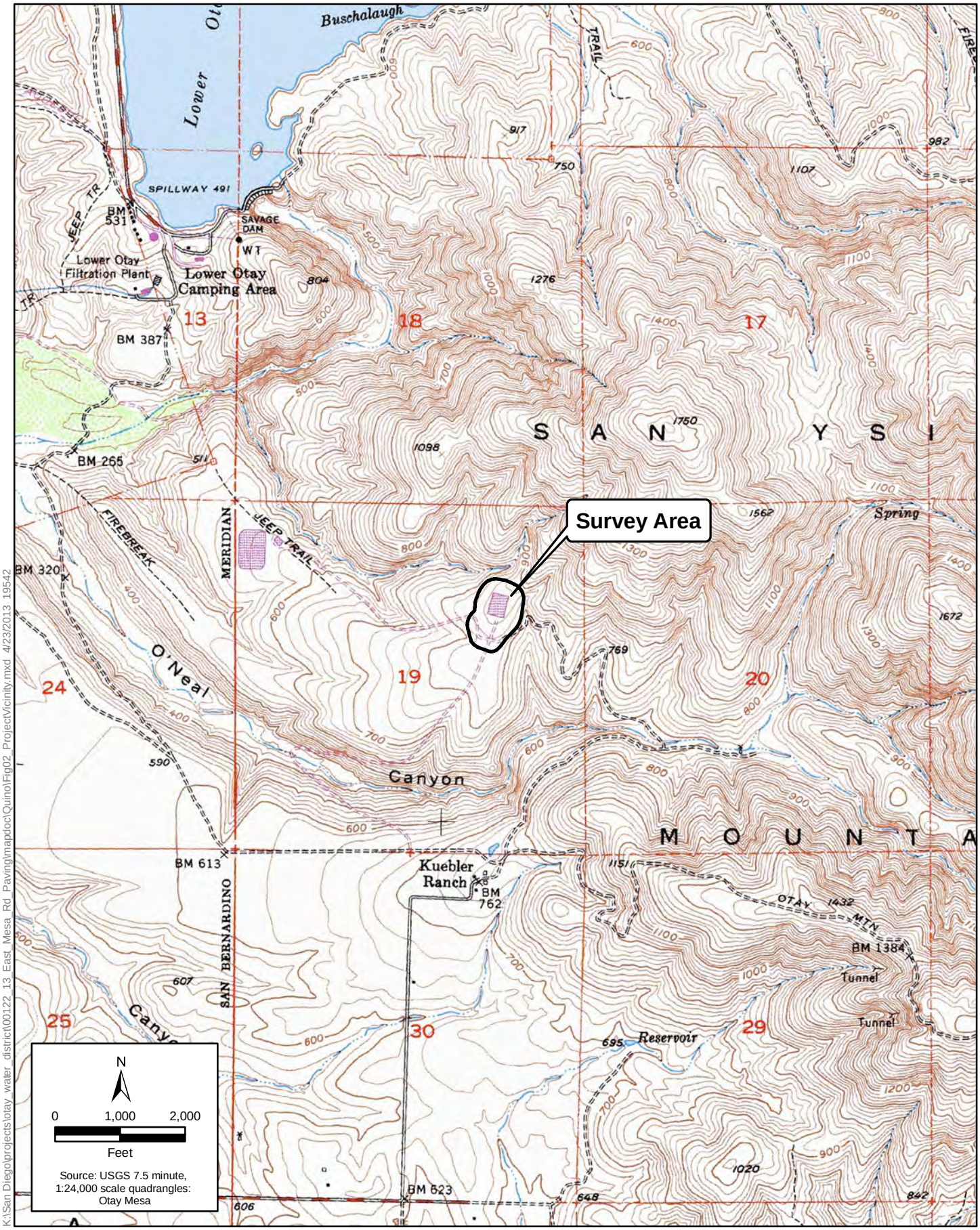

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Figure 2
Project Vicinity
East Mesa Reservoir Road Paving Project

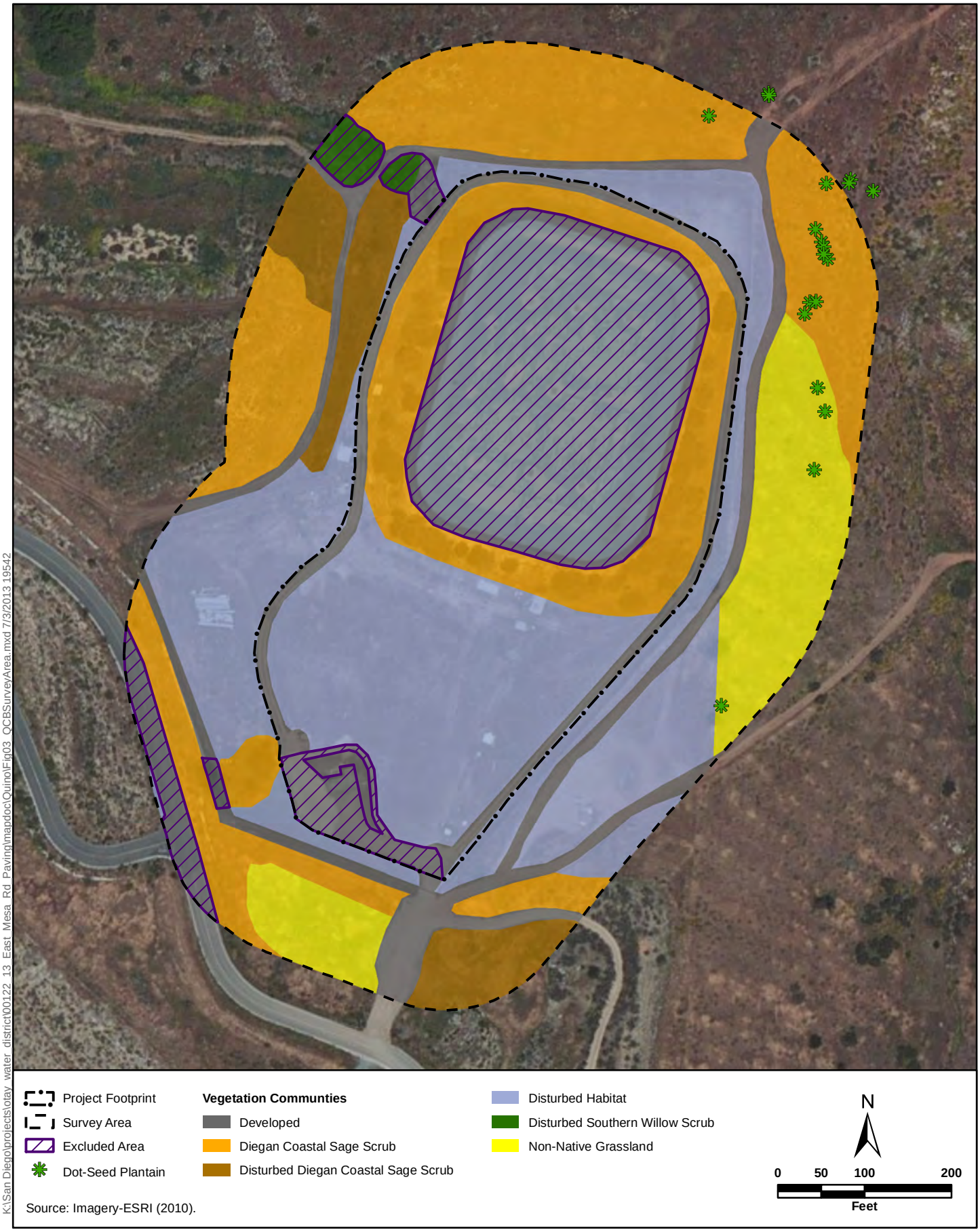

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Figure 3
Quino Checkerspot Butterfly Survey Area
East Mesa Reservoir Road Paving Project

Chapter 2
Methods

On March 5, 2013, a habitat assessment was conducted by E. Eidson. At that time dot-seed plantain (*Plantago erecta*) was the only host plant detected in the survey area. Dot-seed plantain appeared healthy, with approximately 50% of all individuals in bloom. The habitat assessment determined that 12.81 acres of non-excluded areas, as defined by the U.S. Fish and Wildlife Service (USFWS 2002), occurred within the survey area (Figure 3). Excluded areas, not recommended for Quino surveys, are defined as follows:

- Orchards, developed areas, or in-fill parcels largely dominated by nonnative vegetation.
- Active/in-use agricultural fields without natural or remnant inclusions of native vegetation.
- Closed-canopy forest or riparian areas, dense chaparral, and small openings completely enclosed within a closed-canopy or dense chaparral area.

Excluded areas within the survey area included developed areas and areas of dense riparian scrub.

A total of five weekly surveys were conducted between March 15 and April 9, 2013. Surveys for adult Quino were conducted by ICF biologists C. Dunn (TE-29658A-0), E. Eidson (TE-051236-1), and D. Allen (TE-837448-4). These surveys were conducted under acceptable weather conditions as defined in the USFWS protocol (Table 1) (USFWS 2002). Each survey involved slowly walking meandering transects throughout all non-excluded portions of the survey area (Figure 3). The surveys were conducted at an average rate of no more than 10 acres per hour. The surveyor stopped periodically to scan adjacent areas for moving butterflies. All butterfly species observed were identified and recorded (Table 2). All host plants detected within the survey area were mapped (Figure 3), and all potential nectar sources were noted. Copies of daily field notes are provided as an attachment to this report (Attachment 1).

In accordance with the USFWS protocol, Quino surveys, at a minimum, must occur over a 5-week period during the flight season for the given year. The timing of the flight season for Quino typically varies from year to year and by region. In order to determine the beginning and end of the flight season at each site, the conditions of host plants and/or nectar sources within the survey area for the project are assessed prior to the start of focused surveys. Prior to the start of the survey period for this project, host plants on site were healthy and in bloom and nectar sources were available within and adjacent to the survey area.

Surveyors also assess information provided by other biologists monitoring Quino reference populations. For the 2013 flight season, Quino reference information was obtained from populations in the Otay Mountain and Otay Mesa areas and by visiting a known Quino population on OWD property.

Information from the Otay Mountain and Otay Mesa reference sites, as reported by the monitoring biologists, was used to confirm that Quino were actively flying during the survey dates for this project. According to the monitoring information, Quino were detected flying in Otay Mountain and the Otay Mesa area on March 6, 2013. Quino were no longer detected during a survey conducted on April 4 in these areas.

On March 15, 2013, ICF biologists conducted a visit to a known population of Quino located on OWD property northwest of the East Mesa Detention Facility. Permission to visit this site was granted by OWD. More than 30 Quino adults were observed at this site copulating and foraging on nectar sources similar to those available within the survey area.

Table 1. Survey Conditions

Date (2013)	Survey Number	Start—End Time	Temperature (Start/Stop)	Wind Speed	Cloud Cover	Surveyor (Supervised Individuals)
March 15	1	1040–1200	72/75°F	0–4 mph	0% (high haze)	C. Dunn, D. Allen (K. Davis, I. Cain)
March 22	2	1245–1415	70/72°F	1–6 mph	0%	C. Dunn (J. Hickman)
March 29	3	1400–1530	73/72°F	1–5 mph	0% (high haze)	C. Dunn (J. Hickman)
April 3	4	1200–1340	77/79°F	0–1 mph	0–10%	E. Eidson (J. Hickman)
April 9	5	1200–1330	67/69°F	1–8 mph (gusts of 10)	0–10%	E. Eidson

°F = degrees Fahrenheit; mph = miles per hour

Chapter 3
Results

No Quino were detected during the five 2013 protocol surveys for the project in the survey area. However, 13 other butterfly species were observed (Table 2). Several patches of dot-seed plantain, a Quino primary host plant, were detected in the eastern and northeastern portion of the survey area (Figure 3). At the beginning of the survey period dot-seed plantain was approximately 1 inch in height, in good health, and mostly in flower. At the end of the survey period dot-seed plantain was 1.5–2 inches in height and senescing.

Table 2. Butterflies Observed Within the Survey Area

Scientific Name	Common Name	Scientific Name	Common Name
Pontia protodice	Checkered white	*Speyeria callippe*	Callippe fritillary
Pieris rapae	Cabbage white	*Vanessa annabella*	Gabb's checkerspot
Anthocharis sara	Pacific orangetip	*Vanessa cardui*	Painted lady
Callophrys affinis	Western green hairstreak	*Vanessa annabella*	West coast lady
Brephidium exile	Western pygmy-blue	*Coenonympha tullia*	Common ringlet
Glaucopsyche lygdamus	Silvery blue	*Erynnis funeralis*	Funeral duskywing
Apodemia virgulti	Behr's metalmark		

Potential nectar sources present and in bloom during the surveys included San Diego sunflower (*Bahiopsis laciniata*), black mustard (*Brassica nigra*), blue dicks (*Dichelostemma capitatum*), common goldfields (*Lasthenia gracilis*), Crete weed (*Hedypnois cretica*), deerweed (*Acmispon glaber*), San Diego popcornflower (*Plagiobothrys collinus* var. *gracilis*), narrow-toothed pectocarya (*Pectocarya linearis* ssp. *ferocula*), and a few individuals of California buckwheat (*Eriogonum fasciculatum*). Nectar sources were most abundant outside of the fenced area in the eastern and northern portions of the survey area. Most areas inside the fencing and west and south of the project alignment supported highly disturbed habitats that were predominated by non-native, weedy plant species.

Overall the survey area provides habitat ranging from low to high suitability for Quino. The highest suitability occurred in the northeastern corner of the survey area, outside of the project footprint, with suitability increasing as distance from the project footprint increased.

Quino were not observed during the 2013 protocol surveys for this project. Based on the conditions on the project site, the information provided for the reference populations, and our findings at the site northwest of the East Mesa Detention Facility, the 2013 surveys were timed correctly and Quino would have been detected during the focused surveys if it occurred in the survey area. These surveys were conducted according to the survey protocol by qualified, permitted biologists during favorable climatic conditions, and show the absence of the species during the 2013 flight season.

Chapter 4
Certification

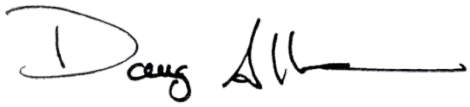
I certify that the information in this survey report and attached exhibits fully and accurately represent my work.

_____ May 14, 2013

Erika Eidson (Permit No. TE-051236-1) Date
Biologist
Author and Field Surveys

_____ May 14, 2013

Cindy Dunn (Permit No. TE-29658A-0) Date
Biologist
Field Surveys



_____ May 14, 2013

Doug Allen (Permit No. TE-837448-4) Date
Biologist
Field Surveys

Chapter 5
References

Bowman R. 1973. *Soil Survey of the San Diego Area*. U.S. Department of Agriculture in cooperation with the USDI, UC Agricultural Experiment Station, Bureau of Indian Affairs, Department of the Navy, and the U.S. Marine Corps.

Natural Resources Conservation Service (NRCS), United States Department of Agriculture. 2013. *Web Soil Survey*. Available: http://websoilsurvey.nrcs.usda.gov/. Accessed: April 24, 2013.

U.S. Fish and Wildlife Service (USFWS). 2002. Quino Checkerspot Butterfly (*Euphydryas editha quino*) Year 2002 Survey Protocol.

Attachment 1
Field Notes

East Mesa Water Tower

[0930 - 1400]

3/15/13

Start

[redacted] 1040

72°F

High Haze

Ø-2mpl

Stop

1200

75°F High Haze

[redacted]

1-4mpl

Quino Survey #1

unk white : II

unk lady : I

Behr's : IIII

Ringlet : ~~HH~~ ~~HH~~ ~~HH~~

perplex green : II

Sara's orange : II

Southern blue : III

Nectar Sources

Erobot, Hirinc, acmgla, blue dick, Rhuint, blueeyed grass, goldfields, wishbone, Johnny jump ups, shooting stars, Onion, viglac,

Host plant Sp

plaere

CORA

HOFI

WEME

COHA

ANHU

MODO

LEGO

South ratt

CAGN

GRRO

Coast Horn

BLTajack

BUSH

BLPH

WEKI

15 MARCH 13 — D Allen

E. MESA H_2O tower — I Cain

CCB #1 — K. DAUS

C Dunn

1030	72°F	High Water	0-2
1200	75°F	Clear	0-2

FUDU
CORI
COWH
PALA
BEMM

ADULT Nectar Sources

Blue Dice — BIDI
Gold Field — GOFI — CRYT sp — Cryptantha
ERCI — Erodium cicutarium
LOSC — Lotus scoparius

East Mesa Water tank
Quino #2

3/22/13

Start
1245
0%
1-4 mph
70°F

Ringleat – ~~HHT~~ ~~HHT~~ ~~HHT~~ |||
Behr's – ~~HHT~~ ~~HHT~~ ~~HHT~~ ||
Southerblue – ||||
Funeral – ~~HHT~~ |
Cabbage w – |
♂ ⊕ Gabbs – ||
Pygmy blue – |
Westcoast – ||

CORA
CaGrSq
WEME
HOLA
CALT

Nectaring: Hirinc, Eno bot, blue eyed, blue dick, lotsco, viglac, plantago, goldfields, lupin,

End
1415
0%
2-6 mph
72°F

Plantago ~ 1 inch, flowering
healthy green

EMWT Quino #3

3/29/13

CA Ring: ~~IIII~~ ~~IIII~~ ~~IIII~~ ~~IIII~~ III
Behr's: ~~IIII~~ ~~IIII~~ ~~IIII~~ IIII
Dusky: ~~IIII~~ ~~IIII~~ II
Perplex: II
Gabb's: II ♀♂

Start
1400
High Haze 10%
73°F
1-2mph

Stop
1530
High haze 50%
72°F
2-5mph

Nectaring: Bluedick, Brunig, viglac, wishbone plant, acaglo, lastinia sp, blue eyed grass,

wildlife
WEME
CALT
COTTONTAIL
GRRO
red diamond
WREN
WCSP
Southern Pacific

HOST: Plaea ~ <1cm-2cm
green, patchy, healthy, flowering, minor yellow

Quino Checkerspot Butterfly Survey Form

Project/Location: East Otay Mesa Survey Segment:

Surveyor: E Edson Date: 4/3/13 Survey #: 8

Additional Surveyors: James Hickman (positively ID'd Gabbs

	Time	% Cloud	Sky Condition			Wind (mph)	Temperature
Start	1200	0%	clear	patchy	cloudy	0-1	77°
			clear	patchy	cloudy		
			clear	patchy	cloudy		
			clear	patchy	cloudy		
			clear	patchy	cloudy		
Stop	1340	10%	clear	patchy	cloudy	2-6	77

Habitat Onsite (circle): hilltop, veg openings, bare ground, flat land, steep slope, plateau, ridgeline, rock outcrop, other

Veg Type Surveyed (circle): CSS, SMC, CSCS, NNG, DH, MSS

Host Plants(circle): Plantago, Castilleja, Cordylanthus, Collinsia, Antirrhinum

Condition/Comments: Plhere 1.5-2" in flower Antcolt (pt)

Nectar Plants: Hypoglab Dichcap
Borarig Bahlac Erifas Chrost
Pemgra

Quino Observed (location, comments, coordinates, photo #):

Butterflies Observed					
Name	Tally	Total	Name	Tally	Total
Acmon Blue			Orange sulfur		
Anise swallowtail			Painted lady		
Behr's metalmark	𝍸 𝍸 IIII		Pale swallowtail		
Brown elfin			Perplexing hairstreak		
Cabbage white			Pygmy blue		
California patch			Quino checkerspot		
California ringlet	IIII		Red admiral		
California sister			Sara's orangetip		
Cerranus blue			Southern blue		
Checkered white	I		Southern dogface		
Common buckeye			Spring white		
Dainty sulfur			Striated queen		
Desert orange-tip			Variable checkerspot		
Funereal duskywing	𝍸 IIII		West coast lady		
Gabb's checkerspot	I ♀		Western tailed blue		
Gray hairstreak			Western tiger swallowt		
Harford's sulphur			White checkered skipp		
Hermes copper			Unknown blue		
Lorquin's admiral			Unknown lady		
Monarch					
Mourning cloak					
Northern white skip					

Quino Checkerspot Butterfly Survey Form

Project/Location: East Otay Res Rd parking Survey Segment: ____

Surveyor: E. Eidson Date: 4-9-13 Survey #: 5

Additional Surveyors: —

	Time	% Cloud	Sky Condition			Wind (mph)	Temperature
Start	1200	10%	(clear)	patchy	cloudy	1-3	67
			clear	patchy	cloudy		
			clear	patchy	cloudy		
			clear	patchy	cloudy		
			clear	patchy	cloudy		
Stop	1330	10%	(clear)	patchy	cloudy	3-8, gusts 10	69

Habitat Onsite (circle): hilltop, (veg openings), (bare ground), flat land, steep slope, plateau, ridgeline, rock outcrop, other

Veg Type Surveyed (circle): (CSS), SMC, CSCS, (NNG), (DH), MSS

Host Plants(circle): Plantago, Castilleja, Cordylanthus, Collinsia, Antirrhinum

Condition/Comments: Plaerc senescing

Nectar Plants: Bahloc, Lasgra, Brarig, Dicpap, Erifas (few), Acmgla, Cryptafha

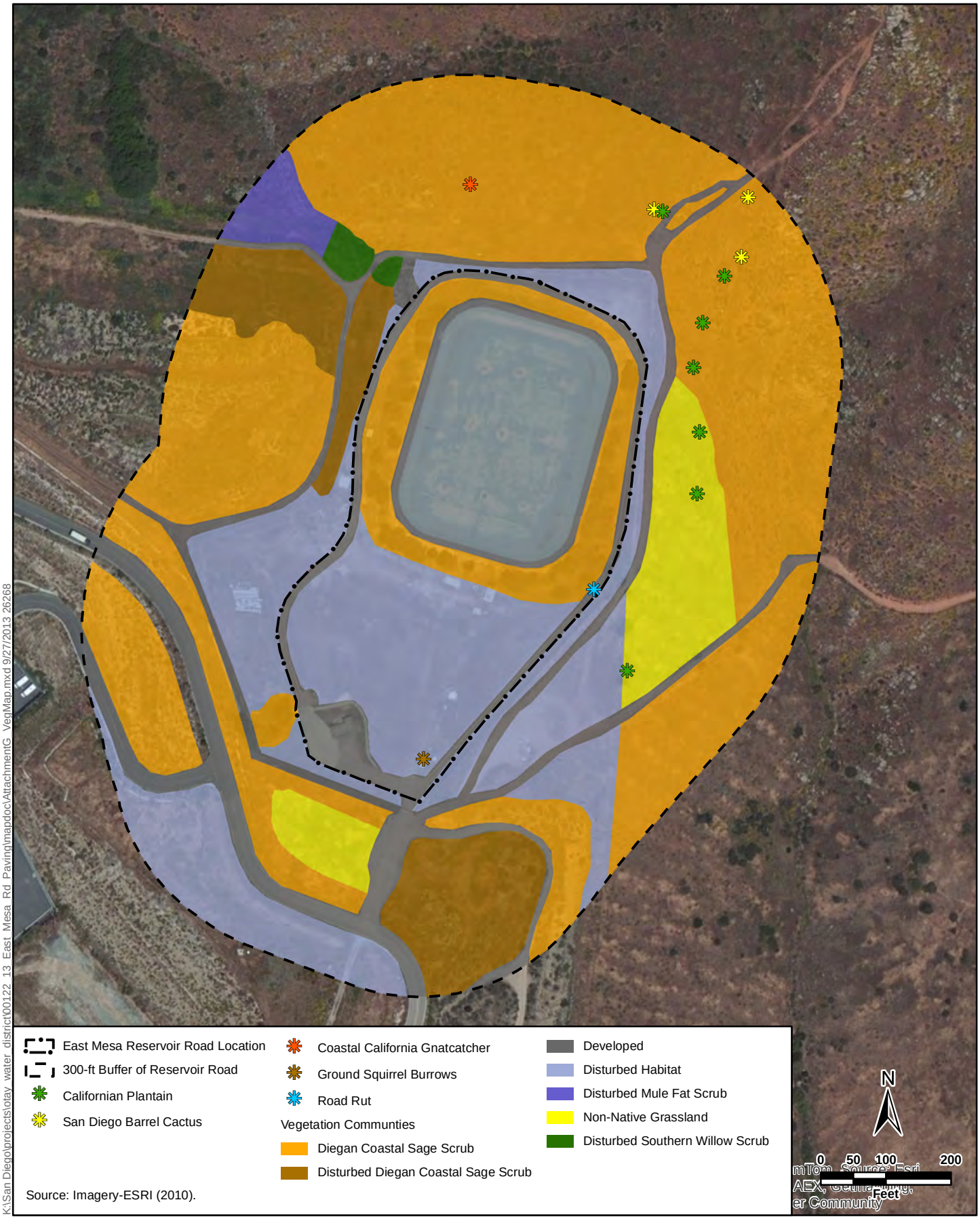
Quino Observed (location, comments, coordinates, photo #):

none

Butterflies Observed

Name	Tally	Total	Name	Tally	Total
Acmon Blue			Orange sulfur		
Anise swallowtail			Painted lady		
Behr's metalmark	~~IIII~~ IIII		Pale swallowtail		
Brown elfin			Perplexing hairstreak		
Cabbage white			Pygmy blue		
California patch			Quino checkerspot		
California ringlet	III		Red admiral		
California sister			Sara's orangetip		
Cerranus blue			Southern blue	II	
Checkered white			Southern dogface		
Common buckeye			Spring white		
Dainty sulfur			Striated queen		
Desert orange-tip			Variable checkerspot		
Funereal duskywing	~~IIII~~ II		West coast lady		
Gabb's checkerspot	II (1♂ 1♀)		Western tailed blue		
Gray hairstreak			Western tiger swallowt		
Harford's sulphur			White checkered skipp		
Hermes copper			Unknown blue		
Lorquin's admiral			Unknown lady		
Monarch					
Mourning cloak					
Northern white skip					

Blue B Comstock's fritillary 1



Source: Imagery-ESRI (2010).

K:\San Diego\projects\otay water district\00122 13 East Mesa Rd Paving\mapdoc\AttachmentG VegMap.mxd 9/27/2013 26268

Attachment G
Vegetation Map and Potentially Sensitive Resources
OWD 870-1 Reservoir Paving Project

Attachment H: Sensitive Plant Species and Their Potential to Occur in the Vicinity of the East Mesa Reservoir Road

Common Name (*Scientific Name*)	**Sensitivity Code**	**Habitat Preference/Requirements**	**Verified On-site (Yes/No)**	**Potential to Occur**	**Rationale**
San Diego thornmint (*Acanthomintha ilicifolia*)	FT SE CRPR 1B.1	Annual herb Grassy openings in chaparral and coastal sage scrub, valley and foothill grassland, and vernal pools. Prefers friable or broken clay soils. 33 to 3150 ft. Blooming Period: Apr-Jun	No	Moderate	Potentially suitable habitat occurs within the survey area.
Spineshrub (*Adolphia californica*)	CRPR 2B.1	Deciduous shrub Chaparral, coastal scrub, and valley and foothill grassland; 45-740 m (147-2428 ft). Blooming period: December - May	No	Moderate	Potentially suitable habitat occurs within the survey area. This distinctive shrub should have been observed if present.
San Diego bur-sage (*Ambrosia chenopodiifolia*)	CRPR 2B.1	Deciduous shrub Coastal scrub 55-155 m Blooming period: April - June	No	Moderate	Potentially suitable habitat occurs within the survey area. This distinctive shrub should have been observed if present.
San Diego County Viguiera (*Bahiopsis laciniata*)	CRPR 4.2	Deciduous shrub Diegan coastal sage scrub. 197-2461 ft. Blooming Period: Feb-Jun	Yes	Observed	Observed along the margins of the slopes of the water reservoir within the survey area.
Golden cereus (*Bergerocactus emoryi*)	CRPR 2B.2	Perennial stem succulent Chaparral and coastal scrub; 3-395 m; Blooming period: May - June	No	Moderate	Appropriate habitat present on-site. This large distinctive cactus should have been observed if present.
San Diego goldenstar (*Bloomeria clevelandii*)	CRPR 1B.1	Bulbiferous herb Chaparral, coastal sage scrub, valley grasslands, particularly near mima mound topography or the vicinity of vernal pools; 50 - 465 m (164-1526 ft). Blooming period : April - May	No	Moderate	Suitable habitat and soils present within on site. Occurs in the vicinity at the same altitude. Annual species which would not have been observed during early spring surveys.
Orcutt's brodiaea (*Brodiaea orcuttii*)	CRPR 1B.1	Bulbiferous herb Moist grasslands, near streams and the periphery of vernal pools; 0-1600 m (0-5249 ft). Blooming period: May - July	No	Low	No vernal pools present within the survey area. Road rut does not support vegetation.
Round-leaved filaree (*California macrophylla*)	CRPR 1B.1	Annual herb Grasslands and cismontane woodland; 15-1200 m; Blooming period: March - May	No	Moderate	Potentially suitable habitat occurs within the survey area.
Dunn's mariposa lily (*Calochortus dunnii*)	SR CRPR 1B.2	Growth Form: perennial bulbiferous herb Blooming Period: Apr-Jun Rocky openings in chaparral or grassland/chaparral ecotone. Seems to be restricted to metavolcanic and gabbroic soils. 1247 to 6004 ft.	No	None	Suitable habitat does not occur in the survey area; this species typically occurs at a higher elevation than that of the survey area.

Common Name (*Scientific Name*)	Sensitivity Code	Habitat Preference/Requirements	Verified On-site (Yes/No)	Potential to Occur	Rationale
Lakeside ceanothus (*Ceanothus cyaneus*)	CRPR 1B.2	Evergreen shrub Closed-cone coniferous forest, dense chaparral. 771 to 2477 ft. Blooming Period: Apr-Jun	No	None	Suitable habitat does not occur in the survey area; The range of this species is highly restricted to the north of the study area.
Summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*)	CRPR 1B.2	Annual herb Sandy soils in coastal bluff scrub, coastal scrub, and grassland; 5-300 m (16-984 ft). Blooming period: Feb - Aug	No	Moderate	Appropriate habitat present on-site. This large shrub should have been observed if present.
Long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*)	CRPR 1B.1	Annual herb Clay lenses, largely devoid of shrubs. Occasionally seen on the periphery of vernal pool habitat and the periphery of montane meadows near vernal seeps; below 1400 m (4593 ft). Blooming period: April - June	No	Moderate	Potentially suitable habitat occurs within the survey area.
Snake cholla (*Cylindropuntia californica* var. *californica*)	CRPR 1B.1	Perennial stem succulent Chaparral and coastal scrub 30-150 m; Blooming period: April - May	No	Moderate	Appropriate habitat present on-site. This distinctive cactus should have been observed if present.
Otay tarplant (*Deinandra conjugens*)	FT SE CRPR 1B.1	Aannual herb Fractured clay soils or lightly vegetated coastal sage scrub. 82 to 984 ft. Blooming Period: May-Jun	No	Moderate	Suitable habitat occurs within the survey area. The frequent mowing within the impact area may prevent the establishment of this species.
Orcutt's bird's beak (*Dicranostegia orcuttiana*)	CRPR 2B.1	Annual herb (Hemiparisitic) Coastal scrub; 10-350 m; Blooming period March - Sept	No	Moderate	Potentially suitable habitat occurs within the survey area.
Variegated dudleya (*Dudleya variegata*)	CRPR 1B.2	Perennial herb Clay soils in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, and vernal pools; 3-580 m (9-1903 ft). Blooming period: April - June	No	Moderate	Suitable habitat occurs within the survey area. Unlikely to occur with within the highly disturbed project impact area.
Cliff spurge (*Euphorbia misera*)	CRPR 2B.2	Shrub Coastal scrub, coastal bluff scrub and Mojavean desert scrub; 10-500 m. Blooming period: Dec - Oct	No	Low	Suitable habitat occurs within the survey area. This distinctive shrub should have been observed if present.
San Diego button-celery (*Eryngium aristaulatum* var. *parishii*)	FE SE CRPR 1B.1	Perennial herb Vernal pools within coastal scrub or grasslands. 65 to 2034 ft. Blooming Period: Apr-Jun	No	Low	No vernal pools present within the survey area. Road rut does not support vegetation.
San Diego barrel cactus (*Ferocactus viridescens*)	CRPR 2B.1	Perennial stem succulent Sandy to rocky areas in coastal sage scrub or grasslands. 10 to 1,476 ft. Blooming Period: May-Jun	Yes	Observed	Several individuals of this species were observed in northeastern area of the survey area.

Common Name (*Scientific Name*)	Sensitivity Code	Habitat Preference/Requirements	Verified On-site (Yes/No)	Potential to Occur	Rationale
Mexican flannelbush (*Fremontodendron mexicanum*)	FE SR CRPR 1B.1	Evergreen shrub Closed cone coniferous forest and southern mixed chaparral. A limited population of mature shrubs grows along Cedar Creek on Otay Mountain; entire known population is now restricted to Otay Mountain; 33 to 2349 ft. Blooming Period: Mar-Jun	No	None	Suitable habitat for this species does not occur in the survey area.
Palmer's grapplinghook (*Harpagonella palmeri*)	CRPR 4.2	Annual herb Chaparral, grasslands, clay vertisols with open grassy slopes or Diegan coastal sage scrub between 20-955 m (65 to 3132 ft). Blooming period: March - May	No	Moderate	Potentially suitable habitat occurs within the survey area.
San Diego marsh elder (*Iva hayesiana*)	CRPR 2B.2	Perennial herb Marshes and swamps, and playas; 10-500 m (32-1640 ft). Blooming period: April - Oct	No	Low	Streambed habitat within the survey area is marginally suitable for this species.
Gander's pitcher sage (*Lepechinia ganderi*)	CRPR	Subshrub Coniferous forest, chaparral, cismontane woodland; 300-1370m Blooming period: Apr-Jul	No	Low	Suitable habitat is marginally suitable.
Spreading navarretia (*Navarretia fossalis*)	FT CRPR 1B.1	Annual herb Vernal pools. 98 to 4265 ft. Blooming Period: Apr-Jun	No	Low	No vernal pools present within the survey area. Road rut does not support vegetation.
California Orcutt grass (*Orcuttia californica*)	FE SE CRPR 1B.1	Annual herb Vernal pools. 49 to 2165 ft. Blooming Period: Apr-Aug	No	Low	No vernal pools present within the survey area. Road rut does not support vegetation.
Otay mesa mint (*Pogogyne nudiuscula*)	FE SE CRPR 1B.1	Annual herb Vernal pools. 295 to 820 ft. Blooming Period: May-Jul	No	Low	No vernal pools present within the survey area. Road rut does not support vegetation.
Munz' sage (*Salvia munzii*)	CRPR 2B.2	Evergreen shrub Chaparral and Diegan coastal sage scrub. Typically found on metavolcanic soils in the southern portion of San Diego County. 394 to 3494 ft. Blooming Period: Feb-Apr	No	Moderate	Suitable habitat occurs within the survey area.
Ashy spike-moss (*Selaginella cinerascens*)	CRPR 4.1	Perennial rhizomatous herb Chaparral and coastal scrub, dry habitat, often in clay soils both in open areas and in the shade of larger plants. 65 to 2100 ft. Blooming Period: none	Yes	Observed	This species was observed in the Diegan coastal sage scrub within the survey area.
Laguna Mountains jewel-flower (*Streptanthus bernardinus*)	CRPR 4.3	Perennial herb Chaparral, Lower montane coniferous forest. 2,198 to 8,202 ft. Blooming Period: May-Aug	No	None	Suitable habitat does not occur in the survey area; this species typically occurs at a higher elevation than that of the survey area.

Common Name (*Scientific Name*)	Sensitivity Code	Habitat Preference/Requirements	Verified On-site (Yes/No)	Potential to Occur	Rationale
Parry's tetracoccus (*Tetracoccus dioicus*)	CRPR 1B.2	Deciduous shrub Typically in low-growing chamise chaparral, with moderately dense canopy cover. Below 3280 ft. Blooming Period: Apr-May	No	None	Suitable chaparral habitat for this species does not occur within the survey area.

Legend:

Status:

Federal

FE - listed as endangered under the federal Endangered Species Act.

FT - listed as threatened under the federal Endangered Species Act.

State

SE - listed as endangered under the California Endangered Species Act.

ST – listed as threatened under California Endangered Species Act.

SR – listed as rare under the Native Plant Protection Act.

California Rare Plant Ranks – formerly California Native Plant Society Lists

1B – Rare, threatened or endangered in California and elsewhere

2B – Rare, threatened or endangered in California but more common elsewhere

3 – May be rare but more research needed to determine true status

4 – Limited distribution and are uncommon but not presently rare or endangered

Threat Ranks

.1 – Seriously endangered in California

.2 – Fairly endangered in California

.3 – Not very endangered in California

References

Special Status information from CDFW 2013. Nomenclature and plant descriptions from Baldwin et al. 2012, Beauchamp 1986, CNPS 2013, Hickman 1993, McAuley 1996, Munz 1974, Reiser 1994, Roberts 1989.

Attachment I: Sensitive Wildlife Species and their Potential to Occur in the Vicinity of the 870-1 Reservoir Project

Common Name (*Scientific Name*)	Sensitivity Code & Status	Habitat |Preference/Requirements	Verified On-site (Yes/No)	Potential to Occur	Rationale
INVERTEBRATES					
San Diego fairy shrimp (*Branchinecta sandiegoensis*)	FE	Vernal pools. All known localities are below 701m (2,300 ft) and are within 64km (40 miles) of the Pacific Ocean.	No	High – After dry season sampling None	Focused protocol dry season survey determined that this species did not occupy suitable habitat.
Thorne's hairstreak (*Callophrys thornei*)	BLM - Sensitive	Associated with host plant Tecate cypress (*Cupressus forbesii*), with nectar sources from shrubs found coastal sage scrub and chaparral.	No	Low	No suitable host plants occur within the survey area, however, suitable nectar sources occur within Diegan coastal sage scrub found within the survey area.
Quino checkerspot butterfly (*Euphydryas editha quino*)	FE	Inhabits openings on clay soils within or in the vicinity of shrublands, grasslands, meadows, vernal pools, and lake margins. Closely tied to its larval host plant, dwarf plantain *(Plantago erecta)* or owl's clover (*Castilleja exserta).*	No	High – after focused surveys None	Suitable habitat occurs on site and populations occur less than one mile from the survey area. Focused protocol dry season survey determined that this species did not occupy suitable habitat.
Riverside fairy shrimp (*Streptocephalus woottoni*)	FE	Vernal pools. It occurs from Los Angeles County to Baja California. In San Diego County, all populations are within 15 kilometers of the coast. Maturation of cysts may require as much as two months, depending on water temperature. Because of this relatively long development period, *S. woottoni* tends to be found only in deeper, more dependable pools.	No	Low – After dry season sampling None	Road rut observed onsite too shallow to be inundated naturally for long enough to support this species. Focused protocol dry season survey determined that this species did not occupy suitable habitat.
AMPHIBIANS					
Western spadefoot (*Spea hammondii*)	CSC	Temporary rain pools with water temperatures between 9°C and < 30°C that last at least 3 weeks.	Yes	Observed	One tadpole was observed in a road rut within the impact area.
REPTILES					
Silvery legless lizard (*Anniella pulchra pulchra*)	CSC	Prefers litter or loose soils under chaparral or sage scrub habitat.	No	Low	Suitable habitat is present within the survey area. Soils are marginally suitable.
Orangethroat whiptail (*Aspidoscelis hyperythra*)	CSC	The habitat characteristics are poorly understood, however historically it was found in floodplains or terraces along streams. Closely tied to coastal sage scrub plants and some chaparral plants.	No	High	Suitable habitat is present within the survey area.

Common Name (*Scientific Name*)	Sensitivity Code & Status	Habitat |Preference/Requirements	Verified On-site (Yes/No)	Potential to Occur	Rationale
San Diego horned lizard (*Phrynosoma blainvillii*)	CSC	Grasslands, brushlands, woodlands, and open coniferous forest with sandy or loose soil; requires abundant ant colonies for foraging.	No	High	Suitable habitat is present within the survey area.
Coast patch-nosed snake (*Salvadora hexalepis virgultea*)	CSC	Inhabits semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains.	No	High	Suitable habitat is present within the survey area.
Two-striped garter snake (*Thamnophis hammondii*)	CSC	Inhabits perennial and intermittent streams with rocky beds and bordered by willow thickets or other dense vegetation.	No	High	Suitable habitat exists in the disturbed southern willow scrub and disturbed mulefat scrub in the drainage in the northwestern portion of the survey area.
BIRDS					
Burrowing owl (*Athene cunicularia*)	CSC	Prairies, grasslands, lowland scrub, agricultural lands, coastal dunes, desert floors, and some artificial, open areas. They require large open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small mammal burrows. They use rodent or other burrows for roosting and nesting cover and also known to use pipes, culverts, and nest boxes where burrows are scarce.	No	Breeding – Moderate Migration/ Wintering - Moderate	Suitable habitat can be found within infrastructure in disturbed habitat and ground squirrel burrows are present within the survey area. There is no sign of current use by burrowing owl in these features.
San Diego cactus wren (*Campylorhynchus brunneicapillus sandiegensis*)	CSC	Cactus thickets	No	None	There are no suitable cactus thickets within in or adjacent to the survey area.
Northern harrier (*Circus cyaneus*)	CSC (nesting)	Grasslands and marshes. Nests are on the ground and typically concealed within a marsh or other dense vegetation.	Yes	Breeding – None Foraging – Observed	Suitable nesting habitat does not occur within the survey area. Suitable foraging habitat occurs throughout the survey area.
Yellow-breasted chat (*Ictera virens*)	CSC	Dense riparian woodland.	No	Low	There is marginal habitat in the disturbed riparian habitat northwest of the reservoir.
Coastal California gnatcatcher (*Polioptila californica californica*)	FT CSC	Prefer open scrubby habitats such as coastal sage scrub and some forms of chaparral.	Yes	Observed	One individual was detected vocalizing in the Diegan coastal sage scrub within the northern portion of the survey area.

Common Name (*Scientific Name*)	Sensitivity Code & Status	Habitat |Preference/Requirements	Verified On-site (Yes/No)	Potential to Occur	Rationale
Least Bell's vireo (*Vireo bellii pusillus*)	FE SE	Riparian thickets either near water or in dry portions of river bottoms; nests along margins of bushes and forages low to the ground; may also be found using mesquite and arrow weed in desert canyons.	No	Moderate	Very marginal habitat occurs within the survey area; however, the species has been observed in other nearby riparian habitat outside the survey area.
MAMMALS					
Western mastiff bat (*Eumops perotis californicus*)	CSC	Primarily a cliff-dwelling species for breeding. Found foraging in a variety of habitats, from dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, montane meadows, and agricultural areas.	No	Roosting – None Foraging - Low	Low quality foraging habitat present on site, no suitable cliffs or other potential breeding habitat.
Pocketed free-tailed bat (*Nyctinomops femorosaccus*)	CSC	Lives in deserts and sage scrub, roosts in rocky crevices.	No	Roosting – None Foraging - Moderate	Suitable foraging habitat present on site, no suitable cliffs or other potential breeding habitat.
Western red bat (*Lasiurus blossevillii*)	CSC	Usually among dense foliage, in forests and wooded areas, making long migrations from the northern latitudes to warmer climes for winter, sometimes hibernates in tree hollows or woodpecker holes.	No	Roosting – None Foraging - Low	Preferred roosting habitat not present within the survey, marginal foraging habitat present.
Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)	CSC	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral communities.	No	Moderate	Suitable habitat present on site.
San Diego black-tailed jackrabbit (*Lepus californicus bennettii*)	CSC	Mostly found on the coastal side of our local mountains in open habitats, usually avoiding dense stands of chaparral or woodlands.	No	High	Suitable habitat present on site.
San Diego desert woodrat (*Neotoma lepida intermedia*)	CSC	Variety of shrub and desert habitats, primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth.	No	Low	No middens observed within the survey area.
American badger (*Taxidea taxus*)	CSC	Inhabit a diversity of habitats with principal requirements of sufficient food, friable soils, and relatively open, uncultivated ground. Grasslands, savannas, and mountain meadows near timberline are preferred.	No	None	No suitable habitat within the survey area. Proximity of the survey area to developed areas would likely deter this species from occurring on site.

Common Name (*Scientific Name*)	Sensitivity Code & Status	Habitat |Preference/Requirements	Verified On-site (Yes/No)	Potential to Occur	Rationale

LEGEND:

STATUS:

Federal

FE - listed as endangered under the federal Endangered Species Act.

FT - listed as threatened under the federal Endangered Species Act.

State

SE - listed as endangered under the California Endangered Species Act.

FPS – fully protected species in California.

CSC - species of special concern in California.

References

Special Status information from CDFG 2011. Nomenclature and invertebrate descriptions from USFWS 1997a, 2002a, 2002b. Nomenclature and vertebrate descriptions from AOU 1998 and supplements (AOU 1998), CDFG 2005, Collins and Taggart 2009, Shuford and Gardali 2008, Stephenson and Calcarone 1999, Baker *et al.* 2003, Wilson and Reeder 2005 and Unitt 2004.

DRY SEASON PROTOCOL SURVEY FOR LISTED FAIRY SHRIMP FOR THE 870-1 RESERVOIR PAVING PROJECT, SAN DIEGO COUNTY

PREPARED FOR:

Otay Water District
2554 Sweetwater Springs Blvd.
Spring Valley, California 91978-2096

PREPARED BY:

ICF International
9775 Businesspark Avenue
San Diego, CA 92131
Contact: Dale Ritenour
(858) 578-8964

August 2013

ICF International. 2013. Dry Season Protocol Survey for Listed Fairy Shrimp for the 870-1 Reservoir Paving Project. August. Prepared for Otay Water District.

Contents

Page

1.0 Introduction 1
1.1 Project Area 1
1.2 Project Vicinity 2
2.0 Methods 2
2.1 Dry Season Fairy Shrimp Sampling 2
3.0 Results 3
4.0 References 3
5.0 Certification 4

Appendix A USFWS Notification

Appendix B Soil Analysis Letter

Figure **Follows Page**

1. Regional Vicinity 1
2. Survey Area Vicinity 1
3. Basin Location 1

1.0 Introduction

Otay Water District (OWD) proposes to pave the existing road surrounding the 870-1 Reservoir (project). This site was referred to as the "East Mesa Reservoir Road Paving Project" in the 15-day notification. The project site is located in the unincorporated community of Otay, in San Diego County, California (Figures 1 and 2). The OWD 870-1 Reservoir is located at the northern terminus of Alta Road, northeast of the East Mesa Detention Facility. A dirt and gravel service road encircles the reservoir within a chain-link fence that encompasses the 870-1 Reservoir facility (Figure 3). In its entirety, the project includes an approximately 815-foot long service road. For the purposes of this report, the term "project footprint" refers to the service road occurring within the fenced facility.

ICF International/Jones & Stokes (ICF), assisted by Ecological Restoration Services, conducted protocol surveys to determine the presence or absence of federally-listed endangered San Diego fairy shrimp (*Branchinecta sandiegonensis*) and Riverside fairy shrimp (*Streptocephalus woottoni*) within a road rut immediately southeast of the 870-1 Reservoir (Figure 3).

1.1 Project Area

The project footprint comprises developed areas primarily consisting of the unpaved road. The study area includes the project footprint and a 150-foot buffer around the unpaved road (Figure 3). The study area covers approximately 15.9 acres. Areas of Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, disturbed southern willow scrub, disturbed mule-fat scrub, non-native grassland, disturbed habitat, bare ground, and developed areas occur within 150 feet of the project footprint. Only one potential basin was observed within the study area. The basin was observed below the southeastern corner of the existing reservoir, in the dirt road at the base of the slope. The basin consists of a series of road ruts that spans part of the road. The basin is unvegetated; no vernal pool indicator plant species were observed.

The study area is surrounded by undeveloped areas supporting native and nonnative vegetation. The study area is at the foot of Otay Hills/Otay Mountain, and slopes down from the northeast to the southwest. Elevation within the survey area ranges from 890 feet above mean sea level (AMSL) in the northeastern portion of the survey area to 815 feet AMSL.

Soils in the study area consist of Huerhuero loam (2 to 9 percent slopes, 9 to 15 percent slopes, and 15 to 30 percent slopes, eroded), San Miguel-Exchequer rocky silt loams (9 to 70 percent slopes), and Stockpen gravelly clay loam (2 to 5 percent slopes) (NRCS 2013). Soils in the Huerhuero series consist of moderately well drained loams with clay subsoil. These soils developed in sandy marine sediment. The San Miguel-Exchequer complex is about 50% San Miguel silt loam and 40% Exchequer silt loam with 10% rock outcrops. Soils in the San Miguel series consist of well-drained, shallow to moderately deep silt loams with clay subsoil. Soils in the Exchequer series consist of shallow and very shallow, well-drained silt loams that formed in material weathered from hard metabasic rock. Soils in the Stockpen series consist of moderately well drained, moderately deep, gravelly clay loams (Bowman 1973).

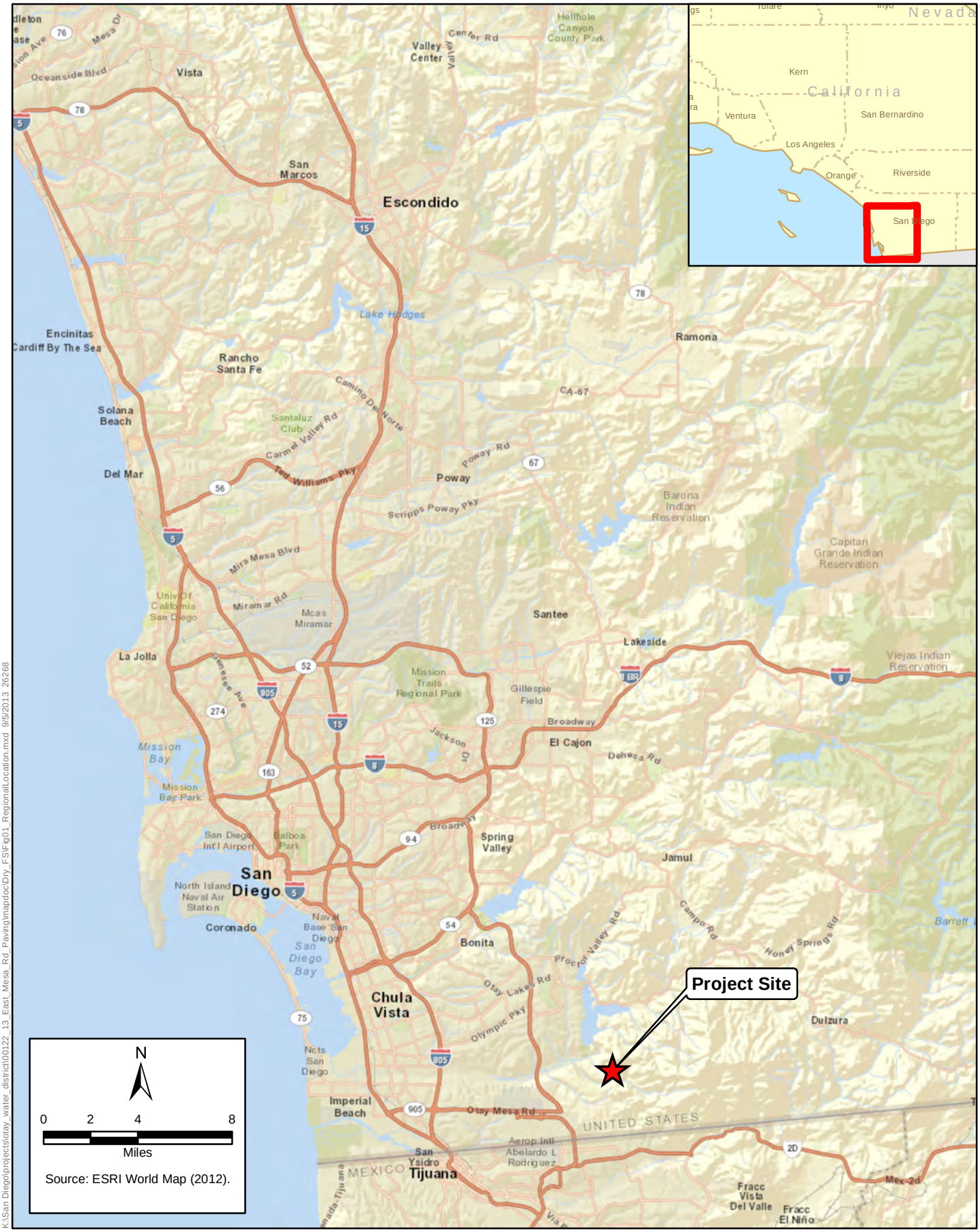


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Figure 1
Regional Location
870-1 Reservoir Paving Project

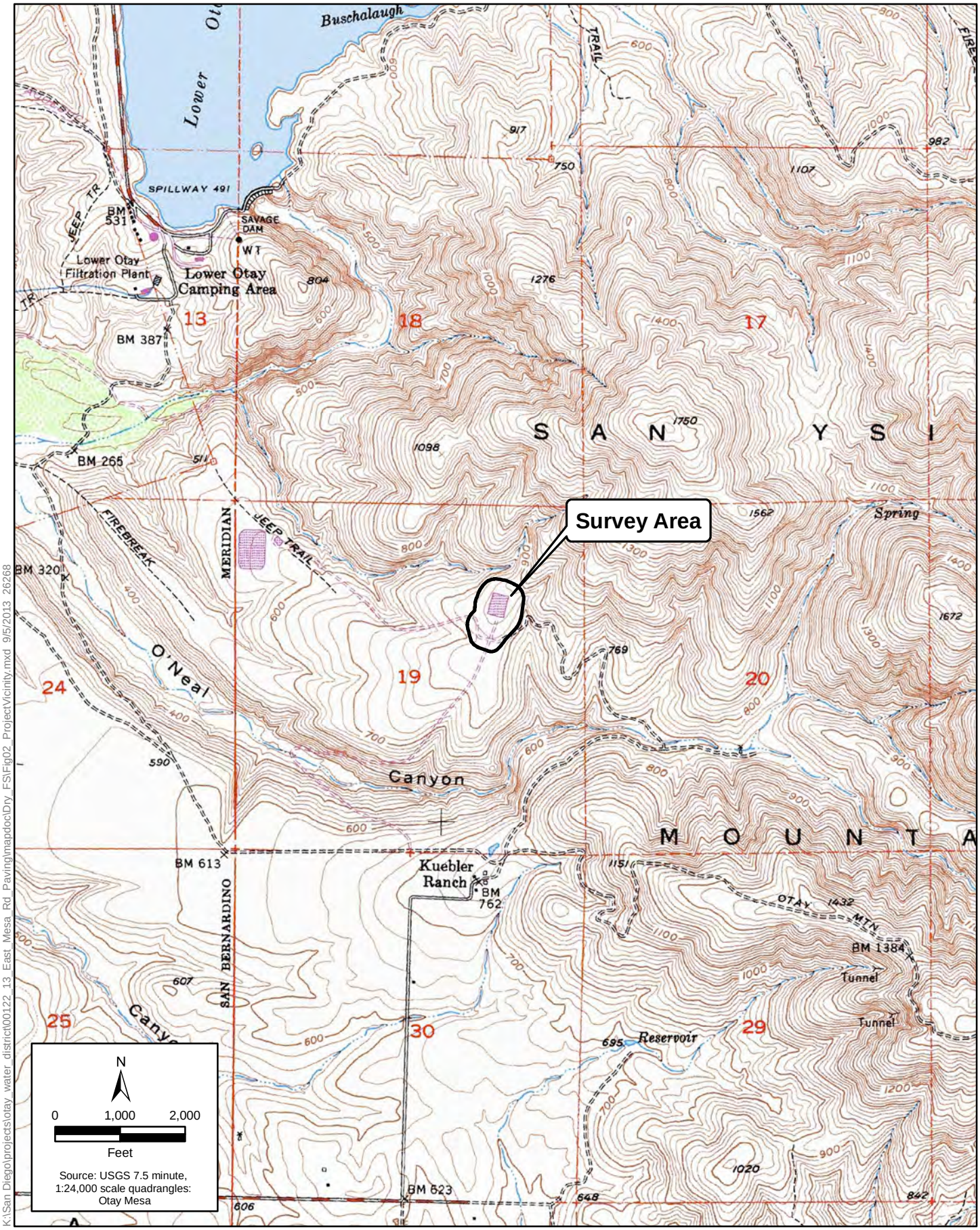

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Figure 2
Project Vicinity
870-1 Reservoir Paving Project

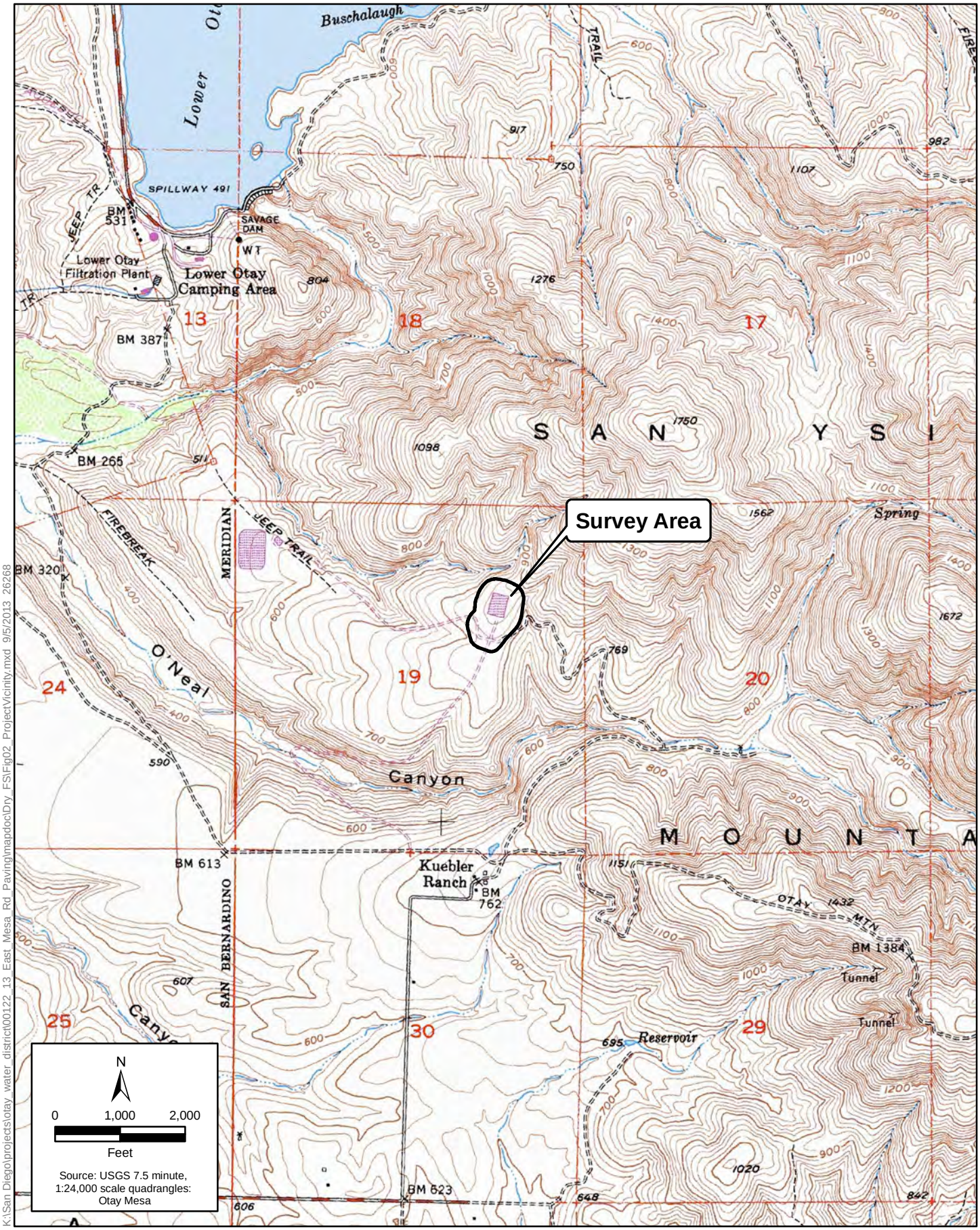

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Figure 2
Project Vicinity
870-1 Reservoir Paving Project

1.2 Project Vicinity

San Diego fairy shrimp are known from vernal pools in natural mima mound topography 0.8 mile from the study area, on the northeast side of the George Bailey Detention Facility. These pools are primarily on lands previously held by The Environmental Trust. Riverside fairy shrimp are known from detention basins 2.3 miles to the south and 3.3 miles to the west of the study area. The study area is on the shoulder of Otay Hills/Otay Mountain, and there is no flat, undeveloped land in the immediate area.

2.0 Methods

ICF biologist Dale Ritenour (TE Permit# 58888A-0) conducted a protocol dry season survey to determine the presence or absence of San Diego fairy shrimp and Riverside fairy shrimp within the basin. Survey methodology follows the Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods (Guidelines) (USFWS 1996). Prior to initiating the surveys, a 15-day pre-notification letter was sent to the U.S. Fish and Wildlife Service (USFWS), Carlsbad Field Office informing intent to conduct a protocol dry season survey for the presence or absence of listed fairy shrimp (Appendix A).

Due to discrepancies in interpretations of Mr. Ritenour's permit authorizations, ICF contracted USFWS-approved listed branchiopod cyst identifier, Dr. Chuck Black of Ecological Restoration Service (TE-835549-8), to process additional soil samples from the basin for presence or absence of fairy shrimp cysts.

2.1 Dry Season Fairy Shrimp Sampling

2.1.1 Soil Collection

On June 11, 2012, ICF vernal pool biologist Doug Allen collected soil samples for the dry season survey. Soil samples were collected when the areas with potential to support fairy shrimp (i.e., vernal pools and road ruts) were dry. A hand trowel was used to collect soil samples from the top 1-3 centimeters of pool sediment in accordance with the USFWS-approved recovery permit protocol. Whenever possible, soil samples were collected in chunks and the trowel was used to pry up intact chunks of sediment. Loosening the soil by raking or shoveling was avoided as such methods can damage cysts. Ten 100-mililiter soil samples were collected at the basin, with no more than one liter of soil taken from the basin. The stored samples were kept out of direct sunlight in order to avoid excessive heating.

On August 5, 2013, ICF vernal pool biologist Dale Ritenour recollected one liter of soil from the basin, following methods above, for processing by Dr. Black.

2.1.2 Soil Processing for Cyst Presence

Soil samples were processed by Dale Ritenour in accordance with the Guidelines (USFWS 1996). The ten soil samples were measured into individual plastic containers. These samples were hydrated in tap water then washed through a set of sieves. Material passing through a Number 45 (0.0139") USA Standard Testing Sieve, A.S.T.M.E.-11 specification and caught on a Number 70 (0.0083") Sieve was

rinsed into a container with approximately 100 milliliters of a saturated brine solution to float organic material, including fairy shrimp cysts. The material floating on the brine was decanted onto a paper filter on a wire-mesh strainer. The organic material collected on the paper was examined under a Cambridge Instruments Stereo Zoom 5 Microscope. No fairy shrimp cysts were identified.

3.0 Results

Cysts of the *Streptocephalus* genus can be discerned from *Branchinecta* cysts based on cyst surface characteristics. Only one member of the *Streptocephalus* genus, Riverside fairy shrimp, is found within San Diego County, so any observed *Streptocephalus* cysts would be accepted as Riverside fairy shrimp. Two species of *Branchinecta* have been found on Otay Mesa: San Diego fairy shrimp and Lindahl's/versatile fairy shrimp (*Branchinecta lindahli*). Cysts of the *Branchinecta* genus present in southern California are very similar and cannot be reliably identified through microscope examination.

No fairy shrimp cysts were recovered in soil samples processed and analyzed by ICF.

No distinctive *Branchinecta* cysts, no *Streptocephalus* cysts, and no cladoceran ephippia were found in any of the samples processed and analyzed by Dale Ritenour or Dr. Black. A single sample had one ostracod shell present. Ostracods are freshwater invertebrates common to ephemeral waters and the presence of an ostracod shell indicates that this basin may hold water for some duration during the rainy season. The methods and results from Dr. Black are included as Appendix B.

4.0 References

Bowman R. 1973. *Soil Survey of the San Diego Area*. U.S. Department of Agriculture in cooperation with the USDI, UC Agricultural Experiment Station, Bureau of Indian Affairs, Department of the Navy, and the U.S. Marine Corps.

U.S. Fish and Wildlife Service (USFWS). 1996. Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods. April 19.

5.0 Certification

I certify that the information in this survey report and attached exhibits fully and accurately represent my work.

August 16, 2013

Dale Ritenour (Permit No. TE-58888A-0) Date
Vernal Pool Biologist
Author and Surveys

August 16, 2013

Doug Allen (Permit No. TE-837448-5) Date
Vernal Pool Biologist
Field Surveys

Appendix A
USFWS Notification

June 10, 2013

Ms. Susie Tharratt
Recovery Permit Coordinator
Department of Interior
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road
Carlsbad, CA 92011

RE: 15-Day Notice for Protocol Surveys for Listed Vernal Pool Branchiopods

Dear Ms. Tharratt:

The Otay Water District (OWD) has requested that ICF International (ICF) conduct a protocol dry season survey for listed vernal pool branchiopods for the East Mesa Reservoir Road Paving Project (Project) on Otay Mesa, San Diego County, CA (Figures 1 and 2). The goal of this Project is to pave the existing dirt road around the OWD East Mesa reservoir. The purpose of the survey is to determine the presence/absence of listed branchiopods within the single rut/basin onsite. I will be conducting the dry season survey under the guidelines stated in the 1996 Interim Survey Guidelines issued by the U.S. Fish and Wildlife Service. Fairy shrimp biologist Douglas Allen (TE-837448-5) may assist me with this survey.

Please do not hesitate to contact me with any questions or comments.

Sincerely,

Dale Ritenour
TE-58888A-0
(858) 444-3958
Dale.Ritenour@icfi.com

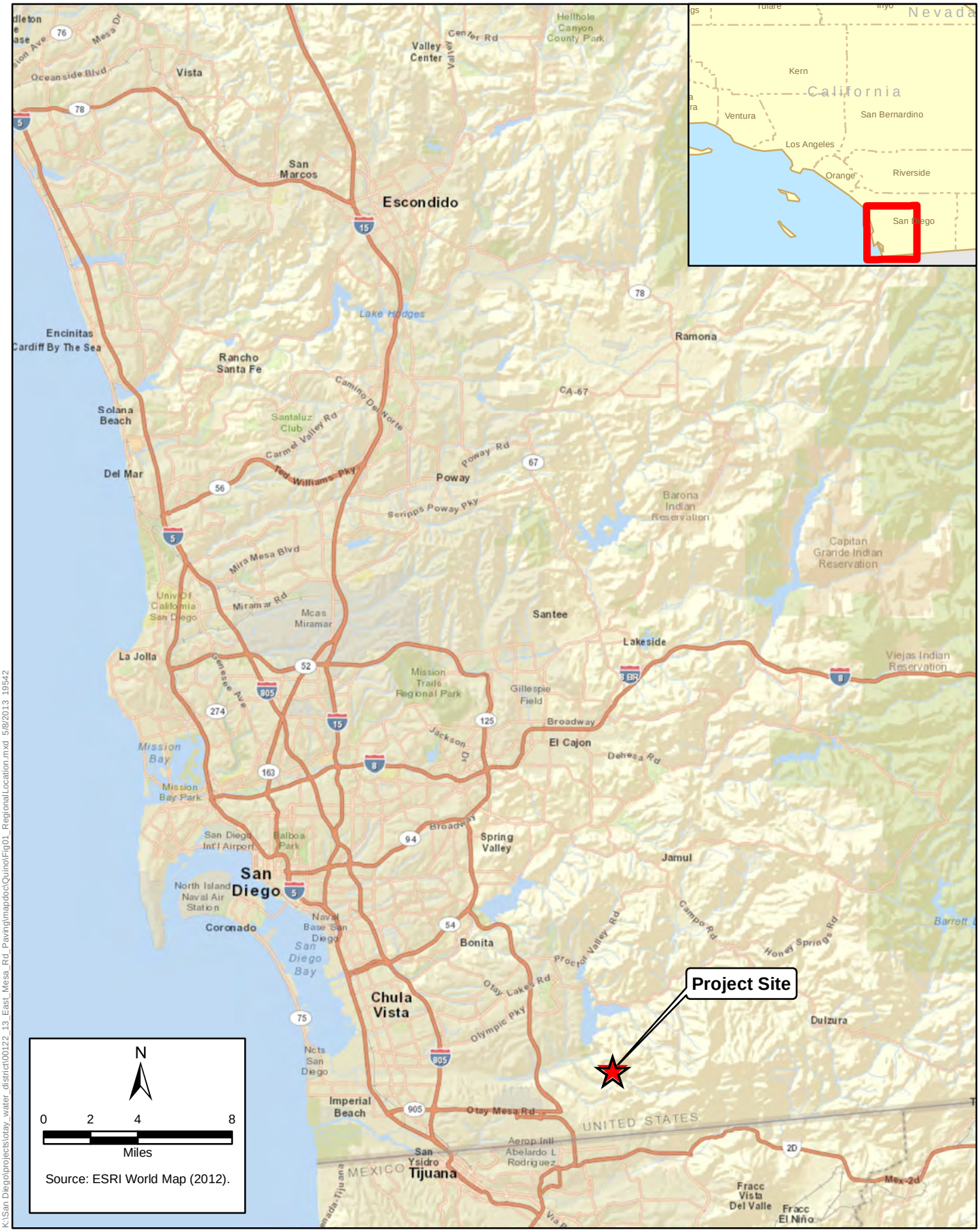

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Figure 1
Regional Location
East Mesa Reservoir Road Paving Project

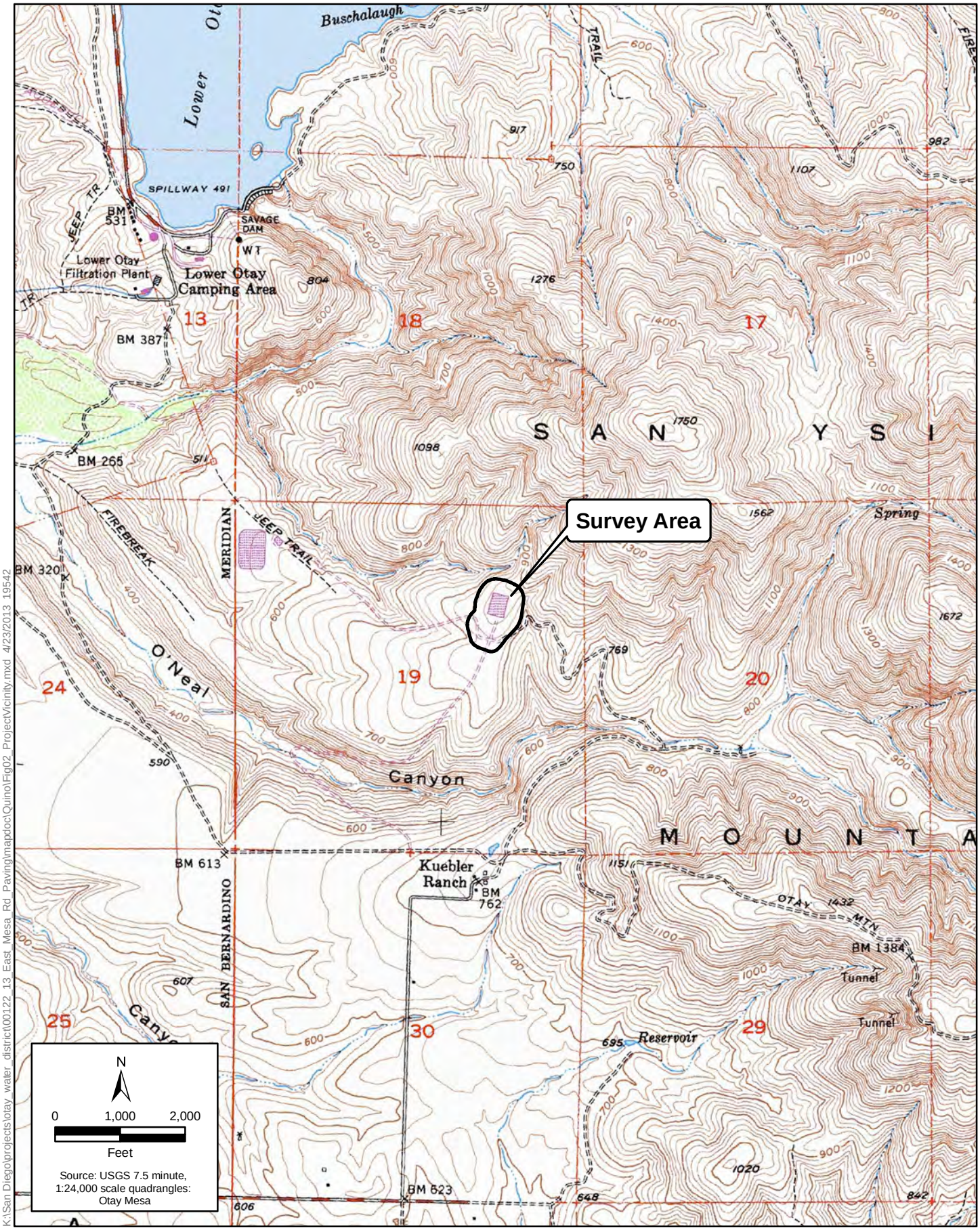

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Figure 2
Project Vicinity
East Mesa Reservoir Road Paving Project

July 26, 2013

Ms. Susie Tharratt
Recovery Permit Coordinator
Department of Interior
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road
Carlsbad, CA 92011

RE: 15-Day Notice for Protocol Surveys for Listed Vernal Pool Branchiopods

Dear Ms. Tharratt:

The Otay Water District (OWD) has requested that ICF International (ICF) conduct a protocol dry season survey for listed vernal pool branchiopods for the East Mesa Reservoir Road Paving Project (Project) on Otay Mesa, San Diego County, CA (Figures 1 and 2). The goal of this Project is to pave the existing dirt road around the OWD East Mesa reservoir. The purpose of the survey is to determine the presence/absence of listed branchiopods within the single rut/basin onsite. ICF will recollect soil from this basin and provide it to Listed Branchiopod Cyst Identifier Chuck Black (TE-835549-8) for processing and analysis.

Please do not hesitate to contact me with any questions or comments.

Sincerely,

Dale Ritenour
TE-58888A-0
(858) 444-3958
Dale.Ritenour@icfi.com

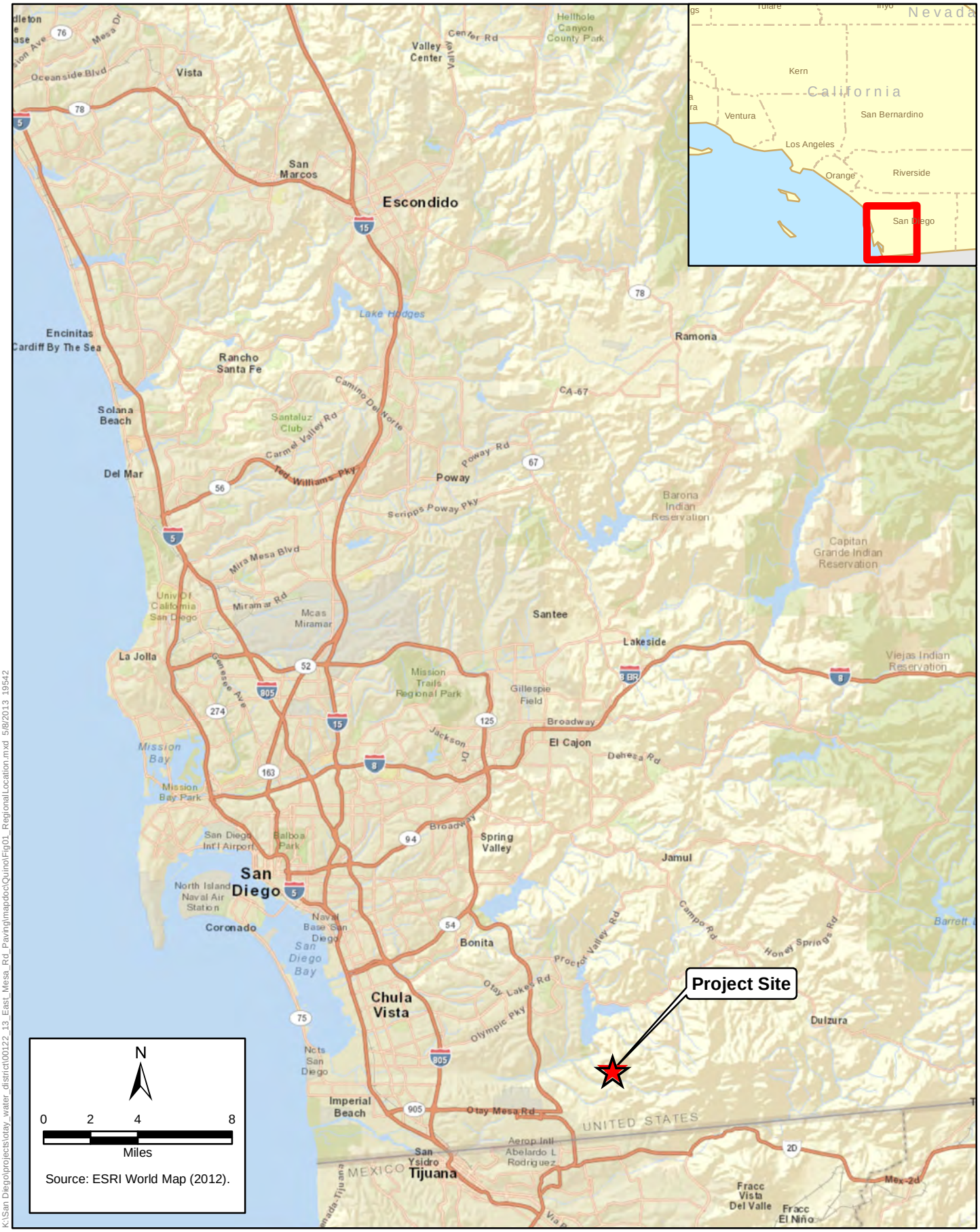

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Figure 1
Regional Location
East Mesa Reservoir Road Paving Project

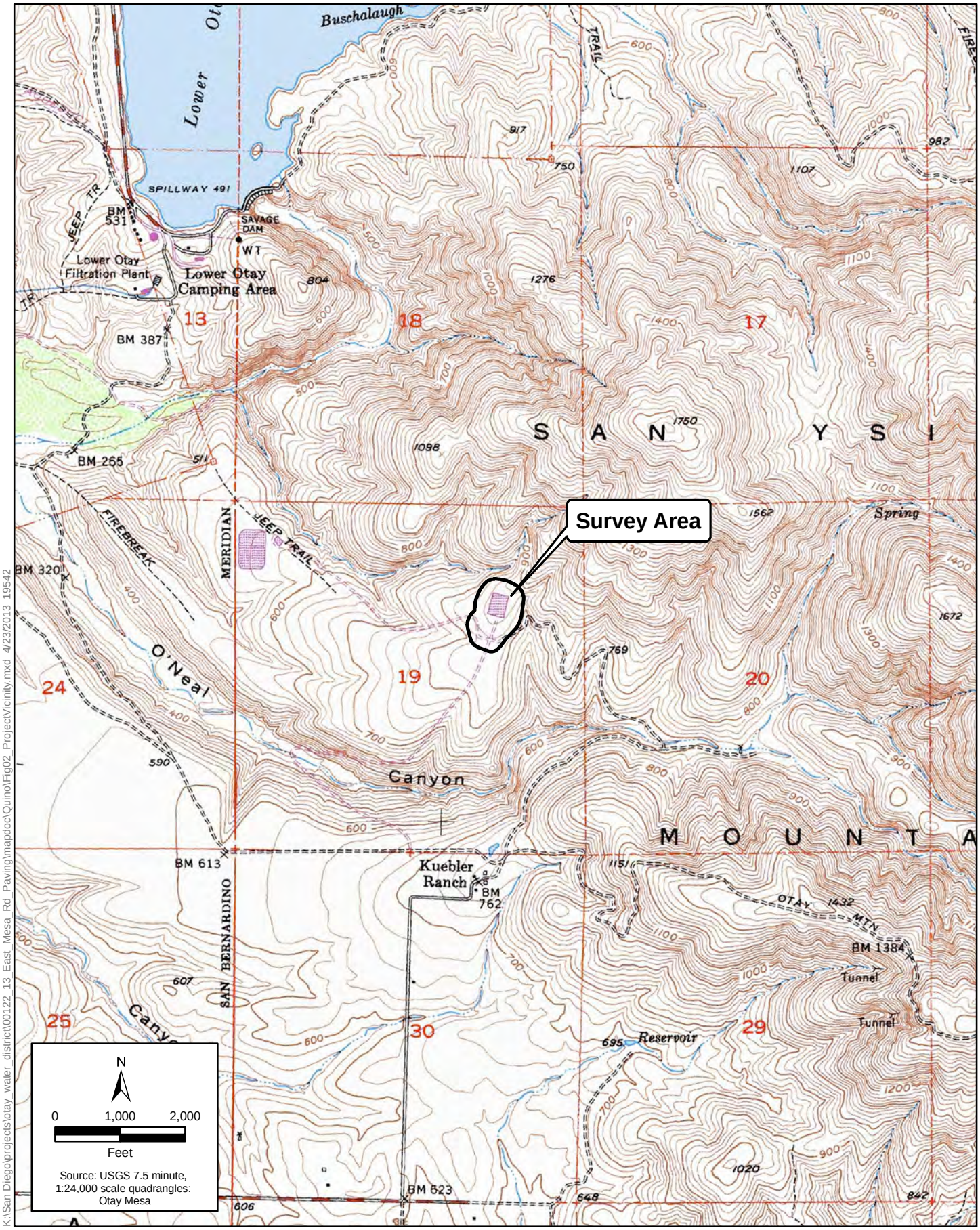

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Figure 2
Project Vicinity
East Mesa Reservoir Road Paving Project

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OWD Water Tank Road Paving

Appendix B
Soil Analysis Letter

Examination of Soil Samples from an Otay Mesa, CA Site for Fairy Shrimp Cysts

Chuck Black
Ecological Restoration Service
San Diego, CA 92103
(619) 944-1964
7 August, 2013

10(a)(1)(A) permit
TE835549-8
Effective to 3/9/2015

Introduction

Ecological Restoration Service was contracted by ICF International, San Diego, CA in August 2013 to process soil samples collected from a seasonally ponding basin at the Otay Water District East Mesa Reservoir site, San Diego County, CA, for determination of the presence of fairy shrimp cysts.

Methods

Soil Processing for Cyst Presence

A composite, approximately 1 liter dry soil sample, collected by Dale Ritenour [10(a)(1)(A) permit number TE-58888A-0] from a road puddle at the Otay Water District site was delivered to Ecological Restoration Service in August 2013. The sample was divided into ten approximately 100 ml samples which were processed per the U.S. Fish and Wildlife Service April 19, 1996 Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(l)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods, modified by Ecological Restoration Service as described below. Charles Black of Ecological Restoration Service is authorized by the U.S. Fish and Wildlife Service to process dry samples for the presence of fairy shrimp cysts and to culture cysts to identify to species level as special conditions of his 10(a)(1)(A) permit. The samples were hydrated for approximately 1 hour in tap water, then washed through a set of sieves. Material passing through a Number 45 (.0139") USA Standard Testing Sieve, A.S.T.M.E.-11 specification and caught on a Number 70 (.0083") Sieve was rinsed into a container with approximately 50 ml of a saturated brine solution to float organic material, including fairy shrimp cysts. The material floating on the brine was decanted onto a paper filter on a filter funnel, and water was removed through the filter paper by vacuum suction. The material left on the paper was examined under a 6.3-570x power Olympus SZX9 Zoom Stereo Microscope. Distinctive fairy shrimp cysts, if present, were individually counted. The presences of ostracod shells and cladoceran ephippia were also noted in samples.

Results

Cyst Presence

No distinctive *Branchinecta* cysts, no *Streptocephalus* cysts, and no cladoceran ephippia were found in any of the samples. A single sample had one ostracod shell present.

Appendix C

Cultural Resources Letter Report

April 18, 2013

Ms. Lisa Coburn-Boyd
Environmental Compliance Specialist
Otay Water District
2554 Sweetwater Springs Road
Spring Valley, California 91978-2096

Subject: Otay Water District East Mesa Reservoir Road Paving Project – Cultural Resources Survey

Dear Ms. Coburn-Boyd:

Please be advised that ICF International (ICF) has completed a Phase I cultural resources survey and inventory for the Otay Water District (OWD) East Mesa Reservoir Road Paving Project (Project). A summary of the investigations is presented below.

Project Overview

The OWD East Mesa Reservoir is located at the northern terminus of Alta Road, northeast of the East Mesa Detention Facility in the unincorporated community of Otay, San Diego County, California, approximately 10 kilometers east-southeast of Chula Vista, California (Figure 1). Specifically, the Project is located within the NE ¼ of Section 19 of Township 18 South, Range 1 East of the San Bernardino Base Meridian, as depicted on the United States Geological Survey *Mesa, California* 7.5-minute series quadrangle (1955 [photorevised 1971, photoinspected 1975]) (Figure 2). OWD plans to pave a dirt and gravel service road that encircles a small reservoir in order to facilitate improved access around the reservoir. The road is located between the reservoir and a chain-link fence that encompasses the facility. The Project Area consists of the road and the area within 7.5 meters of each side of the road (Figure 3).

This study was conducted in compliance with the California Environmental Quality Act (CEQA) as amended (California Public Resources Code [PRC] § 21000 et seq.), pursuant to the *Guidelines for Implementation of the California Environmental Quality Act* (California Code of Regulations, Title 14 § 15000 et seq.), and in accordance with industry standards for similar projects in San Diego County. The study included: 1) a cultural resources records search at the South Coastal Information Center (SCIC), the applicable California Historical Resources Information System (CHRIS) repository for the Project, and (2) a cultural resources intensive pedestrian survey. The purpose of the study was to identify and record any "historical resources" as defined by CEQA (PRC § 5020.1[j]) present in the Project Area.

Methodology

The study included both a cultural resources records search at the SCIC and a cultural resources intensive pedestrian survey. The methodology used during the study is presented below.

Cultural Resources Records Search

ICF submitted a records search request to the SCIC for the Project Area and all areas within ¼ mile of the Project Area on March 11, 2013, and ICF received the results of the request from the SCIC on March 21, 2013. The records search consists of data obtained from the following sources:

- Mapped locations of previously-recorded archaeological resources;
- Mapped locations of previously-recorded non-archaeological resources;
- Mapped locations of previous cultural resources studies;
- Copies of resource records for previously-recorded archaeological resources;
- Copies of resource records for previously-recorded non-archaeological resources;
- Copies of reports from previous studies;
- Ethnographic information; and,
- Historical maps.

The records search revealed that two previously-recorded cultural resources (CA-SDI-10668/H and CA-SDI-16450/H) are present within ¼ mile of the Project Area, and that 16 cultural resources studies have been previously conducted within ¼ mile of the Project Area, of which three have included some portion of the Project Area. Resource CA-SDI-10668/H is a large prehistoric quarry with several lithic scatters and flaking station, and also includes an historic-period rock cistern and historic-period refuse – only the prehistoric component of the resource was recorded within the Project Area. The site boundary for CA-SDI-10668/H includes the southern two-thirds of the Project Area. Resource CA-SDI-16450/H consists of two prehistoric bedrock milling features and flaked stone tools and debitage, and also an historic-period water tank – only the prehistoric component of the resource was recorded within the Project Area. The site boundary for CA-SDI-16450/H covers the northeast corner of the Project Area. Both resources were previously tested for significance and determined not-eligible for listing on the California Register of Historical Resources (CRHR).

Previously-Recorded Cultural Resource Studies Within the Project Area

Trinomial	Description	CRHR-Eligibility
CA-SDI-10668/H	Large prehistoric quarry with an historic-period feature and refuse	Previously determined not-eligible
CA-SDI-16450/H	Prehistoric bedrock milling features and flaked stone, and an historic-period feature	Previously determined not-eligible

Previous Cultural Resource Studies Covering Some Portion of the Project Area

NADB #	Year	Author(s)	Report Title
1124651	1987	WESTEC	East Mesa County Detention Facility Draft Environmental Impact Report
1120850	1988	Kyle, Carolyn, Dennis Gallegos, and Roxana Phillips	Cultural Resource Survey and Testing Program for the East Mesa Detention Facility, San Diego, California.
1122945	1994	Kyle, Carolyn E., and Dennis R. Gallegos	Cultural Resource Survey and Test of Five Sites for the Otay Water District Central Area and Otay Mesa Interconnection Pipeline Alignments.

Field Methods

ICF archaeologist Robin Hoffman, MA, RPA, conducted a cultural resources intensive pedestrian survey for the Project Area on April 18, 2013. The survey methods consisted of walking the Project Area and inspecting the ground surface for cultural materials. A Trimble Geo XH sub-meter accuracy Global Positioning System (GPS) unit was used to track survey coverage and record any identified cultural resources. Digital photographs were taken to document ground conditions and any identified cultural resources. Notes on resource details were collected to meet or exceed site recordation guidelines based on the *California Office of Historic Preservation's California Archaeological Inventory Handbook for Completing an Archaeological Site Record* and those recommended by the SCIC.

Weather conditions during the survey were mild temperature, sunny, with a slight breeze. Ground visibility averaged 95%, with the existing dirt road presenting 100% visibility and areas adjacent to the road with 85% visibility. Areas adjacent to the road were covered in low medium-density grasses, and the road consisted of bare dirt.

Results

No previously-unrecorded cultural resources were identified during the study. Ten pieces of lithic debitage, all Santiago Peak (dark green fine-grained) metavolcanics, were observed within the existing site boundary for CA-SDI-16450/H. The site record describes these artifacts, accurately, and the existing site boundary appears to be accurate. Heavy ground disturbance from construction of the OWD reservoir and associated dirt road has impacted the portions of the site within the Project Area. No cultural material was observed in portions of the Project Area within the existing site boundary for CA-SDI-10668/H. Heavy ground disturbance from construction of the OWD reservoir and associated dirt road has occurred in the portion of CA-SDI-10668/H within the Project Area, and appears to have destroyed this portion of the site.

Conclusions and Management Recommendations

No previously-unrecorded cultural resources were identified during the survey. Two cultural resources (CA-SDI-10668/H and CA-SDI-16450/H) were previously-recorded within portions of the Project Area. However, both resources were previously tested and determined not-eligible for the CRHR. During the survey, no cultural material was identified within the existing site boundary for CA-SDI-10668/H. Cultural materials were identified in the portion of CA-SDI-16450/H within the Project Area. The materials, however, are the same as those (accurately) described in the site record. The likelihood of finding additional cultural resources resources is low due to the excellent (averaging 95%) ground visibility during the survey.

Both of the previously-recorded sites were previously determined not-eligible for the CRHR, and therefore require no further consideration under CEQA. The cultural material identified within CA-SDI-16450/H is the same as that previously-recorded and does not suggest the need to reconsider the CRHR-eligibility of the site.

In summary, ICF does not foresee that the Project will have any substantial adverse change to the significance of an historical resource or unique archaeological resource. Therefore, ICF does not foresee that the Project will have a significant effect on the environment with respect to cultural resources. ICF does not recommend further study or mitigation for cultural resources. If any human remains are discovered during Project activities, the procedures outlined in Section 7050.5 of the

California Health and Human Safety Code should be followed. If you have any questions or comments, do not hesitate to contact me at robin.hoffman@icfi.com or 858-444-3959.

Sincerely,

Robin Hoffman, MA, RPA
ICF International, San Diego

Enclosed: Figure 1 – Regional Location
Figure 2 – Project Vicinity
Figure 3 – Project Area

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Figure 1 - Project Regional Location
Otay Water District
East Mesa Reservoir Road Paving Project

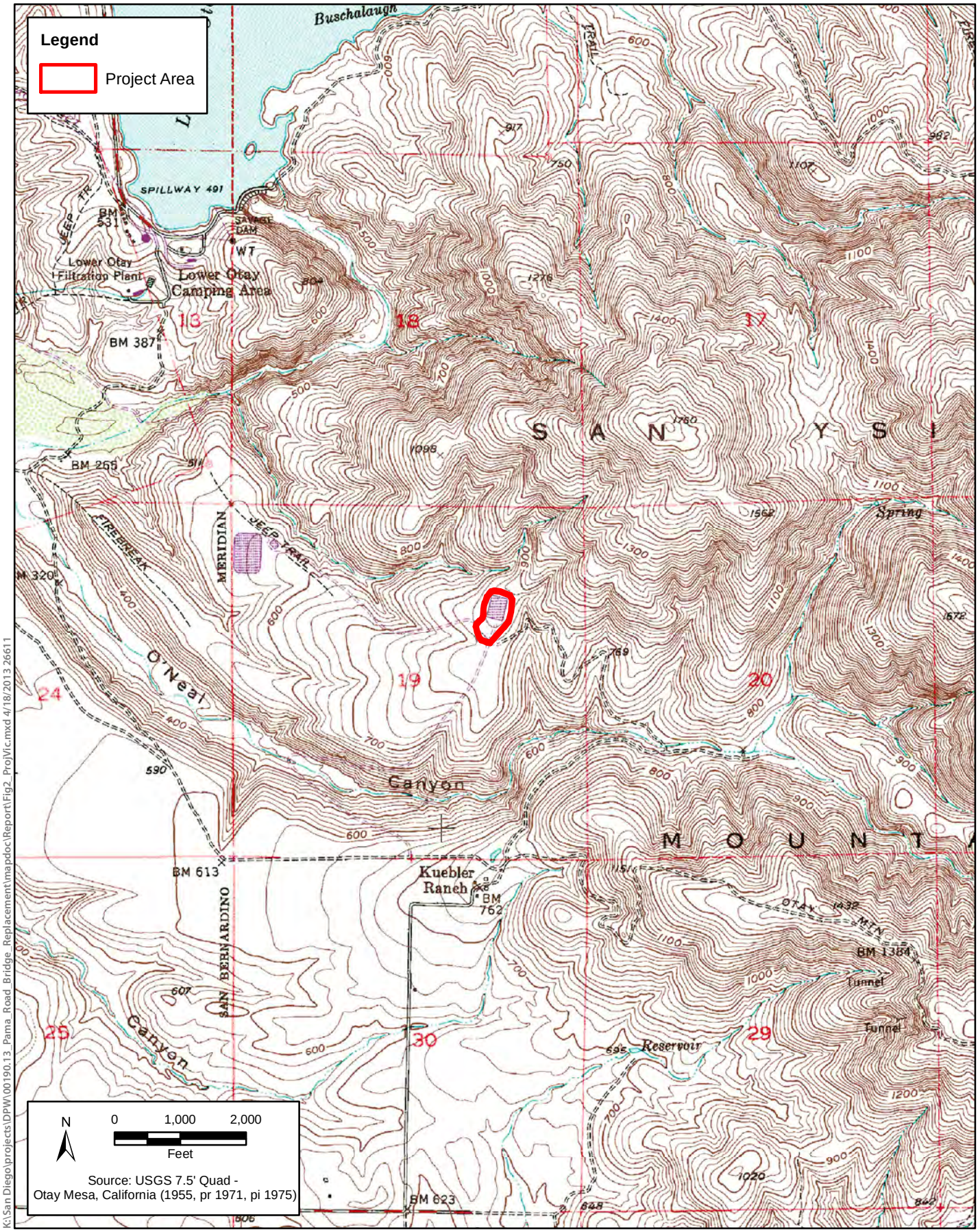

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Figure 2 - Project Vicinity
Otay Water District
East Mesa Reservoir Road Paving Project

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Figure 3 - Project Area
Otay Water District
East Mesa Reservoir Road Paving Project

Appendix D

Subsurface Investigation, CIP 2515 870-1 Reservoir Paving

Geotechnical Engineering
Construction Inspection
Materials Testing
Environmental

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SUBSURFACE INVESTIGATION (REVISED)

CIP P2515 870-1 Reservoir Paving
North of Alta Road
Otay Mesa Area of San Diego, California

Prepared For:
Otay Water District
2544 Sweetwater Springs Boulevard
Spring Valley, California 91978

Prepared By:
MTGL, Inc.
6295 Ferris Square, Suite C
San Diego, California 92121

June 28, 2013
(Revised July 3, 2013)

MTGL Project No. 2069A17
MTGL Log No. 13-547R

Geotechnical Engineering
Construction Inspection
Materials Testing
Environmental

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June 28, 2013
(Revised July 3, 2013)

Otay Water District
2544 Sweetwater Springs Boulevard
Spring Valley, California 91978

MTGL Project No. 2069A17
MTGL Log No. 13-547R

Attention: Mr. Kevin Cameron

Subject: **SUBSURFACE INVESTIGATION (Revised)**
CIP P2515 870-1 Reservoir Paving
North of Alta Road
Otay Mesa Area of San Diego, California

Dear Mr. Cameron:

In accordance with your request and authorization we have completed a Subsurface Investigation for the subject site. We are pleased to present the following report which addresses both engineering geologic and geotechnical conditions including a description of the site conditions, results of our field exploration and laboratory testing, and our conclusions and recommendations for the design and construction of a proposed access road located near 870-1 Reservoir.

Based on our investigation, there were no adverse geotechnical issues that would prevent construction of the access road. The site will be suitable for construction, provided the recommendations presented herein are incorporated into the plans and specifications for the proposed construction.

We appreciate this opportunity to be of continued service and look forward to providing additional consulting services during the planning and construction of the project. Should you have any questions regarding this report, please do not hesitate to contact us at your convenience.

Respectfully submitted,
MTGL, Inc.

Sam E. Valdez, RCE 56226, RGE 2813
Vice President | Chief Engineering

REGISTERED PROFESSIONAL ENGINEER
SAM E. VALDEZ
GE 2813
Expires 12/31/14
GEOTECHNICAL
STATE OF CALIFORNIA

TABLE OF CONTENTS

1.0 INTRODUCTION 1

1.1 PLANNED CONSTRUCTION 1
1.2 SCOPE OF WORK 1
1.3 SITE DESCRIPTION 1
1.4 FIELD INVESTIGATION 2
1.5 LABORATORY TESTING 2

2.0 FINDINGS 3

2.1 REGIONAL GEOLOGIC CONDITIONS 3
2.2 SITE GEOLOGIC CONDITIONS 3
2.3 SURFACE AND GROUNDWATER CONDITIONS 4
2.4 CONTAMINATED SOILS 4
2.5 FAULTING AND SEISMICITY 4
2.6 LIQUEFACTION POTENTIAL 5
2.7 LANDSLIDES 5
2.8 TSUNAMI AND SEICHE HAZARD 5

3.0 CONCLUSIONS 6

4.0 RECOMMENDATIONS 7

4.1 EXCAVATION CHARACTERISTICS/SHRINKAGE 7
4.2 SITE CLEARING RECOMMENDATIONS 7
4.3 SITE GRADING RECOMMENDATIONS 8
4.4 COMPACTION RECOMMENDATIONS 8
4.5 TEMPORARY EXCAVATIONS AND SHORING 8
4.6 FILL MATERIALS 10
4.7 THRUST BLOCKS 11
4.8 CORROSIVITY 11
4.9 PAVEMENTS 12
4.10 CBC SEISMIC DESIGN PARAMETERS 12
4.11 GEOTECHNICAL OBSERVATIONS/TESTING OF EARHTWORK OPERATIONS 13

5.0 LIMITATIONS 14

TABLE OF CONTENTS
(continued)

ATTACHMENTS:

Figure 1 – Site Location Map
Figure 2 – Site Plan
Figure 3 – Regional Geologic Map
Figure 4 – Regional Fault Map

Appendix A – References
Appendix B – Field Exploration Program
Appendix C – Laboratory Test Procedures

1.0 INTRODUCTION

In accordance with your request and authorization, MTGL, Inc. has completed a Subsurface Investigation for the subject site. The following report presents a summary of our findings, conclusions and recommendations based on our investigation, laboratory testing, and engineering analysis.

1.1 PLANNED CONSTRUCTION

It is our understanding that the Otay Water District is in the design phase for a new asphalt concrete access road that runs along the south and east side of the existing 870-1 Reservoir. The 870-1 Reservoir is located in the Otay Mesa area of the City of San Diego, California, see Site Location Map, Figure 1. The new access road is for regular maintenance of the reservoir.

1.2 SCOPE OF WORK

The purpose of our investigation is to provide geotechnical design recommendations to be used for the design and construction of the access road. The scope of our geotechnical services included the following:

- Review of geologic, ground water, aerial photos, and other geotechnical literature.
- Reconnaissance of the site.
- Logging, sampling and backfilling of two exploratory borings drilled with an 8-inch hollow stem auger drill rig to a maximum depth of 7 feet below existing grades.
- Laboratory testing of representative samples.
- Geotechnical engineering review of data and engineering recommendations.
- Preparation of this report summarizing our findings and presenting our conclusions and recommendations for the proposed construction.

1.3 SITE DESCRIPTION

The 870-1 Reservoir is a below ground structure. The site was graded so that fill was added to the northwest, southwest and southeast sides of the reservoir to create a level surface. There is a dirt access road that runs from the entrance to the site, off of Alta Road, along the eastern side of the reservoir to the northeastern side of the reservoir. The existing dirt road is where the new asphalt

concrete access road is planned. Topographically, the site descends toward the south and west. Elevations along the access road ranged from 875 feet msl on the northeast to 837 feet msl on the southwest side, near the entrance to the site. The Site Plan, Figure 2, shows the topographical layout of the site.

1.4 FIELD INVESTIGATION

Prior to the field investigation, a site reconnaissance was performed by an engineer from our office to mark the boring locations, as shown on the Site Plan (Figure 2), and to evaluate the boring location with respect to obvious subsurface structures and access for the drilling rig. Underground Service Alert was then notified of the marked location for utility clearance.

Our subsurface investigation consisted of drilling test borings utilizing a truck mounted drill rig equipped with an 8-inch diameter hollow stem auger. See Appendix B for further discussion of the field exploration including logs of test borings.

Borings were logged and sampled using Modified California Ring (Ring) sampler at selected depth intervals. Samplers were driven into the bottom of the boring with successive drops of a 140-pound weight falling 30 inches. Blows required to drive the Ring sampler 12 inches are shown on the boring logs in the “blows/foot” column (Appendix B). Representative bulk soil samples were also obtained from our borings.

Each soil sample collected was inspected and described in general conformance with the Unified Soil Classification System (USCS). The soil descriptions were entered on the boring logs. All samples were sealed and packaged for transportation to our laboratory.

1.5 LABORATORY TESTING

Laboratory tests were performed on representative samples to verify the field classification of the recovered samples and to determine the geotechnical properties of the subsurface materials. All laboratory tests were performed in general conformance with ASTM or State of California Standard Methods. The results of our laboratory tests are presented in Appendix C of this report.

2.0 FINDINGS

2.1 REGIONAL GEOLOGIC CONDITIONS

The site is located in the coastal portion of the Peninsular Range Province of California. This area of the Peninsular Range Province has undergone several episodes of marine inundation and subsequent marine regression throughout the last 54 million years, which has resulted in the deposition of a thick sequence of marine and nonmarine sedimentary rocks on the basement rock of the Southern California Batholith. Gradual emergence of the region from the sea occurred in Pleistocene time, and numerous wave-cut platforms, most of which were covered by relatively thin marine and nonmarine terrace deposits, formed as the sea receded from the land. Accelerated fluvial erosion during periods of heavy rainfall, coupled with the lowering of the base sea level during Quaternary times, resulted in the rolling hills, mesas, and deeply incised canyons which characterize the landforms in the general site vicinity today.

2.2 SITE GEOLOGIC CONDITIONS

Based on local geology maps, the site is mapped as having Tertiary-age Otay Formation (To) exposed at the surface, underlain by Tertiary-age Fanglomerate (Tf). Cretaceous-age Santiago Peak Volcanics (Ksp) is expected to underlie the Fanglomerate. In general, the Otay Formation is characterized as having massive sandstone and claystone layers, the Fanglomerate is a bolder fanglomerate that typically has a medium to coarse sandstone matrix, and the Santiago Peak Volcanics is typically unmetamorphosed to slightly metamorphosed.

As observed in our borings, the site is underlain by undocumented fill/residual soils over the Otay Formation. In our borings the fill/residual soils extended to 4½ to 5½ feet below existing grade. The fill/residual soils encountered consisted of light brown, yellowish brown, and reddish brown clayey sand (SC) and dark brown fat clay (CH). The clayey sand is fine to coarse grained, moist and medium dense to dense. The fat clay is high plasticity, moist and hard. Gravel and cobbles were encountered throughout the borings and are exposed on the surface at the site.

The Otay Formation was encountered in the borings below the undocumented fill/residual soils at a depth of 4½ to 5½ feet below existing grade. The Otay Formation consisted of brown clayey sandstone ‘SC’ and yellowish brown silty sandstone ‘SM’. The sandstones are fine to coarse

grained, moist and moderately to well cemented. Refusal in the Otay Formation occurred at both borings at a depth of 7 feet below existing grade. Logs of the subsurface conditions encountered in our borings are provided in Appendix B.

2.3 Surface and Groundwater Conditions

No seepage or groundwater was observed in our investigation. However, it should be recognized that leaking from the reservoir could produce seepage or locally perched groundwater conditions within the soil underlying the site. Based on the subsurface conditions at the site, any perched groundwater would typically lie at the bottom of the fill/residual materials at the contact of the denser formational soils.

2.4 Contaminated Soils

We did not expose any signs of contaminated soil within the borings drilled as a part of this investigation. It should be noted that although no obvious signs of contamination were encountered within the borings there is still a potential for contaminated soils to exist between boring locations.

2.5 Faulting and Seismicity

Faults are one of the most widespread geologic hazards to development in California. Faults of most concern are those designated as active, which have shown surface displacement within the last approximately 11,000 years and potentially active, which have shown surface displacement within the last approximately 1.6 million years. The subject site is not located within an area previously known for significant geologic hazards. The site is not located within the Alquist-Priolo Earthquake Fault Zone and therefore surface rupture of an active fault is not considered to be a significant geologic hazard at the site.

Potential seismic hazards at the site are anticipated to be the result of ground shaking from distant active faults. The nearest known active fault is the Rose Canyon fault zone, which is located about 15.0 miles (24.1 km) northwest of the site. Other active faults include the Coronado Bank fault zone, which is located 21.4 miles (34.4 km) west of the site, and the Elsinore-Julian fault zone, which is located 39.8 miles (64.1 km) northeast of the site. The Regional Fault Map, Figure 4, shows the site plotted in relation to active faults in the area. A number of other significant faults also occur in the San Diego metropolitan area suggesting that the regional faulting pattern is very

complex. Faults such as those offshore are known to be active and any could cause a damaging earthquake. The San Diego metropolitan area has experienced some major earthquakes in the past, and will likely experience future major earthquakes.

2.6 Liquefaction Potential

Liquefaction is a phenomenon where earthquake induced ground vibrations increase the pore pressure in saturated, granular soils until it is equal to the confining, overburden pressure. When this occurs, the soil can completely loose its shear strength and enter a liquefied state. The possibility of liquefaction is dependent upon grain size, relative density, confining pressure, saturation of the soils, and strength of the ground motion and duration of ground shaking. In order for liquefaction to occur three criteria must be met: underlying loose, coarse-grained (sandy) soils, a groundwater depth of less than about 50 feet and a nearby large magnitude earthquake. Given the relatively dense nature of the subsurface soils, and the absence of a groundwater table, the potential for liquefaction at the site is considered to be negligible.

2.7 Landslides

Given the shallow depth to formation materials, and the relative density of those materials, the potential for landslides and debris flows to impact the site is considered to be very low.

2.8 Tsunami and Seiche Hazard

The site is not located within an area mapped by the California Geological Survey as subject to inundation by tsunami. Given the inland location of the elevation of the site, the inundation hazard posed by tsunami is considered to be low. There is a potential for flooding to impact the site if the adjacent 870-1 reservoir fails.

3.0 CONCLUSIONS

Given the findings of the investigation, it appears that the site geology is suitable for the proposed construction. Based on the investigation, it is our opinion that the proposed development is safe provided the recommendations presented in our report are incorporated into the design and construction of the project. There appears to be no significant geologic constraint onsite that cannot be mitigated by proper planning, design, and sound construction practices. Specific conclusions pertaining to geologic conditions are summarized below:

- Undocumented fill/residual soils, up to 4½ to 5½ feet below existing grade, were encountered within our two subsurface exploration borings. These materials in their current condition are not suitable for support of the proposed access road. Recommendations are presented in the following sections for remedial grading of these materials.
- Seepage or groundwater was not observed in the exploratory borings drilled for this site. There is a potential for leaking of the reservoir to produce seepage or locally perched groundwater conditions within the soils underlying the site.

4.0 RECOMMENDATIONS

Our recommendations are considered minimum and may be superseded by more conservative requirements of the civil engineer, building code, or governing agencies. The geotechnical recommendations are based on the boring logs and laboratory testing of the onsite soils. Waterline installations that are performed by Otay Water District typically follow Water Agency Standards (WAS) Standard Specifications. If recommendations presented in our report differ from the WAS Standard Specifications, then the WAS Standard Specifications should govern.

4.1 EXCAVATION CHARACTERISTICS/SHRINKAGE

Our exploratory borings were advanced with little difficulty within the undocumented fill/residual soils encountered in our subsurface investigation; however, we encountered practical refusal in the Otay Formation in both borings at a depth of 7 feet below existing grade. Any excavation within the Otay Formation may require the use of extra-large grading equipment. Grading activities are expected to generate oversized cobble materials that are not considered suitable for use within the fill materials.

Shrinkage is the decrease in volume of soil upon removal and recompaction expressed as a percentage of the original in-place volume, which will account for changes in earth volumes that will occur during grading. Our estimate for shrinkage of the onsite surficial soils are expected to range from 5 to 10 percent.

4.2 SITE CLEARING RECOMMENDATIONS

All surface vegetation, trash, debris, asphalt concrete, portland cement concrete and underground pipes should be cleared and removed from the proposed construction site. Underground facilities such as utilities may exist at the site. Depressions resulting from the removal of buried obstructions and/or tree roots should be backfilled with properly compacted material. All organics, debris, trash and topsoil should be removed from the grading area and hauled offsite.

4.3 Site Grading Recommendations

We recommend that the upper 12 inches of existing grade or planned finish grade, whichever is lower, be scarified, moisture conditioned to a moisture content that is slightly above optimum moisture, and compacted to at least 95 percent of the maximum dry density as determined by ASTM Test Method D1557. Any remaining fills that are placed within the roadway to bring it to finished grade elevations should be compacted to at least 95 percent of the maximum dry density.

4.4 Compaction Recommendations

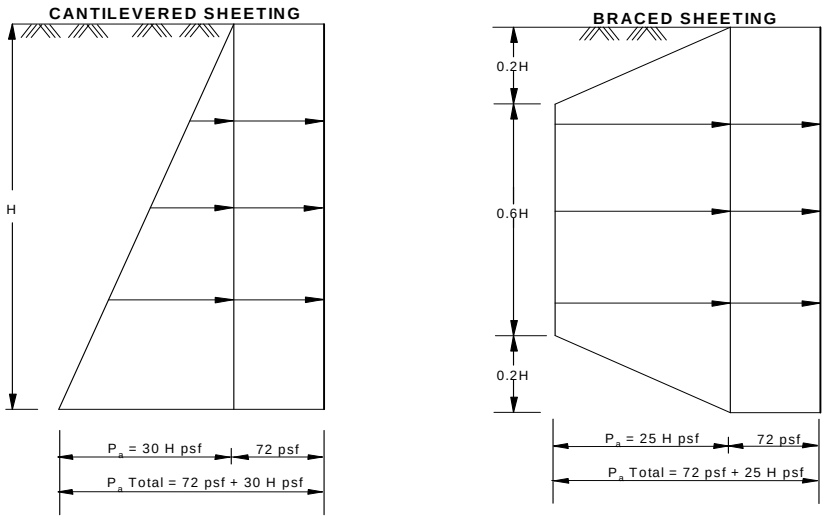
All trench backfill materials should be compacted as outlined in WAS Standard Specifications but at a minimum should be at least 90 percent of maximum dry density as determined by ASTM Test Method D1557, except as modified below. Fill materials should be placed in loose lifts, no greater than 8 inches prior to applying compactive effort. All engineered fill materials should be moisture-conditioned and processed as necessary to achieve a uniform moisture content that is near optimum moisture content and within moisture limits required to achieve adequate bonding between lifts.

The upper 12 inches of finished subgrade materials, the zone immediately below the pavement section, should be compacted to at least 95 percent of the maximum dry density as determined by ASTM Test Method D1557. Fills placed below the upper 12 inches of finish subgrade materials in the trench zone should be compacted to at least 90 percent of the maximum dry density as determined by ASTM Test Method D1557.

4.5 Temporary Excavations and Shoring

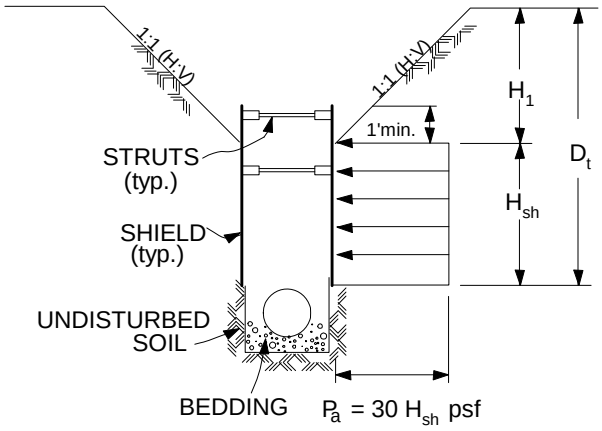
Short term temporary excavations in existing soils may be safely made at an inclination of 1:1 (horizontal to vertical) or flatter. If vertical sidewalls are required in excavations greater than 3 feet in depth, the use of cantilevered or braced shoring is recommended. Excavations less than 3 feet in depth may be constructed with vertical sidewalls without shoring or shielding. Our recommendations for lateral earth pressures to be used in the design of cantilevered and/or braced shoring are presented below. These values incorporate a uniform lateral pressure of 72 psf to provide for the normal construction loads imposed by vehicles, equipment, materials, and workmen on the surface adjacent to the trench excavation. However, if vehicles, equipment, materials, etc. are

kept a minimum distance equal to the height of the excavation away from the edge of the excavation, this surcharge load need not be applied.



SHORING DESIGN: LATERAL SHORING PRESSURES

Design of the shield struts should be based on a value of 0.65 times the indicated pressure, Pa, for the approximate trench depth. The wales and sheeting can be designed for a value of 2/3 the design strut value.



HEIGHT OF SHIELD, H_{sh} = DEPTH OF TRENCH, D_t , MINUS DEPTH OF SLOPE, H_1

TYPICAL SHORING
DETAIL

Placement of the shield may be made after the excavation is completed or driven down as the material is excavated from inside of the shield. If placed after the excavation, some over-excavation

may be required to allow for the shield width and advancement of the shield. The shield may be placed at either the top or the bottom of the pipe zone. Due to the anticipated thinness of the shield walls, removal of the shield after construction should have negligible effects on the load factor of pipes. Shields may be successively placed with conventional trenching equipment.

Vehicles, equipment, materials, etc. should be set back away from the edge of temporary excavations a minimum distance of 15 feet from the top edge of the excavation. Surface waters should be diverted away from temporary excavations and prevented from draining over the top of the excavation and down the slope face. During periods of heavy rain, the slope face should be protected with sandbags to prevent drainage over the edge of the slope, and a visqueen liner placed on the slope face to prevent erosion of the slope face.

Periodic observations of the excavations should be made by the geotechnical consultant to verify that the soil conditions have not varied from those anticipated and to monitor the overall condition of the temporary excavations over time. If at any time during construction conditions are encountered which differ from those anticipated, the geotechnical consultant should be contacted and allowed to analyze the field conditions prior to commencing work within the excavation. All Cal/OSHA construction safety orders should be observed during all underground work.

4.6 FILL MATERIALS

The on-site materials are suitable for use as fill materials within the roadway grading provide that they are free from vegetable matter and other deleterious substances. Rocks greater than 4 inches in size shall not be used within the fill materials.

The ‘pipe zone’ is the area within the trench width that extends from the bottom of the trench to 12 inches above the top of pipe. The pipe zone materials should conform to the requirements for pipe zone as outlined in WAS Standard Specifications. For pressurized pipelines, the pipe zone materials should be decomposed granite that has a sand equivalent of at least 30, have a coefficient of uniformity of 3 or greater, and conform to the following gradation:

US Standard Sieve Size	Percent Passing by Weight
1-inch	100
¾-inch	90 – 100
No. 4	50 – 95
No. 30	25 – 45
No. 200	3 – 15

The 'trench zone' is the area within the trench that extends from the top of the pipe zone to the bottom of the pavement section. The WAS Standard Specifications recommends that backfill material within the trench zone be composed of a decomposed granitic rock with a minimum sand equivalent of 30, have a coefficient of uniformity of 3 or greater, and conform to the following gradation:

US Standard Sieve Size	Percent Passing by Weight
1-inch	100
¾-inch	90 – 100
No. 4	50 – 95
No. 30	25 – 45
No. 200	3 – 15

The on-site materials are not considered suitable for use as pipe zone and trench zone materials.

4.7 Thrust Blocks

Lateral resistance for thrust blocks may be determined by a passive pressure value of 275 pounds per square foot for every foot of embedment, assuming a triangular pressure distribution. This value is for both the fill and formational materials that are present at the site.

4.8 Corrosivity

Corrosion series tests consisting of pH, soluble sulfates, soluble chlorides, and minimum resistivity were performed on a selected sample of the on-site soils. Soluble sulfate levels for the on-site soils indicate a negligible sulfate exposure for concrete structure. As such, no special considerations are required for concrete placed in contact with the on-site soils. However, it is recommended that Type II cement to be used for all concrete.

Based on the soluble chloride levels the on-site soils have a degree of corrosivity to metals that is corrosive. Based on the pH and Resistivity, the on-site soils have a degree of corrosivity to ferrous

metals that is corrosive to very corrosive. The actual corrosive potential is determined by many factors in addition to those presented herein. MTGL, Inc. does not practice corrosion engineering. Underground metal conduits in contact with the soil need to be protected. We recommend that a corrosion engineer be consulted.

4.9 PAVEMENTS

Asphalt concrete pavement design for the new access road was conducted in general accordance with Caltrans Design Method (Topic 608.4). A Traffic Index of 3.5 was assumed for the site to handle vehicle maintenance trucks. Laboratory R-Value tests on the site soils indicate that an R-Value of 5 may be used for pavement design. Based on an R-Value of 5 and using a Traffic Index of 3.5 we recommend that the access road pavement consist of 3 inches of asphalt concrete over 6 inches aggregate base.

Immediately prior to constructing pavement sections, the upper 12 inches of pavement subgrade should be scarified, brought to about optimum moisture content, and compacted to at least 95 percent of the maximum dry density as determined by ASTM D 1557. Aggregate base should also be compacted to at least 95 percent relative compaction. Aggregate base should conform to Caltrans Class II or Standard Specifications for Public Works Constructions (SSPWC), Section 200 for crushed aggregate base. Asphalt concrete should be compacted to at least 95 percent of the Hveem unit weight. Asphalt concrete should conform to SSPWC Section 400-4.

Concrete pavement design was conducted in accordance with the simplified design procedures of the Portland Cement Association. This methodology is based on a 20 year design life. For design it was assumed that aggregate interlock would be used for load transfer across control joints. Laboratory R-Value tests indicate that the subgrade materials will provide a ‘low’ subgrade support. Based on these assumptions, we recommend that the pavement section consist of 6 inches of portland cement concrete (PCC) over native subgrade. Crack control joints should be constructed for all PCC pavements on a maximum of 10 foot centers, each way.

4.10 CBC SEISMIC DESIGN PARAMETERS

The computer program Earthquake Ground Motion Parameters Version 5.0.8 (USGS, 2007) was used to calculate the CBC site specific design parameters as required by the 2010 California

Building Code. Based upon the shallow depth to formational soils at the site, the site can be classified as Site Class C. The spectral acceleration values for 0.2 second and 1 second periods obtained from the computer program and in accordance with the 2010 California Building Code are tabulated below.

Ground Motion Parameter	Value	2010 CBC Reference
S_S	0.919g	Section 1613.5.1
S_1	0.331g	Section 1613.5.1
Site Class	C	Section 1613.5.2
F_a	1.033	Table 1613.5.3(1)
F_v	1.469	Table 1613.5.3(2)
S_{MS}	0.949g	Section 1613.5.3
S_{M1}	0.487g	Section 1613.5.3
S_{DS}	0.633g	Section 1613.5.4
S_{D1}	0.324g	Section 1613.5.4

4.11 GEOTECHNICAL OBSERVATION/TESTING OF EARTHWORK OPERATIONS

The recommendations provided in this report are based on preliminary design information and subsurface conditions as interpreted from the investigation. Our preliminary conclusion and recommendations should be reviewed and verified during construction, and revised accordingly if exposed geotechnical conditions vary from our preliminary findings and interpretations.

5.0 LIMITATIONS

The findings, conclusions, and recommendations contained in this report are based on the site conditions as they existed at the time of our investigation, and further assume that the subsurface conditions encountered during our investigation are representative of conditions throughout the site. Should subsurface conditions be encountered during construction that are different from those described in this report, this office should be notified immediately so that our recommendations may be re-evaluated.

This report was prepared for the exclusive use and benefit of the owner, architect, and engineer for evaluating the design of the project as it relates to geotechnical aspects. It should be made available to prospective contractors for information on factual data only, and not as a warranty of subsurface conditions included in this report.

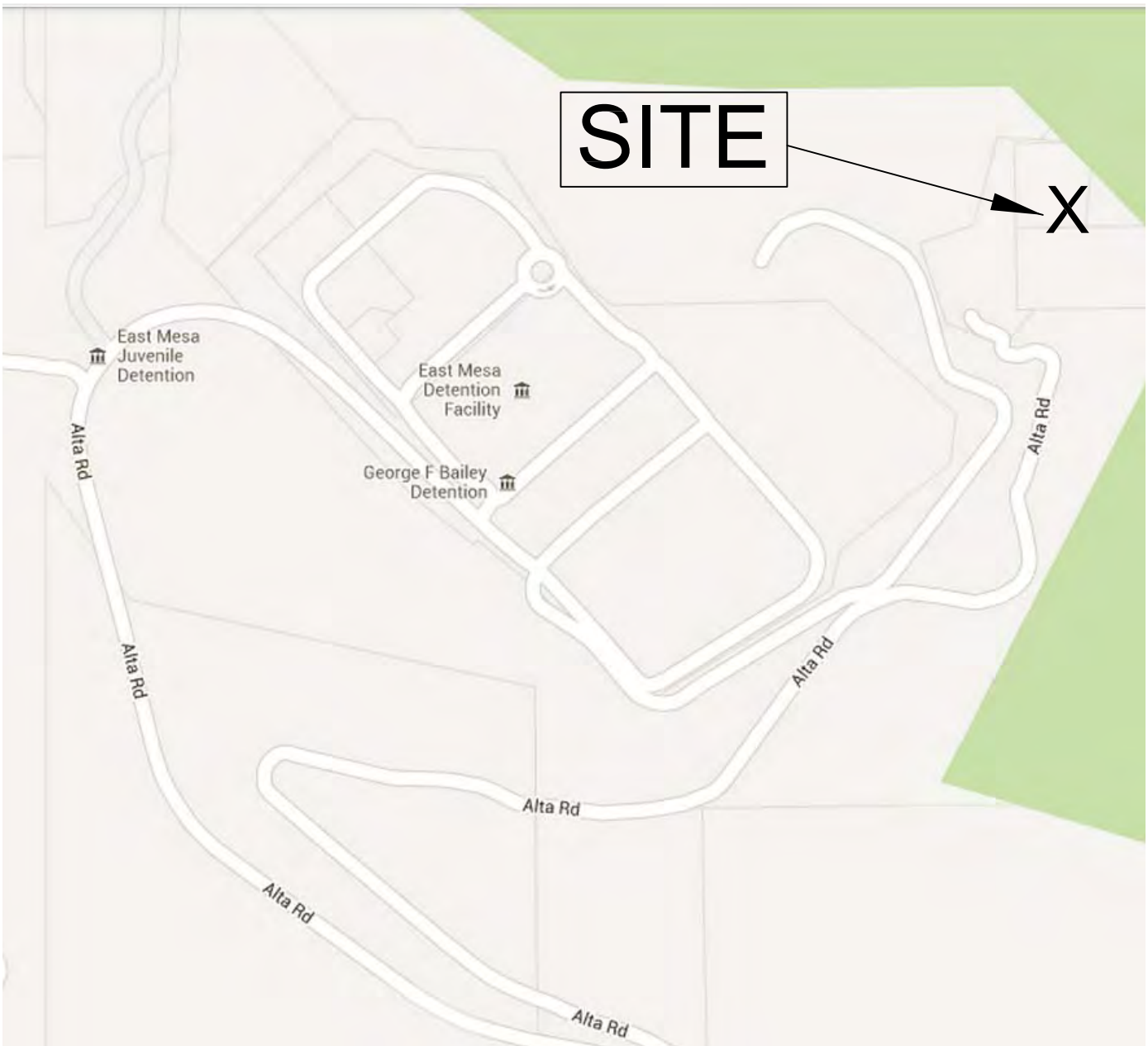
Our investigation was performed using the standard of care and level of skill ordinarily exercised under similar circumstances by reputable soil engineers and geologists currently practicing in this or similar localities. No warranty, express or implied, is made as to the conclusions and professional advice included in this report.

This firm does not practice or consult in the field of safety engineering. We do not direct the Contractor's operations, and we are not responsible for their actions. The contractor will be solely and completely responsible for working conditions on the job site, including the safety of all persons and property during performance of the work. This responsibility will apply continuously and will not be limited to our normal hours of operation.

The findings of this report are considered valid as of the present date. However, changes in the conditions of a site can occur with the passage of time, whether they are due to natural events or to human activities on this or adjacent sites. In addition, changes in applicable or appropriate codes and standards may occur, whether they result from legislation or the broadening of knowledge.

Accordingly, this report may become invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and revision as changed conditions are identified.

FIGURES

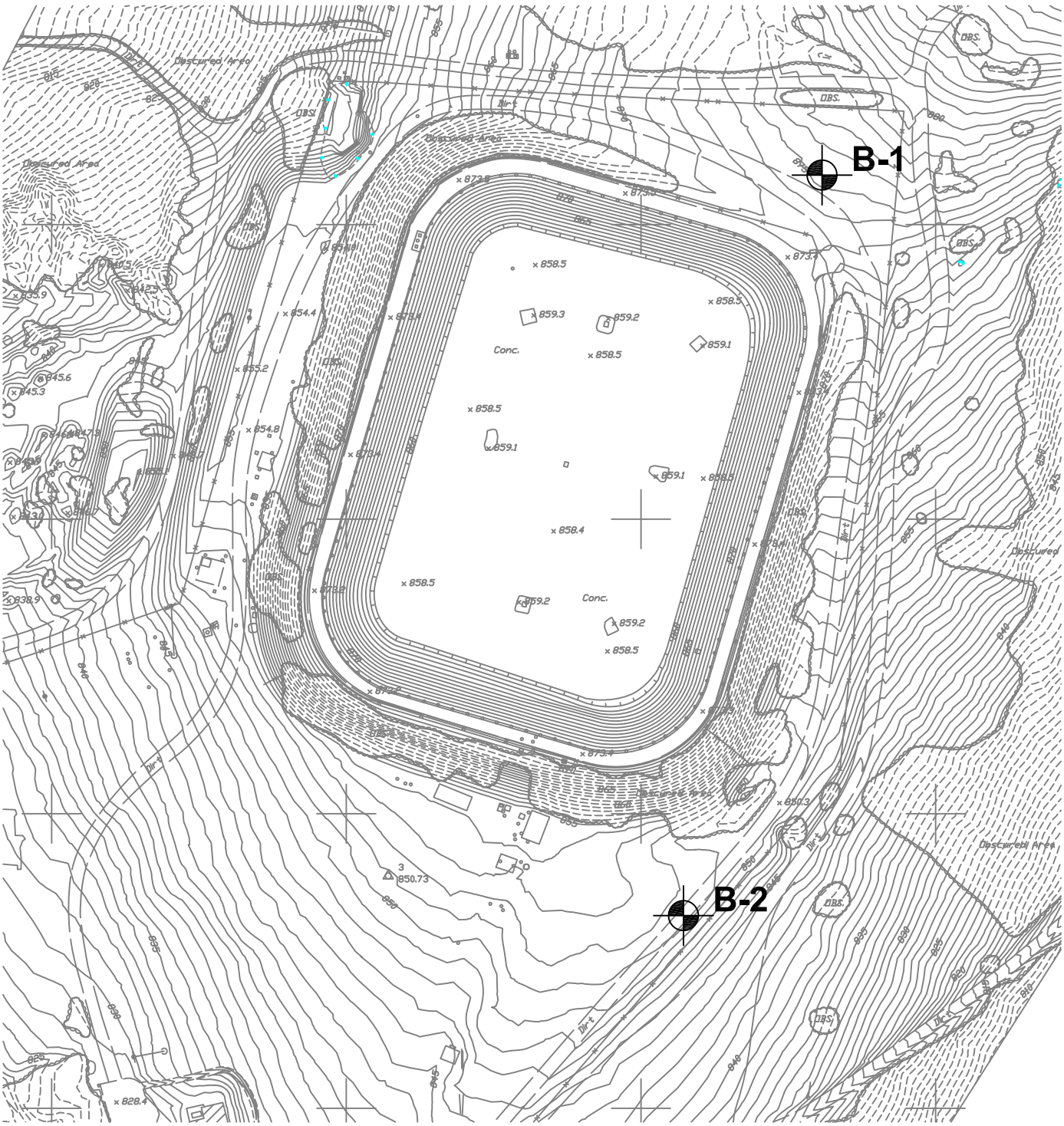


N

NO SCALE

SITE LOCATION MAP	
MTGL, INC.	Project No. 2069A17 MTGL Log No. 13-547 **FIGURE 1**

REFERENCE: Google, 2013.



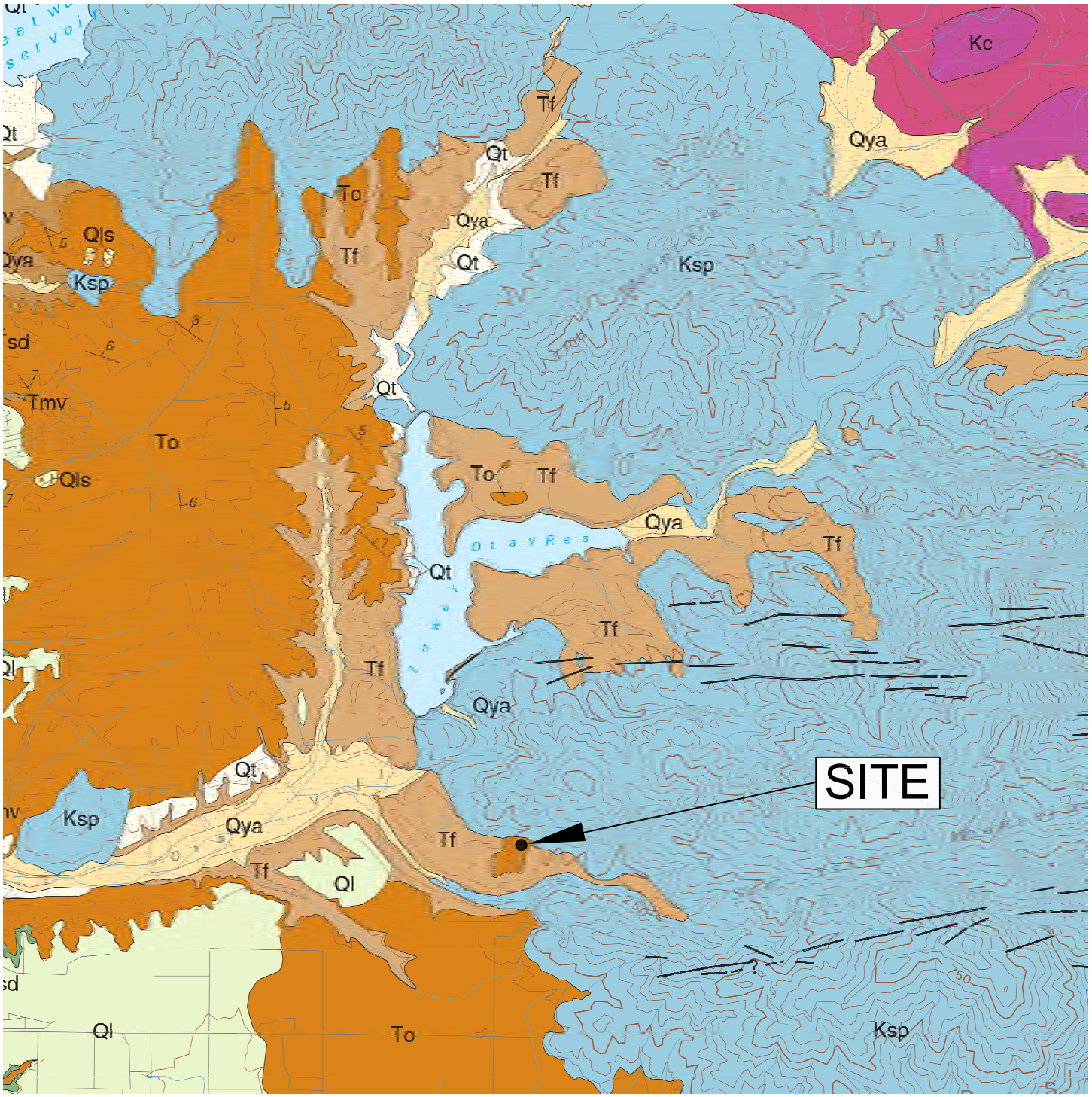
N

1" = 100'

SITE PLAN

MTGL, INC.	Project No. 2069A17 MTGL Log No. 13-547 **FIGURE 2**

REFERENCE: Topo map provided by Otay Water District, 2013.



Ksp — **Santiago Peak Volcanics (Early Cretaceous)**—Dacitic and andesitic breccia, tuff, and flows, and lesser basalt and rhyolite. Unmetamorphosed to slightly metamorphosed

Tf — **Fanglomerate (Pliocene and Miocene)**—Boulder fanglomerate. Rests nonconformably on low-grade metavolcanic rocks; clasts locally derived. Matrix is medium- and coarse-grained, light-brown sandstone and bentonite

To — **Otay Formation (Oligocene)**—Massive sandstone and claystone. Light gray and light brown, moderately well sorted, poorly indurated. Claystone is waxy, composed almost exclusively of bentonite. Correlated with Miocene-Pliocene rocks in Baja California, Mexico (Kennedy and Tan, 1977)

N

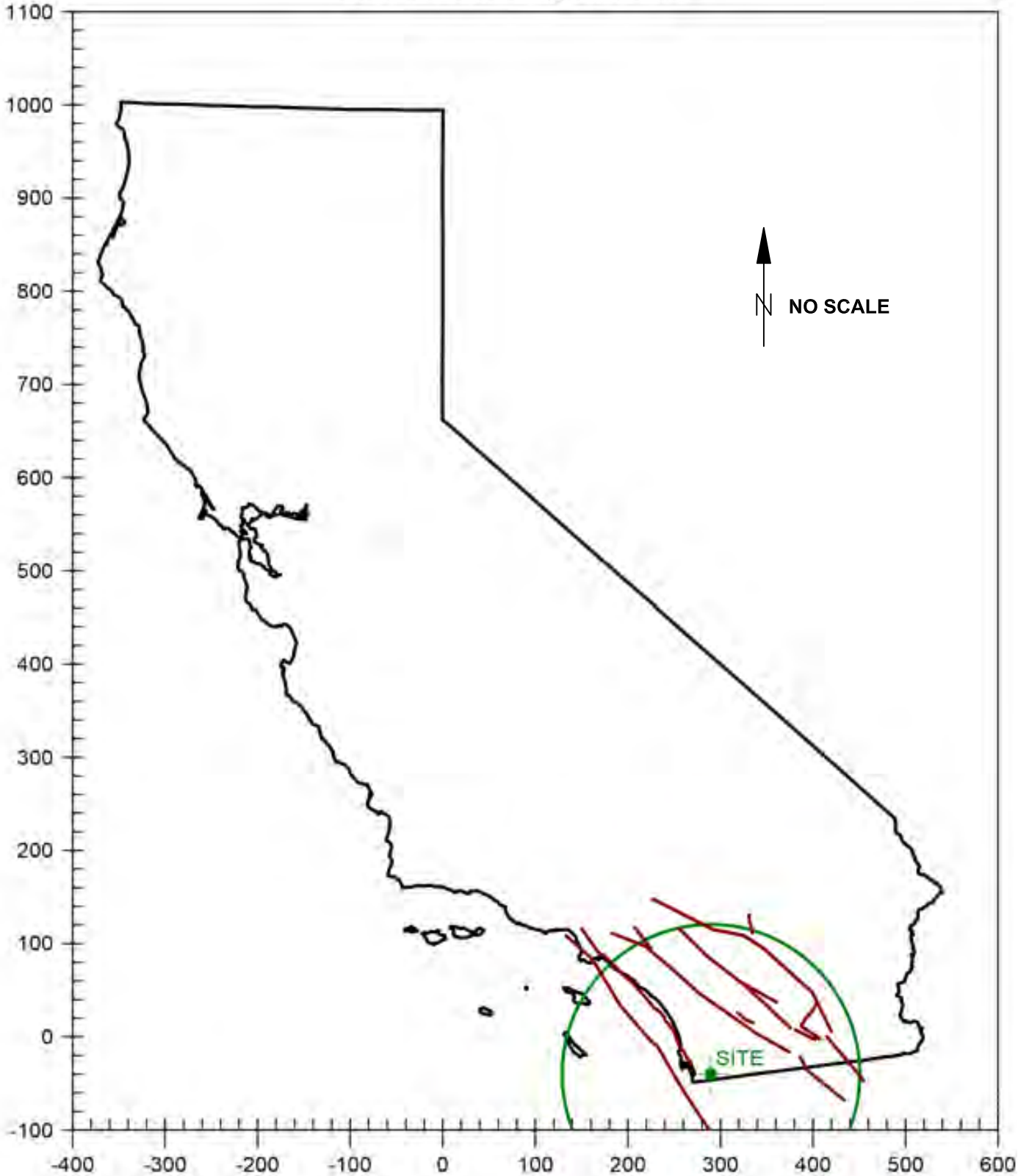
NO SCALE

REFERENCE: Preliminary Geologic Map of the El Cajon 30' x 60' Quadrangle, Southern California, Compiled by Victoria R. Todd, 2004.

REGIONAL GEOLOGIC MAP	
MTGL, INC.	Project No. 2069A17 MTGL Log No. 13-547 **FIGURE 3**

CALIFORNIA FAULT MAP

870-1 Reservoir Paving CIP P2515



REGIONAL FAULT MAP	
MTGL, INC.	Project No. 2069A17 MTGL Log No. 13-547 FIGURE 4

REFERENCE: EQSearch, Blake, 2000.

APPENDIX A

REFERENCES

APPENDIX A

REFERENCES

American Society for Testing and Materials (2012). *Annual Book of ASTM Standards, Section 4, Construction, Volume 04.08 Soil and Rock (I); Volume 04.09 Soil and Rock (II); Geosynthetics*, ASTM, West Conshohocken, PA.

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APPENDIX B

FIELD EXPLORATION PROGRAM

APPENDIX B

FIELD EXPLORATION PROGRAM

The subsurface conditions for this Subsurface Investigation were explored by excavating exploratory borings with an 8-inch hollow-stem-auger to a maximum depth of 7 feet below existing grade. All drive samples were obtained by California Tube Sampler. The approximate locations of the borings are shown on the Site Plan (Figure 2). The field exploration was performed under the supervision of our engineer who maintained a continuous log of the subsurface soils encountered and obtained samples for laboratory testing.

Subsurface conditions are summarized on the accompanying Logs of Borings. The logs contain factual information and interpretation of subsurface conditions between samples. The stratum indicated on these logs represents the approximate boundary between earth units and the transition may be gradual. The logs show subsurface conditions at the dates and locations indicated, and may not be representative of subsurface conditions at other locations and times.

Identification of the soils encountered during the subsurface exploration was made using the field identification procedure of the Unified Soils Classification System (ASTM D2488). A legend indicating the symbols and definitions used in this classification system and a legend defining the terms used in describing the relative compaction, consistency or firmness of the soil are attached in this appendix. Bag samples of the major earth units were obtained for laboratory inspection and testing, and the in-place density of the various strata encountered in the exploration was determined

The exploratory borings were located in the field by using cultural features depicted on a preliminary site plan provided by the client. Each location should be considered accurate only to the scale and detail of the plan utilized.

The exploratory borings were backfilled in accordance with State of California regulations which incorporated compacting soil cuttings and bentonite chips.

BORING NO. B-1

Logged by: SEV **Date Drilled:** 5/29/2013

Method of Drilling: 8-inch diameter hollow-stem auger **Elevation:** 875' msl

DEPTH (FT)	BLOWS PER FT	DRIVE SAMPLE	BULK SAMPLE	DENSITY (PCF)	MOISTURE (%)	DESCRIPTION	LAB TESTS
1						**FILL / RESIDUAL SOILS:** Clayey sand (SC), reddish brown, fine to coarse, moist, dense, some gravels and cobbles to 6 inches in size. (LL=43, PL=18, PI=25) Yellowish brown.	Sieve Analysis, Atterberg Limits, Expansion Index, R-Value, pH, Resistivity, Sulfate, Chloride
2							
3							
4				77	36.2		
5	66-11"	CAL				**OTAY FORMATION (To):** Silty sandstone 'SM', yellowish brown, fine to medium grained, moist, moderately cemented, 'very dense', gravels and cobbles.	
6							
7							
8						Total depth: 7 feet Groundwater not encountered Backfilled in accordance with State and County requirements on 5/29/13	
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

BORING NO. B-2

Logged by: SEV **Date Drilled:** 5/29/2013

Method of Drilling: 8-inch diameter hollow-stem auger **Elevation:** 851' msl

DEPTH (FT)	BLOWS PER FT	DRIVE SAMPLE	BULK SAMPLE	DENSITY (PCF)	MOISTURE (%)	DESCRIPTION	LAB TESTS
						1 to 2 inches gravel and sitly sand (SM) roadway surface.	Max Density & Optimum Moisture, R-Value
1, 2						**FILL / RESIDUAL SOILS:** Clayey sand (SC), light brown, fine to medium, moist, dense.	
3, 4	28	CAL		95	23.4	Fat clay (CH), dark brown, high plasticity, moist, hard, some gravel.	
5				102	8.5		
6	78	CAL				**OTAY FORMATION (To):** Clayey sandstone 'SC', brown, fine to coarse grained, moist, moderately cemented, 'very dense', gravel and cobbles.	
7							
8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30						Total depth: 7 feet Groundwater not encountered Backfilled in accordance with State and County requirements on 5/29/13	

PROJECT NO. 2069A17 **LOG OF BORING** **FIGURE B-2**

UNIFIED SOIL CLASSIFICATION SYSTEM					
No. 200 U.S. Standard Sieve is the smallest particle visible	Coarse-grained soils >1/2 of materials is larger than #200 sieve	GRAVELS are more than half of coarse fraction larger than #4 sieve	Clean Gravels (less than 5% fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines
			Gravels with fines	GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines
		SANDS are more than half of coarse fraction larger than #4 sieve	Clean Sands (less than 5% fines)	GM	Silty Gravels, poorly-graded gravel-sand-silt mixtures
			Sands with fines	GC	Clayey Gravels, poorly-graded gravel-sand-clay mixtures
	Fine-grained Soils >1/2 of materials is smaller than #200 sieve	SILTS AND CLAYS Liquid Limit Less than 50		SW	Well-graded sands, gravelly sands, little or no fines
				SP	Poorly-graded sands, gravelly sands, little or no fines
				SM	Silty Sands, poorly-graded sands-gravel-clay mixtures
				SC	Clayey Sands, poorly-graded sand-gravel-silt mixtures
				ML	Inorganic clays of low to med plasticity, gravelly, sandy, silty, or lean clays
		SILTS AND CLAYS Liquid Limit Greater than 50		CL	Inorganic clays of low to med plasticity, gravelly, sandy, silty, or lean clays
				OL	Organic silts and clays of low plasticity
				MH	Inorganic silts, micaceous or diatomaceous fine sands or silts
				CH	Inorganic clays of high plasticity, fat clays
				OH	Organic silts and clays of medium to high plasticity
Highly Organic Soils				PT	Peat, humus swamp soils with high organic content

GRAIN SIZE					SIZE PROPORTION
Description		Sieve Size	Grain Size	Approximate Size	Trace – Less than 5%
Boulders		>12”	>12”	Larger than basketball-sized	Few – 5% to 10%
Cobbles		3”- 12”	3”- 12”	Fist-sized to basketball-sized	Little – 15% to 20%
Gravel	Coarse	¾”- 3”	¾”- 3”	Thumb-sized	Some – 30% to 45%
	Fine	#4 - ¾”	0.19” - 0.75”	Peat-sized to thumb-sized	Mostly – 50% to 100%
Sand	Coarse	#10 - #4	0.079” - 0.19”	Rock salt-sized to pea-sized	**MOISTURE CONTENT**
	Medium	#40 - #10	0.017” - 0.079”	Sugar-sized to rock salt-sized	Dry – Absence of moisture
	Fine	#200 - #40	0.0029” - 0.017”	Flour-sized to sugar-sized	Moist – Damp but not visible
Fines		Passing #200	<0.0029”	Flour-sized or smaller	Wet – Visible free water

CONSISTENCY FINE GRAINED SOILS			RELATIVE DENSITY COARSE GRAINED SOILS		
Apparent Density	**SPT (Blows/Foot)**	**Mod CA Sampler (Blows/Foot)**	**Apparent Density**	**SPT (Blows/Foot)**	**Mod CA Sampler (Blows/Foot)**
Very Soft	<2	<3	Very Loose	<4	<5
Soft	2-4	3-6	Loose	4-10	5-12
Firm	5-8	7-12	Medium Dense	11-30	13-35
Stiff	9-15	13-25	Dense	31-50	36-60
Very Stiff	16-30	26-50	Very Dense	<50	<60
Hard	>30	>50			

APPENDIX C

LABORATORY TEST PROCEDURES

APPENDIX C

LABORATORY TESTING PROCEDURES

1. Classification

Soils were classified visually, generally according to the Unified Soil Classification System. Classification tests were also completed on representative samples in accordance with ASTM D422 for Grain Size. The test results are attached to this appendix.

2. Particle Size Analysis

Particle size analysis was performed on a selected soil sample in general accordance with the laboratory procedures outlined in ASTM test method D 422. The grain size distributions were used to estimate presumptive soil strength parameters and foundation design criteria. The results are summarized in Figure C-1.

3. Maximum Density

Maximum density test was performed on representative bag samples of the near surface soils in accordance with ASTM D1557. The results are presented below:

Sample Location	Soil Description	Maximum Dry Density (pcf)	Optimum Moisture Content (%)
B-2 at 0 to 3’	Light brown clayey sand (SC)	113.9	15.4

4. Expansion Index

Expansion Index testing was completed in accordance with the standard test method ASTM D4829. Test results are presented below:

Sample Location	Soil Description	Expansion Index	Expansion Potential
B-1 at 0 to 2’	Reddish brown clayey sand (SC)	48	Low

5. Corrosion

Chemical testing was performed on a representative sample to determine the corrosion potential of the onsite soils. Testing consisted of pH, chlorides (CTM 422), soluble sulfates (CTM 417), and resistivity (CTM 643). Test results are as follows:

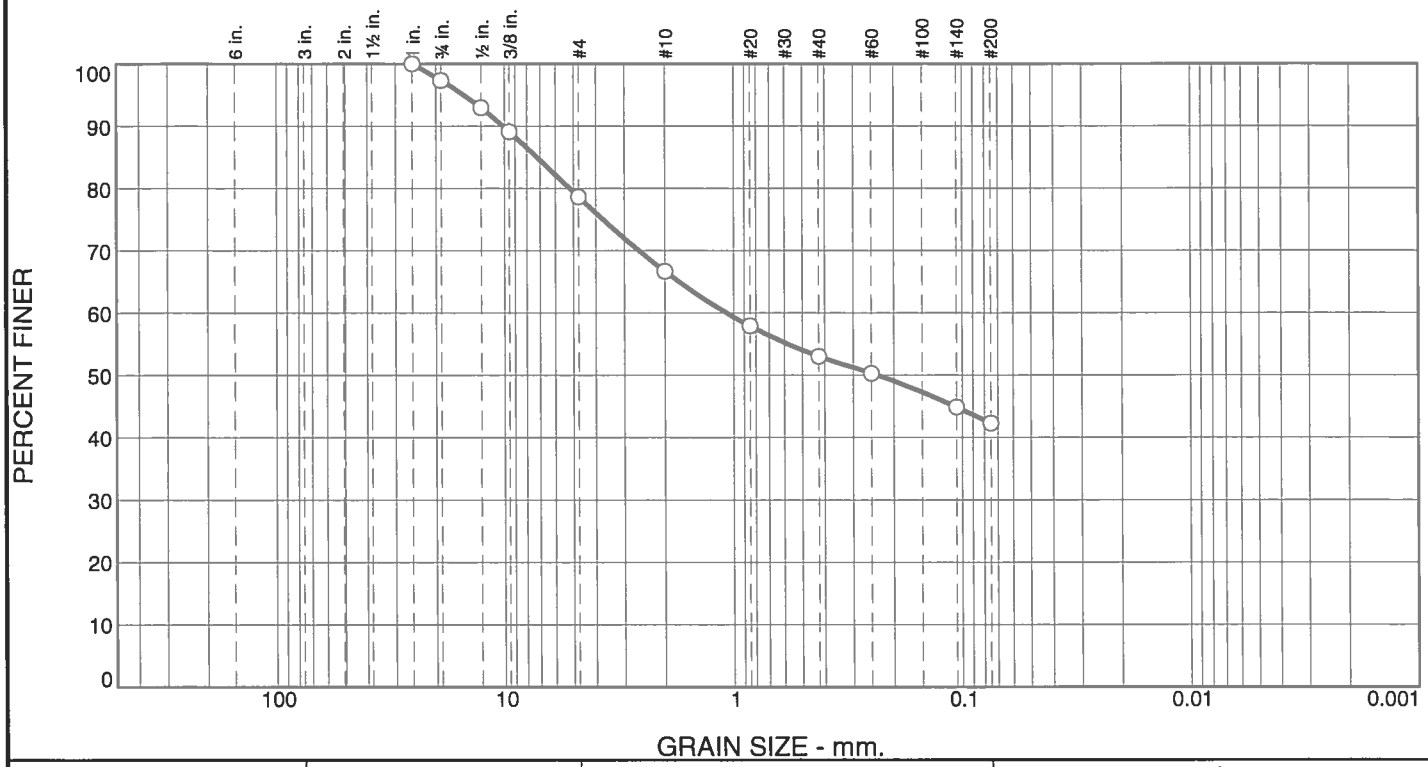
Sample Location	pH	Resistivity (ohm-cm)	Soluble Sulfate (ppm)	Soluble Chloride (ppm)
B-1 at 0 to 2’	7.6	740	325	408

6. R-Value

R-value test was performed on a sample of the upper soils in general accordance with the laboratory procedures outlined in ASTM D 2844. Test results are presented below:

Sample Location	Soil Description	R-Value
B-1 at 0 to 2’	Reddish brown clayey sand (SC)	<5
B-2 at 0 to 3’	Light brown clayey sand (SC)	<5

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	2.7	18.7	11.9	13.7	10.7	42.3	

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1	100.0		
.75	97.3		
.5	92.9		
.375	89.0		
#4	78.6		
#10	66.7		
#20	57.9		
#40	53.0		
#60	50.3		
#140	44.8		
#200	42.3		

* (no specification provided)

Material Description

CLAYEY SAND (SC), with gravel, reddish-brown

Atterberg Limits (ASTM D 4318)

PL= 18.2 **LL=** 43.2 **PI=** 25.0

Classification

USCS (D 2487)= SC **AASHTO (M 145)=** A-7-6(6)

Coefficients

D_{90}= 10.1915 D_{85}= 7.2402 D_{60}= 1.0759
D_{50}= 0.2364 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Remarks

Date Received: **Date Tested:** 5/30/13

Tested By: JH

Checked By: SV

Title: ENGINEER

Sample Number: B-1 **Depth:** 0-2' **Date Sampled:**

MTGL, Inc.

Anaheim, CA

Client:

Project: 970-RESERVOIR

Project No: 2069-A17 **Figure** C-1

Appendix E

Noise Analysis Letter Report

June 2, 2014

Lisa Coburn-Boyd
Environmental Compliance Specialist
Otay Water District
2554 Sweetwater Springs Road
Spring Valley, California 91978-2096

Subject: Otay Water District East Mesa Reservoir Road Paving Project – Noise

Dear Ms. Coburn-Boyd:

Please be advised that ICF International (ICF) has completed a noise analysis for the Otay Water District (OWD) East Mesa Reservoir Road Paving Project (Project). A summary of the analysis is presented below.

Project Overview

The OWD East Mesa Reservoir is located at the northern terminus of Alta Road, northeast of the East Mesa Detention Facility in the unincorporated community of Otay, San Diego County, California, approximately 10 kilometers east-southeast of Chula Vista, California (Figure 1). Specifically, the Project is located within the NE ¼ of Section 19 of Township 18 South, Range 1 East of the San Bernardino Base Meridian, as depicted on the United States Geological Survey Mesa, California 7.5- minute series quadrangle (1955 [photorevised 1971, photoinspected 1975]) (Figure 2). OWD plans to pave a dirt and gravel service road that encircles a small reservoir in order to facilitate improved access around the reservoir. The road is located between the reservoir and a chain-link fence that encompasses the facility. The Project Area consists of the road and the area within 7.5 meters of each side of the road (Figure 3).

Existing Conditions

The Project vicinity is largely undeveloped. The Project site is bounded to the northwest, northeast, and southeast by the Otay County Open Space Preserve. The closest developed land use to the Project is the East Mesa Detention Complex, which is located to the southwest. This a complex of four county- and privately-operated detention facilities. The Project site is more than two miles from the closest major highway or airport and background noise levels are generally quite low except for operational noise from the Detention Complex which includes prisoners in the exercise yards and officers training at an outdoor firing range located at the northwest edge of the complex (approximately 2,500 feet from the Project site).

Noise Standards

Noise standards for the County of San Diego are provided in the County's Noise Element of the General Plan and in Section 36.4 (i.e., Title 3, Division 6, Chapter 4) of the County's Code of Regulatory Ordinances.

The standards contained in the Noise Element are intended to address ongoing and long-term noise/land use compatibility and therefore, are not applicable to the Project for the following reasons: (1) it is a short-term construction project; (2) the Project will not introduce new noise-sensitive land uses; and, (3) the Project will not create new operations that could generate ongoing noise levels at existing noise-sensitive land uses.

The County's noise ordinance seeks to control construction noise by placing limits both on the hours during which construction activity may occur and on the average noise levels that may be generated during those hours, as follows:

- Construction equipment may not be operated between the hours of 7:00 p.m. and 7 a.m., or at any time on a Sunday or holiday.
- During the permitted hours of 7:00 a.m. to 7:00 p.m., noise from construction equipment may not exceed an eight-hour average noise level (i.e., 8-hour Leq) of 75 dBA.

Noise Analysis

Based on information provided by Otay Water District staff (Lisa Coburn-Boyd, Environmental Compliance Specialist), the Project will be constructed in two phases, utilizing the following equipment:

Phase 1 – Grading

- 4 pickup trucks
- 1 grader
- 1 excavating dozer
- 1 dump truck
- 1 loader

Phase 2 – Paving

- 4 pickup trucks
- 1 heavy truck (for asphalt delivery)
- 1 roller
- 1 paver
- 1 loader

The closest area to the proposed construction activity that might be considered noise-sensitive is an exercise yard at the neighboring detention facility to the southwest. This yard is located approximately 450 feet from the nearest portion of the Project site and 1,250 feet from the most distant portion of the Project site. The acoustical average distance from the Project site to

the receiver is approximately 750 feet[1]. Using this distance, along with typical construction equipment noise levels and calculation techniques provided by the Federal Transit Administration (FTA) and Federal Highway Administration (FHWA), an average noise level of 64 dBA is estimated for the grading phase of construction and 65 dBA for the paving phase of construction. A summary of the noise analysis is provided in Tables 1 and 2.

Construction activities that might cause unusually high levels of vibration, such as pile driving or blasting, will not take place at the Project site. Heavy construction equipment such as graders and dozers will generate groundborne vibration that will dissipate with distance from the Project site. Over the distances that exist between the Project site and the closest sensitive receiver (450 to 1,200 feet) vibration will be reduced to extremely low (probably imperceptible) levels.

As noted previously, the Project is not anticipated to lead to any long-term increases in operational activity at the Project site and, therefore, would not increase long-term noise levels. It is also not anticipated that the Project would create any significant increase in traffic to and from the reservoir, so perceptible increases in traffic noise levels are not expected.

Table 1 – Summary of Construction Noise Analysis, Phase 1 - Grading

Equipment Item	Maximum Noise Level at 50 feet[a]	Number of Units[b]	Usage Factor[a,c]	Distance to Receiver[d]	Average Noise Level at Receiver
Pickup truck	75 dBA	4	0.4	750 feet	54 dBA
Grader	85 dBA	1	0.4	750 feet	57 dBA
Dozer	85 dBA	1	0.4	750 feet	57 dBA
Dump Truck	84 dBA	1	0.4	750 feet	56 dBA
Loader	85 dBA	1	0.4	750 feet	57 dBA
	Total for All Equipment				**64 dBA**

a. Obtained or estimated from:
Transit Noise and Vibration Impact Assessment, FTA, (FTA-VA-90-1003-06), May 2006 and/or
*FHWA Roadway Construction Noise Mode*l (RCNM), Version 1.0, February 2, 2006
b. Noise level increase = 10×log(number of units)
c. Usage Factor is the percentage of time equipment is operating in noisiest mode while in use.
Noise level decrease = 10×log(usage factor)
d. Noise level decreases at a rate of 6 dBA per doubling of distance from source to receiver.

[1] When noise sources are distributed or mobile across an area, the average noise level can be estimated by assuming all the noise occurs at an acoustical average distance from the receiver. This average is calculated as the square route of the product of shortest and farthest distance between the noise source and the receiver. In this case $\sqrt{(450\times1250)}=750$.

Table 2 – Summary of Construction Noise Analysis, Phase 2 - Paving

Equipment Item	Maximum Noise Level at 50 feet[a]	Number of Units[b]	Usage Factor[a,c]	Distance to Receiver[d]	Average Noise Level at Receiver
Pickup truck	75 dBA	4	0.4	750 feet	54 dBA
Dump Truck	84 dBA	1	0.4	750 feet	56 dBA
Roller	74 dBA	1	0.2	750 feet	43 dBA
Paver	89 dBA	1	0.5	750 feet	62 dBA
Loader	85 dBA	1	0.4	750 feet	57 dBA
Total for All Equipment					**65 dBA**

a. Obtained or estimated from:
Transit Noise and Vibration Impact Assessment, FTA, (FTA-VA-90-1003-06), May 2006 and/or
FHWA Roadway Construction Noise Model (RCNM), Version 1.0, February 2, 2006
b. Noise level increase = 10×log(number of units)
c. Usage Factor is the percentage of time equipment is operating in noisiest mode while in use.
Noise level decrease = 10×log(usage factor)
d. Noise level decreases at a rate of 6 dBA per doubling of distance from source to receiver.

Conclusions

The main source of noise associated with the Project is construction activity. Analysis shows that construction noise levels will not exceed the applicable County noise standard of 75 dBA (8-hour Leq). However, it is noted that construction activity must not occur between the hours of 7:00 p.m. and 7 a.m., or at any time on a Sunday or holiday. The Project is not expected to generate long-term operational noise.

In summary, ICF does not anticipate that the Project will generate any substantial adverse noise impacts. Therefore, ICF does not foresee that the Project will have a significant effect on the environment with respect to noise, and does not recommend further study or mitigation for noise (beyond compliance with the County-mandated hours of construction described above). If you have any questions or comments, do not hesitate to contact me at jonathan.higginson@icfi.com or 949.333.6619.

Sincerely,

Jonathan Higginson, INCE
Senior Noise Analyst

Enclosed: Figure 1 – Regional Location
Figure 2 – Project Vicinity
Figure 3 – Project Area

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Figure 1 - Project Regional Location
Otay Water District
East Mesa Reservoir Road Paving Project

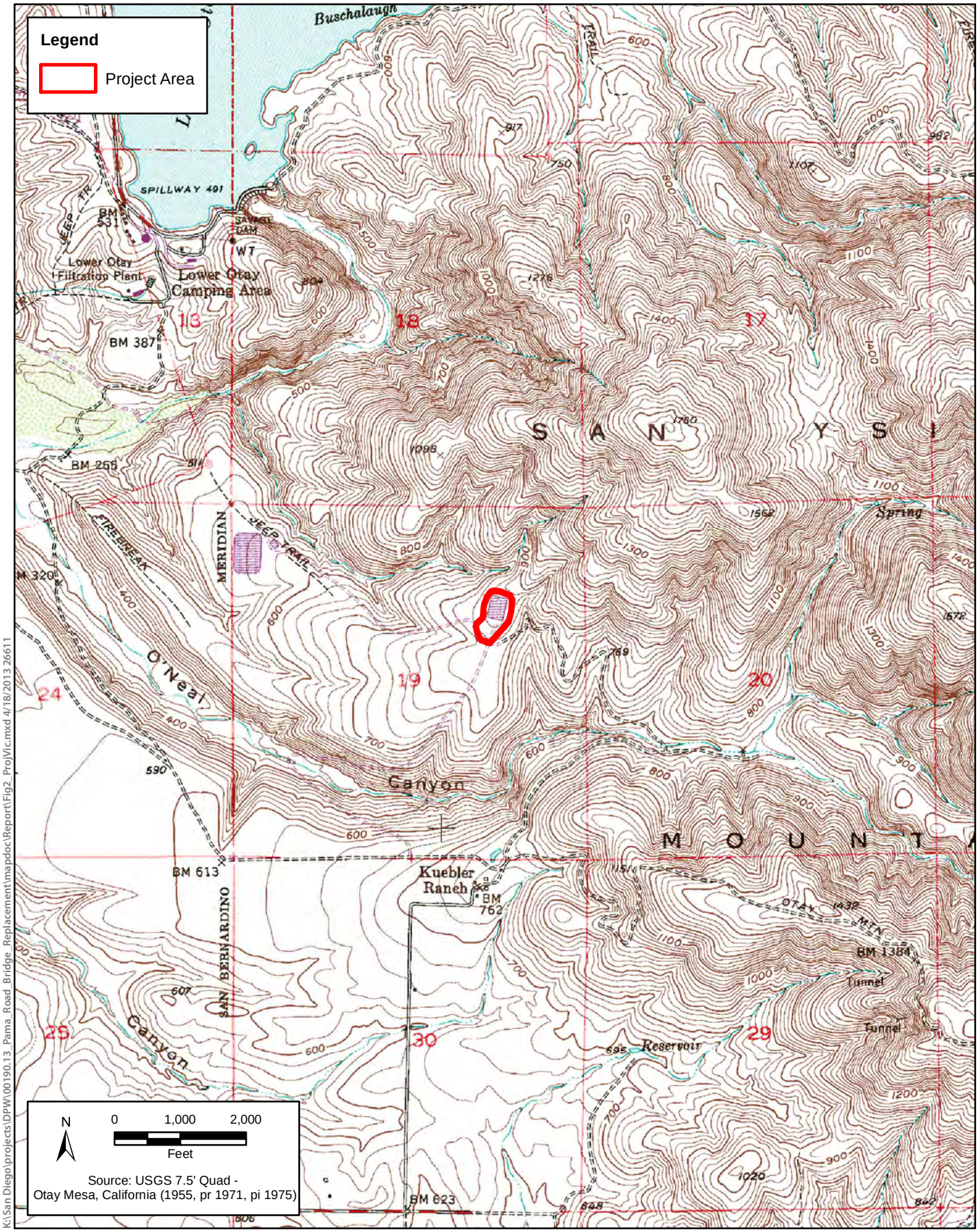

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Figure 2 - Project Vicinity
Otay Water District
East Mesa Reservoir Road Paving Project

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Figure 3 - Project Area
Otay Water District
East Mesa Reservoir Road Paving Project

Attachment B

Mitigation, Monitoring, and Reporting Program

Attachment B

Mitigation, Monitoring and Reporting Program for the Otay Water District

870-1 Reservoir Access Road Paving Project

Mitigation Measures	Timing & Methods	Responsible Parties
BIOLOGICAL RESOURCES		
BIO-1: Due to the observed presence of one western spadefoot tadpole, a qualified biologist will conduct pre-construction surveys to determine if this species is present. If present, the species will be removed from the project site.	**Timing:** Prior to any disturbance of the road surface. **Methods:** Retain a qualified biologist to perform pre-construction surveys and, if species is present, remove from the site.	**Implementation:** Otay Water District **Monitoring & Reporting:** Otay Water District **Verification:** Otay Water District
BIO-2: Prior to any construction activity, all contractual agreements with the District will ensure that the following project requirements regarding sensitive wildlife species are completed. • No clearing, grubbing, or grading of vegetation will occur between February 15 and August 31, the breeding season of the coastal California gnatcatcher. However, if construction is proposed during the breeding season for the gnatcatcher, the following requirements will have to be met: – U.S. Fish and Wildlife Service protocol surveys will be required in order to determine species' presence or absence. – If no gnatcatchers are detected within 300 feet of the proposed grading/construction, then no restriction on grading will be necessary. – If gnatcatchers are present, measures to minimize noise impacts will be required and should include temporary noise walls and/or berms. – If the survey is not performed and construction is proposed during the species' breeding season, presence will be assumed and a temporary wall/berm will be required. – Noise levels from grading/construction activities during the breeding season should not exceed 60 dBA hourly LEQ at the edge of the occupied habitat, or the ambient noise level if noise levels already exceed 60 dBA hourly LEQ.	**Timing:** Prior to any construction activity. **Methods:** Ensure sensitive wildlife species impacts are avoided or mitigated by preconstruction nesting bird surveys and buffering.	**Implementation:** Otay Water District **Monitoring & Reporting:** Otay Water District **Verification:** Otay Water District

AGENDA ITEM 11a

STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	September 3, 2014
		PROJECT:	DIV. NO. All
SUBMITTED BY:	Rita Bell, Finance Manager		
APPROVED BY:	☒ Joseph R. Beachem, Chief Financial Officer ☒ German Alvarez, Assistant General Manager ☒ Mark Watton, General Manager		
SUBJECT:	Adopt Ordinance No. 545 Amending Section 9, Annexations and Detachments; Section 28 Connection Fees and Charges for Potable or Recycled Water Service; Section 53, Conditions for Sewer Service; and Appendix A of the Code of Ordinances to Adjust the District's Water Capacity Fee, New Water Supply Fee, and Annexation Fee; Create a Sewer Capacity Fee and Modify the Sewer Annexation Fee, with all Changes to be Effective October 1, 2014		

GENERAL MANAGER'S RECOMMENDATION:

That the Board adopt Ordinance No. 545 amending Section 9, Annexations and Detachments 9.04 B. & C.4; Section 28 Connection Fees and Charges for Potable or Recycled Water Service 28.01 A & B; Section 53, Conditions for Sewer Service 53.03 A.1; and Appendix A of the Code of Ordinances which will incorporate the following changes effective October 1, 2014.

1) Update the current water capacity fee (including the Triad fee) and new water supply fee to reflect the value of the District's current and future assets.

2) Update the water annexation fee to reflect the updated "buy-in" for new customers annexing into the Otay Water District boundaries.

3) Modify the sewer capacity fee to a new "combined" methodology of charging capacity fees which is consistent with the methodology used for water, which reflects the value of the District's current and future assets.

4) Modify the sewer annexation fee to reflect a new “buy-in” methodology which will only be charged to new customers annexing into a sewer improvement district (ID). This is also consistent with the current water annexation fee.

COMMITTEE ACTION:

See Attachment A.

PURPOSE:

To obtain approval of Ordinance No. 545 that would modify the water and sewer capacity and annexation fees the District charges.

SUMMARY:

At the time of connection to a public agency’s utility system, customers are typically charged a capacity fee to “buy in” to the water and wastewater systems. The capacity fee requires new users to pay for their share of the costs to construct the facilities required for providing their water and sewer service. Revenues generated through the proposed capacity fees can be used to directly offset system expansion costs, repay debt issued for the water system expansion, or for renewal and replacement of capital projects. Use of capacity fee revenues to offset these capital and debt service costs reduces the amount of revenue required from rates assessed to existing users. In this way capacity fee revenues, in effect, reimburse the existing users (through lower rates) for the costs they have incurred to provide capacity for new users.

In addition, the new water supply fee pays for the expansion cost of capital for new water supply projects. This fee could be incorporated into the capacity fee; however, the recommendation is for it to remain separate from the general capacity fee to highlight how the District is charging new users for the new supply.

An annexation fee is based on all availability fees and property taxes paid by existing users. For water customers it is charged to all properties annexing into the Otay Water District boundaries. For sewer customers it is proposed to be charged to all properties annexing into a sewer ID. This fee compensates the existing users for their past investment in the District’s water and sewer systems.

The proposed fees, effective October 1, 2014, are applied per Equivalent Dwelling Unit (EDU) and are as follows:

	Current Fee	Proposed Fee	Change
Water			
Capacity Fee	$8,237	$7,984	($253)
New Water Supply Fee	$949	$989	$40
Annexation Fee	$1,622	$1,777	$155
Total	$10,808	$10,750	($58)
Triad Capacity Fee	$6,164	$5,990	($174)
Sewer (in ID)			
Capacity Fee (buy-in)	$0	$4,092	$4,092
Sewer (outside ID)			
Capacity Fee (buy-in)	$5,986	$4,092	($1,894)
Capacity Fee (debt)	$0	$2,308	$2,308
Annexation Fee	$0	$1,018	$1,018
Total (outside ID)	$5,986	$7,418	$1,432

BACKGROUND:

A District objective is that growth pays for growth. This is achieved by charging capacity and annexation fees to new customers. Periodically, these fees are reviewed and updated to ensure equity and accuracy of the fees.

In 2010, a Capacity and Annexation Fee study was performed. In May of 2010, the Board changed the fee structure for water. The capacity fee structure was changed from an incremental to a combined fee methodology. A new water supply fee was established to separately identify the cost of new water supply projects and is essentially a subcomponent of the capacity fee that we choose to show separately.

The water annexation fee methodology was also modified in 2010 to reflect both the changes in the capacity fee study and to use an industry accepted method for calculating the fee. This fee is charged to new customers annexing into the Otay Water District boundaries. The purpose was to collect from new water customers their fair share of taxes (1% property tax and availability fees) already paid by the existing customers in the District.

In the 2010 study, the sewer capacity and annexation fees were not updated. Currently, the District has what is called a sewer annexation fee, a more industry standard name for this fee would be the “buy-in” portion of a capacity fee. No expansion of this system was or is planned so the expansion component of the capacity fee was not necessary.

In October 2013, an RFP was issued to retain a consultant to conduct a water and sewer capacity and annexation fee study for the District. Three firms responded and, in December 2013, under the General

Manager's authority, the firm of HDR was retained to perform a capacity and annexation fee study for the District. The results of this study are presented below.

STUDY RESULTS:

Fee Analysis:

There are several industry accepted methodologies to use when calculating capacity and annexation fees which are viable under California law.

The first capacity fee method is the Combined Capacity Fee, which is what the District currently uses for the water capacity fee. Under this methodology, the cost of the current system plus the cost of all future expansion projects is divided by all customers existing and future. The following illustrates the combined fee methodology.

$$\frac{\text{Existing and Future Asset Values}}{\text{Existing and Future Equivalent Meters}}$$

The second is the Incremental Capacity Fee method where the cost of all future expansion projects is divided by all future customers. Currently, this is the method used by the District for calculating the sewer capacity fee. Since 1998 there have been no sewer expansion projects therefore, the sewer capacity fee is essentially zero. The following illustrates the components of this calculation.

$$\frac{\text{Value of Future Facilities}}{\text{Future Equivalent Meters}}$$

The third capacity fee method is called the Buy-in Fee, where the cost of the current system, including the excess capacity, is divided by the existing customers. This fee is charged to all new customers and reflects how much existing customers have paid for the current system. The current sewer annexation fee uses this method and therefore, is essentially a sewer Buy-in Capacity Fee. The calculation is illustrated below.

$$\frac{\text{Existing Asset Value}}{\text{Existing Equivalent Meters}}$$

Annexation fees are commonly used by cities and districts and ensure that existing users are compensated for their past investment in the water system. Under this methodology, all property taxes paid by the existing District property owners (1% property tax and availability fees) is divided by the total number of existing EDUs within the District. The calculation is illustrated below.

$$\frac{\text{Total Taxes Collected}}{\text{Existing EDUs}}$$

Asset Valuation:

There are two ways to value the cost of existing facilities. The first valuation methodology is reproduction cost. This method uses the original cost of existing facilities adjusted for inflation. The second valuation methodology is replacement cost or what it would cost today to build the same functional infrastructure (which means it may not be identical in construction methods or materials, but that it performs the same function).

Staff and the consultant's recommendation is to use replacement cost using depreciated value as the basis for valuation of water and sewer pipelines. Reproduction cost using depreciated value is recommended for all other assets such as reservoirs and pump stations.

Water Capacity and Annexation Fees:

This study's recommendation is to continue to use the Combined Capacity Fee methodology for the calculation of the water capacity fee. The current water capacity fee is $8,237.03 after being adjusted for the ENR Index through June 1, 2014. Based on the most up-to-date capital improvement plan, the newly calculated water capacity fee is $7,984. A discounted capacity fee of $5,990 was calculated for the Triad developers by excluding future potable storage, thereby recognizing their prepayment of storage.

In May 2010, the Board authorized a New Water Supply fee which separately identifies the cost of new water supply projects. The current study recommends continuing the same methodology as the basis of the fee and to update the current fee of $949.03, inflated by ENR, to the recommended fee of $989 which reflects the current capital plan.

This study also recommends to continue the current industry accepted water annexation fee methodology. This fee is charged to new customers that want to annex into the Otay Water District boundaries, since they have not historically paid their share of these fees or taxes. Thus, existing users are compensated for their past investment in the District's water system. The current water annexation fee is $1,622.36, after being adjusted for the ENR Index through June 1, 2014, and the new recommended fee is $1,777 reflecting the updated cumulative tax collections.

Sewer Capacity and Annexation Fees:

The sewer capacity and annexation fees were last updated in November 1998 as part of a fee study. Currently, the District has no sewer capacity fee (based on the 1998 study) and an annexation fee of $5,985.73. The annexation fee currently charged is really a "buy-in" capacity fee meant to reimburse the sewer customers who built the sewer infrastructure. The current annexation fee is only charged when a customer is annexed into a sewer ID.

At the time of the 1998 study it was thought that some customers, up to one-third, would not pay the annexation fee or capacity fee. But in fact, in the past five years only 5 of 27 new sewer connections paid an annexation fee because these 5 customers were outside a sewer ID. The flaw in the prior thinking did not anticipate that so many new sewer customers would pay no connection fee. Based on this current study, staff recommends that all new sewer customers should have to “buy-in” to the sewer system to ensure all customers pay their fair share.

Additionally, because customers who were already in a sewer ID paid debt (used for the construction of sewer facilities) that was collected through the tax role, it is necessary to create two separate capacity fees. The first capacity fee applies to parcels within an ID that paid prior tax debt, which is recommended to be set at $4,092. The second capacity fee applies to parcels outside an ID that have not paid tax debt and it is recommended to be set at $6,400 ($4,092 + $2,308 see table above). By establishing two separate sewer capacity fees it ensures that each new customer pays their fair share of facilities and that no customer is overcharged.

The new recommended sewer annexation fee is set at $1,018 based on the availability fees paid via the tax role by existing customers. The new annexation fee would only be paid by new customers that are not currently in a sewer ID and therefore, are required to annex into a sewer ID prior to any sewer connection.

FISCAL IMPACT: ☒ Joe Beachem, Chief Financial Officer

The fiscal impact for Fiscal Year 2015, based on the projected meter sales, is an estimated decrease in capacity fees and an increase in new water supply fees of approximately $46,178 and $7,295, respectively. There is no expected fiscal impact for the new water annexation fee in Fiscal Year 2015 since the District does not anticipate any new annexations. All long-term fiscal impacts of these rate changes will be assessed and considered in the future rate modeling. The proposed changes in these fees are not expected to have a significant long-term fiscal impact because of the minimal change in the amounts.

Because new sewer connections are minimal, on average less than two a year, it is difficult to determine the fiscal impact. However, based on the history of sewer, the assumption is that there will be an increase in sewer capacity and annexation fees that will offset future sewer rate increases and debt.

STRATEGIC GOAL:

To ensure that the costs of service are born by responsible parties. This revenue source will help the District meet its fiscal responsibility to its ratepayers.

LEGAL IMPACT:

None.

_____
General Manager

Attachments:
A) Committee Action Form
B) Ordinance No. 545
   Exhibit 1 Strike-through Section 9
   Exhibit 2 Strike-through Section 28
   Exhibit 3 Strike-through Section 53
   Exhibit 4 Strike-through Appendix A
C) Proposed Section 9
D) Proposed Section 28
E) Proposed Section 53
F) Proposed Appendix A
G) Fee Study by HDR
H) Presentation by HDR

ATTACHMENT A

SUBJECT/PROJECT:	Adopt Ordinance No. 545 Amending Section 9, Annexations and Detachments; Section 28 Connection Fees and Charges for Potable or Recycled Water Service; Section 53, Conditions for Sewer Service; and Appendix A of the Code of Ordinances to Adjust the District's Water Capacity Fee, New Water Supply Fee, and Annexation Fee; Create a Sewer Capacity Fee and Modify the Sewer Annexation Fee, with all Changes to be Effective October 1, 2014

COMMITTEE ACTION:

The Finance, Administration and Communications Committee reviewed this item at a meeting held on August 18, 2014 and the following comments were made:

- Staff indicated that the District updates its capacity and annexation fees every four (4) to six (6) years. The purpose of updating the fees is to assure that growth pays for growth and to verify that the rates are based on cost.

- The last capacity and annexation fee study was completed in 2010 and, at that time, the District modified the methodology of some of the District's fees which is explained in the staff report.

- The District had met with the Developers in April 2014 and shared with them the capacity and annexation fee study and the updates to the fees that are being proposed.

- Mr. Tom Gould of HDR reviewed the results of the study they had prepared on the District's Capacity and Annexation fees. He stated that it is prudent to review the fees on a regular basis as conditions change (growth, facilities, time value of money, etc.) and the fees should reflect the current environment.

- It was indicated that capacity and annexation fees are different from rates. Rates are charged for the operation and maintenance of the water and sewer systems. Capacity and annexation fees are for new customers who wish to connect to the system. The fees:

  - Are to charge new customers an equitable share of the cost of infrastructure to serve their needs ("growth paying for growth," that is, new customers pay for new facilities and their proportionate share of the existing distribution system)
  - Shelters existing customers from impacts of system expansion for growth
  - Generates revenue for growth related facilities

- The methodology for determining the water capacity and annexation fees is consistent with the District's 2010 study. The past studies have used generally accepted practices.

- The study looked at capital improvement projects that would provide for new capacity or expansion on the system. It was indicated that in situations where an existing facility will be upsized, the portion that is upsized would be included in the expansion fee. Replacement of a facility would be borne by the existing ratepayers.

- It was explained that the Capacity Fee is used to fund existing facilities along with any expansion to serve growth and the New Supply Fee is for funding new water supply projects. The fees are based on connection size/meter size and the number of equivalent EDU's (Equivalent Dwelling Units – the safe operating capacity of the water meter) required to serve a customer's property. It was indicated that a 2-inch water meter has eight (8) times the capacity of a 3/4-inch meter (or a 2-inch meter is equivalent to eight [8] 3/4-inch meter connections). The capacity and new supply fee increase in relation to the amount of capacity (meter size) the customer is requesting from the system. The study's review of the District's Capacity fee proposes that it be lowered slightly and the Water Supply fee be increased a little (see page 8 of presentation for the new proposed Capacity and New Supply fees by meter size).

- For a 3/4-inch meter (1 EDU), the Capacity and New Supply fee together would decrease from $9,186 to $8,973 or -$213. Staff noted that the capacity and new supply fees are adjusted each quarter based on the ENR index and is the reason there is a small change in the proposed fees between studies. The fees are kept fairly updated through the quarterly inflation adjustments. The proposed rates were

calculated using June 30, 2013 data, which was the most up-to-date data available. The proposed fees were then adjusted to June 1, 2014 using the ENR index. If approved, the proposed fees will be adjusted further as per in the Code of Ordinance using the September 1, 2014 ENR index. Therefore, the October 1, 2014 implementation will use the June 30, 2013 calculated fees adjusted by the ENR values to September 1, 2014.

- Staff indicated that the board has been conscientious to assure that the ratepayers are not paying for the cost of expansion. The District has been preparing Cost of Service Studies for many years to assure that this objective is met.

- It was indicated that the District currently has an annexation fee for sewer and is not charging a capacity fee presently. The annexation fee, however, is more of a capacity fee rather than an annexation fee. The study proposes that the terminology be made consistent between water and sewer. Thus, what the District termed as an annexation fee, will now be termed a capacity fee and an annexation fee will be established for sewer.

- The new sewer capacity fee will be changed to a similar methodology as the water capacity fee. It will not include future planned assets/improvements and considers only existing sewer assets. The present sewer capacity fee "former annexation fee" for a Residential unit outside a sewer ID per EDU is $5,986. The fee is based on the capacity requirements that a new customer places on the system (see page 13 of presentation).

- The proposed policy for sewer capacity fees was presented:

  - Customers within an ID area:
    - would pay the capacity fee less a debt credit (the 1% general tax [availability fee] which they have paid in the past)
    - would receive reductions recognizing their previous payments of debt
    - pay a fee for their share of facilities paid for through rates
  - Customers outside of an ID area:
    - Would pay a capacity and annexation fee

- The study proposes that the sewer capacity fee for a residential unit (1 EDU) for customers within an ID area be set at $4,092 and if the customer is outside an ID area, the fee will be set at $6,400. Staff noted that the District had a sewer State loan which was paid off approximately four (4) years ago. This debt was paid through the tax rolls. Thus, if a customer was within a sewer ID, he/she was paying for this sewer debt on their property taxes. If the customer was outside a sewer ID, he/she was not paying for this sewer debt.

- The purpose of an Annexation fee is to bring equity to existing customers who have paid the general tax and availability fees into the system over the years and those that have not. The District has established an annexation fee for water, however, an annexation fee was never established on the sewer side.

- In comparing the present and new proposed sewer fees, for parcel outside an ID, there will be a $415 increase in the fee. The present fee is $5,986 (this fee was titled an Annexation fee, but was really a Capacity fee) and the new proposed Capacity fee is $6,400. For parcels within an ID who formerly paid no capacity fee the new sewer capacity fee will be $4,092.

- Any customer outside of the District’s service area or ID areas who annexes into the District’s system is subject to pay an annexation fee. The fee is a one-time fee and a share is equal to the value of the past fees and taxes paid by existing customers. The fee is determined by accumulating the past taxes and availability fees and bringing them into current day dollars (applying CPI), and dividing by current EDU’s. This will determine the “buy-in” share per EDU.

- The current water annexation fee for a 3/4-inch meter is $1,622. It is proposed that the fee be increased slightly to $1,777 for a 3/4-inch meter. It is proposed that the District implement a new annexation fee for sewer. The new sewer annexation fee for a residential customer (1 EDU) is $1,018 (see page 20 of the presentation for the new proposed annexation fees by meter size and EDU’s). Staff indicated that this fee is only for customers who are annexing into an ID. If a customer is already in an ID, they would not pay this fee.

- In response to an inquiry from the committee, staff confirmed that all the District’s sewer customers are located within Division 5.

- It was discussed that the Sewer Annexation fee is a new proposed fee and it is a policy decision by the board if they wished to implement the new fee. It was noted that approximately 90% of customers are already within an ID. Over the last five (5) years the District has received 27 customer requests to connect to the District’s sewer system. Of the 27 only 3 paid a sewer capacity fee (formerly known as the annexation fee).

- It was indicated that if the District charged less than what is proposed by the study, then in effect, the District would be sharing the cost of growth between the existing customers and the new customers.

- The District’s attorney explained in response to an inquiry from the committee, that if the District under-collected fees, it cannot go back and collect back fees. The fees would become a proposed tax which would be voted on by the sewer ratepayers.

- The committee requested that the developers be made aware that this item would be presented to the board for consideration at the September 3 board meeting.

Upon completion of the discussion, the committee received staffs’ report and supported presentation to the full board as an action item.

Attachment B

ORDINANCE NO. 545

AN ORDINANCE OF THE BOARD OF DIRECTORS OF
THE OTAY WATER DISTRICT
AMENDING SECTION 9, ANNEXATIONS AND DETACHMENTS; SECTION 28,
CONNECTION FEES AND CHARGES FOR POTABLE OR
RECYCLED WATER SERVICE; SECTION 53, CONDITIONS
FOR SEWER SERVICE; AND APPENDIX A
OF THE DISTRICT'S CODE OF ORDINANCES

BE IT ORDAINED by the Board of Directors of Otay Water District that the District's Code of Ordinances Section 9, Annexations and Detachments; Section 28, Connection Fees and Charges for Potable or Recycled Water Service; Section 53, Conditions for Sewer Service; and Appendix A be amended as per Exhibits 1, 2, 3 & 4 to this resolution.

NOW, THEREFORE, BE IT RESOLVED that the new proposed Section 9, Annexations and Detachments (Attachment C); Section 28, Connection Fees and Charges for Potable or Recycled Water Service (Attachment D); Section 53, Conditions for Sewer Service (Attachment E); and proposed Appendix A (Attachment F) of the Code of Ordinances shall become effective October 1, 2014.

PASSED, APPROVED AND ADOPTED by the Board of Directors of the Otay Water District at a regular meeting duly held this 3rd day of September 2014, by the following roll call vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
President

ATTEST:

_____
District Secretary

Exhibit 1

CHAPTER 6 MISCELLANEOUS ADMINISTRATION PROCEDURES

SECTION 9 ANNEXATIONS AND DETACHMENTS

9.01 REQUIREMENT OF ANNEXATION FOR SERVICE

Except as provided elsewhere in this Code, whenever utility service is requested for land outside the boundaries of an improvement district, the land to be serviced must first be annexed to an improvement district(s). If the land is located outside the boundaries of the District, the land must also be annexed to the District.

9.02 ANNEXATIONS TO OR DETACHMENTS FROM IMPROVEMENTS DISTRICTS

An owner or owners of land within the District desiring to annex to or detach land from an improvement district within the District must file a petition for such proceeding with the District. Annexation proceedings shall be conducted pursuant to Chapter I (commencing with Section 72670) of Part 11, Division 20 of the California Water Code. Detachment or exclusion proceedings shall be conducted pursuant to Part 8.5 (commencing with Section 72080) of Division 20 of the California Water Code.

If the land proposed to be annexed is outside the boundaries of the territory served by the Metropolitan Water District of Southern California and the territory served by the San Diego County Water Authority, and no local sources of water are available to serve such land, the District will require that the land be annexed to those entities as well.

9.03 ANNEXATIONS TO OR DETACHMENTS FROM THE DISTRICT THROUGH LAFCO

An owner or owners desiring to annex land to or to detach land from the District may either (i) file a petition directly with the Local Agency Formation Commission (LAFCO) for the annexation or detachment or (ii) request the District to file the petition with LAFCO for such annexation or detachment. Any such proceeding for annexation or detachment, which is deemed a change of organization or reorganization pursuant to the Cortese-Knox Local Government Reorganization Act of 1985, shall be initiated, conducted and completed pursuant to Title 6, Division 1 (commencing with Section 56000) of the California Government Code.

By annexing to the District the owners and representatives of the annexing land agree, on behalf of themselves and all future owners and occupants of the annexed lands, to comply with all laws, statutes, policies, plans, conditions and requirements applicable to the services provided by the District to such lands, including

without limitation any conservation or local supply use requirements.

9.04 FEES AND CHARGES FOR ANNEXATIONS OR DETACHMENTS

A petitioner requesting an annexation to or detachment from the District or within the District shall pay the following applicable fees and charges:

A. Administrative Processing Fees

1. District Processing Fee. A District processing fee (see Appendix A, Section 9~~.04 A.1.~~ for fee) shall be paid to the District for each annexation or detachment proceeding, regardless of the number of parcels involved, provided all parcels are included in one proceeding. This fee shall constitute the "base rate" on March 3, 1997. The base rate shall be adjusted annually for fluctuations in the Consumer Price Index (Urban Wage Earners and Clerical Workers - Los Angeles) and subsequent cost-of-living adjustment (COLA).

2. Additional Processing Fees or Charges. The petitioner shall pay all processing fees and charges due LAFCO, the State Board of Equalization and any other applicable government agency.

3. Concurrent Annexations to or Detachments from the District and an Existing Improvement District. No additional processing costs or fees will be charged to a petitioner for an annexation to or detachment from an existing improvement district when the proceeding is part of an annexation to or detachment from the District.

4. Payment of Fees and Charges. The District processing fees and charges shall be paid to the District at the time the petition for such proceeding is filed. Where a petition is filed with LAFCO, the District shall notify LAFCO that payment of all required fees and charges to the District shall be a condition for District approval of the annexation or detachment.

B. Water Annexation Fees. ~~for Annexations into the Otay Water District Boundaries.~~ The annexation fee (see Appendix A~~, Section 9, 9.04 B.~~) shall constitute the "base rate" on ~~August 6~~October 1, 2014). The base rate shall be adjusted quarterly for fluctuations in construction costs, as measured by the Engineering News Record Construction Cost Index for the Los Angeles Region. The ENR Construction Cost Index of ~~9777.19~~10,739.43 on ~~July~~

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~~1, 2009~~ June 1, 2014 shall be deemed the "base index." The adjustment shall be in an amount equal to the percentage change in the ENR Construction Cost Index from the base index for the period from ~~June 10, 2009~~June 1, 2014 to the date of payment.

1. No water annexation fee shall be required for existing and future agricultural water service furnished by the District under the COMMERCIAL AGRICULTURAL category of Section 25 of the Code.

2. Non-permanent irrigation water service furnished by the District under Section 30 of the Code shall be available without payment of a water annexation fee.

3. Open Space to be Annexed. Open space lands shall not be excluded from annexations of land to a water improvement district.

4. Water Meter Type Exclusions. Annexation fees shall be collected on all water meters sold except for temporary water meters, water tank truck meters, nonpermanent irrigation water meters and outside user meters, all as defined elsewhere in this Code.

5. Effective Date. Annexation fees shall be collected on all lands annexing into the Otay Water District boundaries on or after March 5, 1997.

6. Basis for Determination. For annexations of land into the Otay Water District boundaries, the petitioner shall pay an annexation fee. The fee shall be paid at the time of petition to be annexed. There shall be no water annexation fee charged for parcels already within District boundaries that are applying to be annexed into a water ID.

   For permanent water meters, except for commercial agricultural meters, the annexation fee shall be determined on the basis of the demand to be placed on the District-wide water system. The fee will be determined on the basis of the size of the water meter required, as set forth in Section 27 of the Code. The fee shall be determined by multiplying the demand factor for the meter size, as set forth in Section 28 of the Code, by the annexation fee per EDU. See Appendix A, ~~,~~ Section 9~~9.04 B.~~ for fees.

C. Sewer Annexation Fees ~~for Annexations to Sewer Improvement Districts~~

1. Improvement District Annexation. All annexation for sewer service shall be into Improvement District No. 18 on or after December 16, 1998.

2. Open Space to be Annexed. Open space lands shall not be excluded from annexations of land to a sewer improvement district.

3. Effective Date. Annexation fees shall be collected on all lands annexing to a sewer improvement district on or after December 16, 1998.

4. Basis for Determination. For annexations of land to a sewer improvement district within the District, the petitioner shall pay an annexation fee. The fee shall be determined on the basis of the demand to be placed on the District sewer system. The fee shall be paid at the time of sewer service connection request or General Manager's approval of plans, whichever occurs earlier. The extent of the demand will be determined on the basis of each equivalent dwelling unit (EDU) of service which is to be connected to the District sewer system. The number of EDUs prescribed in Section 53 of the Code shall be the basis for computation of the amount of the annexation fee. The fee will be determined by multiplying the number of EDUs by the annexation fee per EDU. See Appendix A, Section 9~~, 9.04 C.4~~ for fees.

This annexation fee shall constitute the "base rate" on ~~December 16, 1998~~October 1, 2014. The base rate shall be adjusted quarterly for fluctuations in construction costs as measured by the Engineering News Record Construction Cost Index for the Los Angeles Region. The ENR Construction Cost Index of ~~$6,859.45~~1,018~~1~~0,739.43 (as of ~~November 9, 1998~~June 1, 2014) shall be deemed the "base index." The adjustment shall be in an amount equal to the percentage change in the ENR Construction Cost Index from the base index for the period from ~~November 9, 1998~~June 1, 2014 to the date of payment.

D. Detachment Fees

For each detachment of land from an improvement district, the petitioner shall pay such fees as the General Manager determines are appropriate for

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the detachment. Determinations shall be made by the General Manager on a case-by-case basis.

9.05 TAXATION OF PROPERTY AFTER ANNEXATION TO IMPROVEMENT DISTRICT

Where property is annexed by a petitioner, other than a tax-exempt agency, the property in the annexed area shall be subject to taxation after the annexation thereof for the purposes of the improvement district, including the payment of principal and interest on bonds and other obligations of the improvement district authorized and outstanding at the time of the annexation. The Board of Directors shall provide as a condition of the annexation that the annexed area shall be subject to taxation as if the property had always been a part of the improvement district.

9.06 OTHER CONDITIONS OF ANNEXATION

By annexing to the District the owners and representatives of the annexing land agree, on behalf of themselves and all future owners and occupants of the annexed lands, to comply with all laws, statutes, policies, plans, conditions and requirements applicable to the services provided by the District to such lands, including without limitation any conservation or local supply use requirements.

Exhibit 2

SECTION 28 CONNECTION FEES AND CHARGES FOR POTABLE OR RECYCLED WATER SERVICE

28.01 COLLECTION OF FEES AND CHARGES

A. Fees and Charges to be paid by the Customer.

The following fees and charges shall be paid by the customer to connect to a District water system for potable water or recycled water service; these are in addition to the fees and charges in Section 9 and 25. Fees and charges shall include, but not be limited to, District fees, San Diego County Water Authority fees, ~~applicable zone charge~~ and charges for work performed by District personnel on behalf of the customer. These charges may include the installation by District personnel of a water service lateral, and inspections required due to the requirement of a back flow device. These charges may also include a meter fee, installation fee (where laterals exist), lateral fee, meter box fee, and excavation permit fee.

B. Basis for Determination of Connection Fees and Charges.

The fees and charges shall be determined as follows:

For permanent water meters, including potable or recycled irrigation service, the total water connection fee shall be determined on the basis of the demand to be placed on the District water system. The extent of demand will be determined on the basis of the size of the water meter, as set forth in Section 27 of the Code. For individually metered residential fire service, as outlined in Section 38.03 of the Code, the size and fee would be set based on water use requirements without additional fire capacity. The water connection fee will be determined by multiplying the demand factor for the meter size, as set forth below, by the total of the District-wide capacity fee ~~and applicable zone charge~~.

Meter Size	Demand Factor
3/4"	1
1	2-1/2
1-1/2"	5
2"	8
3"	16
4"	25
6"	50
8"	80
10"	115

1. ~~1.~~ The District-wide capacity fee ~~and the applicable zone charge~~ shall constitute the "base rate." For fees or charges after ~~July 1, 2010~~~~August 6, 2014~~October 1, 2014, the base rate shall be adjusted quarterly for fluctuations in construction costs, as measured by the *Engineering News Record Construction Cost Index for the Los Angeles Region*. The ENR Construction Cost Index of ~~9777.19~~ 10,739.43(as of ~~July 1, 2009~~June 1, 2014) shall be deemed the "base index." The adjustment shall be in an amount equal to the percentage change in the ENR Construction Cost Index from the base index for the period from June ~~10, 2009~~1, 2014 to the date of payment. (See Appendix A, Section 28~~, 28.01 B.1.~~ for fees.)

2. The District-wide new water supply fee shall constitute the "base rate." For fees or charges after ~~July 1, 2010~~~~August 6, 2014~~October 1, 2014, the base rate shall be adjusted quarterly for fluctuations in construction costs, as measured by the *Engineering News Record Construction Cost Index for the Los Angeles Region.* The ENR Construction Cost Index of ~~9777.19~~10,739.43 (as of ~~July 1, 2009~~June 1, 2014) shall be deemed the "base index." The adjustment shall be in an amount equal to the percentage change in the ENR Construction Cost Index from the base index for the period from June ~~10, 2009~~1, 2014 to the date of payment. (See Appendix A, Section 28~~, 28.01 B.2.~~ for fees.)

28.02 INSTALLATION CHARGES FOR WATER METER AND WATER SERVICE LATERALS

The determination of the water meter or service lateral size shall be based upon the information provided by the customer as detailed in Section 27 of the Code. The meter fees and installation charges are set forth in Appendix A, Section 28~~, 28.02~~.

Where a new water lateral is required, a customized, written estimate of the District's costs will be prepared.

The customer shall deposit the estimated costs with the District prior to commencement of the work. If actual costs incurred by the District are less than the amount deposited, the District shall refund the excess to the customer. If the actual costs incurred exceed the amount deposited, the customer shall reimburse the District for the additional costs.

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A. The meter fees and installation charges shall be set effective September 1, 2012, and then adjusted in the same manner as capacity fees as described in Section 28.01 B.1 above (See Appendix A, Section 28~~, 28.01 B.2.~~ for fees).

28.03 METER FEE REFUND

A. If a water meter/service has been paid for but not installed, a customer may receive a refund of the District's capacity fee and charges. If San Diego County Water Authority capacity fees have been paid to San Diego County Water Authority, the customer shall request a refund from San Diego County Water Authority.

B. If the customer wants to change the meter/service size, they will be credited with the number of equivalent dwelling units they have previously purchased and will be refunded any balance per Section 28.03 A, above. If additional equivalent dwelling units are required, the customer will be charged based on 28.01 and 28.02.

C. If a water meter/service has been previously paid and installed, and the customer requests a different meter size, the customer shall pay for the new meter and installation fees, plus any differential in capacity and new water supply fees as described in Section 28.03 B above.

Exhibit 3

SECTION 53 CONDITIONS FOR SEWER SERVICE

53.01 CONDITIONS FOR ACQUISITION OF SEWER SERVICE CAPACITY

Sewer service capacity may be acquired only for service to a specific address, parcel of land, or a land development project covered by an approved map. An approved map shall mean a recorded final map, a recorded parcel map or a tentative sub-division map that has been approved by the County or by a City, as applicable.

A. District Acceptance of Sewer Facilities for Russell Square Area - Under an Agreement with Cal Dorado Development, Inc., dated June 28, 1981, the District accepted title to a sewer pump station, force main and appurtenances for a sewage system to provide sewer service to the residential dwelling units to be constructed within the parcels of land in San Diego County Tentative Parcel Map 17150. Under an Agreement with Cal Dorado Development, Inc., dated June 18, 1981, the District agreed to provide service to such parcels on the terms and conditions contained therein. On October 1, 1984, pursuant to Resolution No. 2139, the District Board of Directors accepted title to the facilities.

53.02 SERVICE AREAS

Sewer service shall be furnished by the District only to property located in Improvement District No. 14 (ID 14), Improvement District No. 18 (ID 18), and Assessment District No. 4 (AD 4), and the Russell Square Sewer Service Area. Sewer service to property located outside such areas may be furnished only upon annexation to ID 18 and payment of all applicable annexation fees. (Appendix A, Section 9, 9.04 C.4.)

A. Designation of Russell Square Sewer Area - The geographical area described on the District Map entitled "Russell Square Sewer Service Area," dated October 11, 1988, on file with the District Secretary, constitutes the Russell Square Sewer Service Area.

53.03 53.03ACQUISITION OF SEWER CONNECTIONS FOR SERVICE

A. A. ID 14, ID 18 and AD 4.

Prior to December of 1998 the sewer customers who have been in an ID but not yet connected to the sewer system have paid sewer tax debt. Effective SeptemberOctober 1, 2014 two separate sewer capacity fees have been established to ensure sewer customers do not pay for facilities twice. The first capacity fee applies to parcels within an ID that paid prior tax debt. The second capacity fee applies parcels outside an ID that have not paid the tax debt. The sewer capacity fees shall constitute the "base rate." For fees or charges after October 1, 2014, the base rate shall

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be adjusted quarterly for fluctuations in construction costs, as measured by the *Engineering News Record Construction Cost Index for the Los Angeles Region*. The ENR Construction Cost Index of 10,739.43(as of June 1, 2014) shall be deemed the "base index." The adjustment shall be in an amount equal to the percentage change in the ENR Construction Cost Index from the base index for the period from June 1, 2014 to the date of payment.

1. Sewer ~~Connection~~Capacity Fee within an ID

~~There shall be no connection capacity fee for sewer service to parcels already annexed into Improvement District No. 14, Improvement District No. 18 and Assessment District No. 4 on or after December 16, 1998.~~All new sewer connections for parcels within a sewer ID shall pay a ~~connection fee (C~~capacity ~~F~~fee~~)~~ for each Equivalent Dwelling Unit (EDU) of sewer service provided. The ~~connection~~capacity fee is due at the time an application for sewer service is ~~submitted~~requested. The number of EDUs for the connection shall be as set forth in Section 53.08 of the Code. (See Appendix A, Section 53 for fees) ~~In addition, the customer for such service shall pay the monthly service charge for sewer service set forth in Section 53.10 A and B.~~

2. Sewer ~~Connection~~Capacity Fee outside an ID

All new sewer connections for parcels not within a sewer ID (requiring to be annexed into a sewer ID18 per code Section 9.04 C.) shall pay a ~~connection fee (C~~capacity ~~F~~fee~~)~~ for each Equivalent Dwelling Unit (EDU) of sewer service provided. The ~~connection~~capacity fee is due at the time an application for sewer service is ~~submitted~~requested. The number of EDUs for the connection shall be as set forth in Section 53.08 of the Code. (See Appendix A, Section 53 for fees)

B. Russell Square Pump Station

1. Sewer Connection Fee

A connection fee (see Appendix A~~, section 53, 53.03 B.1.~~ for fee) for each Equivalent Dwelling Unit (EDU) of sewer service provided through Russell Square Pump Station shall be collected. The connection fee is due at the time an application for sewer service is submitted. The number of EDUs for the connection shall be as set forth in Section 53.08 of the Code.

(a) Exempt Parcels - The connection fee shall not apply to connections for sewer service to the parcels within the Tentative Parcel Map 17150. Such exempt parcels are currently identified as

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Assessor Parcel Nos. 497-011-41, 497-011-42, 497-011-44, 497-011-46 and 497-011-47.

2. Monthly Sewer Service Charge

A monthly sewer service charge (see Appendix A, Section 53~~, 53.03 B.2~~ for charge) to cover normal operational costs of the Russell Square Pump Station and force mains shall be collected. This charge shall be reviewed by the Board of Directors from time to time to assure that such charges cover the costs for operation of the sewer facilities.

The proceeds of the fees and charges received by the District under 53.03 B.1 and 53.03 B.2 shall be used by the District solely for maintenance, replacement or repair under 53.03 B.1 and for the operation of the facilities under 53.03 B.2.

In addition, the customer for such service shall pay the monthly service charge for sewer service set forth in Section 53.10 A and B.

53.04 CHARGES FOR INSTALLATION OF SEWER LATERALS

Upon application for construction of one or more sewer laterals, the customer shall deposit with the District the estimated costs to be incurred by the District in connection with the installation of the facilities required, as determined by the District. Upon completion of the work, the District shall calculate the actual costs incurred by the District in performing the work. If actual costs are less than the amount deposited, the District shall refund the balance of the deposit to the customer. If actual costs exceed the amount deposited, the customer shall reimburse the District for the additional costs.

53.05 PAYMENT OF FEES

All fees prescribed in the Code shall become owing, due and payable at the time application is made to connect a premise to the sewer system of the District. The fees shall be paid to the District prior to the issuance of any permit authorizing the connection of such premise to the District sewer system. If the proposed connection cannot be made, the fee may be refunded when approved by the General Manager.

53.06 SEWER SERVICE USE CHANGES RESULTING IN INCREASED SYSTEM UTILIZATION

The use of a sewer connection shall be limited to the type and number of EDUs authorized by the original wastewater discharge permit. Before adding any additional equivalent dwelling units, buildings, modifying existing buildings, or change of occupancy type, the property owner shall make a supplementary wastewater

permit application to the District for such change in use and pay additional sewer annexation fees per EDU, if necessary, as may be applicable. Periodic inspection of the premises may be made by the District and if actual use is greater than estimated use, an assessment for additional annexation fees shall be assessed in accordance with the fee schedule in the then current Code of Ordinances.

53.07 WASTEWATER DISCHARGE PERMIT ISSUANCE AND LIMITATION

A. A wastewater discharge permit shall be required for any property for which a request is made to discharge into the District sewage system.

B. Every wastewater discharge permit shall expire by limitations and shall become null and void, if the construction or work authorized by such permit is not commenced within 120 days from date of issuance of such wastewater discharge permit or if the construction or work authorized by such wastewater discharge permit is suspended or abandoned for a period of 120 days at any time after the work is commenced.

C. Before such work can be recommenced, a new wastewater discharge permit application must be filed with the District. The District may reactivate the previous wastewater discharge permit provided that wastewater quantity and type is the same as the wastewater discharge allowed under the original permit, and provided further that such suspension and abandonment has not exceeded one year. Fees paid for the previous wastewater discharge permit may be credited toward the total permit fees required on the new permit application. Reactivation of the previous wastewater discharge permit shall be subject to District sewer capacity being available at the time of new application and subject to any additional costs or charges imposed during the period of such suspension or abandonment.

53.08 BASIS FOR DETERMINATION OF EQUIVALENT DWELLING UNITS (EDUs)

The number of EDUs for sewer service shall be determined on the following basis:

A. Residential Facilities

EDUs	Description

1	▪ Single-family residence (Includes manufactured homes and mobile homes which are on private lots.) ▪ A secondary structure with a kitchen is considered an additional EDU ▪ Each individual living unit in apartments, multiple family housing and residential condominiums ▪ Each individual space in mobile homes and trailer parks

B. Commercial/Industrial Facilities

1. Food Service Establishments

EDUs	Description
3	▪ Take-out restaurants with disposable utensils, no dishwasher and no public restrooms ▪ Take-out restaurants with disposable utensils, no dishwasher and no public restrooms ▪ Miscellaneous food establishments - ice cream shops, yogurt shops, bakeries (sales on premise only) ▪ Take-out/eat-in restaurants with disposable utensils, but with seating and public restrooms ▪ Restaurants with reusable utensils, seating and public restrooms (0-18 seats) o Add 1.0 EDU for each additional 6 seat unit, or portion thereof

2. Hotels and Motels

EDUs	Description
.38	Per living unit without kitchen
.60	Per living unit with kitchen

3. Commercial, Professional, Industrial Buildings and Establishments not specifically listed herein

EDUs	Description
1.2 +0.7	For first 1,000 square feet AND For each additional square feet or portion thereof Applies to any office, store or industrial condominium or establishments
1.2 +0.7	For first 1,000 square feet AND For each additional 1,000 square feet of gross building floor area. Portions less than 1,000 sq. ft. will be prorated.

	Applies to situations where the occupancy type or usage is unknown at the time of application for service. This shall include, but not be limited to, shopping centers, industrial parks and professional office buildings.
1.0	Self-service laundry per washer

4. Convalescent Homes

EDUs	Description
0.7/bed	Skilled nursing care facilities, psychological hospitals, convalescent hospitals; licensed by the applicable Governmental Agency.
0.5/bed	Community Care Facilities with 16 or more beds licensed by the applicable Governmental Agency.
1.0	Community Care Homes with six or fewer total residents, including resident staff and housekeepers (to be the same EDU as a single family residence).

C. Other commercial, industrial and other types of business establishments not included in 53.08 B.1 through 53.08 B.4

If the establishment is not included in 53.08 B.1 through 53.08 B.4 or if the EDUs specified in 53.08 B.1 through 53.08 B.4 are not representative of actual flow due to the number of employees or type of operation, the number of EDUs shall be determined in each case by the list of commercial strengths as defined by the State Water Resources Control Board (SWRCB) or by the General Manager and shall be based upon the estimated volume and type of wastewater discharge into the sewer.

Examples of commercial, industrial and other business establishments include, but are not limited to, bottling works, supermarkets, markets, deli/markets, convenience stores, hospitals, laundries (other than self-service laundries), automobile service stations, mortuaries, day-care centers, bars and pool halls.

53.09 TRANSFER, ASSIGNMENT, OR RESALE OF SEWER CONNECTION RIGHTS

EDU sewer connection rights obtained by a customer may not be sold, transferred, or assigned separately from ownership of the real property for which they were obtained, unless otherwise stated in an agreement with the District.

53.10 DEFINITIONS OF RESIDENTIAL AND MULTI-RESIDENTIAL SEWER SERVICE RATES, CHARGES AND FEES

All District sewer rates, charges, and fees are subject to Board approval of rate increases to residential and multi-residential sewer services billed on or after January 1, 2014 and may apply

to sewer services as early as the beginning of December 2013 and periodically thereafter through December 31, 2018. The increases shall be the amount sufficient to cover cost increases related to operation and maintenance, but not to exceed 10% per year.

Five-year Periodic Pass-through Rate Increases or Decreases from District Wholesalers - All District sewer rates, charges, and fees are subject to periodic rate changes from the District's public agency wholesalers for a five-year period beginning January 1, 2014 through December 31, 2018.

Set-up Fees for Accounts - A set-up fee (see Appendix A, Section 53~~, 53.10~~ for fee) shall be charged for each account transferred to another customer.

Winter Average Determination - Sewer service usage fee shall be based on the ''Winter Average'' water consumption, measured in units of hundred cubic feet (HCF). The winter average period is January through April. The winter average is calculated by adding the four months of water consumption for the preceding winter and dividing the resulting amount by four. This average is then reduced by a 15% usage discount, recognizing that not all water used flows into the sewer system, to determine the ''Winter Average'' for billing purposes see Appendix A, Section 53~~, 53.10~~.

Usage Fee - The usage fee rate (see Appendix A, Section 53~~, 53.10~~) is multiplied by the ''Winter Average'' calculation for each customer (after the above noted 15% discount) and the resulting amount is added to the System Fee applicable to the size of meter. The resulting fixed fee shall be charged on a monthly basis for an entire calendar year, until a new ''Winter Average'' is determined for the following year.

Residential Sewer System Fee - The monthly system fee is set forth in Appendix A, Section 53~~, 53.10~~.

A. Residential Rate Charges

1. Defined as: Sewer service for individually metered residential households.

2. The monthly sewer bill is calculated by adding the system fee plus the usage fee as described in 53.10 above.

3. The maximum ''Winter Average'' for individually metered residential customers is 30 units (after the 15% discount).

4. Monthly Residential Sewer Rate without Consumption History: The average residential sewer rate shall be determined by calculating the total usage fee for all residential customers and dividing by the number of residential customers. Then the monthly average usage

fee is added to the system fee and this shall be used to determine the total monthly fee to be used for residential customers with no prior winter consumption, customers using well water or other unmetered water. See Appendix A, Section 53~~, 53.10 A~~.

B. Multi-Residential Rate Charges

1. Defined as: Sewer service for master metered water service for multiple-residential households including for example; duplex, townhomes, apartments, and mobile homes.

2. The monthly sewer bill for the complex is calculated by adding a system fee based on meter size (as set forth in Appendix A, Section 53~~, 53.10 B.2.~~) plus the usage fee (as set forth in Appendix A, Section 53~~, 53.10 B.2.~~) multiplied by the winter average, for the entire complex. Note: There is no cap on consumption for the multi-residential customers.

3. Monthly Multi-Residential Sewer Rate without Consumption History: The multi-residential sewer rate shall be determined by calculating the total usage fee for all multi-residential customers and dividing by the number of multi-residential dwelling units. The usage fee per dwelling unit is multiplied by the new customer's number of dwelling units and this shall be added to the monthly system fee, based on meter size, to determine the monthly rate. This is applicable to new complexes that do not have a prior winter consumption history. See Appendix A, Section 53~~, 53.10 B~~.

53.11 DEFINITIONS OF COMMERCIAL AND INDUSTRIAL SEWER SERVICE RATES, CHARGES AND FEES

All District sewer rates, charges, and fees are subject to Board approval of rate increases to commercial and industrial sewer services billed on or after January 1, 2014 and may apply to sewer services as early as the beginning of December 2013 and periodically thereafter through December 31, 2018. The increases shall be the amount sufficient to cover cost increases related to operation and maintenance, but not to exceed 10% per year.

Five-year Periodic Pass-through Rate Increases or Decreases from District Wholesalers - All District sewer rates, charges, and fees are subject to periodic rate changes from the District's public agency wholesalers for a five-year period beginning January 1, 2014 through December 31, 2018.

Set-up Fees for Accounts - A set-up fee (see Appendix A, Section 53~~, 53.11~~ for fee) shall be charged for each account transferred to another customer.

Average Annual Consumption - The Average Annual Consumption, measured in units of hundred cubic feet (HCF). The annual consumption period is January through December of the preceding year divided by the number of months of consumption. This average is reduced by a 15% usage discount which recognizes that not all water used flows into the sewer system.

Usage Fee - The usage fee rate (see Appendix A, Section 53~~, 53.11~~ for rate) is determined by the commercial customer's sewer strength category in which they are assigned (low strength, medium strength or high strength).

System Fee - The monthly system fee is determined by the commercial customer's water meter size (as set forth in Appendix A, Section 53~~, 53.11~~).

Strength Factor - The State Water Resources Control Board (SWRCB) has grouped commercial customers into various categories and has identified Strength Factors for each of these business categories. The standard of measure for Strength Factors is the typical sewer strength of a single-family residence (SFR). A SFR has strength factor of 1. (As set forth in Appendix A, Section 53~~, 53.11~~)

A. Commercial Rate Charges

1. The monthly sewer bill for commercial sewer customers is calculated by multiplying the average annual consumption, reduced by 15%, by the usage fee based on strength (as set forth in Appendix A, Section 53 ~~53.11~~) plus the monthly system fee based on the customer's water meter size.

2. For new commercial sewer customers without consumption history, staff shall make a determination of the average annual consumption to be used until a year's consumption data can be collected. The determination shall be based on the prior owner or tenant of the sewer connection, or based on the most similar type of current business operation. If the customer does not agree with staff's recommendation, the customer may request an adjustment, in writing, and direct it to the General Manager.

B. Industrial and Other Users

1. Charges determined by the Board of Directors on a case-by-case basis.

Monthly sewer service charges shall commence upon installation of the water meter to serve the premises receiving the sewer service, upon connection to the District sewer system, upon start of occupancy of the premises to be served, or one year after the date the application for sewer service is filed. If a sewer service connection has been obtained and if sewer service will not be used until sometime after installation of the water meter, commencement of the sewer service charge may be deferred until the later date only upon prior approval of the General Manager.

C. Commercial User Classifications

Commercial sewer service customers are subject to periodic inspection of the premises by the District for verification of proper sewer strength classification. In addition to such periodic inspections, strength classifications will be reviewed periodically, at the discretion of the District. If warranted following a periodic inspection, periodic classification review, or a change in the nature of a customer's business and/or use of the property, customers may be reclassified to reflect their current business operations and proper sewer strength, at the discretion of the District and consistent with the standards set forth herein and in the State Water Resources Control Board (SWRCB) listing for sewer strength.

1. Low-Strength Commercial = 1.0 Strength Factor

Car wash
General office and buildings
Barber and beauty shops
Department, retail stores and general commercial
Hospitals and convalescent homes
Public Laundromats and dry cleaners
Professional office or office building
Warehouse
Bars without dining facilities
Churches
Schools (Elementary, junior & High Schools, Colleges)
Other uses having a similar strength as determined by the District

2. Medium-Strength Commercial = 2.0 Strength Factor

Hotels without dining facilities or cooking facilities
Auto repair/sales shop and service station
Shopping centers
Other uses having a similar strength as determined by the District

3. High-Strength Commercial = 4.0 Strength Factor

Bakery or bakery with deli
Hotel with dining facilities
Restaurants and bars with food
Grocery stores with onsite butcher and/or bakery
Other uses having a similar strength as determined by the District

53.12 ISSUANCE AND PAYMENT OF SEWER BILLS

A. Issuance of Statements: Statements for sewer service or other charges will be mailed monthly or as soon as practical, after the applicable charges have been determined.

B. Due Date: Each statement issued by the District for such charges shall be due and payable on the date of mailing or other presentation to the customer.

C. Final Payment Date: All charges in each statement must be paid on or before the final payment date shown on the statement, which shall be at least 20 calendar days following the date of mailing or presentation of the statement.

D. Place of Payment: Payments shall not be credited to a customer's account until cash, check, credit card, draft, electronic funds transfer, money order or any other acceptable form of payment that will be honored by the bank has been received by the District at the District business office during regular office hours. Deposit of payment in the mail or at a location other than the District business office shall not be credited to a customer's account until received at the business office.

E. Returned Check Charges: A returned payment charge (see Appendix A, Section 34~~, 34.01 D.2~~ for charge) shall be added to a customer's account in each instance where payment has been made to the District with a check, draft, credit card or any other acceptable form of payment that has not been honored upon presentment to the bank upon which it is drawn.

53.13 DELINQUENT ACCOUNTS

A. Requirement of Deposit Due to Repeated Delinquencies: If payments on a customer account have become delinquent five or more times, the General Manager, Chief Financial Officer, or any person delegated by the General Manager, shall be authorized to require the customer to make a deposit with the District, in cash or any other form satisfactory to the General Manager. The deposit amount shall be established at the discretion of the General Manager and the Chief Financial Officer, but shall not exceed two times the

highest bill during the twelve (12) months preceding the date of demand for a deposit.

B. Handling of Deposit: A deposit shall not earn interest and shall only be applied to reduce or satisfy amounts due the District in the event of termination of service. A deposit does not constitute payment for service bills and the customer shall be required to comply with bill payment requirements to continue receiving service.

C. Refund of Deposit: A deposit required under this Section shall be refunded to the customer as provided in Section 25.04 B.

Exhibit 4

Otay Water District
Appendix A

Section #	Code #	Fee Description	Meter Size		Charges		
9	9.04 A.1.	District Annexation Processing Fee			$763.83		
	9.04 B.	Annexation Fees for Water Annexations into Otay Water District Boundaries			District-wide Annexation Fee		
			3/4"		~~$1,622.36~~		
			1"		~~$4,055.90~~		
			1-1/2"		~~$8,111.80~~		
			2"		~~$12,978.88~~		
			3"		~~$25,957.76~~		
			4		~~$40,559.00~~		
			6"		~~$81,118.00~~		
			8"		~~$129,788.80~~		
			10"		~~$186,571.40~~		
	9.04 C.4.	Annexation Fees for Annexations to Sewer Improvement Districts			~~$5,985.73~~		
					.		
10	10.01	Filing of Petition			$50.00		
23	23.04	Backflow Certification					
		- Second Notification			$10.00		
		- Third Notification			$25.00		
		- Reconnection (service resumed)			$50.00		
		- Initial Filing Fee (New applicants for addition to the list of approved backflow prevention device testers)			$25.00		
		- Renewal Filing Fee (to remain on list of approved backflow prevention device testers)		Annually	$10.00		
25	25.03 A.	Set-up Fees for Accounts			$10.00		
25	25.03 C.	Monthly Fixed System Charges, MWD & CWA Charges [1]	Meter Size	System Charge	MWD & CWA Fixed Charge	Total Fixed Charge	
			3/4"	$16.19	$14.45	$30.64	
[1] All Water used in December and billed in January 2014.			1"	$22.87	$26.79	$49.66	

Section #	Code #	Fee Description	Meter Size		Charges		
25	25.03 C.	Monthly Fixed System Charges, MWD & CWA Charges (continued)[1]	1-1/2"	$39.58	$60.61	$100.19	
			2"	$59.62	$103.08	$162.70	
			3"	$113.08	$219.23	$332.31	
			4"	$173.22	$351.09	$524.31	
			6"	$340.29	$718.69	$1,058.98	
			8"	$540.76	$1,160.59	$1,701.35	
			10"	$774.64	$1,670.55	$2,445.19	
25	25.03 E.1.(b)	Domestic Residential Water Rates [1]		Unit	Charge		
		(The Conservation Tier discount applies	Conservation Tier	0 - 5	$1.86		
		toward the first five units of water when		6-10	$2.90		
		overall consumption is ten units or less.)		11-22	$3.77		
				23 or more	$5.80		
25	25.03 E.2.(b)	Multiple Residential Water Rates - Per Dwelling Unit [1]		0-4	$2.86		
				5-9	$3.71		
				10 or more	$5.73		
25	25.03 E.3.(b)	Business and Publicly-Owned Water Rates [1]	under 10"	0-185	$3.06		
				186-1,400	$3.14		
				1,401 or more	$3.19		
			10" & larger	0-7,426	$3.06		
				7,427-14,616	$3.14		
				14,617 or more	$3.19		
25	25.03 E.4.(c)	Irrigation and Commercial Agricultural Using Potable Water Rates [1]	1" & smaller	0-54	$4.17		
				55-199	$4.25		
				200 or more	$4.32		
			1.5" & 2"	0-144	$4.17		
				145-355	$4.25		
				356 or more	$4.32		
			3" & larger	0-550	$4.17		
				551-1,200	$4.25		
				1,201 or more	$4.32		

[1] All Water used in December and billed in January 2014.

Section #	Code #	Fee Description	Meter Size		Charges		
25	25.03 E.5. (c)	Recycled Water [1]	3/4" - 1"	0-32	$3.56		
		Landscape Irrigation and Certain Non-		33-75	$3.61		
		Irrigation Purposes Rates		76 or more	$3.68		
			1.5" & 2"	0-130	$3.56		
				131-325	$3.61		
				326 or more	$3.68		
			3" & 4"	0-440	$3.56		
				441-1,050	$3.61		
				1,051 or more	$3.68		
			6" & larger	0-4,000	$3.56		
				4,001-10,000	$3.61		
				10,001 or more	$3.68		
25	25.03 E.6.(c)	Recycled Commercial [1]	under 10"	0-173	$2.56		
				174-831	$2.64		
				832 or more	$2.66		
			10" & larger	0-7,426	2.56		
				7,427-14,616	$2.64		
				14,617 or more	$2.66		
25	25.03 E.7.(b)	Potable Temporary and Construction Water Service Rates [1]	1" & smaller	0-54	$8.34		
				55-199	$8.50		
				200 or more	$8.64		
			1.5" & 2"	0-144	$8.34		
				145-355	$8.50		
				356 or more	$8.64		
			3" & larger	0-550	$8.34		
				551-1,200	$8.50		
				1,201 or more	$8.64		
25	25.03 E.10.(b)	Tank Trucks Water Rates [1]	1" & smaller	0-54	$8.34		
				55-199	$8.50		
				200 or more	$8.64		
[1] All Water used in December and billed in January 2014.							

Section #	Code #	Fee Description	Meter Size		Charges
			1.5" & 2"	0-144	$8.34
				145-355	$8.50
				356 or more	$8.64
			3" & larger	0-550	$8.34
				551-1,200	$8.50
				1,201 or more	$8.64
25	25.03 E.11.(c)	Application Fee for Water Service Outside District Boundaries			$500.00
25	25.03 E.11.(d)	Water Rate for Service Outside District Boundaries [1]	1" & smaller	0-54	$8.34
				55-199	$8.50
				200 or more	$8.64
			1.5" & 2"	0-144	$8.34
				145-355	$8.50
				356 or more	$8.64
			3" & larger	0-550	$8.34
				551-1,200	$8.50
				1,201 or more	$8.64
25	25.03 E.12.(b)	Application Fee for Water Service Outside an Improvement District			$275.00
25	25.03 E.12.(c)	Water Rate for Service Outside Improvement District [1]	1" & smaller	0-54	$8.34
				55-199	$8.50
				200 or more	$8.64
			1.5" & 2"	0-144	$8.34
				145-355	$8.50
				356 or more	$8.64
25	25.03 E.12.(c)	Water Rate for Service Outside Improvement District (continued) [1]	3" & larger	0-550	$8.34
				551-1,200	$8.50
				1,201 or more	$8.64

[1] All Water used in December and billed in January 2014.

Section #	Code #	Fee Description	Meter Size		Charges
25	25.03 E.13.(c)	Fire Service Monthly Charge	3" or less		$21.14
			more than 4"		$28.49
25	25.03 E.14.(b)	Additional Water Service for Property Not Subject to District Taxes		per unit	$0.31
25	25.03 E.15.(b)	Interim Service Water Rate in Improvement District 7 [1]	1" & smaller	0-54	$8.34
				55-199	$8.50
				200 or more	$8.64
			1.5" & 2"	0-144	$8.34
				145-355	$8.50
				356 or more	$8.64
			3" & larger	0-550	$8.34
				551-1,200	$8.50
				1,201 or more	$8.64
25	25.03 F.	Energy Charges for Pumping Water [1]		Per 100 ft of lift over 450 ft per unit	$0.048
25	25.03 G.1.	Additional Water Charge for Service in the North District		Per unit charge except for the first 5 units of residential	$0.08
25	25.03 H.1.	Additional Water Charges for Service in the Improvement District 9 Water Service Zone		Per unit charge except for the first 5 units of residential	$0.27
25	25.03 H.2.	Additional Monthly System Fee for Improvement District 9			$2.00
[1] All Water used in December and billed in January 2014.					

Section #	Code #	Fee Description	Meter Size	Charges		
25	25.03 I.1.(b)	Additional Water Charges for Services in Improvement District 10	Per unit charge except for the first 5 units of residential	0.27 per H.C.F.	Effective Jan 1st 2011-2018	
25	25.04 A.	Deposits for Non-Property Owners	3/4"	$75.00		
			1"	$150.00		
			1-1/2"	$200.00		
			2"	$360.00		
			3"	$800.00		
			4"	$1,350.00		
			6"	$3,300.00		
			8"	$4,400.00		
			10"	$5,500.00		
28	28.01 B.1.	Capacity Fees ~~and Zone Charge~~		District-wide Capacity Fee		
		~~- I.D.'s 1,2,3,5,7,9,10,20,22,22/27,25~~	3/4"	~~$8,237.03~~		
		(excluding Triad~~) and only I.D. 22/27~~	1"	~~$20,592.58~~		
		~~require reclaimed irrigation meters.~~	1-1/2"	~~$41,185.15~~		
			2"	~~$65,896.24~~		
			3"	~~$131,792.48~~		
			4	~~$205,925.75~~		
			6"	~~$411,851.50~~		
			8"	~~$658,962.40~~		
			10"	~~$947,258.45~~		
28	28.01 B.1.	Capacity Fees ~~and Zone Charge~~				
		- ~~22/27~~ TRIAD	3/4"	~~$6,164.32~~		
			1"	~~$15,410.80~~		
			1 -1/2"	~~$30,821.60~~		
			2"	~~$49,314.56~~		
			3"	~~$98,629.12~~		
			4	~~$154,108.00~~		
			6"	~~$308,216.00~~		
			8"	~~$493,145.60~~		
			10"	~~$708,896.80~~		
28	28.01 B.2.	New Water Supply Fee		-		
		- All IDs including Triad	3/4"	~~$949.03~~		
			1"	~~$2,372.58~~		
			1-1/2"	~~$4,745.15~~		
			2"	~~$7,592.24~~		
			3"	~~$15,184.48~~		

Section #	Code #	Fee Description	Meter Size		Charges		
28	28.01 B.2.	New Water Supply Fee, continued	4"		~~$23,725.75~~		
		- All IDs including Triad	6"		~~$47,451.50~~		
			8"		~~$75,922.40~~		
			10"		~~$109,138.45~~		
28	28.02	Installation ~~Charges for~~ Water Meter ~~and Water Service Laterals~~	Meter Size	Meter Cost	Installation	Total	Meter Box/Vault (if Needed)
		Potable (Non-Irrigation)	3/4" x 7.5"	$210.94	$100.10	$311.04	$84.98
			3/4" x 9"	$224.59	$100.10	$324.69	$84.98
			1"	$272.20	$100.10	$372.30	$84.98
			1.5"	$442.43	$100.10	$542.53	$192.65
			2"	$633.96	$100.10	$734.06	$192.65
			3"	$1,975.66	$602.69	$2,578.35	$3,436.57
			4"	$3,431.41	$602.69	$4,034.10	$3,436.57
			6"	$5,926.98	$951.99	$6,878.97	$3,436.57
			8"	$7,405.32	$1,459.79	$8,865.11	$4,930.00
			10"	$10,650.23	$1,459.79	$12,110.02	$4,930.00
		Potable/Recycled Irrigation	3/4" x 7.5"	$210.94	$100.10	$311.04	$216.57
			3/4" x 9"	$224.59	$100.10	$324.69	$216.57
			1"	$272.20	$100.10	$372.30	$216.57
			1.5"	$442.43	$100.10	$542.53	$216.57
			2"	$633.96	$100.10	$734.06	$216.57
			3"	$1,367.36	$602.69	$1,970.05	$3,436.57
			4"	$2,662.04	$602.69	$3,264.73	$3,436.57
			6"	$4,792.53	$951.99	$5,744.52	$3,436.57
			8"	$6,384.51	$1,459.79	$7,844.30	$4,930.00
			10"	$9,060.10	$1,459.79	$10,519.89	$4,930.00
		Combined Fire and Domestic	4"	$8,163.63	$602.69	$8,766.32	$3,436.57
			6"	$10,865.08	$951.99	$11,817.07	$3,436.57
			8"	$15,797.04	$1,459.79	$17,256.83	$4,930.00
			10"	$21,557.73	$1,459.79	$23,017.52	$4,930.00
31	31.02 D.1.	Requirement of Temporary Meter for Service		minimum/per day	$25.00		
31	31.03 A.1.	Requirement of Deposit for Temporary Meters					
			3/4"		$150.00		
			1"		$180.00		
			1-1/2"		$330.00		
			2"		$2,046.00		

Section #	Code #	Fee Description	Meter Size		Charges
31	31.03 A.1.	Requirement of Deposit for Temporary Meters, continued	3"		$850.00
			4"		$1,986.00
			6"		$2,465.00
		- Construction Trailer Temporary Meter	2"		$2,046.00
		- Tank Truck Temporary Meter (Ordinance No. 372)	2"		$850.00
31	31.03 A.4.	Temporary Meter Install & Removal			$128.00
31	31.03 A.5.	Temporary Meter Move Fee (includes backflow certification)	3/4" - 2"		$64.00
			3" and larger	No backflow test	$64.00
33	33.07 A.	Customer Request for Meter Test (Deposit)	5/8", 3/4" & 1"		$25.00
			1-1/2" & 2 "		$50.00
			3" & Larger		$125.00
34	34.01 D.2.	Returned Check Charges			$25.00
34	34.02 B.	Late Payment Charge			5% of Delinquent Balance
34	34.02 G.1.(d)	Delinquency Tag			$10.00
34	34.02 G.3.(a)	Meter "Turn-On" Charge		During regular business hours	$35.00
34	34.02 G.3.(b)	Meter "Turn-On" Charge		After regular business hours	$65.00
53	53.03 B.1.	Sewer Connection Fee - Russell Square			$7,500.00
53	53.03 B.2.	Monthly Sewer Service Charge - Russell Square			$200.00
53	53.10 & 11	Set-up Fees for Accounts			$10.00
53	53.10	Residential Sewer Usage Fee [(2)]		Rate multiplied by winter average units	$2.35

[(2)] Sewer billed beginning January 1, 2014.

Section #	Code #	Fee Description	Meter Size		Charges		
53	53.10	Residential Sewer System Fee [2]	5/8" & 3/4"		$14.38		
			1" & larger		$14.38		
53	53.10 A.	Residential Sewer Without Consumption History [2]	5/8" & 3/4"		$42.35		
			1" & larger		$42.35		
53	53.10 B.	Multi-Residential Usage Fee - Sewer Without Consumption History [2]			$27.97		
53	53.10 B.2.	Multi-Residential Usage Fee - Sewer [2]		Rate multiplied by winter average units	$2.35		
53	53.10 B. 2.	Multi-Residential System Fee - Sewer [2]	.75"		$25.83		
			1"		$38.03		
			1.5"		$68.53		
			2"		$105.12		
			3"		$190.52		
			4"		$312.51		
			6"		$617.48		
			8"		$983.46		
			10"		$1,410.42		
53	53.11	Commercial and Institutional Sewer Strength Factors	Low Strength	1			
			Medium Strength	2			
			High Strength	4			
53	53.11	Monthly Usage Fee for Commercial and Institutional Sewer [2]	Rate multiplied	Low Strength	$2.35		
			by annual	Medium Strength	$3.37		
			avg. units	High Strength	$5.37		
53	53.11	Monthly System Fee for Commercial and Institutional Sewer [2]	.75"		$25.83		
			1"		$38.03		
			1.5"		$68.53		
			2"		$105.12		
			3"		$190.52		

[2] Sewer billed beginning January 1, 2014.

Section #	Code #	Fee Description	Meter Size	Charges		
			4"	$312.51		
			6"	$617.48		
			8"	$983.46		
			10"	$1,410.42		
60	60.03	Issuance of Availability Letters for Water and/or Sewer Service		$75.00		
72	72.04 A.1.	Locking or Removing Damaged or Tampered Meters				
		- To Pull and Reset Meter	3/4" - 2"	$170.00		
		- Broken Curbstop or Tabs	3/4" - 1"	$192.00		
		- If Customer uses Jumper	3/4" - 1"	$149.00		
		- Broken Lock/Locking Device	3/4" - 1"	$56.00		
		- Cap Lock (Welded)	3/4" - 1"	$158.00		
		- Broken Curbstop or Tabs	1.5" - 2"	$265.00		
		- To Pull and Reset Meter	3"	$351.00		
		- To Pull and Reset Meter	4"	$454.00		
		- To Pull and Reset Meter	6"	$454.00		
		- To Pull and Reset Meter	8"	$600.00		
		- To Pull and Reset Meter	10"	$600.00		
72	72.05 D. A.	Type I Fine				
		- First Violation		$100.00		
		- Second Violations		$200.00		
		- Third or each additional violation of that same ordinance or requirement within a twelve-month period		$500.00		
		Type II Fine	Will not exceed per each day the violation is identified or continues.	$5,000.00		
72	72.05 D. A. (continued)	Type III Fine	Fine up to amount specified per each day the violation is identified or continues.	$500.00		

Section #	Code #	Fee Description	Meter Size	Charges		
		Type IV Fine	Fine up to amount specified per each day the violation is identified or continues.	$500.00		
State Water Code	#71630 & Annual Board Resolution #4142	Water Availability/Standby Annual Special Assessment Charge	Less than one-acre all I.D.s & Outside an I.D.	$10.00		
			Per acre in I.D. 1, 5, & Outside an I.D.	$10.00		
			Per acre in I.D. 2,3,7,9,10,19,20,22,25,& 27	$30.00		
			Less than one-acre Outside I.D. and greater than one mile from District facilities.	$3.00		
			Per acre for outside I.D. & greater than one mile from District facilities.	$3.00		
			Less than one acre I.D. 4, 14, & 18	$10.00		
			Per acre I.D. 4, 14, & 18	$30.00		
Annual Board Resolution		General Obligation Bond Annual Tax Assessment	Per $1000 of assessed value for I.D. 27	$0.005		

Policies

5		Copies of Identifiable Public Records		$0.10/page	
		Cassette Tape Duplication		$2.00/tape	
		Yearly Subscription Service for Agendas and Ratified Minutes		$20.00/year or $0.50/meeting	
		Yearly Subscription Service for Board Packet and Ratified Minutes		$100.00/year for first copy and $200.00/year for each copy thereafter	

CHAPTER 6 MISCELLANEOUS ADMINISTRATION PROCEDURES

SECTION 9 ANNEXATIONS AND DETACHMENTS

9.01 REQUIREMENT OF ANNEXATION FOR SERVICE

Except as provided elsewhere in this Code, whenever utility service is requested for land outside the boundaries of an improvement district, the land to be serviced must first be annexed to an improvement district(s). If the land is located outside the boundaries of the District, the land must also be annexed to the District.

9.02 ANNEXATIONS TO OR DETACHMENTS FROM IMPROVEMENTS DISTRICTS

An owner or owners of land within the District desiring to annex to or detach land from an improvement district within the District must file a petition for such proceeding with the District. Annexation proceedings shall be conducted pursuant to Chapter I (commencing with Section 72670) of Part 11, Division 20 of the California Water Code. Detachment or exclusion proceedings shall be conducted pursuant to Part 8.5 (commencing with Section 72080) of Division 20 of the California Water Code.

If the land proposed to be annexed is outside the boundaries of the territory served by the Metropolitan Water District of Southern California and the territory served by the San Diego County Water Authority, and no local sources of water are available to serve such land, the District will require that the land be annexed to those entities as well.

9.03 ANNEXATIONS TO OR DETACHMENTS FROM THE DISTRICT THROUGH LAFCO

An owner or owners desiring to annex land to or to detach land from the District may either (i) file a petition directly with the Local Agency Formation Commission (LAFCO) for the annexation or detachment or (ii) request the District to file the petition with LAFCO for such annexation or detachment. Any such proceeding for annexation or detachment, which is deemed a change of organization or reorganization pursuant to the Cortese-Knox Local Government Reorganization Act of 1985, shall be initiated, conducted and completed pursuant to Title 6, Division 1 (commencing with Section 56000) of the California Government Code.

By annexing to the District the owners and representatives of the annexing land agree, on behalf of themselves and all future owners and occupants of the annexed lands, to comply with all laws, statutes, policies, plans, conditions and requirements applicable to the services provided by the District to such lands, including

without limitation any conservation or local supply use requirements.

9.04 FEES AND CHARGES FOR ANNEXATIONS OR DETACHMENTS

A petitioner requesting an annexation to or detachment from the District or within the District shall pay the following applicable fees and charges:

A. Administrative Processing Fees

1. District Processing Fee. A District processing fee (see Appendix A, Section 9 for fee) shall be paid to the District for each annexation or detachment proceeding, regardless of the number of parcels involved, provided all parcels are included in one proceeding. This fee shall constitute the "base rate" on March 3, 1997. The base rate shall be adjusted annually for fluctuations in the Consumer Price Index (Urban Wage Earners and Clerical Workers - Los Angeles) and subsequent cost-of-living adjustment (COLA).

2. Additional Processing Fees or Charges. The petitioner shall pay all processing fees and charges due LAFCO, the State Board of Equalization and any other applicable government agency.

3. Concurrent Annexations to or Detachments from the District and an Existing Improvement District. No additional processing costs or fees will be charged to a petitioner for an annexation to or detachment from an existing improvement district when the proceeding is part of an annexation to or detachment from the District.

4. Payment of Fees and Charges. The District processing fees and charges shall be paid to the District at the time the petition for such proceeding is filed. Where a petition is filed with LAFCO, the District shall notify LAFCO that payment of all required fees and charges to the District shall be a condition for District approval of the annexation or detachment.

B. Water Annexation Fees. The annexation fee (see Appendix A, Section 9) shall constitute the "base rate" on October 1, 2014). The base rate shall be adjusted quarterly for fluctuations in construction costs, as measured by the Engineering News Record Construction Cost Index for the Los Angeles Region. The ENR Construction Cost Index of 10,739.43 on June 1, 2014 shall be deemed the "base index." The adjustment shall be in an amount equal to the

percentage change in the ENR Construction Cost Index from the base index for the period from June 1, 2014 to the date of payment.

1. No water annexation fee shall be required for existing and future agricultural water service furnished by the District under the COMMERCIAL AGRICULTURAL category of Section 25 of the Code.

2. Non-permanent irrigation water service furnished by the District under Section 30 of the Code shall be available without payment of a water annexation fee.

3. Open Space to be Annexed. Open space lands shall not be excluded from annexations of land to a water improvement district.

4. Water Meter Type Exclusions. Annexation fees shall be collected on all water meters sold except for temporary water meters, water tank truck meters, nonpermanent irrigation water meters and outside user meters, all as defined elsewhere in this Code.

5. Effective Date. Annexation fees shall be collected on all lands annexing into the Otay Water District boundaries on or after March 5, 1997.

6. Basis for Determination. For annexations of land into the Otay Water District boundaries, the petitioner shall pay an annexation fee. The fee shall be paid at the time of petition to be annexed. There shall be no water annexation fee charged for parcels already within District boundaries that are applying to be annexed into a water ID.

   For permanent water meters, except for commercial agricultural meters, the annexation fee shall be determined on the basis of the demand to be placed on the District-wide water system. The fee will be determined on the basis of the size of the water meter required, as set forth in Section 27 of the Code. The fee shall be determined by multiplying the demand factor for the meter size, as set forth in Section 28 of the Code, by the annexation fee per EDU. See Appendix A, Section 9 for fees.

C. Sewer Annexation Fees

1. Improvement District Annexation. All annexation for sewer service shall be into Improvement District No. 18 on or after December 16, 1998.

2. Open Space to be Annexed. Open space lands shall not be excluded from annexations of land to a sewer improvement district.

3. Effective Date. Annexation fees shall be collected on all lands annexing to a sewer improvement district on or after December 16, 1998.

4. Basis for Determination. For annexations of land to a sewer improvement district within the District, the petitioner shall pay an annexation fee. The fee shall be determined on the basis of the demand to be placed on the District sewer system. The fee shall be paid at the time of sewer service connection request or General Manager's approval of plans, whichever occurs earlier. The extent of the demand will be determined on the basis of each equivalent dwelling unit (EDU) of service which is to be connected to the District sewer system. The number of EDUs prescribed in Section 53 of the Code shall be the basis for computation of the amount of the annexation fee. The fee will be determined by multiplying the number of EDUs by the annexation fee per EDU. See Appendix A, Section 9 for fees.

   This annexation fee shall constitute the "base rate" on October 1, 2014. The base rate shall be adjusted quarterly for fluctuations in construction costs as measured by the Engineering News Record Construction Cost Index for the Los Angeles Region. The ENR Construction Cost Index of 10,739.43 (as of June 1, 2014) shall be deemed the "base index." The adjustment shall be in an amount equal to the percentage change in the ENR Construction Cost Index from the base index for the period from June 1, 2014 to the date of payment.

D. Detachment Fees

For each detachment of land from an improvement district, the petitioner shall pay such fees as the General Manager determines are appropriate for the detachment. Determinations shall be made by the General Manager on a case-by-case basis.

9.05 TAXATION OF PROPERTY AFTER ANNEXATION TO IMPROVEMENT DISTRICT

Where property is annexed by a petitioner, other than a tax-exempt agency, the property in the annexed area shall be subject to taxation after the annexation thereof for the purposes of the improvement district, including the payment of principal and interest on bonds and other obligations of the improvement district authorized and outstanding at the time of the annexation. The Board of Directors shall provide as a condition of the annexation that the annexed area shall be subject to taxation as if the property had always been a part of the improvement district.

9.06 OTHER CONDITIONS OF ANNEXATION

By annexing to the District the owners and representatives of the annexing land agree, on behalf of themselves and all future owners and occupants of the annexed lands, to comply with all laws, statutes, policies, plans, conditions and requirements applicable to the services provided by the District to such lands, including without limitation any conservation or local supply use requirements.

SECTION 28 CONNECTION FEES AND CHARGES FOR POTABLE OR RECYCLED WATER SERVICE

28.01 COLLECTION OF FEES AND CHARGES

A. Fees and Charges to be paid by the Customer.

The following fees and charges shall be paid by the customer to connect to a District water system for potable water or recycled water service; these are in addition to the fees and charges in Section 9 and 25. Fees and charges shall include, but not be limited to, District fees, San Diego County Water Authority fees, and charges for work performed by District personnel on behalf of the customer. These charges may include the installation by District personnel of a water service lateral, and inspections required due to the requirement of a back flow device. These charges may also include a meter fee, installation fee (where laterals exist), lateral fee, meter box fee, and excavation permit fee.

B. Basis for Determination of Connection Fees and Charges.

The fees and charges shall be determined as follows:

For permanent water meters, including potable or recycled irrigation service, the total water connection fee shall be determined on the basis of the demand to be placed on the District water system. The extent of demand will be determined on the basis of the size of the water meter, as set forth in Section 27 of the Code. For individually metered residential fire service, as outlined in Section 38.03 of the Code, the size and fee would be set based on water use requirements without additional fire capacity. The water connection fee will be determined by multiplying the demand factor for the meter size, as set forth below, by the total of the District-wide capacity fee.

Meter Size	Demand Factor
3/4"	1
1	2-1/2
1-1/2"	5
2"	8
3"	16
4"	25
6"	50
8"	80
10"	115

1. The District-wide capacity fee shall constitute the "base rate." For fees or charges after October 1, 2014, the base rate shall be adjusted quarterly for fluctuations in construction costs, as measured by the *Engineering News Record Construction Cost Index for the Los Angeles Region*. The ENR Construction Cost Index of 10,739.43(as of June 1, 2014) shall be deemed the "base index." The adjustment shall be in an amount equal to the percentage change in the ENR Construction Cost Index from the base index for the period from June 1, 2014 to the date of payment. (See Appendix A, Section 28 for fees.)

2. The District-wide new water supply fee shall constitute the “base rate.” For fees or charges after October 1, 2014, the base rate shall be adjusted quarterly for fluctuations in construction costs, as measured by the *Engineering News Record Construction Cost Index for the Los Angeles Region.* The ENR Construction Cost Index of 10,739.43 (as of June 1, 2014) shall be deemed the “base index.” The adjustment shall be in an amount equal to the percentage change in the ENR Construction Cost Index from the base index for the period from June 1, 2014 to the date of payment. (See Appendix A, Section 28 for fees.)

28.02 INSTALLATION CHARGES FOR WATER METER AND WATER SERVICE LATERALS

The determination of the water meter or service lateral size shall be based upon the information provided by the customer as detailed in Section 27 of the Code. The meter fees and installation charges are set forth in Appendix A, Section 28.

Where a new water lateral is required, a customized, written estimate of the District's costs will be prepared.

The customer shall deposit the estimated costs with the District prior to commencement of the work. If actual costs incurred by the District are less than the amount deposited, the District shall refund the excess to the customer. If the actual costs incurred exceed the amount deposited, the customer shall reimburse the District for the additional costs.

A. The meter fees and installation charges shall be set effective September 1, 2012, and then adjusted in the same manner as capacity fees as described in Section 28.01 B.1 above (See Appendix A, Section 28 for fees).

28.03 METER FEE REFUND

A. If a water meter/service has been paid for but not installed, a customer may receive a refund of the District's capacity fee and charges. If San Diego County Water Authority capacity fees have been paid to San Diego County Water Authority, the customer shall request a refund from San Diego County Water Authority.

B. If the customer wants to change the meter/service size, they will be credited with the number of equivalent dwelling units they have previously purchased and will be refunded any balance per Section 28.03 A, above. If additional equivalent dwelling units are required, the customer will be charged based on 28.01 and 28.02.

C. If a water meter/service has been previously paid and installed, and the customer requests a different meter size, the customer shall pay for the new meter and installation fees, plus any differential in capacity and new water supply fees as described in Section 28.03 B above.

SECTION 53 CONDITIONS FOR SEWER SERVICE

53.01 CONDITIONS FOR ACQUISITION OF SEWER SERVICE CAPACITY

Sewer service capacity may be acquired only for service to a specific address, parcel of land, or a land development project covered by an approved map. An approved map shall mean a recorded final map, a recorded parcel map or a tentative subdivision map that has been approved by the County or by a City, as applicable.

A. District Acceptance of Sewer Facilities for Russell Square Area - Under an Agreement with Cal Dorado Development, Inc., dated June 28, 1981, the District accepted title to a sewer pump station, force main and appurtenances for a sewage system to provide sewer service to the residential dwelling units to be constructed within the parcels of land in San Diego County Tentative Parcel Map 17150. Under an Agreement with Cal Dorado Development, Inc., dated June 18, 1981, the District agreed to provide service to such parcels on the terms and conditions contained therein. On October 1, 1984, pursuant to Resolution No. 2139, the District Board of Directors accepted title to the facilities.

53.02 SERVICE AREAS

Sewer service shall be furnished by the District only to property located in Improvement District No. 14 (ID 14), Improvement District No. 18 (ID 18), and Assessment District No. 4 (AD 4), and the Russell Square Sewer Service Area. Sewer service to property located outside such areas may be furnished only upon annexation to ID 18 and payment of all applicable annexation fees. (Appendix A, Section 9)

A. Designation of Russell Square Sewer Area - The geographical area described on the District Map entitled "Russell Square Sewer Service Area," dated October 11, 1988, on file with the District Secretary, constitutes the Russell Square Sewer Service Area.

53.03 ACQUISITION OF SEWER CONNECTIONS FOR SERVICE

A. ID 14, ID 18 and AD 4
Effective October 1, 2014 two separate sewer capacity fees have been established to ensure sewer customers do not pay for facilities twice. The first capacity fee applies to parcels within an ID that paid prior tax debt. The second capacity fee applies parcels outside an ID that have not paid the tax debt. The sewer capacity fees shall constitute the "base rate." For fees or charges after October 1, 2014, the base rate shall be adjusted quarterly for fluctuations in construction costs, as measured by the

Engineering News Record Construction Cost Index for the Los Angeles Region. The ENR Construction Cost Index of 10,739.43(as of June 1, 2014) shall be deemed the "base index." The adjustment shall be in an amount equal to the percentage change in the ENR Construction Cost Index from the base index for the period from June 1, 2014 to the date of payment.

1. Sewer Capacity Fee within an ID

All new sewer connections for parcels within a sewer ID shall pay a capacity fee for each Equivalent Dwelling Unit (EDU) of sewer service provided. The capacity fee is due at the time an application for sewer service is requested. The number of EDUs for the connection shall be as set forth in Section 53.08 of the Code. (See Appendix A, Section 53 for fees)

2. Sewer Capacity Fee outside an ID

All new sewer connections for parcels not within a sewer ID (requiring to be annexed into a sewer ID18 per code Section 9.04 C.) shall pay a capacity fee for each Equivalent Dwelling Unit (EDU) of sewer service provided. The capacity fee is due at the time an application for sewer service is requested. The number of EDUs for the connection shall be as set forth in Section 53.08 of the Code. (See Appendix A, Section 53 for fees)

B. Russell Square Pump Station

1. Sewer Connection Fee

A connection fee (see Appendix A, section 53for fee) for each Equivalent Dwelling Unit (EDU) of sewer service provided through Russell Square Pump Station shall be collected. The connection fee is due at the time an application for sewer service is submitted. The number of EDUs for the connection shall be as set forth in Section 53.08 of the Code.

(a) Exempt Parcels - The connection fee shall not apply to connections for sewer service to the parcels within the Tentative Parcel Map 17150. Such exempt parcels are currently identified as Assessor Parcel Nos. 497-011-41, 497-011-42, 497-011-44, 497-011-46 and 497-011-47.

2. Monthly Sewer Service Charge

A monthly sewer service charge (see Appendix A, Section 53 for charge) to cover normal operational

costs of the Russell Square Pump Station and force mains shall be collected. This charge shall be reviewed by the Board of Directors from time to time to assure that such charges cover the costs for operation of the sewer facilities.

The proceeds of the fees and charges received by the District under 53.03 B.1 and 53.03 B.2 shall be used by the District solely for maintenance, replacement or repair under 53.03 B.1 and for the operation of the facilities under 53.03 B.2.

In addition, the customer for such service shall pay the monthly service charge for sewer service set forth in Section 53.10 A and B.

53.04 CHARGES FOR INSTALLATION OF SEWER LATERALS

Upon application for construction of one or more sewer laterals, the customer shall deposit with the District the estimated costs to be incurred by the District in connection with the installation of the facilities required, as determined by the District. Upon completion of the work, the District shall calculate the actual costs incurred by the District in performing the work. If actual costs are less than the amount deposited, the District shall refund the balance of the deposit to the customer. If actual costs exceed the amount deposited, the customer shall reimburse the District for the additional costs.

53.05 PAYMENT OF FEES

All fees prescribed in the Code shall become owing, due and payable at the time application is made to connect a premise to the sewer system of the District. The fees shall be paid to the District prior to the issuance of any permit authorizing the connection of such premise to the District sewer system. If the proposed connection cannot be made, the fee may be refunded when approved by the General Manager.

53.06 SEWER SERVICE USE CHANGES RESULTING IN INCREASED SYSTEM UTILIZATION

The use of a sewer connection shall be limited to the type and number of EDUs authorized by the original wastewater discharge permit. Before adding any additional equivalent dwelling units, buildings, modifying existing buildings, or change of occupancy type, the property owner shall make a supplementary wastewater permit application to the District for such change in use and pay additional sewer annexation fees per EDU, if necessary, as may be applicable. Periodic inspection of the premises may be made by the District and if actual use is greater than estimated use, an assessment for additional annexation fees shall be

assessed in accordance with the fee schedule in the then current Code of Ordinances.

53.07 WASTEWATER DISCHARGE PERMIT ISSUANCE AND LIMITATION

A. A wastewater discharge permit shall be required for any property for which a request is made to discharge into the District sewage system.

B. Every wastewater discharge permit shall expire by limitations and shall become null and void, if the construction or work authorized by such permit is not commenced within 120 days from date of issuance of such wastewater discharge permit or if the construction or work authorized by such wastewater discharge permit is suspended or abandoned for a period of 120 days at any time after the work is commenced.

C. Before such work can be recommenced, a new wastewater discharge permit application must be filed with the District. The District may reactivate the previous wastewater discharge permit provided that wastewater quantity and type is the same as the wastewater discharge allowed under the original permit, and provided further that such suspension and abandonment has not exceeded one year. Fees paid for the previous wastewater discharge permit may be credited toward the total permit fees required on the new permit application. Reactivation of the previous wastewater discharge permit shall be subject to District sewer capacity being available at the time of new application and subject to any additional costs or charges imposed during the period of such suspension or abandonment.

53.08 BASIS FOR DETERMINATION OF EQUIVALENT DWELLING UNITS (EDUs)

The number of EDUs for sewer service shall be determined on the following basis:

A. Residential Facilities

EDUs	Description
1	▪ Single-family residence (Includes manufactured homes and mobile homes which are on private lots.) ▪ A secondary structure with a kitchen is considered an additional EDU ▪ Each individual living unit in apartments, multiple family housing and residential condominiums ▪ Each individual space in mobile homes and trailer parks

B. Commercial/Industrial Facilities

1. Food Service Establishments

EDUs	Description
3	▪ Take-out restaurants with disposable utensils, no dishwasher and no public restrooms ▪ Take-out restaurants with disposable utensils, no dishwasher and no public restrooms ▪ Miscellaneous food establishments – ice cream shops, yogurt shops, bakeries (sales on premise only) ▪ Take-out/eat-in restaurants with disposable utensils, but with seating and public restrooms ▪ Restaurants with reusable utensils, seating and public restrooms (0-18 seats) o Add 1.0 EDU for each additional 6 seat unit, or portion thereof

2. Hotels and Motels

EDUs	Description
.38	Per living unit without kitchen
.60	Per living unit with kitchen

3. Commercial, Professional, Industrial Buildings and Establishments not specifically listed herein

EDUs	Description
1.2 +0.7	For first 1,000 square feet AND For each additional square feet or portion thereof Applies to any office, store or industrial condominium or establishments
1.2 +0.7	For first 1,000 square feet AND For each additional 1,000 square feet of gross building floor area. Portions less than 1,000 sq. ft. will be prorated. Applies to situations where the occupancy type or usage is unknown at the time of application for service. This shall include, but not be limited to, shopping centers, industrial parks and professional office buildings.
1.0	Self-service laundry per washer

4. Convalescent Homes

EDUs	Description
0.7/bed	Skilled nursing care facilities, psychological hospitals, convalescent hospitals; licensed by the applicable Governmental Agency.
0.5/bed	Community Care Facilities with 16 or more beds licensed by the applicable Governmental Agency.
1.0	Community Care Homes with six or fewer total residents, including resident staff and housekeepers (to be the same EDU as a single family residence).

C. Other commercial, industrial and other types of business establishments not included in 53.08 B.1 through 53.08 B.4

If the establishment is not included in 53.08 B.1 through 53.08 B.4 or if the EDUs specified in 53.08 B.1 through 53.08 B.4 are not representative of actual flow due to the number of employees or type of operation, the number of EDUs shall be determined in each case by the list of commercial strengths as defined by the State Water Resources Control Board (SWRCB) or by the General Manager and shall be based upon the estimated volume and type of wastewater discharge into the sewer.

Examples of commercial, industrial and other business establishments include, but are not limited to, bottling works, supermarkets, markets, deli/markets, convenience stores, hospitals, laundries (other than self-service laundries), automobile service stations, mortuaries, day-care centers, bars and pool halls.

53.09 TRANSFER, ASSIGNMENT, OR RESALE OF SEWER CONNECTION RIGHTS

EDU sewer connection rights obtained by a customer may not be sold, transferred, or assigned separately from ownership of the real property for which they were obtained, unless otherwise stated in an agreement with the District.

53.10 DEFINITIONS OF RESIDENTIAL AND MULTI-RESIDENTIAL SEWER SERVICE RATES, CHARGES AND FEES

All District sewer rates, charges, and fees are subject to Board approval of rate increases to residential and multi-residential sewer services billed on or after January 1, 2014 and may apply to sewer services as early as the beginning of December 2013 and periodically thereafter through December 31, 2018. The increases shall be the amount sufficient to cover cost increases

related to operation and maintenance, but not to exceed 10% per year.

Five-year Periodic Pass-through Rate Increases or Decreases from District Wholesalers - All District sewer rates, charges, and fees are subject to periodic rate changes from the District's public agency wholesalers for a five-year period beginning January 1, 2014 through December 31, 2018.

Set-up Fees for Accounts - A set-up fee (see Appendix A, Section 53 for fee) shall be charged for each account transferred to another customer.

Winter Average Determination - Sewer service usage fee shall be based on the "Winter Average" water consumption, measured in units of hundred cubic feet (HCF). The winter average period is January through April. The winter average is calculated by adding the four months of water consumption for the preceding winter and dividing the resulting amount by four. This average is then reduced by a 15% usage discount, recognizing that not all water used flows into the sewer system, to determine the "Winter Average" for billing purposes see Appendix A, Section 53.

Usage Fee - The usage fee rate (see Appendix A, Section 53) is multiplied by the "Winter Average" calculation for each customer (after the above noted 15% discount) and the resulting amount is added to the System Fee applicable to the size of meter. The resulting fixed fee shall be charged on a monthly basis for an entire calendar year, until a new "Winter Average" is determined for the following year.

Residential Sewer System Fee - The monthly system fee is set forth in Appendix A, Section 53.

A. Residential Rate Charges

1. Defined as: Sewer service for individually metered residential households.

2. The monthly sewer bill is calculated by adding the system fee plus the usage fee as described in 53.10 above.

3. The maximum "Winter Average" for individually metered residential customers is 30 units (after the 15% discount).

4. Monthly Residential Sewer Rate without Consumption History: The average residential sewer rate shall be determined by calculating the total usage fee for all

residential customers and dividing by the number of residential customers. Then the monthly average usage fee is added to the system fee and this shall be used to determine the total monthly fee to be used for residential customers with no prior winter consumption, customers using well water or other unmetered water. See Appendix A, Section 53.

B. Multi-Residential Rate Charges

1. Defined as: Sewer service for master metered water service for multiple-residential households including for example; duplex, townhomes, apartments, and mobile homes.

2. The monthly sewer bill for the complex is calculated by adding a system fee based on meter size (as set forth in Appendix A, Section 53) plus the usage fee (as set forth in Appendix A, Section 53) multiplied by the winter average, for the entire complex. Note: There is no cap on consumption for the multi-residential customers.

3. Monthly Multi-Residential Sewer Rate without Consumption History: The multi-residential sewer rate shall be determined by calculating the total usage fee for all multi-residential customers and dividing by the number of multi-residential dwelling units. The usage fee per dwelling unit is multiplied by the new customer's number of dwelling units and this shall be added to the monthly system fee, based on meter size, to determine the monthly rate. This is applicable to new complexes that do not have a prior winter consumption history. See Appendix A, Section 53.

53.11 DEFINITIONS OF COMMERCIAL AND INDUSTRIAL SEWER SERVICE RATES, CHARGES AND FEES

All District sewer rates, charges, and fees are subject to Board approval of rate increases to commercial and industrial sewer services billed on or after January 1, 2014 and may apply to sewer services as early as the beginning of December 2013 and periodically thereafter through December 31, 2018. The increases shall be the amount sufficient to cover cost increases related to operation and maintenance, but not to exceed 10% per year.

Five-year Periodic Pass-through Rate Increases or Decreases from District Wholesalers - All District sewer rates, charges, and fees are subject to periodic rate changes from the District's public agency wholesalers for a five-year period beginning January 1, 2014 through December 31, 2018.

Set-up Fees for Accounts - A set-up fee (see Appendix A, Section 53 for fee) shall be charged for each account transferred to another customer.

Average Annual Consumption - The Average Annual Consumption, measured in units of hundred cubic feet (HCF). The annual consumption period is January through December of the preceding year divided by the number of months of consumption. This average is reduced by a 15% usage discount which recognizes that not all water used flows into the sewer system.

Usage Fee - The usage fee rate (see Appendix A, Section 53 for rate) is determined by the commercial customer's sewer strength category in which they are assigned (low strength, medium strength or high strength).

System Fee - The monthly system fee is determined by the commercial customer's water meter size (as set forth in Appendix A, Section 53).

Strength Factor - The State Water Resources Control Board (SWRCB) has grouped commercial customers into various categories and has identified Strength Factors for each of these business categories. The standard of measure for Strength Factors is the typical sewer strength of a single-family residence (SFR). A SFR has strength factor of 1. (As set forth in Appendix A, Section 53)

A. Commercial Rate Charges

1. The monthly sewer bill for commercial sewer customers is calculated by multiplying the average annual consumption, reduced by 15%, by the usage fee based on strength (as set forth in Appendix A, Section 53) plus the monthly system fee based on the customer's water meter size.

2. For new commercial sewer customers without consumption history, staff shall make a determination of the average annual consumption to be used until a year's consumption data can be collected. The determination shall be based on the prior owner or tenant of the sewer connection, or based on the most similar type of current business operation. If the customer does not agree with staff's recommendation, the customer may request an adjustment, in writing, and direct it to the General Manager.

B. Industrial and Other Users

1. Charges determined by the Board of Directors on a case-by-case basis.

Monthly sewer service charges shall commence upon installation of the water meter to serve the premises receiving the sewer service, upon connection to the District sewer system, upon start of occupancy of the premises to be served, or one year after the date the application for sewer service is filed. If a sewer service connection has been obtained and if sewer service will not be used until sometime after installation of the water meter, commencement of the sewer service charge may be deferred until the later date only upon prior approval of the General Manager.

C. Commercial User Classifications

Commercial sewer service customers are subject to periodic inspection of the premises by the District for verification of proper sewer strength classification. In addition to such periodic inspections, strength classifications will be reviewed periodically, at the discretion of the District. If warranted following a periodic inspection, periodic classification review, or a change in the nature of a customer's business and/or use of the property, customers may be reclassified to reflect their current business operations and proper sewer strength, at the discretion of the District and consistent with the standards set forth herein and in the State Water Resources Control Board (SWRCB) listing for sewer strength.

1. Low-Strength Commercial = 1.0 Strength Factor

Car wash
General office and buildings
Barber and beauty shops
Department, retail stores and general commercial
Hospitals and convalescent homes
Public Laundromats and dry cleaners
Professional office or office building
Warehouse
Bars without dining facilities
Churches
Schools (Elementary, junior & High Schools, Colleges)
Other uses having a similar strength as determined by the District

2. Medium-Strength Commercial = 2.0 Strength Factor

Hotels without dining facilities or cooking facilities
Auto repair/sales shop and service station
Shopping centers
Other uses having a similar strength as determined by the District

3. High-Strength Commercial = 4.0 Strength Factor

Bakery or bakery with deli
Hotel with dining facilities
Restaurants and bars with food
Grocery stores with onsite butcher and/or bakery
Other uses having a similar strength as determined by the District

53.12 ISSUANCE AND PAYMENT OF SEWER BILLS

A. Issuance of Statements: Statements for sewer service or other charges will be mailed monthly or as soon as practical, after the applicable charges have been determined.

B. Due Date: Each statement issued by the District for such charges shall be due and payable on the date of mailing or other presentation to the customer.

C. Final Payment Date: All charges in each statement must be paid on or before the final payment date shown on the statement, which shall be at least 20 calendar days following the date of mailing or presentation of the statement.

D. Place of Payment: Payments shall not be credited to a customer's account until cash, check, credit card, draft, electronic funds transfer, money order or any other acceptable form of payment that will be honored by the bank has been received by the District at the District business office during regular office hours. Deposit of payment in the mail or at a location other than the District business office shall not be credited to a customer's account until received at the business office.

E. Returned Check Charges: A returned payment charge (see Appendix A, Section 34for charge) shall be added to a customer's account in each instance where payment has been made to the District with a check, draft, credit card or any other acceptable form of payment that has not been honored upon presentment to the bank upon which it is drawn.

53.13 DELINQUENT ACCOUNTS

A. Requirement of Deposit Due to Repeated Delinquencies: If payments on a customer account have become delinquent five or more times, the General Manager, Chief Financial Officer, or any person delegated by the General Manager, shall be authorized to require the customer to make a deposit with the District, in cash or any other form satisfactory to the

General Manager. The deposit amount shall be established at the discretion of the General Manager and the Chief Financial Officer, but shall not exceed two times the highest bill during the twelve (12) months preceding the date of demand for a deposit.

B. Handling of Deposit: A deposit shall not earn interest and shall only be applied to reduce or satisfy amounts due the District in the event of termination of service. A deposit does not constitute payment for service bills and the customer shall be required to comply with bill payment requirements to continue receiving service.

C. Refund of Deposit: A deposit required under this Section shall be refunded to the customer as provided in Section 25.04 B.

Attachment F

Otay Water District
Appendix A

Section #	Code #	Fee Description	Meter Size		Charges		
9	9.04 A.1.	District Annexation Processing Fee			$763.83		
	9.04 B.	Annexation Fees for Water Annexations into Otay Water District Boundaries			District-wide Annexation Fee		
			3/4"		$1,777.00		
			1"		$4,443.00		
			1-1/2"		$8,885.00		
			2"		$14,216.00		
			3"		$28,432.00		
			4		$44,425.00		
			6"		$88,850.00		
			8"		$142,160.00		
			10"		$204,355.00		
	9.04 C.4.	Annexation Fees for Annexations to Sewer Improvement Districts per EDU			$1,018.00		
					.		
10	10.01	Filing of Petition			$50.00		
23	23.04	Backflow Certification					
		- Second Notification			$10.00		
		- Third Notification			$25.00		
		- Reconnection (service resumed)			$50.00		
		- Initial Filing Fee (New applicants for addition to the list of approved backflow prevention device testers)			$25.00		
		- Renewal Filing Fee (to remain on list of approved backflow prevention device testers)		Annually	$10.00		
25	25.03 A.	Set-up Fees for Accounts			$10.00		
25	25.03 C.	Monthly Fixed System Charges, MWD & CWA Charges [1]	Meter Size	System Charge	MWD & CWA Fixed Charge	Total Fixed Charge	
			3/4"	$16.19	$14.45	$30.64	
			1"	$22.87	$26.79	$49.66	
[1] All Water used in December and billed in January 2014.							

Section #	Code #	Fee Description	Meter Size		Charges		
25	25.03 C.	Monthly Fixed System Charges, MWD & CWA Charges (continued)[1]	1-1/2"	$39.58	$60.61	$100.19	
			2"	$59.62	$103.08	$162.70	
			3"	$113.08	$219.23	$332.31	
			4"	$173.22	$351.09	$524.31	
			6"	$340.29	$718.69	$1,058.98	
			8"	$540.76	$1,160.59	$1,701.35	
			10"	$774.64	$1,670.55	$2,445.19	
25	25.03 E.1.(b)	Domestic Residential Water Rates [1]		Unit	Charge		
		(The Conservation Tier discount applies	Conservation Tier	0 - 5	$1.86		
		toward the first five units of water when		6-10	$2.90		
		overall consumption is ten units or less.)		11-22	$3.77		
				23 or more	$5.80		
25	25.03 E.2.(b)	Multiple Residential Water Rates - Per Dwelling Unit [1]		0-4	$2.86		
				5-9	$3.71		
				10 or more	$5.73		
25	25.03 E.3.(b)	Business and Publicly-Owned Water Rates [1]	under 10"	0-185	$3.06		
				186-1,400	$3.14		
				1,401 or more	$3.19		
			10" & larger	0-7,426	$3.06		
				7,427-14,616	$3.14		
				14,617 or more	$3.19		
25	25.03 E.4.(c)	Irrigation and Commercial Agricultural Using Potable Water Rates [1]	1" & smaller	0-54	$4.17		
				55-199	$4.25		
				200 or more	$4.32		
			1.5" & 2"	0-144	$4.17		
				145-355	$4.25		
				356 or more	$4.32		
			3" & larger	0-550	$4.17		
				551-1,200	$4.25		
				1,201 or more	$4.32		

[1] All Water used in December and billed in January 2014.

Section #	Code #	Fee Description	Meter Size		Charges		
25	25.03 E.5. (c)	Recycled Water [1]	3/4" - 1"	0-32	$3.56		
		Landscape Irrigation and Certain Non-		33-75	$3.61		
		Irrigation Purposes Rates		76 or more	$3.68		
			1.5" & 2"	0-130	$3.56		
				131-325	$3.61		
				326 or more	$3.68		
			3" & 4"	0-440	$3.56		
				441-1,050	$3.61		
				1,051 or more	$3.68		
			6" & larger	0-4,000	$3.56		
				4,001-10,000	$3.61		
				10,001 or more	$3.68		
25	25.03 E.6.(c)	Recycled Commercial [1]	under 10"	0-173	$2.56		
				174-831	$2.64		
				832 or more	$2.66		
			10" & larger	0-7,426	2.56		
				7,427-14,616	$2.64		
				14,617 or more	$2.66		
25	25.03 E.7.(b)	Potable Temporary and Construction Water Service Rates [1]	1" & smaller	0-54	$8.34		
				55-199	$8.50		
				200 or more	$8.64		
			1.5" & 2"	0-144	$8.34		
				145-355	$8.50		
				356 or more	$8.64		
			3" & larger	0-550	$8.34		
				551-1,200	$8.50		
				1,201 or more	$8.64		
25	25.03 E.10.(b)	Tank Trucks Water Rates [1]	1" & smaller	0-54	$8.34		
				55-199	$8.50		
				200 or more	$8.64		
[1] All Water used in December and billed in January 2014.							

Section #	Code #	Fee Description	Meter Size		Charges		
25	25.03 E.10.(b)	Tank Trucks Water Rates [1], continued	1.5" & 2"	0-144	$8.34		
				145-355	$8.50		
				356 or more	$8.64		
			3" & larger	0-550	$8.34		
				551-1,200	$8.50		
				1,201 or more	$8.64		
25	25.03 E.11.(c)	Application Fee for Water Service Outside District Boundaries			$500.00		
25	25.03 E.11.(d)	Water Rate for Service Outside District Boundaries [1]	1" & smaller	0-54	$8.34		
				55-199	$8.50		
				200 or more	$8.64		
			1.5" & 2"	0-144	$8.34		
				145-355	$8.50		
				356 or more	$8.64		
			3" & larger	0-550	$8.34		
				551-1,200	$8.50		
				1,201 or more	$8.64		
25	25.03 E.12.(b)	Application Fee for Water Service Outside an Improvement District			$275.00		
25	25.03 E.12.(c)	Water Rate for Service Outside Improvement District [1]	1" & smaller	0-54	$8.34		
				55-199	$8.50		
				200 or more	$8.64		
			1.5" & 2"	0-144	$8.34		
				145-355	$8.50		
				356 or more	$8.64		
			3" & larger	0-550	$8.34		
				551-1,200	$8.50		
				1,201 or more	$8.64		
25	25.03 E.13.(c)	Fire Service Monthly Charge	3" or less		$21.14		
			more than 4"		$28.49		
[1] All Water used in December and billed in January 2014.							

Section #	Code #	Fee Description	Meter Size		Charges		
25	25.03 E.14.(b)	Additional Water Service for Property Not Subject to District Taxes		per unit	$0.31		
25	25.03 E.15.(b)	Interim Service Water Rate in Improvement District 7 [1]	1" & smaller	0-54	$8.34		
				55-199	$8.50		
				200 or more	$8.64		
			1.5" & 2"	0-144	$8.34		
				145-355	$8.50		
				356 or more	$8.64		
			3" & larger	0-550	$8.34		
				551-1,200	$8.50		
				1,201 or more	$8.64		
25	25.03 F.	Energy Charges for Pumping Water [1]		Per 100 ft of lift over 450 ft per unit	$0.048		
25	25.03 G.1.	Additional Water Charge for Service in the North District		Per unit charge except for the first 5 units of residential	$0.08		
25	25.03 H.1.	Additional Water Charges for Service in the Improvement District 9 Water Service Zone		Per unit charge except for the first 5 units of residential	$0.27		
25	25.03 H.2.	Additional Monthly System Fee for Improvement District 9			$2.00		
25	25.03 I.1.(b)	Additional Water Charges for Services in Improvement District 10		Per unit charge except for the first 5 units of residential	0.27 per H.C.F.	Effective Jan 1st 2011-2018	

[1] All Water used in December and billed in January 2014.

Section #	Code #	Fee Description	Meter Size	Charges		
25	25.04 A.	Deposits for Non-Property Owners	3/4"	$75.00		
			1"	$150.00		
			1-1/2"	$200.00		
			2"	$360.00		
			3"	$800.00		
			4"	$1,350.00		
			6"	$3,300.00		
			8"	$4,400.00		
			10"	$5,500.00		
28	28.01 B.1.	Capacity Fees		District-wide Capacity Fee		
		- All IDs excluding Triad	3/4"	$7,984.00		
			1"	$19,960.00		
			1-1/2"	$39,920.00		
			2"	$63,872.00		
			3"	$127,744.00		
			4	$199,600.00		
			6"	$399,200.00		
			8"	$638,720.00		
			10"	$918,160.00		
28	28.01 B.1.	Capacity Fees	3/4"	$5,990.00		
		- TRIAD	1"	$14,975.00		
			1 -1/2"	$29,950.00		
			2"	$47,920.00		
			3"	$95,840.00		
			4	$149,750.00		
			6"	$299,500.00		
			8"	$479,200.00		
			10"	$688,850.00		
28	28.01 B.2.	New Water Supply Fee	3/4"	$989.00		
		- All IDs including Triad	1"	$2,473.00		
			1-1/2"	$4,945.00		
			2"	$7,912.00		
			3"	$15,824.00		
			4"	$24,725.00		
			6"	$49,450.00		
			8"	$79,120.00		
			10"	$113,735.00		

Section #	Code #	Fee Description	Meter Size	Charges			
28	28.02	Installation and Water Meter Charges	Meter Size	Meter Cost	Installation	Total	Meter Box/Vault (if Needed)
		- Potable (Non-Irrigation)	3/4" x 7.5"	$210.94	$100.10	$311.04	$84.98
			3/4" x 9"	$224.59	$100.10	$324.69	$84.98
			1"	$272.20	$100.10	$372.30	$84.98
			1.5"	$442.43	$100.10	$542.53	$192.65
			2"	$633.96	$100.10	$734.06	$192.65
			3"	$1,975.66	$602.69	$2,578.35	$3,436.57
			4"	$3,431.41	$602.69	$4,034.10	$3,436.57
			6"	$5,926.98	$951.99	$6,878.97	$3,436.57
			8"	$7,405.32	$1,459.79	$8,865.11	$4,930.00
			10"	$10,650.23	$1,459.79	$12,110.02	$4,930.00
		- Potable/Recycled Irrigation	3/4" x 7.5"	$210.94	$100.10	$311.04	$216.57
			3/4" x 9"	$224.59	$100.10	$324.69	$216.57
			1"	$272.20	$100.10	$372.30	$216.57
			1.5"	$442.43	$100.10	$542.53	$216.57
			2"	$633.96	$100.10	$734.06	$216.57
			3"	$1,367.36	$602.69	$1,970.05	$3,436.57
			4"	$2,662.04	$602.69	$3,264.73	$3,436.57
			6"	$4,792.53	$951.99	$5,744.52	$3,436.57
			8"	$6,384.51	$1,459.79	$7,844.30	$4,930.00
			10"	$9,060.10	$1,459.79	$10,519.89	$4,930.00
		- Combined Fire and Domestic	4"	$8,163.63	$602.69	$8,766.32	$3,436.57
			6"	$10,865.08	$951.99	$11,817.07	$3,436.57
			8"	$15,797.04	$1,459.79	$17,256.83	$4,930.00
			10"	$21,557.73	$1,459.79	$23,017.52	$4,930.00
31	31.02 D.1.	Requirement of Temporary Meter for Service		minimum/per day	$25.00		
31	31.03 A.1.	Requirement of Deposit for Temporary Meter	3/4"		$150.00		
			1"		$180.00		
			1-1/2"		$330.00		
			2"		$2,046.00		
			3"		$850.00		
			4"		$1,986.00		
			6"		$2,465.00		
		- Construction Trailer Temporary Meter	2"		$2,046.00		
		- Tank Truck Temporary Meter (Ordinance No. 372)	2"		$850.00		
31	31.03 A.4.	Temporary Meter Install & Removal			$128.00		

Section #	Code #	Fee Description	Meter Size		Charges		
31	31.03 A.5.	Temporary Meter Move Fee (includes backflow certification)	3/4" - 2"		$64.00		
			3" and larger	No backflow test	$64.00		
33	33.07 A.	Customer Request for Meter Test (Deposit)	5/8", 3/4" & 1"		$25.00		
			1-1/2" & 2 "		$50.00		
			3" & Larger		$125.00		
34	34.01 D.2.	Returned Check Charges			$25.00		
34	34.02 B.	Late Payment Charge			5% of Delinquent Balance		
34	34.02 G.1.(d)	Delinquency Tag			$10.00		
34	34.02 G.3.(a)	Meter "Turn-On" Charge		During regular business hours	$35.00		
34	34.02 G.3.(b)	Meter "Turn-On" Charge		After regular business hours	$65.00		
53	53.03 A.1.	Sewer Capacity Fee per EDU for parcels within a Sewer ID			$4,092.00		
53	53.03 A.2.	Sewer Capacity Fee per EDU for parcels not within a Sewer ID			$6,400.00		
53	53.03 B.1.	Sewer Connection Fee - Russell Square Annexing			$7,500.00		
53	53.03 B.2.	Monthly Sewer Service Charge - Russell Square			$200.00		
53	53.10 & 11	Set-up Fees for Accounts			$10.00		
53	53.10	Residential Sewer Usage Fee (2)		Rate multiplied by winter average units	$2.35		
53	53.10	Residential Sewer System Fee (2)	5/8" & 3/4"		$14.38		
			1" & larger		$14.38		
53	53.10 A.	Residential Sewer Without Consumption History (2)	5/8" & 3/4"		$42.35		
			1" & larger		$42.35		

Section #	Code #	Fee Description	Meter Size		Charges		
53	53.10 B.	Multi-Residential Usage Fee - Sewer Without Consumption History [2]			$27.97		
53	53.10 B.2.	Multi-Residential Usage Fee - Sewer [2]		Rate multiplied by winter average units	$2.35		
53	53.10 B. 2.	Multi-Residential System Fee - Sewer [2]	.75"		$25.83		
			1"		$38.03		
			1.5"		$68.53		
			2"		$105.12		
			3"		$190.52		
			4"		$312.51		
			6"		$617.48		
			8"		$983.46		
			10"		$1,410.42		
53	53.11	Commercial and Institutional Sewer Strength Factors	Low Strength	1			
			Medium Strength	2			
			High Strength	4			
53	53.11	Monthly Usage Fee for Commercial and Institutional Sewer [2]	Rate multiplied	Low Strength	$2.35		
			by annual	Medium Strength	$3.37		
			avg. units	High Strength	$5.37		
53	53.11	Monthly System Fee for Commercial and Institutional Sewer [2]	.75"		$25.83		
			1"		$38.03		
			1.5"		$68.53		
			2"		$105.12		
			3"		$190.52		
			4"		$312.51		
			6"		$617.48		
			8"		$983.46		
			10"		$1,410.42		
60	60.03	Issuance of Availability Letters for Water and/or Sewer Service			$75.00		
[2] Sewer billed beginning January 1, 2014.							

Section #	Code #	Fee Description	Meter Size	Charges		
72	72.04 A.1.	Locking or Removing Damaged or Tampered Meters				
		- To Pull and Reset Meter	3/4" - 2"	$170.00		
		- Broken Curbstop or Tabs	3/4" - 1"	$192.00		
		- If Customer uses Jumper	3/4" - 1"	$149.00		
		- Broken Lock/Locking Device	3/4" - 1"	$56.00		
		- Cap Lock (Welded)	3/4" - 1"	$158.00		
		- Broken Curbstop or Tabs	1.5" - 2"	$265.00		
		- To Pull and Reset Meter	3"	$351.00		
		- To Pull and Reset Meter	4"	$454.00		
		- To Pull and Reset Meter	6"	$454.00		
		- To Pull and Reset Meter	8"	$600.00		
		- To Pull and Reset Meter	10"	$600.00		
72	72.05 D. A.	Type I Fine				
		- First Violation		$100.00		
		- Second Violations		$200.00		
		- Third or each additional violation of that same ordinance or requirement within a twelve-month period		$500.00		
		Type II Fine	Will not exceed per each day the violation is identified or continues.	$5,000.00		
		Type III Fine	Fine up to amount specified per each day the violation is identified or continues.	$500.00		
		Type IV Fine	Fine up to amount specified per each day the violation is identified or continues.	$500.00		
State Water Code	#71630 & Annual Board Resolution #4142	Water Availability/Standby Annual Special Assessment Charge	Less than one-acre all I.D.s & Outside an I.D.	$10.00		

Section #	Code #	Fee Description	Meter Size	Charges		
State Water Code	#71630 & Annual Board Resolution #4142	Water Availability/Standby Annual Special Assessment Charge	Per acre in I.D. 1, 5, & Outside an I.D.	$10.00		
			Per acre in I.D. 2,3,7,9,10,19,20,22,25,& 27	$30.00		
			Less than one-acre Outside I.D. and greater than one mile from District facilities.	$3.00		
			Per acre for outside I.D. & greater than one mile from District facilities.	$3.00		
		Sewer Availability/Standby Annual Special Assessment Charge	Less than one acre I.D. 4, 14, & 18	$10.00		
			Per acre I.D. 4, 14, & 18	$30.00		
Annual Board Resolution		General Obligation Bond Annual Tax Assessment	Per $1000 of assessed value for I.D. 27	$0.005		

Policies

5	Copies of Identifiable Public Records		$0.10/page		
	Cassette Tape Duplication		$2.00/tape		
	Yearly Subscription Service for Agendas and Ratified Minutes		$20.00/year or $0.50/meeting		
	Yearly Subscription Service for Board Packet and Ratified Minutes		$100.00/year for first copy and $200.00/year for each copy thereafter		

Draft Final Report

Otay Water District

Capacity, New Water Supply, and Annexation Fees for Water and Sewer

August 2014

Prepared by
HDR

August 21, 2014

Ms. Rita K. Bell
Finance Manager
Otay Water District
2554 Sweetwater Springs Blvd.
Spring Valley, California 91978-2004

Subject: Draft Final Report for the Updated Capacity Fees, New Water Supply Fee, and Annexation Fees for the Water and Sewer Utilities

Dear Ms. Bell:

HDR was retained by the Otay Water District (District) to develop cost-based capacity, new water supply, and annexation fees for the District. Enclosed please find HDR's draft final report for this project. The conclusions and recommendations contained within this report should enable the District to implement cost-based capacity, new water supply, and annexation fees that meet the District's financial goals and objectives. The District has historically established cost-based fees and this report is a continuation of those past practices.

This report has been prepared using "generally accepted" financial, rate setting and engineering principles. The District's financial, budgeting and engineering data were the primary sources for much of the data contained in this report. This report was developed with significant participation and input by District management and staff. Prior to adoption of the calculated capacity, new water supply, and annexation fees, HDR recommends that the District have its legal counsel review the report to ensure compliance with California law.

HDR appreciates the opportunity to assist the District in this matter. We also would like to thank you and your staff for assistance provided to us. If you have any questions, please call.

Very truly yours,
HDR Engineering, Inc.

Thomas E. Gould
Vice President
HDR's Business Leader for
Finance and Rates

Enclosure

HDR Engineering, Inc.

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Contents

Executive Summary

Introduction....1
Summary and Conclusions....1
District Board Review....3
Summary....3

1 Introduction

1.1 Introduction....5
1.2 Organization of Report....5
1.3 Disclaimer....6

2 Overview of Capacity, New Water Supply, and Annexation Fees

2.1 Introduction....7
2.2 Defining Capacity, New Water Supply, and Annexation Fees....7
2.3 Economic Theory and Capacity, New Water Supply, and Annexation Fees....8
2.4 Capacity, New Water Supply, and Annexation Fee Criteria....8
2.5 Overview of the Capacity and New Water Supply Fee Methodology....11
2.6 Summary....13

3 Legal Considerations in Establishing Fees for the District

3.1 Introduction....15
3.2 Requirements under California Law....15
3.3 Proposition 218 and 26 and Capacity, New Water Supply, and Annexation Fees....17
3.4 Summary....18

4 Determination of the District's Capacity and New Water Supply Fees

4.1 Introduction....19
4.2 Overview of the District's Water and Sewer System....19
4.3 Current Water and Sewer Capacity Fees....20
4.4 Calculation of the District's Capacity and New Water Supply Fees....21
4.4.1 System Planning Criteria....22
4.4.2 Equivalent Meter Units....22
4.4.3 Calculation of the Capacity Fee for the Major System Components....23
4.5 Allowable Capacity Fees and New Water Supply Fee....25
4.6 Key Assumptions....26
4.7 Implementation of the Capacity Fees, New Water Supply and Annexation Fees....30
4.8 Conformance of the District's Fees with Critical Legal Elements....30
4.9 Consultant Recommendations....33
4.10 Summary....33

5 Determination of the District's Water and Sewer Annexation Fees

5.1 Introduction....35
5.2 Current Water Annexation Fee....35
5.3 Calculation of the District's Water and Sewer Annexation Fee....36
5.4 Key Assumptions....38
5.5 Implementation of the Annexation Fees....38
5.6 Consultant Recommendations....39
5.7 Summary....39

Technical Appendices

Water Exhibits

Exhibit W-1 Development of Capacity Fee – Buy In
Exhibit W-2 Development of Pipe Replacement Cost
Exhibit W-3A Development of Water Debt
Exhibit W-3B Development of Past Interest Payments
Exhibit W-4 Summary of Reserve Funds
Exhibit W-5 Development of Equivalent Dwelling Units
Exhibit W-6 Development of Capacity Fee - Future
Exhibit W-7 Current and Proposed Capacity Fee
Exhibit W-8 Development of Capacity Fee - New Supply Fee

Sewer Exhibits

Exhibit S-1 Development of Capacity Fee – Buy In
Exhibit S-2 Development of Pipe Replacement Cost
Exhibit S-3A Development of Water Debt
Exhibit S-3B Development of Past Interest Payments
Exhibit S-4 Summary of Reserve Funds
Exhibit S-5 Development of Equivalent Dwelling Units
Exhibit S-6 Development of Capacity Fee - Future
Exhibit S-7 Current and Proposed Capacity Fee
Exhibit S-7A Discounted Sewer Capacity Fee for Inside ID Area Customers

Annexation Exhibits

Exhibit A-1 Summary of Annexation Fee Calculation
Exhibit A-2 Summary of Water and Sewer EDUs
Exhibit A-3 Summary of Tax Collections and Availability Charges

Abbreviations and Acronyms

CCP	Cast-in-place Concrete Pipe
CF	Capacity Fee
CIP	Cast-iron pipe
CIP	Capital Improvement Plan
COP	Certificate of Participation
DIP	Ductile iron pipe
EDU	Equivalent dwelling unit
G.O.	General Obligation (Bond)
HDPE	High density plastic pipe
MGD	Million gallons per day
OC	Original Cost
OCLD	Original Cost Less Depreciation
PVC	Polyvinyl Chloride Pipe
RC	Replacement/Reproduction Cost
RCLD	Replacement/Reproduction Cost Less Depreciation
RCNLD	Replacement/Replacement Cost New Less Depreciation
RCNLD	Reproduction/Replacement Cost New Less Depreciation
RCP	Clap pipe
STL	Steel pipe
VCP	Vitrified clay pipe

Executive Summary

Introduction

HDR was retained by the Otay Water District (District) to review and update the capacity, new water supply fee, and annexation fees for the water and sewer utilities. The purpose of capacity, new water supply fee, and annexation fees is to bring equity between existing customers and new customers connecting to the District's utility systems. The objective of this study was to calculate cost-based fees for new customers connecting to the District's water and sewer system. By establishing cost-based new water supply, capacity and annexation fees, the District attempts to have "growth pay for growth" and existing utility customers will, for the most part, be sheltered from the financial impacts of growth.

The District currently has a new water supply fee, water capacity fee, water annexation fee and a sewer annexation fee which is actually the sewer capacity fee. For this study, the proposed fees were developed to be cost-based and bring consistency in the naming and application of the fees across both utilities. The current capacity, new water supply, and annexation fees have not been formally updated since June 2010. Since 2010, the annexation fees, new water supply and capacity fees have been updated quarterly based on the Engineering News Record Construction Cost Index for Los Angeles. The capacity fees were recently updated as of June 2014 ENR and the fees are effective July 1, 2014. [1]

Summary and Conclusions

The new water supply fee is based on the future capital improvements needed to serve growth divided by the equivalent dwelling units (EDUs) that will be served by the new capacity. For the capacity fees, the District has previously used the "combined methodology" for calculating the capacity fees (CFs) and this methodology is in conformance with generally accepted rate making practices and is based on the District's water and sewer system planning and design criteria. The calculations also take into account the financing mechanisms of capital improvements. Based on the sum of the existing and future component costs, the net allowable utility CF is determined. "Net" refers to the "gross" capacity fee, net of any debt service credits. "Allowable" refers to the concept that the calculated capacity fee is the District's cost-based charge. The District, as a matter of policy, may charge any amount up to the cost-based capacity fee, but not over that amount. Charging an amount greater than the allowable capacity fee would not meet the nexus test of a cost-based capacity fee related to the benefit derived by the customer.

[1] The adjustment of these types of fees using a price index is a generally accepted utility practice and a best industry practice.

Capacity fees must be implemented according to the capacity requirement or impact each new development has on the utility system. This way, the capacity fee is related to the impact the customer places on the system, and to the benefit they derive from the service provided.

The existing and maximum allowable capacity and new water supply fee for the water utility system, as calculated within this report, for a new single-family residential meter connection is presented in Table ES-1. The maximum allowable fee has been adjusted to reflect the recent ENR adjustment made in June 2014. Further detail can be found in Section 4 of this report.

Table ES – 1
Existing and Maximum Allowable Water Capacity and New Water Supply Fee

Fee Description	Existing Fee	Maximum Allowable
Capacity Fee	$8,237	$7,984
New Water Supply Fee	$949	$989

Larger sized meters pay a higher dollar amount, based on industry established (American Water Works Association – AWWA) weighting factor standards for single family meter equivalencies. The capacity fees for these larger sized meters are presented in Section 4 of this report.

The existing and maximum allowable capacity fee for the sewer utility, as calculated within this study, for one Equivalent Dwelling Unit (EDU), or one single-family dwelling unit, is presented in Table ES-2. The maximum allowable fee has been adjusted to reflect the recent ENR adjustment made in June 2014.

Table ES – 2
Existing and Maximum Allowable Sewer Capacity Fee ($/EDU)

Existing Fee	Maximum Allowable
$5,986	$6,400

The sewer capacity fees, charged based on various numbers of EDUs, are presented in Section 4 of this report.

The annexation fee is charged to new customers annexing into the District boundaries. The annexation fee reimburses existing customers for past contributions so that all customers have contributed equally to the District's water and sewer system. Currently the District only charges a water annexation fee. The current sewer "annexation fee" is actually a capacity fee. This study has proposed a standardization of the use of the term "capacity" and "annexation" fees between the water and sewer utility.

The calculation of the District's water annexation fee is based on the original value of 1% General Tax and availability charges received to date, escalated to present day values based on the Consumer Price Index, from San Diego, from 1959 to present (through 2013). The 1% general tax is only for water and is not included in the sewer calculation. The existing and proposed annexation fees are shown below in Table ES-3.

Table ES – 3
Existing and Maximum Allowable Annexation Fee

Utility	Existing Fee	Maximum Allowable
Water Annexation Fee	$1,622	$1,777
Sewer Annexation Fee	N/A	$1,018

District Board Review

On August 18, 2014 the findings of this study were presented to the District's FA&C Committee. Results of the study will be presented to the District's Board September 3rd.

Summary

The capacity and annexation fees developed and presented in this report are based on the planning and engineering design criteria of the District's water and sewer systems, the value of the existing assets, past financing of the system and "generally accepted" ratemaking principles. Adoption of the proposed capacity fees and annexation fees will provide multiple benefits to the District and will continue the District's practice of establishing equitable and cost-based charges for new customers connecting to the District's utility systems.

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Section 1
Introduction

1.1 Introduction

HDR was retained by the Otay Water District (District) to review and update its capacity fees, new water supply fee, and annexation fees for water and sewer. The objective of this study is to calculate cost-based capacity, new water supply, and annexation fees for new customers connecting to the District's water and sewer system. These fees provide the means of balancing the cost requirements for new utility infrastructure between existing customers and new customers. The portion of existing infrastructure and future capital improvements that will provide service (capacity) to new customers is included in the capacity fees. In contrast to this, the District has future capital improvement projects that are related to renewal and replacement of existing infrastructure in service. These infrastructure costs are typically included within the rates charged to the District's customers, and are not included within the capacity fee. By establishing cost-based fees the District maintains an approach of having "growth pay for growth" and existing utility customers should, for the most part, be sheltered from the financial impacts of growth.

> *"The objective of this study is to calculate cost-based capacity, new water supply, and annexation fees for new customers connecting to the District's water and sewer system."*

1.2 Organization of Report

This report documents the methodology, approach and technical analysis undertaken by HDR and the District to develop the District's capacity, new water supply, and annexation fees for water and sewer. For purposes of ease in understanding the fees and proposed adjustments, the sewer capacity fee, which is currently the sewer annexation fee, is referred to in this report as the existing sewer capacity fee. The report is divided into five sections. Section 1 provides a brief introduction and overview of the study. Given this brief introduction, Section 2 provides an overview of capacity, new water supply, and annexation fees and the criteria and general methodology that should be used to calculate and establish cost-based fees. Next, Section 3 provides an overview of the requirements under California law for determining capacity, new water supply, and annexation fees. Section 4 reviews the District specific calculations of the cost-based water and sewer capacity fees and the new water supply fee. Finally, Section 5 and provides a summary of the water and sewer annexation fees.

> *"By establishing cost-based fees for water and sewer the District maintains an approach of having "growth pay for growth" and existing utility customers should, for the most part, be sheltered from the financial impacts of growth."*

1.3 Disclaimer

HDR, in its calculation of the capacity, new water supply, and annexation fees for water and sewer presented in this report, has used "generally accepted" engineering and ratemaking principles. This should not be construed as a legal opinion with respect to California law. HDR recommends that the District have its legal counsel review the new water supply, capacity and annexation fees for water and sewer as set forth in this report to ensure compliance with California law.

Section 2 – Overview of Capacity, New Water Supply and Annexation Fees

2.1 Introduction

An important starting point in establishing capacity, new water supply, and annexation fees is to have a basic understanding of the purpose of these fees, along with the criteria and general methodology that is used to establish cost-based fees. Presented in this section of the report is an overview of these fees and the criteria and general methodology that is used to develop cost-based capacity, new water supply, and annexation fees.

2.2 Defining Capacity, New Water Supply, and Annexation Fees

The first step in establishing cost-based capacity, new water supply and annexation fees is to gain a better understanding of the definition of a system development charge (SDC) [i.e. a capacity fee (CF)]. For the purposes of this report, an SDC is defined as follows:

> *"System development charges (capacity fees) are one-time charges paid by new development to finance construction of public facilities needed to serve them."*[1]

Simply stated, capacity fees are a contribution of capital to either reimburse existing customers for the available capacity in the existing system, or help finance planned future growth-related capacity improvements. At some utilities, capacity fees may be referred to as system development charges, impact fees, connection charges, infrastructure investment fees, etc. Regardless of the label used to identify them, their objective is the same. That is, these charges are intended to provide funds to the utility to finance all or a part of the capital improvements needed to serve and accommodate new customer growth. Absent those fees, many utilities would likely be unwilling to build growth-related facilities (i.e., burden existing rate payers with the entire cost of growth-related capacity expansion).

In the specific case of the District, annexation fees are a separate fee applied to new outside-District connections to account for the contributions existing District customers have made to the system through payment of general taxes and availability fees over the years. New outside District customers pay a one-time fee based on past general taxes, availability fees and past debt payments (for sewer) that bring the new outside-District customer connecting to the District's system to an equal financial footing with existing customers of sharing the cost of developing the utility systems to provide services. The District currently has a policy in place for the sewer utility that only customers outside of an ID area pay the annexation fee.

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1 Arthur C. Nelson, System Development Charges for Water, Wastewater, and Stormwater Facilities, Lewis Publishers, New York, 1995, p. 1,

It is important to note that the current sewer "annexation fee" is actually a buy-in capacity fee. To avoid confusion regarding these fees and their purpose, an objective of this study was to establish consistent terminology between the utilities regarding these fees. Given that, the sewer "annexation fee" is changed in name primarily. It has been updated, to reflect the current value of the system based on District data and asset values, to a sewer capacity fee. A new sewer annexation fee, based on prior availability fees paid, is calculated for any new customers connecting to the system who are not located within an existing ID area. These fees are further explained in Section 5, along with the updated water annexation fees.

2.3 Economic Theory and Capacity, New Water Supply, and Annexation Fees

Capacity, new water supply, and annexation fees are generally imposed as a condition of service. The objective of a capacity fee is not merely to generate money for a utility, but to ensure that all customers seeking to connect to the utility's system bear an equitable share of the cost of capacity that is invested in both the existing system and any future growth-related expansions. Through the implementation of fair and equitable capacity, new water supply, and annexation fees, existing customers will not be unduly burdened with the cost of new development.

By establishing cost-based fees, the District will be taking an important step in assuring adequate infrastructure to meet growth-related needs, and more importantly, providing this required infrastructure to new customers in a cost-based, fair and equitable manner.

2.4 Capacity, New Water Supply and Annexation Fee Criteria

In the determination and establishment of the capacity new water supply, and annexation fees, a number of different criteria are often utilized. The criteria often used by utilities to these fees are as follows:

- Customer understanding
- System planning criteria
- Financing criteria, and
- State/local laws

Annexation fees differ from capacity and new water supply fees in that annexation fees are based solely on fees and taxes previously paid by other customers. In that sense, system planning criteria does not apply to annexation fees. Capacity and new water supply fees are based on capacity needs of new customers, capacity available in the system, and the cost to provide a unit of capacity. With these differences in mind, a majority of the discussion below relates primarily to capacity and new water supply fees.

The component of customer understanding implies that the charge is easy to understand. This criterion has implications on the way that the fees are implemented and assessed to the customer. For water systems, the charge is generally based on meter size or specific customer usage (demands). The other implication of this criterion is that the methodology is clear and concise in its calculation of the amount of infrastructure necessary to provide service.

The use of system planning criteria is one of the more important aspects in the determination of the new water supply and capacity fees. System planning criteria provides the "rational nexus" between the amount of infrastructure necessary to provide service and the charge to the customer. The rational nexus test requires that there be a connection (nexus) established between new development and the new or expanded facilities required to accommodate new development, and appropriate apportionment of the cost to the new development in relation to benefits reasonably received.

> *"System planning criteria provides the "rational nexus" between the amount of infrastructure necessary to provide service and the charge to the customer."*

To comply with the rational nexus test the calculated fees require the following:

1. *"A connection be established between new development and the new or expanded facilities required to accommodate such development. This establishes the rational basis of public policy.*
2. *Identification of the cost of these new or expanded facilities needed to accommodate new development. This establishes the burden to the public of providing new facilities to new development and the rational basis on which to hold new development accountable for such costs. This may be determined using the so-called Banberry factors. [Banberry Development Company v. South Jordan City (631 P.2d 899, Utah 1981)].*
3. *Appropriate apportionment of that cost to new development in relation to benefits it reasonably receives. This establishes the nexus between the fees being paid to finance new facilities that accommodate new development and benefit new development receives from such new facilities."*[2]

The first bullet of the rational nexus test requires the establishment of a rational basis of public policy. This implies the planning and capital improvement studies that are used to establish the need for new facilities to accommodate growth. Adopted master plans or facility plans should firmly meet this first test since these plans assess existing facilities and capacity, project future capacity requirements and determine the future capital infrastructure and new facilities needed to accommodate growth.

The second portion of the ration nexus test discusses the Banberry Factors. In summary, "*consideration must be given to seven factors to determine the proportionate share of costs to be borne by new development:*

- *The cost of existing facilities*
- *The means by which existing facilities have been financed*
- *The extent to which new development has already contributed to the cost of providing existing excess capacity*

[2] Ibid, p. 16 and 17.

- *The extent to which existing development will, in the future, contribute to the cost of providing existing facilities used community wide or non-occupants of new development*
- *The extent to which new development should receive credit for providing at its cost facilities the community has provided in the past without charge to other development in the service area.*
- *Extraordinary costs incurred in serving new development*
- *The time-price differential inherent in fair comparisons of amount of money paid at different times."*[3]

The final portion of the rational nexus test is the reasonable apportionment of the cost to new development in relation to benefits it reasonably receives. This is accomplished in the methodology to establish the capacity and new water supply fees, which is discussed in more detail within this section.

One of the driving forces behind establishing cost-based capacity, new water supply, and annexation fees is that "growth pays for growth." Therefore, these fees are typically established as a means of having new customers pay an equitable share of the cost of their required infrastructure. The financing criteria for establishing the fees relates to the method used to finance infrastructure on the system and assures that customers are not paying twice for infrastructure – once through the development fees and again through rates. The double payment can come in through the imposition of growth-related infrastructure debt service within a customer's rates. The financing criteria also reviews the basis under which main line extensions were provided and assures that the customer are not charged for infrastructure that was provided (contributed) by developers.

> *"One of the driving forces behind establishing cost-based capacity, new water supply, and annexation fees is that "growth pays for growth."*

Many states and local communities have enacted laws which govern the calculation and imposition of these types of development fees. These laws must be followed in the development of these types of fees. Most statutes require a "reasonable relationship" between the fee charged and the cost associated with providing service capacity to the customer. (California legal requirements are described in Section 3 of this report.) The fees do not need to be mathematically exact, but must bear a reasonable relationship to the cost burden imposed. As discussed above, the utilization of the planning and financing criteria and the actual costs of construction and the planned costs of construction provide the nexus for the reasonable relationship requirement.

[3] Ibid, P. 18 and 19.

2.5 Overview of the Capacity and New Water Supply Fee Methodology

There are "generally-accepted" methodologies that are used to establish capacity and new water supply fees. Nelson describes eight different methodologies that may be used to establish capacity fees. *"They include:*

- *Market capacity method*
- *Prototypical system method*
- *Growth-related cost allocation method*
- *Recoupment value method, also known as the buy-in method*
- *Replacement cost method*
- *Marginal cost method*
- *Average cost method*
- *System-wide and growth-related cost-attribution method"*[4]

As Nelson notes, each of these methods may have certain advantages and disadvantages and should be applied in a manner that reflects circumstances and conditions of the utility. As an example, a utility which has significant capacity in their existing system and can accommodate future growth would likely use the recoupment (buy-in) method. In contrast to this, a utility with no existing capacity which requires expansion of capacity to accommodate growth could potentially use the growth-related cost allocation method or the marginal cost method. For utilities that have some existing capacity available to serve a portion of new development, but must build additional capacity to serve all future development, the system-wide and growth-related attribution method may be appropriate. In the case of the District, this is essentially the circumstance for water, in which there is available capacity, but also the need for future expansion to accommodate build-out. Sewer, on the other hand, has available capacity for the foreseeable future to accommodate anticipated customer growth.

Regardless of the overall methodology selected, a common denominator of the technical analyses is the various steps undertaken. These steps are as follows:

- Determination of system planning criteria
- Determination of equivalent dwelling unit equivalents (EDUs)
- Calculation of existing system costs
- Determination of any credits

The first step in establishing capacity fees is the determination of the system planning criteria. This implies calculating the amount of water or sewer capacity required by a single-family residential customer. For water systems, water demand per equivalent meter is most often used, since this represents the basis for system design. The number of existing customers is expressed in equivalent meter units. The American Water Works Association (AWWA) has a standardized method for determining meter equivalency for larger meter sizes.

[4] Ibid., P. 71.

For the sewer system, the amount of flow for one dwelling unit is determined and used to assess the number of equivalent dwelling units, or EDUs. The number of dwelling unit equivalents or equivalent meters can be determined based on a single family meter capacity. This provides the linkage between the amounts of infrastructure necessary to provide service to a set number of customers.

Once the number of equivalent meters, or capacity components for the system are determined, a component by component analysis is undertaken to determine the portion of the capacity fee attributable to each component in dollars per equivalent meter. In this process, the existing assets must be valued. Existing assets may be valued in a number of different ways. These methods may include the following:

- ✓ Original Cost (OC)
- ✓ Original Cost Less Depreciation (OCLD)
- ✓ Replacement Cost (RC)
- ✓ Replacement Cost Less Depreciation (RCLD)

Given these four different methods for valuing the assets, the selection of the valuation method certainly arises. The American Water Works Association M-1 manual notes the following concerning these various generally accepted valuation methods:

> *"Using the OC and OCLD valuations, the SDC [capacity fee] reflects the original investment in the existing capacity. The new customer "buys in" to the capacity at the OC or the net book value cost (OCLD) for the facilities and as a result pays an amount similar to what the existing customers paid for the capacity (OC) or the remaining value of the original investment (OCLD).*
>
> *Using the RCN and the RCNLD valuations, the SDC [capacity fee or new supply fee] reasonably reflects the cost of providing new expansion capacity to customers as if the capacity was added at the time the new customers connected to the water system. It may be also thought of as a valuation method to fairly compensate the existing customers for the carrying costs of the excess capacity built into the system in advance of when the new customers connect to the system. This is because, up to the point of the new customer connecting to the system, the existing customers have been financially responsible for the carrying costs of that excess capacity that is available to development."*[5]

As a point of reference for this study, the District capacity fee analysis will use a RCNLD methodology for all assets and the District references this as "reproduction" not "replacement" cost in the study. The District's existing assets are escalated to current dollars using a cost index (e.g. the Engineering New Record, Construction Cost Index; ENR CCI) and then depreciated using a simple straight-line method based on the useful life of each historical asset,

[5] AWWA M-1 Manual, 6th Edition, p. 268

respectively. The pipes are valued at “replacement” cost based on current inventory of the system at the current time and a current dollar per lineal foot. This value is also depreciated and is referred to as “replacement” cost.

After the existing infrastructure is analyzed then the future expansion projects are added to the total cost component. This total existing and future cost is divided by the total existing and future equivalent meters to determine the “gross capacity charge”. The last step in the calculation of the capacity charge is the determination of any credits. This is generally a calculation to assure that customers are not paying twice − once through capacity fees and again within the local water and sewer rates.

2.6 Summary

This section of the report has provided an overview of capacity, new water supply, and annexation fees; the basis for establishing cost-based fees, considerations in establishing the fees, the burden development places on the system and the steps typically taken in the development of the technical analyses. In the development of the District’s capacity, new water supply, and annexation fee study, the issues identified in this section of the report have been addressed and will be discussed in more detail in later sections of the report. The next section of the report provides a brief overview of the legal considerations in establishing new capacity, water supply, and annexation fees as they relate to California law.

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Section 3 – Legal Considerations in Establishing Fees for the District

3.1 Introduction

An important consideration in establishing capacity, new water supply, and annexation fees is any legal requirements at the state or local level. The legal requirements often establish the methodology around which the capacity, new water supply, and annexation fees must be calculated or how the funds must be used. Given that, it is important for the District to understand these legal requirements and develop and adopt fees which comply with those legal requirements. This section of the report provides an overview of the legal requirements for establishing capacity, new water supply, and annexation fees under California law. A discussion of the applicability of Proposition 218, as it relates to these fees is also provided.

The discussion within this section of the report is intended to be a summary of our understanding of the relevant California law as it relates to establishing capacity, new water supply, and annexation fees. It in no way constitutes a legal interpretation of California law by HDR.

3.2 Requirements under California Law

In establishing capacity, new water supply, and annexation fees, an important requirement is that they be developed and implemented in conformance with local laws. In particular, many states have established specific laws regarding the establishment, calculation and implementation of development fees. The main objective of most state laws is to assure that these charges are established in such a manner that they are fair, equitable and cost-based. In other cases, state legislation may have been needed to provide the legislative powers to the utility to establish the charges.

"The laws for the enactment of capacity charges in California are found in California Government Code sections 66013, 66016, and 66022 within the 'Mitigation Fee Act.'

The laws for the enactment of capacity charges in California are codified in California Government Code sections 66013, 66016, and 66022, which are interspersed within the 'Mitigation Fee Act.' The Mitigation Fee Act is comprehensive legislation dealing mainly with development impact fees, although the above sections set forth the various requirements for imposition of capacity fees in California: calculation of the fees, noticing, accounting and reporting requirements, and processes for judicial review.

A summary of the relevant statutes required in the calculation of capacity fees is as follows:

> *"66013 (a) Notwithstanding any other provision of law, when a local agency imposes fees for water connections or sewer connections, or imposes capacity charges, those fees or charges shall not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed, unless a question regarding the amount of the fee or charge imposed in excess of the estimated reasonable cost of providing the services or materials is submitted to, and approved by, a popular vote of two-thirds of those electors voting on the issue."*
>
> *"66013 (b) (3) 'Capacity charge' means a charge for facilities in existence at the time a charge is imposed or charges for new facilities to be constructed in the future that are of benefit to the person or property being charged."*

In addition to the determination of "the estimated reasonable cost of providing the service for which the fee is imposed," California law also requires the following:

- That notice (of the time and place of the meeting, including a general explanation of the matter to be considered) and a statement that certain data is available be mailed to those who filed a written request for such notice,
- That certain data (the estimated cost to provide the service and anticipated revenue sources) be made available to the public,
- An opportunity for public input at an open and public meeting to adopt or modify the fee, and
- That revenue in excess of actual cost be used to reduce the fee creating the excess.

The basic principle that needs to be followed under California law is that the charge be based on a proportionate share of the costs of the system required to provide service and that the requirements for adoptions and accounting be followed in compliance with California law.

For annexation fees, California has provided the authority to charge an availability charge for water and sewer utilities. Within the California water code Section 71631.6 there is a provision for availability charges, as follows:

> *"71631.6. Notwithstanding the provisions of Section 71631, in any improvement district situated within the Otay Municipal Water District in San Diego County, the standby assessment or availability charge shall not exceed thirty dollars ($30) per acre per year for land on which the charge is levied or ten dollars ($10) per year for a parcel less than one acre. In any such improvement district the proceeds from any standby assessment or availability charge in excess of ten dollars ($10) per acre per year shall only be used for the purposes of such improvement district. This section, applicable only to the Otay Municipal Water District of San Diego County, is necessary because of the unique and special water management problems of the area included within such district."*

Additionally, the California Public Utilities Code Section 16475[1], while not applicable to the District, provides further authority and clarification of this fee.

> *"16475.(a) A public utility district which acquires, constructs, owns, operates, controls or uses works for supplying its inhabitants with water, may, pursuant to the notice, protest, and hearing procedures in Section 53753 of the Government Code, fix and collect a water standby or immediate availability charge on all land within its boundaries to which water is made available for any purpose by the district, whether the water is actually used or not, except that such charge shall not supply to lands permanently dedicated exclusively to transportation of persons or property. If the procedures set forth in this section as it read at the time a standby charge was established were followed, the district's board of directors may, by resolution, continue the charge pursuant to this section in successive years at the same rate. If new, increased, or extended assessments are proposed, the district shall comply with the notice, protest, and hearing procedures in Section 53753 of the Government Code….*
>
> *(c) If a person for more than one year obtains substantially all of his or her water requirements for the contiguous parcels of land which he or she occupies from rainfall, springs, streams, lakes, rivers, or wells, and if the person's primary economic activity on such land is the commercial extraction or processing of minerals, such land shall be exempt from any water standby or availability charges.*
>
> *d) Any funds derived from the charges levied pursuant to this section may be used by the district for all purposes which a public utility district is authorized to expend funds insofar as said purposes relate to the acquisition, construction, operation, control, or use of works for supplying its inhabitants with water."*

These Sections of California law indicate the authority to levy the availability fee, which is the key financial input to the annexation fees, properties exempt from such fees, and directives and authority of how such fee revenue should be used.

3.3 Proposition 218 and 26 and Capacity, New Water Supply, and Annexation Fees

In 1996, the voters of California approved Proposition 218, which required that the imposition of certain fees and assessments by municipal governments require a vote of the people to change or increase the fee or assessment. Of interest in this particular study is the applicability of Proposition 218 to the establishment of capacity fees for the District.

In Richmond v. Shasta Community Services Dist., 32 Cal.4th 409 (2004), the California Supreme Court held that water connection fees (capacity and new water supply fees) are not "assessments" under Proposition 218 because they are imposed only on those who are voluntarily seeking water service, rather than being charged to particular identified parcels, and therefore such fees are not subject to the procedural or substantive requirements of

[1] Generally the Public Utilities Code does not apply to the District.

Proposition 218. The court also held that such fees can properly be enacted by either ordinance or resolution.

In November 2010 the voters of California passed Proposition 26, an initiative based state constitutional amendment, the Supermajority Vote for Passage of New Taxes and Fees Act. Proposition 26 requires a two-thirds supermajority vote of the California State Legislature or local legislative Board, to pass many fees, levies, charges and tax revenue allocations that previously could be enacted by a simple majority vote. However, the changes of this legislation do not apply to most user fees, property development charges, and property assessments, per exemption 6 of the legislation. Exemption 6 states that a charge imposed as a condition of property development are exempt. This language is similar to the fees' exemption from Proposition 218. Property development charges, such as capacity fees and annexation fees, which are imposed as a result of property development in order to provide services directly to the fee payer, and are associated with level of benefits directly received by the fee payer, are exempt from this legislation because they are determined based on the benefit the fee payer directly receives from the services, or have a reasonable nexus to the benefits derived by the fee payer.

3.4 Summary

This section of the report has provided an overview of the legal requirements under California law for the establishment of capacity, new water supply, and annexation fees. As was noted above, an important legal requirement is that the fees or charges shall not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed. The next section of the report provides the District's calculation of the fees, which provides the basis for the establishment of a reasonable cost (capacity fee).

Section 4 – Determination of the District's Capacity and New Water Supply Fees

4.1 Introduction

This section of the report presents the details and key assumptions in the calculation of the District's capacity fees for water and sewer and the new water supply fee for water. The calculation of the District's capacity and new water supply fees is based upon District specific accounting and planning information. Specifically, the fees are based upon the District's fixed asset records; the District's current capital improvement plans, existing equivalent dwelling units (EDUs) and projection of future EDUs. For the water utility, the Water Resources Master (WRM) Plan Update, of October 2008 (and revised in 2010 and 2013) was used. This document will be referred to as the "WRM Plan" throughout this section of the report. Additionally, for the sewer utility, the latest Plan used for planning criteria, was the Wastewater Management (WWM) Plan, 2013, referred to as the WWM Plan in this report. As was noted in Section 2 of this report, these planning documents and projections of future EDUs provide the required support for a "rationally based public policy" to support the imposition of cost-based capacity and new water supply fees.

To the extent that the cost and timing of future capital improvements change, then the capacity and new water supply fees presented in this section of the report should be updated to reflect the changes.

4.2 Overview of the District's Water and Sewer System

The Otay Water District is a water, recycled water and sewer service provider. The District was established in 1956. The District is located in the southern portion of San Diego County and includes approximately 137 square miles of which 125.5 miles are within the District's boundaries. The service area includes both urban and rural development.

The District provides water within 125.5 square miles of the southeaster San Diego County. The water service planning area comprises three distinct land use planning agencies. They are the City of San Diego, the City of Chula Vista, and the County of San Diego. It serves the communities of Spring Valley, La Presa, Rancho San Diego, Jamul, eastern Chula Vista, and eastern Otay Mesa along the international border of Mexico. Potable water delivered by Otay Water District is purchased from the San Diego County Water Authority. Most of the water is purchased from the region's primary importer, the Metropolitan Water District of Southern California. There are approximately 724 miles of potable water lines, 40 potable reservoirs, and 21 potable pump stations.

The District provides wastewater service to a portion of the land area within the Jamacha Basin, which is located within its North District. The County of San Diego also provides wastewater service in a portion of the Jamacha Basin. Wastewater flows from each agency's customers are conveyed in joint collection and pumping systems. The District is responsible for approximately 88 miles of sewer line. The District owns and operates the Ralph W. Chapman Water Reclamation Facility (RWCWRF) within the Jamacha Basin. Wastewater flows generated within the Jamacha Basin are pumped to the RWCWRF and treated to produce recycled water, which is used to meet a portion of the District's existing recycled water demand. All remaining flows are discharged into the Metro System. Wastewater collection, pumping, and treatment costs are shared between the District and the County as provided in the 1998 agreement between the Spring Valley Sanitation District (San Diego County) and Otay Water District.

There are two sources of recycled water to the District. The RWCWRF has up to 1.3 MGD (million gallons per day capacity). The District also has an agreement with the City of San Diego which allows the District to purchase up to 6.0 MGD of recycled water generated by the City's South Bay Water Reclamation Plant (SBWRP). There are approximately 99 miles of recycled water lines, 4 recycled water reservoirs, and 3 recycled water pump stations. The District delivers recycled water to customers through a dedicated distribution system where it is used to irrigate golf courses, playing fields, public parks, roadside landscapes and open space in eastern Chula Vista.

4.3 Current Water and Sewer Capacity Fees

The District's current water capacity and new water supply fees are shown below in Table 4-1.

Table 4-1
Current Water Capacity and New Water Supply Fees by Meter Size

Meter Size	Meter Equivalent	Water Capacity Fee	New Water Supply Fee
3/4"	1.0	$8,237	$949
1"	2.5	20,593	2,373
1- 1/2"	5.0	41,185	4,745
2"	8.0	65,896	7,592
3"	16.0	131,792	15,184
4"	25.0	205,926	23,726
6"	50.0	411,852	47,452
8"	80.0	658,962	75,992
10"	115.0	947,258	109,138

[1] – District Capacity Fees effective June 2014, ENR on 7/1/2014

Larger sized meters pay a greater fee which is based upon industry established (American Water Works Association [AWWA]) safe operating capacities of the meters. Weighting factors are created to establish single family meter equivalencies.

As part of this study, the District requested that HDR develop a capacity fee for the sewer utility. Currently the sewer capacity fee is referred to as the sewer "annexation fee", but that fee is based on the buy-in costs of available capacity in the sewer system. Within this study, and for consistency moving forward, the District's current sewer annexation fee will be appropriately renamed and referred to as the sewer capacity fee. The existing sewer capacity fee is presented in Table 4-2, on a per EDU basis. The District's Code Section 53.09 indicates the number of EDUs for various types of land uses.

Table 4-2
Current Sewer Capacity Fees by Number of EDUs

Number of EDUs	Sewer Capacity Fee
0.38	$2,275
0.60	3,591
1.00	5,986
1.20	7,183
0.70	4,190
5.00	29,929
15.00	89,786
25.00	149,643
40.00	239,429

[1] – District Capacity Fees effective June 2014, ENR on 7/1/2014

Section 53.09 of the District's Code provides guidelines for determining the number of EDUs. For example, single-family, multi-family, condos and mobile homes are charged 1.0 EDU per unit. Hotels/motels with rooms with no kitchen are charged 0.38 EDUs per unit, while rooms with kitchens are charged 0.60 EDUs. Commercial uses are charged 1.2 EDUs for the first 1,000 square feet, and 0.70 EDU per 1,000 square feet of additional space.

4.4 Calculation of the District's Capacity and New Water Supply Fees

As was discussed in Section 2, the process of calculating new water supply fee and capacity fees is based upon a four-step process. These steps were as follows:

- Determination of system planning criteria
- Determination of equivalent dwelling units (EDUs)

- Calculation of the capacity fee for system costs
- Determination of any capacity fee credits

Each of these areas is discussed in more detail below.

4.4.1 System Planning Criteria

System planning criteria typically involves calculating the amount of water required by a single-family residential customer. Water demand represents the basis for system design. For the District, the American Water Works Association (AWWA) has a standardized method for determining meter equivalency for larger meter sizes. The number of equivalent meters can be determined based on AWWA meter equivalency.

The number of customers by meter size was based on data from the District's utility billing system as of June 2013. Table 4-3 shows a summary of the District's 2013 water service customers by meter size.

Table 4-3
2013 Water Existing Number of Meters

Meter Size	Residential	Master Metered	Commercial & Public	AG, LDs, Const.	Recycled	Total
5/8"	1	0	679	--	--	680
3/4"	43,186	41	336	103	1	43,667
1"	1,463	186	389	262	102	2,402
1–1/2"	14	245	291	383	393	1,326
2"	4	224	404	466	194	1,292
3"	--	34	32	5	4	75
4"	--	61	28	6	7	102
6"	--	6	8	2	2	18
8"	--	3	--	--	--	3
10"	--	--	5	--	1	6
Total	**44,668**	**800**	**2,172**	**1,227**	**704**	**49,571**

The total number of water service customers by meter size as of June 2013 is 49,571 units.

For the sewer utility, the WWM Plan used 80 gallons per capita day (gpcd) for residential equivalents, and 25 gpcd for employment populations.

4.4.2 Equivalent Meter Units

For system planning the number of existing customers by meter size is converted to equivalent meters. Equivalent meters are used to adjust to the total number of customers to reflect the capacity differences associated with different size meter connections. The AWWA has a

standardized method for determining meter equivalency for larger meter sizes. For the District, the AWWA M1 Manual meter equivalency ratios are used for residential connections.

The number of dwelling unit equivalents or equivalent meters can be determined based on a single family meter capacity. Table 4-4 shows the 2013 water service customers by meter size converted to a single family meter equivalency.

Table 4-4
2013 Water Equivalent Meters

Meter Size	AWWA Single Family Weighting	Total Customers by Meter Size	Total Single Family Meter Equivalency
5/8”	1.00	680	680
3/4”	1.00	43,667	43,667
1”	2.50	2,402	6,005
1–1/2”	5.00	1,326	6,630
2”	8.00	1,292	10,336
3”	16.00	75	1,200
4”	25.00	102	2,550
6”	50.00	18	900
8”	80.00	3	240
10”	115.00	6	690
Total		**49,571**	**72,898**

The total water residential meter equivalency for the District is 72,898 units. This total will be used in determination of the capacity and annexation fees.

For the sewer system, the number of EDUs was determined by using the EDUs in the 2010 study of 6,714, and adding the 27 new connections since 2009, for a total of 6,741 existing EDUs on the sewer system.

4.4.3 Calculation of the Capacity Fee for the Major System Components

The next step of the analysis is to review the major functional system infrastructure to determine the capacity fee for the system. In calculating the capacity fees for the District, existing components, debt service for existing facilities, future capital improvements relating to expansion and capital fund reserves were included. The methodology used to calculate each component is described below.

Existing or Buy-In Component – To calculate the value of the existing assets for the buy-in component, the District’s methodology considered the original cost of each asset. The original cost

of the asset was then adjusted to the value for reproduction cost. The reproduction cost of each asset was then depreciated for the remaining useful life (i.e. reproduction cost less depreciation). A reproduction cost method "is appropriate when the system has been completely built out, or possesses substantial excess capacity to accommodate new development on a fill-in basis. . ."[1]

The District provided an asset listing for the various existing components and their installation dates. As was noted in Section 2, there are different methods for valuing existing assets. In this case, a reproduction cost new less depreciation method was used. To accomplish this, the original cost of each asset was escalated to current, June 30, 2013 dollars, based on the Construction Cost Index (CCI) for the Los Angeles area published in the City Engineering News & Record (ENR). Then, based on the installation date and an estimated useful life provided by the District for each asset, the reproduction cost for each asset was depreciated.

Pipelines were valued at replacement cost new less depreciation. The length and size of pipe was multiplied by an average replacement cost per inch diameter of $25. Including the recycled water components, the total capacity related eligible plant is approximately $631.8 million. The valuation of the existing assets can be seen on Exhibit W-1 for water and Exhibit S-1 for sewer of the Technical Appendix.

Given the value of the assets, the next step was to determine the portion of the project costs that were deemed eligible to be included in the calculation of the capacity fee. The term "Capacity fee eligible" simply describes the amount of the asset to be included within the calculation of the fee. Within this study, meters, older computers, and miscellaneous other operational cost items that appeared to be nearly depreciated were not included in the capacity fee calculation. The final value of the assets was reduced by the amount of future principal on the debt associated with the assets as the principal will be recovered via the debt component.

As described below (see Debt Service Component discussion), the remaining principal portion of the debt associated with the assets was deducted from the total eligible asset value prior to calculating the capacity fee. This inclusion of a "debt service credit" avoids double charging the customer for the asset value in the existing or buy-in component of the capacity charge, and also in the debt service component of the rates. The principal portion of the debt service balance on existing assets is removed from the value prior to calculating the buy-in portion of the fee.

DEBT SERVICE COMPONENT - In addition to the buy-in component, a debt service component was also developed. This component accounts for the principal on existing assets. By segregating the debt service out, the cost can be clearly identified and calculated appropriately. To avoid double-counting of the assets financed with debt, the future principal associated with those assets was deducted from the existing infrastructure value.

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[1] Arthur C. Nelson, System Development Charges for Water, Wastewater, and Stormwater Facilities, Lewis Publishers, New York, 1995, P. 77

The District has six outstanding issues for the water system. They are the 1996, 2007 and 2010A Certificates of Participation, 2009 General Obligation Bond, 2010 Build America Bonds, and the 2013 Water Revenue Refunding Bonds. There are no outstanding sewer bonds or State low-interest loans. The District's total outstanding principal is $110 million, which is all related to water. Details of the debt service are shown on Exhibit W-1 and W-3A.

OTHER COMPONENTS - In addition to the existing or buy-in component and debt service component, capital fund reserves, past interest payments from 1959 to 2008 which were not previously capitalized (net of depreciation at 50 year average life) were determined to be capacity fee related. These components are considered to be asset valuation adjustments to the overall water and sewer systems since they are capacity infrastructure costs that relate to the water and sewer systems as a whole. The total capacity eligible fund reserve is $30 million for water. Past interest payments net of depreciation is $40 million for water and $9.9 million for sewer. Further detail can be seen on Exhibit W-1, W-3B and W-4 for water and S-1, S-3B and S-4 for sewer of the Technical Appendix.

FUTURE COMPONENTS – An important requirement for a capacity fee study is the connection between the anticipated future growth on the system and the needed facilities required to accommodate that growth. For purposes of this study, the District's most current Capital Improvement Plan was provided. This plan came from the District's latest WRM Plan, which is currently being updated, and the District's Adopted Capital Improvement Program Budget document for 2014 - 2019. District staff reviewed the existing capital improvement plan (CIP) and updated it with information, as available, from the on-going WRM Plan update. Additionally, projected growth was developed within this WRM Plan for the water system, and within the WWM Plan for the sewer system. The projects necessary to meet demand for the water system were included in the CIP, along with a projection of the number of future EDUs. For the sewer system, it was determined that no expansion projects are needed at this time to meet the needs of projected growth.

The updated CIP detailed projects as expansion, betterment, new supply or replacement projects. Capital improvements that were expansion related were included in the capacity fee calculation. The total capacity eligible future projects for water totaled $280 million. Exhibit W-6 of the water Technical Appendix contains the details of this portion of the fee.

4.5 Allowable Capacity and New Water Supply Fees

Based on the sum of the component costs calculated above, the allowable water and sewer capacity fee were determined. "Allowable" refers to the concept that the calculated capacity fees shown on Table 4-5 are the District's cost-based water capacity fees. The District, as a matter of policy, may charge any amount up to the allowable capacity fee, but not over that amount. Charging an amount greater than the allowable capacity fee would not meet the nexus test of a cost-based capacity fee. Details are provided in Exhibit W-7 for water and S-7 for sewer of the Technical Appendix.

Table 4-5 Summary of Allowable Water Capacity Fee Based on Single Family Meter Equivalent	
	Total "Allowable" Capacity Fee
Total Existing Capacity Plant (Repro & Replace. Less Depreciation)	$592,228,550
Total Future Capacity Plant	283,405,230
Total Capacity Plant	$875,633,780
Existing EDUs	72,898
Future EDUs	41,405
Total EDUs	114,303
Total Allowable Capacity Fee per 3/4" Equivalent Meter	$7,661
Index to June 2014 ENR	1.0422
Total Allowable Capacity Fee per 3/4" Equivalent Meter	**$7,984**

As can be seen in Table 4-5, the water capacity fee is $7,661 for a 3/4" equivalent meter as of June 2013 data. The maximum allowable fee has been adjusted to reflect the recent ENR adjustment made in June 2014. The final allowable fee is $7,984. The fee is then placed in the context of the size of meter. The water capacity fee varies based upon the safe operating capacity of the customer's meter, which is shown below in Table 4-7.

Table 4-6 shows the new water supply fee calculation. This fee used the same methodology as described above, but is based only on future CIP projects that were identified as necessary for new water supply. The cost of these future projects were divided by the projected growth they are estimated to serve, to determine a total allowable new water supply fee per EDU for an equivalent meter.

Table 4-6 Summary of Allowable New Water Supply Fee	
	Total "Allowable" Water Supply Fee
Total Future Capacity Plant (Expansion)	$39,279,000
Future EDUs	41,405
Total Allowable Capacity Fee per 3/4" Meter Equivalent	$949
Index to February 2014 ENR	1.0422
Total Allowable Capacity Fee per 3/4" Equivalent Meter	**$989**

Table 4-7 provides a summary of the calculated and allowable new water supply and water capacity fees by meter size.

Table 4-7
Calculated Water Capacity and New Water Supply Fee by Meter Size

Meter Size	Meter Equivalent	Water Capacity Fee	Water New Water Supply Fee
3/4"	1.0	$7,984	$989
1"	2.5	19,960	2,473
1- 1/2"	5.0	39,920	4,945
2"	8.0	63,872	7,912
3"	16.0	127,744	15,824
4"	25.0	199,600	24,725
6"	50.0	399,200	49,450
8"	80.0	638,720	79,120
10"	115.0	918,160	113,735

As can be seen in Table 4-7, the water capacity fee is $7,984 for a 3/4" meter, the new water supply fee is $989 for a new water supply fee. The capacity and new water supply fee varies based upon the safe operating capacity of the customer's meter. The capacity charges for the larger meter sizes are determined by multiplying the capacity charge for a 3/4" meter by the meter capacity weighting factors in the AWWA M1 manual. The weighting factors are determined based on the AWWA safe operating capacities for the size of meter. The safe operating capacity of each meter is divided by the safe operating capacity for a single family displacement type meter to determine the weighting factor for each meter. For example, the safe operating flow capacity of a 2" displacement meter is eight (8) times the safe operating

flow capacity of a 3/4" meter. Stated another way, the capacity of a customer with a 2" displacement meter has the equivalent capacity of eight (8) single-family homes.

The District's current fee schedule has a separate fee for the Triad Development area. For this study, District staff researched the purpose of the fee reduction back to its inception and determined that when the Triad Development initially was developed the developers paid for the storage the area would need. Therefore, the capacity fees for the Triad area are credited the portion of the fee that relates to potable water storage. HDR reviewed the discount provided to Triad and concluded that the discount of 25% of the fee fairly reflects the time value of the $17 million paid for storage facilities. This is also consistent with the District's current approach to providing a Triad credit on the fees.

Table 4-8 presents the calculated water capacity fees along with the reduced Triad Development fees. New connections within the Triad area still pay the annexation fee (as appropriate) and the new water supply fee, as presented within this report.

Table 4-8
Calculated Water Capacity and Triad Capacity Fees by Meter Size

Meter Size	Meter Equivalent	Water Capacity Fee	Triad Water Capacity Fee
3/4"	1.0	$7,984	$5,990
1"	2.5	19,960	14,975
1- 1/2"	5.0	39,920	29,950
2"	8.0	63,872	47,920
3"	16.0	127,744	95,840
4"	25.0	199,600	149,750
6"	50.0	399,200	299,500
8"	80.0	638,720	479,200
10"	115.0	918,160	688,850

SEWER CAPACITY FEES – The allowable sewer capacity fee is shown below in Table 4-9. There were no future sewer capacity related projects. There is ample capacity within the existing sewer system to serve the anticipated growth on the system. Details are provided in Exhibit S-7 of the Technical Appendix.

Table 4-9 Summary of Allowable Sewer Capacity Fee Based on One EDU	
	Total "Allowable" Capacity Fee
Total Existing Capacity Plant (Repro & Replace. Less Depreciation)	$41,397,911
Total Future Capacity Plant	0
Total Capacity Plant	$41,397,911
Existing EDUs	6,741
Future EDUs	0
Total EDUs	6,741
Total Allowable Capacity Fee per EDU	$6,141
Index to June 2014 ENR	1.0422
Total Allowable Capacity Fee per EDU	**$6,400**

Table 4-10 provides a summary of the calculated and allowable sewer capacity fee by number of EDUs, based on Section 53.09 of the District's Code. The District's current resolution also specifies that customers within an ID area would not pay the "annexation fee". Since the current sewer annexation fee is actually the buy-in capacity fee, it was determined by District staff who researched the historical aspects of the Resolution, that customers within an ID area should pay an equitable portion of the costs of available capacity, but should not pay an actual annexation fee, and should receive a credit for debt payments they have paid through debt assessments applied to parcels within the ID areas. Therefore, the sewer capacity fee is listed for those customers outside an ID area, who would pay the full capacity fee and an annexation fee for sewer, and those inside an ID area who would pay only a reduced capacity fee, which is reduced by the principal paid on the 1990 State loan for treatment plant, and all past interest payments.

Table 4-10
Calculated Sewer Capacity Fee by Number of EDUs

Number of EDUs	Sewer Capacity Fee Outside ID Area	Sewer Capacity Fee Inside Sewer ID Area
0.38	$2,432	$1,555
0.60	3,840	2,455
1.00	6,400	4,092
1.20	7,680	4,911
0.70	4,480	2,865

4.6 Key Assumptions

In the development of the capacity fees for the District's water and sewer utilities, a number of key assumptions were utilized. These are as follows:

- The District's capacity fees were developed on the basis of planning documents, anticipated future connections and the needed capital improvements to serve those future connections.
- The District developed their projections of future EDUs based upon an analysis of available land area and type of development, and assumed meter sizes.
- The District's asset records were used to determine the existing infrastructure assets.
- The District provided financial records related to capital reserves available, past interest payments, billing system reports for number of meters by size, and pipeline inventories.
- The District provided the current cost per lineal foot for pipelines for each utility.
- The District provided the most recent CIP for future expansion improvements.
- The District determined the portion of future improvements that were growth-related.
- The base year for the CIP was assumed at 2014.
- The calculation of the debt credit component included current outstanding principal on existing assets.

4.7 Implementation of the Capacity, New Water Supply Fees, and Annexations Fees

The District currently escalates capacity, new water supply, and annexation fees based on the Engineering News Record Construction Cost Index (ENR-CCI) on a quarterly basis. The ENR-CCI tracks changes in municipal construction costs. The methodology used to calculate these fees takes into account the cost of money or interest charges and inflation. Therefore, HDR would recommend that the District continue to adjust the fees at least annually, or quarterly, using the local ENR-CCI to reflect the cost of interest and inflation. This method of escalating the District's fees should be used for no more than a five-year period. After five years, HDR recommends that the District update the fees based on the actual cost of infrastructure and any new planned facilities that would be contained in an updated master plan or capital improvement plan.

4.8 Conformance of the District's Fees with Critical Legal Elements

In calculating the District's capacity fees, significant thought and consideration was given developing a fair and reasonable methodology that would meet the critical legal elements for capacity fees. These critical elements were previously discussed in Section 2. In summary form, the three tests to comply with the rational nexus test for the calculated fees require the following:

1. A connection be established between new development and the new or expanded facilities required to accommodate such development. This establishes the rational basis of public policy.

   In the development of this study, the District's capacity fees were based upon District specific accounting and planning information. Specifically, the capacity fees are based upon the District's fixed asset records; and the District's current capital improvement plan (CIP) and projection of future EDUs. The use of this data and information was the "best available" and "reasonable" information and provides the required support for a "*rationally based public policy"* to support the imposition of capacity fees.

2. Identification of the cost of these new or expanded facilities needed to accommodate new development. This establishes the burden to the public of providing new facilities to new development and the rational basis on which to hold new development accountable for such costs. This may be determined using the so-called Banberry factors. Banberry states that "consideration must be given to seven factors to determine the proportionate share of costs to be borne by new development:

   - The cost of existing facilities

     The District's analysis considers the existing assets with a combined component. The assets are valued using a depreciated reproduction cost value for all assets and a replacement cost value for pipes.

   - The means by which existing facilities have been financed

     The District's analysis considered the debt service component related to the expansion component. The methodology provided a debt credit for outstanding principle related to existing assets.

   - The extent to which new development has already contributed to the cost of providing existing excess capacity

     The District's methodology excluded all contributed capital from the calculation of the combined component of the capacity fee. The Triad credit (discount) reflects this requirement.

   - The extent to which existing development will, in the future, contribute to the cost of providing existing facilities used community wide or non-occupants of new development

     The District's future expansion considers all future projects for the benefit of future expansion. Absent growth, the District's existing facilities are sufficient to serve existing District customers.

   - The extent to which new development should receive credit for providing at its cost facilities the community has provided in the past without charge to other development in the service area.

     The District is not aware of any situation or condition that would receive a credit for this test. No credits have been included within the calculation of the District's

capacity fee for new development providing at its cost facilities the community has provided in the past without charge to other development in the service area.

- Extraordinary costs incurred in serving new development

  No extraordinary costs are assumed to have been incurred in the past, nor are any extraordinary costs assumed to be incurred in the future and included within the calculation of the District's capacity fee.

- The time-price differential inherent in fair comparisons of amount of money paid at different times.

  By using a depreciated reproduction cost for assets and depreciated replacement cost for pipes, the methodology for the combined method, the District has acknowledged the age and remaining useful life of the facilities. The adjustment for the Engineering News Record takes into consideration the time-price differential as a customer connects to the system.

3. Appropriate apportionment of that cost to new development in relation to benefits it reasonably receives. This establishes the nexus between the fees being paid to finance new facilities that accommodate new development and benefit new development receives from such new facilities.

   The District's methodology considered the value of existing and future assets to determine the fee. The value of those assets were divided by the number of EDUs that would be served by those assets.

Based upon the above, HDR is of the opinion that the District's calculated capacity, new water supply and annexation fees meet the rational nexus test. While different parties may agree or disagree on certain assumptions or approaches, the overall test is a reasonableness relationship between the fee imposed and the benefit derived.

The other perspective to consider is the following finding by the Florida Supreme Court. The court ruled the fees were valid when they:

- "Do not exceed that which is reasonably required to fund expansion to benefit future connections
- Are needed to finance expansion that accommodates new development
- Are earmarked for expansion"[2]

The answer to these three tests for the District are "yes." As calculated the proposed fees will be no greater than the calculated fees. The District's calculated capacity fees may be used to not only pay for debt on past expansion projects, but also to fund future planned expansion projects. Finally, the District has a separate and segregated expansion fund and all capacity

[2] Florida Supreme Court, Contractors and Builders Association of Pinellas County v. City of Dunedin [329 So. 2nd 314 (Fla. 1976)]

fees collected will remain in the expansion fund and be used to fund existing expansion related debt and future expansions.

4.9 Consultant Recommendations

Based on our review and analysis of the District's fees, HDR makes the following recommendations:

- The District should revise and update their capacity and new supply fees for new connections to the water and sewer systems that are no greater than the fees as set forth in this report.
- The District should continue within their resolution or ordinance the provision for periodic (annual or quarterly) adjustments to the fees based on changes in the Engineering News Record Construction Cost Index.
- The District should update the actual calculations for the capacity and new supply fees based on the methodology as approved by the resolution or ordinance setting forth the methodology for capacity fees at such time when a new capital improvement plan, facilities plan, master plan or a comparable plan is approved or updated by the District.

4.10 Summary

The capacity and new supply fees developed and presented in this section of the report are based on the engineering design criteria of the District's water and sewer system, the value of the existing assets, future capital improvements, current debt service on existing assets and "generally accepted" ratemaking principles. Adoption of the proposed fees will provide multiple benefits to the District and create equitable and cost-based charges for new customers connecting to the District's water and sewer system.

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Section 5 – Determination of the District's Water and Sewer Annexation Fees

5.1 Introduction

This section of the report presents the details and key assumptions in the calculation of the District's water and sewer annexation fee. The annexation fee is charged only to new customers annexing into the District's service area boundaries (i.e. customer's currently outside the District's boundaries). The annexation fee reimburses existing customers for past contributions so that all customers have contributed equally to the District's water and sewer systems. Currently the District only charges a water annexation fee. As noted in the previous section of the report, the District's sewer "annexation fee" is actually the sewer system buy-in capacity fee. This study proposes separating the sewer fee into an annexation and capacity fee, in order that both utilities are treated as consistently as possible within the fee structure and schedule. The calculation of the District's annexation fee is based upon District specific tax and availability charge collections.

5.2 Current Water Annexation Fees

The current water annexation fee is based on the original value of the 1% General Tax and availability charges to date. These values are then escalated using the Consumer Price Index, from San Diego, from 1959 to present (2013). The total present value of the 1% general tax and the availability charges are divided by current water and recycled EDUs. The District's current water annexation fees are shown below in Table 5-1.

Table 5-1
Water Annexation Fees by Meter Type and Size

Meter Size	Meter Equivalent	Water Annexation Fee
3/4"	1.0	$1,622.39
1"	2.5	4,055.90
1- 1/2"	5.0	8,111.80
2"	8.0	12,978.88
3"	16.0	25,957.76
4"	25.0	40,559.00
6"	50.0	81,118.00
8"	80.0	129,788.80
10"	115.0	186,571.40

[1] – District Annexation Fees linked to ENR-CCI for Los Angeles and adjusted quarterly. Last updated July 2014.

As shown, the District's current annexation charge is based on a 3/4" meter based on the AWWA safe operating capacity of a single family meter. The fees shown are effective July 1, 2014 and were adjusted by the consumer price index June 2014.

5.3 Calculation of the District's Water and Sewer Annexation Fee

The District currently has a water annexation fee and does not have a sewer annexation fee. The District's current sewer "annexation" fee is a sewer capacity fee. To avoid confusion concerning the purpose or use of the fees, HDR has developed the capacity fee (See Section 4) and in this section of the report will develop a sewer annexation similar to the current water annexation fee. The separate sewer annexation fee established herein has been developed such that it reflects the availability fees previously paid by customers within the ID areas of the sewer service area.

The calculation is still based on the current methodology for water of the original value of the 1% General Tax and availability charges to date escalated to present day values based on the Consumer Price Index, from San Diego, from 1959 to present (2013). The 1% general tax is only for the water utility and is not included in the sewer calculation because no customers in the service area have paid the 1% general tax for the sewer system. The calculated water annexation fees are shown below in Table 5-2 and Table 5-3.

Table 5-2
Calculation of Water Annexation Fee

Item	Original Value	Present Value
1% General Tax	$40,494,657	$62,541,413
Availability Charges	35,605,529	67,000,559
Total Gen. Tax & Availability	$76,100,186	$129,541,972
Current EDUs	72,898	72,898
Potable Water Annexation Fee	$1,044	$1,777

[1] – District Annexation Fees inked to ENR-CCI for Los Angeles and adjusted quarterly. Last updated July 2014.

The resulting proposed annexation fee would be $1,777 for a 3/4" meter size. Table 5-3 shows the water annexation fees for various meter sizes.

Table 5-3 Water Annexation Fee by Meter Type and Size		
Meter Size	**Meter Equivalent**	**Water Annexation Fee**
3/4”	1.0	$1,777
1”	2.5	4,443
1- 1/2”	5.0	8,885
2”	8.0	14,216
3”	16.0	28,432
4”	25.0	44,426
6”	50.0	88,852
8”	80.0	142,162
10”	115.0	204,359

Similar to the capacity fees and new water supply fees, the annexation fees for larger size meters are assessed based on the size of the meter, using the AWWA safe operating capacities from the AWWA M1 manual.

Table 5-4 shows the calculation for the sewer annexation fee. The same methodology is applied to sewer except the 1% general tax is not included for sewer.

Table 5-4 Calculation of Sewer Annexation Fee		
Item	**Original Value**	**Present Value**
Availability Charges	$2,948,941	$6,861,466
Current EDUs	6,741	6,741
Sewer Annexation Fee	$437	$1,018

[1] – District Annexation Fees linked to ENR-CCI for Los Angeles and adjusted quarterly.

The resulting proposed sewer annexation fee would be $1,018 per one EDU. EDU's are determined by the District's code, Section 53.09. For example, single-family, multi-family, condos and mobile homes are charged 1.0 EDU per unit. Table 5-5 shows the sewer annexation fees for various EDUs.

Table 5-5 Sewer Annexation Fee by Number of EDUs	
Number of EDUs	**Sewer Annexation Fee**
0.38	$387
0.60	611
1.00	1,018
1.20	1,222
0.70	713
5.00	5,090
15.00	15,270
25.00	25,450
40.00	40,720

The sewer annexation fee, per District Resolution, applies only to customers who are not currently within an ID area that annex into the District's service area. Customers within an ID area are assumed to have been paying the availability charges and therefore are considered to be equal to other existing customers in having paid their share of system improvements prior to connecting to the system.

5.4 Key Assumptions

In the development of the annexation fees for the District a number of key assumptions were utilized. These are as follows:

- The annexation fees were developed to utilize the same and consistent methodology to both utilities.
- The District's annexation fees were developed on the basis of 1% General Tax and Availability Charges escalated by the San Diego Consumer Price Index.
- The District water EDUs were based on current number of accounts by meter size calculated into equivalent meters by the AWWA meter equivalency for a single family meter.
- The District sewer EDUs were provided by the District, based on the 2010 EDUs and additional 27 new EDUs since 2009.
- The sewer annexation fees do not include any 1% general tax within the calculation.

5.5 Implementation of the Annexation Fees

The methodology used to calculate the annexation fees takes into account the cost of money or inflation. Therefore, HDR would recommend that the District continue the practice of adjusting the annexation fees, each year, by the Consumer Price Index for San Diego.

5.6 Consultant Recommendations

Based on our review and analysis of the District's annexation fees, HDR makes the following recommendations:

- The District should revise and update their water annexation fees for new connections and annexations to the water system that are no greater than the water annexation fees as set forth in this report.
- The District should establish sewer annexation fee for new connections and annexations to the sewer system that are no greater than the sewer annexation fees as set forth in this report. The sewer annexation fee will be a new fee for the District.
- The District should continue with their resolution provision for periodic (annual or quarterly) adjustments to the annexation fees based on changes in the ENR-CCI.
- The District should update the actual calculations for the annexation fees based on the methodology as approved by the resolution, for annexation fees at least every five years.

5.7 Summary

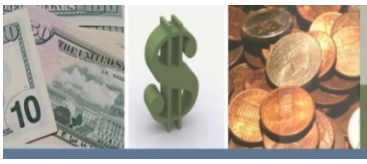
The water and sewer annexation fees developed and presented in this section of the report are based on the District's customer data and 1% General Tax and availability charges. Adoption of the proposed annexation fees will continue to create equitable and cost-based charges for new customers connecting to the District's water and sewer systems.

Technical Appendices

Summary of 8/5/14 Revised Capacity, New Supply and Annexation Fees ($/EDU/3/4-inch meter)

Component	2010 Study Fee	2014 Current Fee (1)	2014 Calculated Fee (2)
Annexation Fee (3)			
Water	$1,477	$1,622,36	$1,777
Sewer	0	0	1,018
Total Annexation Fee	**$1,477**	**$1,622.36**	**$2,795**
Water (4)			
Buy-In Fee	$7,249		$8,467
Expansion Fee	$7,803		$7,134
Combined Capacity Fee	$7,499	$8,237.03	$7,984
New Supply Fee	864	949.03	989
Total Fee	**$8,363**	**$9,186.06**	**$8,973**
Sewer			
Buy-In Fee for customers not in an ID			$6,400
Buy-In Fee for customers in an ID area (5)			4,092
Expansion Fee			$0
Combined Capacity Fee	**$5,804**	**$5,985.73**	**$6,400**
Combined Capacity Fee (5)	**$5,804**	**$5,985.73**	**$4,092**

(1) Fees updated 6/2014 effective 7/1/2014.
(2) Calculated based on 6/30/2013 data and 6/30/2013 ENR-CCI for LA. Fee then adjusted to 6/2014 ENR-CCI for LA.
(3) Fee adjusted annually by San Diego CPI.
(4) Fee adjusted by ENR-CCI for LA.
(5) Customers within an ID area should pay for the portions of the system that were not paid for through debt, but were rate funded.



Water Technical Appendix

Otay Water District - Water
Exhibit W-1
Development of Capacity Fee - Buy-In

Plant Description	Original Cost (1)	Accumulated Depreciation	Original Cost Less Depr.	Reproduction Cost (2)	Reproduction Cost Less Depr.	Pipe Replacement Cost	Pipe Replacement Cost Less Depr.	Capacity Fee= RCLND + RCLND-Pipe	Reference
	OC		OCLD	RC	RCLND	RC-Pipe (3)	RCLND-Pipe		
Water									
Land	$12,572,073	$0	$12,572,073	$41,598,728	$41,598,728	$0	$0	$41,598,728	
Buildings	18,099,224	8,085,813	10,013,411	28,163,194	14,983,209	0	0	14,983,209	
Field Equipment	3,041,431	2,993,891	47,540	4,745,616	89,516	0	0	89,516	
Chlorination	703,384	459,632	243,753	1,206,788	365,943	0	0	365,943	
Contributed	0	0	0	0	0	0	0	0	
Finance (Capitalized Interest)	10,593,028	3,078,729	7,514,300	18,392,716	10,620,495	0	0	10,620,495	
Maps And Plans	297,875	134,023	163,851	469,644	258,449	0	0	258,449	
Main Water System	115,650,206	30,154,998	85,495,208	216,632,115	109,737,686	1,141,184,018	259,757,728	259,757,728	
Pump Stations	24,728,324	5,832,833	18,895,491	32,608,021	24,004,786	0	0	24,004,786	
Pumps	5,655,878	2,543,094	3,112,784	11,575,265	5,094,109	0	0	5,094,109	
Power	440,470	337,324	103,146	601,323	106,243	0	0	106,243	
Repairs	18,120,697	5,434,850	12,685,847	21,593,830	13,897,391	0	0	13,897,391	
Reservoirs	109,651,677	32,331,864	77,319,813	151,949,303	99,344,198	0	0	99,344,198	
Security	133,075	126,174	6,902	242,186	13,942	0	0	13,942	
Water System Yearly	14,130,155	9,776,852	4,353,302	37,604,412	10,111,731	0	0	10,111,731	
Total Water	$333,817,498	$101,290,076	$232,527,421	$567,383,142	$330,226,426	$1,141,184,018	$259,757,728	$480,246,469	

Otay Water District - Water
Exhibit W-1
Development of Capacity Fee - Buy-In

Plant Description	Original Cost (1) OC	Accumulated Depreciation	Original Cost Less Depr. OCLD	Reproduction Cost (2) RC	Reproduction Cost Less Depr. RCLND	Pipe Replacement Cost RC-Pipe (3)	Pipe Replacement Cost Less Depr. RCLND-Pipe	Capacity Fee= RCLND + RCLND-Pipe	Reference
Recycled Water									
Land	$883,418	$0	$883,418	993,363	993,363	0	0	$993,363	
Buildings	727,480	103,053	624,427	757,636	651,560	0	0	651,560	
Field Equipment	0	0	0	0	0	0	0	0	
Chlorination	754,411	93,044	661,367	777,062	681,224	0	0	681,224	
Contributed	0	0	0	0	0	0	0	0	
Equipment	11,439	11,439	0	16,310	0	0	0	0	
Jamacha Basin Sewer	6,126,940	960,901	5,166,039	6,686,802	5,293,109	0	0	5,293,109	
Maps & Plans	12,601	4,791	7,810	19,877	12,319	0	0	12,319	
Main	51,629,411	9,266,266	42,363,146	63,235,595	51,017,085	172,625,600	116,015,111	116,015,111	
Pump Stations	8,179,040	900,974	7,278,067	9,179,419	8,168,247	0	0	8,168,247	
Pumps	1,388,624	378,470	1,010,153	1,464,519	1,063,829	0	0	1,063,829	
Power	34,098	32,338	1,760	50,401	2,599	0	0	2,599	
Repair	420,935	11,134	409,801	421,948	410,778	0	0	410,778	
Reservoir	18,705,700	3,061,974	15,643,727	22,188,939	18,274,952	0	0	18,274,952	
Study	71,821	71,821	0	75,341	0	0	0	0	
Total Recycled	$88,945,919	$14,896,204	$74,049,715	$105,867,211	$86,569,064	$172,625,600	$116,015,111	$151,567,090	
Total	**$422,763,417**	**$116,186,281**	**$306,577,136**	**$673,250,353**	**$416,795,490**	**$1,313,809,618**	**$375,772,840**	**$631,813,559**	
Less: Outstanding Debt Principal (4)								(110,725,000)	See Exhibit W-3A
Plus: Capital Fund Reserves (5)								30,735,587	See Exhibit W-4
Past Interest Payments (6)								40,404,404	See Exhibit W-3B
Less:									
Excess Storage Capacity - Potable (7)								-	
Excess Storage Capacity - Recycled (8)								-	
Excess Storage Pump Station - Potable (9)								-	
Excess Storage Pump Station - Recycled (10)								-	
Total Net Plant								**$592,228,550**	
Existing Equivalent Dwelling Units EDU (11)								72,898	See Exhibit W-5
Buy-In Capacity Fee per EDU (12)								$8,124	
				Plus: ENR update per Ordinance 534					
				Current Index		6/2014	10,739.43		
				Base Index		06/30/13	10,304.68		
				Total Capacity Fee with ENR		Index	1.04	**$8,467**	

(1) Asset listing as of June 30, 2013.
(2) Based on specific in service date of asset and June 2013 Engineering News Record, for LA construction cost index.
(3) Based on pipe inventory and $25 per inch diameter. See Exhibit W-2
(4) Remaining principal as of June 30, 2013. See Exhibit W-3A.
(5) Cash reserves as of December 2013 which are CF eligible. See Exhibit W-4.
(6) Past interest payments from 1959 to 2008 which were not previously capitalized; net of depreciation at 50 year average life. See Exhibit W-3B.
(7) Potable Reservoir excess capacity 7.75 MGD at $0.95 per gallon equals $7,400,000.
(8) Recycled Reservoir excess capacity 8.49 MGD at $0.84 per gallon equals $7,200,000.
(9) Potable Storage Pump Station estimate to construct four pump stations with a total capacity of 3,600 gpm in today's dollars. (4 X $2,500,000 = $10,000,000)
(10) Recycled Storage Pump Station estimate to construct two pump stations with a total capacity of 11,234 gpm in today's dollars. (11,234 X $1,000 = $11,234,000)
(11) Based on data from the utility billing system as of June 30, 2013. See Exhibit W-5.
(12) Based on "buy-in" methodology established in AWWA M1, Sixth Edition, Table VI.2-1, page 269.

Otay Water District - Water
Exhibit W-2
Development of Pipe Replacement Cost

Pipe cost based on dollars per inch diameter 2014 = $25

POTABLE WATER PIPELINES				RECYCLED WATER PIPELINES				TOTAL
DIAMETER INCH	MATERIAL TYPE	LENGTH FEET	REPLACEMENT COST	DIAMETER INCH	MATERIAL TYPE	LENGTH FEET	REPLACEMENT COST	
4	ACP	24,006	$2,400,600	4	ACP	54	$5,400	
4	STL	643	64,300	4	STL	316	31,600	
4	PVC	12,177	1,217,700	4	PVC	2,999	299,900	
4	CCP	46	4,600	4	DIP	29	2,900	
4	RCP	33	3,300	4	CPR	2,715	271,500	
6	ACP	228,212	34,231,800	6	ACP	410	61,500	
6	STL	2,195	329,250	6	STL	1,163	174,450	
6	PVC	9,021	1,353,150	6	PVC	91,288	13,693,200	
6	CCP	176	26,400					
				8	ACP	9,874	1,974,800	
8	ACP	822,967	164,593,400	8	STL	259	51,800	
8	STL	6,788	1,357,600	8	PVC	124,170	24,834,000	
8	DIP	31	6,216	8	DIP	16	3,200	
8	PVC	709,345	141,869,000					
				10	ACP	12,205	3,051,250	
10	ACP	384,339	96,084,750	10	PVC	11,229	2,807,250	
10	STL	5,375	1,343,750	10	PRM (FRP)	5,332	1,333,000	
10	DIP	517	129,163	10	STL	22	5,500	
10	PVC	82,433	20,608,250					
10	CIP	1,999	499,750	12	ACP	11,593	3,477,900	
				12	STL	9,748	2,924,400	
12	ACP	402,530	120,759,000	12	PVC	50,636	15,190,800	
12	STL	29,142	8,742,600	12	DIP	195	58,500	
12	DIP	6,089	1,826,700	12	PRM (FRP)	2,548	764,400	
12	PVC	309,300	92,790,000					
12	CCP	10,791	3,237,300	14	STL	16,325	5,713,750	
12	CIP	6,136	1,840,800					
12	RCP	740	222,000	16	ACP	15,799	6,319,600	
				16	STL	17,917	7,166,800	
14	ACP	33,677	11,786,950	16	PVC	67,454	26,981,600	
14	STL	7,257	2,539,950					
14	CCP	63	22,050	20	ACP	21,548	10,774,000	
				20	STL	4,922	2,461,000	
16	ACP	149,832	59,932,800	20	PVC	28,651	14,325,500	
16	STL	36,345	14,538,000					
16	DIP	2,820	1,128,168	24	STL	4,726	2,835,600	
16	PVC	124,192	49,676,800	24	PVC	1,194	716,400	
16	CCP	10,972	4,388,800					
16	CIP	14	5,600	30	STL	32,114	24,085,500	
16	RCP	1,712	684,800	30	PVC	0	0	
18	ACP	14,536	6,541,200	36	PVC	254	228,600	
18	STL	1,664	748,800			**Total**	**$172,625,600**	
18	DIP	371	166,991					
18	PVC	204	91,800					
18	PVC	8,242	3,708,900					
18	PVC	5,261	2,367,450					

Otay Water District - Water
Exhibit W-2
Development of Pipe Replacement Cost

Pipe cost based on dollars per inch diameter 2014 = $25

POTABLE WATER PIPELINES				RECYCLED WATER PIPELINES				TOTAL
DIAMETER INCH	MATERIAL TYPE	LENGTH FEET	REPLACEMENT COST	DIAMETER INCH	MATERIAL TYPE	LENGTH FEET	REPLACEMENT COST	
20	ACP	55,818	27,909,000					
20	STL	18,216	9,108,000					
20	PVC	31,480	15,740,000					
20	CCP	3,658	1,829,000					
20	RCP	1,235	617,500					
24	ACP	65,289	39,173,400					
24	STL	12,481	7,488,600					
24	PVC	30,699	18,419,400					
24	CCP	11,949	7,169,400					
24	RCP	185	111,000					
27	STL	1,183	798,525					
30	ACP	1,730	1,297,500					
30	STL	88,570	66,427,500					
30	PVC	2,420	1,815,000					
30	CCP	13,314	9,985,500					
30	CIP	1,975	1,481,250					
30	RCP	84	63,000					
36	ACP	1,433	1,289,700					
36	STL	34,737	31,263,300					
36	PVC	1,147	1,032,300					
36	CCP	29,352	26,416,800					
42	STL	15,855	16,647,750					
42	PVC	636	667,800					
42	CCP	342	359,100					
48	STL	66	78,756					
60	STL	83	124,500					
		Total	**$1,141,184,018**					

	Useful Life	Rep. Cost		Useful Life	Rep. Cost	Rep. Cost
Contributed Pipelines		$695,541,379	**Contributed Pipelines**		$41,401,050	
Otay Owned	50	445,518,140	**Otay Owned**	50	131,221,350	
Total		**$1,141,059,518**	**Total**		**$172,622,400**	**$1,313,681,918**

Assume for potable 12" inches and smaller was contributed

Assume for recycled 8" and smaller was contributed

Yearly Depreciation	Average Age (1)	Accumulated Depreciation	Replacement Cost Less Depreciation	Yearly Depreciation	Average Age (1)	Accumulated Depreciation	Replacement Cost Less Depreciation	Replacement Cost Less Depreciation
$ 8,910,363	20.8	$ 185,760,411	**$259,757,728**	$ 2,624,427	5.8	$ 15,206,239	**$116,015,111**	**$375,772,840**

(1) Average age based on 2010 study information.

Otay Water District - Water
Exhibit W-3A
Development of Water Debt
For the Year Ended June 30, 2013

Debt Name	Principal	Interest	1996 COP	Principal	Interest	2007 COP	Principal	Interest	2009 G.O.	Principal	Interest	2010 A COP	Principal	Interest	2010 B BABs	Principal	Interest	July 5, 2013 Refunding	TOTAL PRINCIPAL
I. Debt Status:																			
Original Debt	**$15,400,000**			**$42,000,000**			**$7,780,000**			**$13,840,000**			**$36,355,000**			**$7,735,000**			**$123,110,000**
# of Years/Rate	0.00%			0.00%			0.00%			0.00%			0.00%			0.00%			
II. Principal and Interest Payments:																			
2014	$500,000	$602,900	$1,102,900	$955,000	$1,541,900	$2,496,900	$535,000	$215,088	$750,088	$820,000	$533,538	$1,353,538	$0	$2,371,868	$2,371,868	$660,000	$254,667	$914,667	$3,470,000
2015	500,000	572,700	1,072,700	995,000	1,504,900	2,499,900	550,000	198,663	748,663	845,000	508,563	1,353,563	0	2,371,868	2,371,868	605,000	237,275	842,275	3,495,000
2016	600,000	537,500	1,137,500	1,035,000	1,466,300	2,501,300	570,000	181,663	751,663	870,000	478,488	1,348,488	0	2,371,868	2,371,868	615,000	213,033	828,033	3,690,000
2017	600,000	501,200	1,101,200	1,075,000	1,425,800	2,500,800	585,000	162,969	747,969	900,000	443,088	1,343,088	0	2,371,868	2,371,868	635,000	186,800	821,800	3,795,000
2018	600,000	465,000	1,065,000	1,115,000	1,383,700	2,498,700	605,000	139,633	744,633	940,000	406,288	1,346,288	0	2,371,868	2,371,868	660,000	159,567	819,567	3,920,000
2019	700,000	465,000	1,165,000	1,155,000	1,339,300	2,494,300	635,000	114,433	749,433	975,000	367,988	1,342,988	0	2,371,868	2,371,868	685,000	131,167	816,167	4,150,000
2020	700,000	423,700	1,123,700	1,200,000	1,292,900	2,492,900	650,000	88,533	738,533	1,015,000	323,113	1,338,113	0	2,371,868	2,371,868	715,000	101,567	816,567	4,280,000
2021	700,000	339,200	1,039,200	1,250,000	1,243,400	2,493,400	680,000	61,533	741,533	1,065,000	271,113	1,336,113	0	2,371,868	2,371,868	745,000	70,767	815,767	4,440,000
2022	800,000	291,900	1,091,900	1,300,000	1,191,700	2,491,700	705,000	33,500	738,500	1,120,000	216,488	1,336,488	0	2,371,868	2,371,868	775,000	38,767	813,767	4,700,000
2023	800,000	243,600	1,043,600	1,355,000	1,136,800	2,491,800	720,000	4,800	724,800	1,175,000	159,113	1,334,113	0	2,371,868	2,371,868	805,000	5,567	810,567	4,855,000
2024	900,000	190,200	1,090,200	1,410,000	1,079,300	2,489,300	0	0	0	1,235,000	98,863	1,333,863	0	2,371,868	2,371,868	835,000	0	835,000	4,380,000
2025	900,000	135,900	1,035,900	1,470,000	1,019,200	2,489,200	0	0	0	1,295,000	33,994	1,328,994	0	2,371,868	2,371,868	0	0	0	3,665,000
2026	1,000,000	76,500	1,076,500	1,530,000	955,500	2,485,500	0	0	0	0	0	0	1,365,000	2,328,345	3,693,345	0	0	0	3,895,000
2027	1,100,000	11,100	1,111,100	1,595,000	955,500	2,550,500	0	0	0	0	0	0	1,450,000	2,238,589	3,688,589	0	0	0	4,145,000
2028	0	0	0	1,665,000	818,000	2,483,000	0	0	0	0	0	0	1,545,000	2,143,093	3,688,093	0	0	0	3,210,000
2029	0	0	0	1,735,000	744,800	2,479,800	0	0	0	0	0	0	1,640,000	2,041,540	3,681,540	0	0	0	3,375,000
2030	0	0	0	1,810,000	668,400	2,478,400	0	0	0	0	0	0	1,745,000	1,933,609	3,678,609	0	0	0	3,555,000
2031	0	0	0	1,890,000	588,600	2,478,600	0	0	0	0	0	0	1,855,000	1,818,823	3,673,823	0	0	0	3,745,000
2032	0	0	0	1,970,000	505,500	2,475,500	0	0	0	0	0	0	1,975,000	1,694,728	3,669,728	0	0	0	3,945,000
2033	0	0	0	2,055,000	416,600	2,471,600	0	0	0	0	0	0	2,105,000	1,560,558	3,665,558	0	0	0	4,160,000
2034	0	0	0	2,150,000	323,200	2,473,200	0	0	0	0	0	0	2,245,000	1,417,508	3,662,508	0	0	0	4,395,000
2035	0	0	0	2,245,000	225,700	2,470,700	0	0	0	0	0	0	2,390,000	1,265,086	3,655,086	0	0	0	4,635,000
2036	0	0	0	2,340,000	124,000	2,464,000	0	0	0	0	0	0	2,550,000	1,102,634	3,652,634	0	0	0	4,890,000
2037	0	0	0	2,445,000	17,800	2,462,800	0	0	0	0	0	0	2,715,000	929,495	3,644,495	0	0	0	5,160,000
2038	0	0	0	0	0	0	0	0	0	0	0	0	2,895,000	745,010	3,640,010	0	0	0	2,895,000
2039	0	0	0	0	0	0	0	0	0	0	0	0	3,085,000	548,357	3,633,357	0	0	0	3,085,000
2040	0	0	0	0	0	0	0	0	0	0	0	0	3,290,000	338,716	3,628,716	0	0	0	3,290,000
2041	0	0	0	0	0	0	0	0	0	0	0	0	3,505,000	115,262	3,620,262	0	0	0	3,505,000
TOTAL	**$10,400,000**	**$4,856,400**	**$15,256,400**	**$37,745,000**	**$21,968,800**	**$59,713,800**	**$6,235,000**	**$1,200,815**	**$7,435,815**	**$12,255,000**	**$3,840,631**	**$16,095,631**	**$36,355,000**	**$50,683,773**	**$87,038,773**	**$7,735,000**	**$1,399,175**	**$9,134,175**	**$110,725,000**

Otay Water District - Water
Exhibit W-3B
Development of Past Interest Payments

Year	Total	Sewer	Water	CPI Escalation Factor 2008	Present Day Dollars Sewer	Present Day Dollars Water	CPI Escalation Factor 2013	Present Day Dollars Sewer	Present Day Dollars Water	Average Age	YTD	Remaining	Depreciated Sewer	Depreciated Water	Present Dollars Less Depr. Sewer	Present Dollars Less Depr. Water
2008	2,601,252	47,277	2,553,975	1.09	51,683	2,791,997	1.07	$50,788	$2,743,663	50	6	44	$6,095	$329,240	$44,694	$2,414,424
2007	950,479	58,066	892,413	1.03	59,948	921,344	1.12	64,783	995,641	50	7	43	9,070	139,390	55,713	856,252
2006	959,225	68,491	890,734	1.06	72,330	940,660	1.14	78,163	1,016,515	50	8	42	12,506	162,642	65,657	853,872
2005	1,327,844	78,562	1,249,282	1.09	85,786	1,364,158	1.18	92,704	1,474,164	50	9	41	16,687	265,350	76,017	1,208,814
2004	1,252,307	88,293	1,164,014	1.13	99,946	1,317,638	1.22	108,006	1,423,893	50	10	40	21,601	284,779	86,405	1,139,114
2003	947,099	97,695	849,404	1.17	114,629	996,632	1.27	123,873	1,077,001	50	11	39	27,252	236,940	96,621	840,061
2002	1,503,063	106,779	1,396,284	1.22	129,973	1,699,564	1.32	140,454	1,836,617	50	12	38	33,709	440,788	106,745	1,395,829
2001	1,543,336	115,556	1,427,780	1.26	145,585	1,798,801	1.36	157,325	1,943,856	50	13	37	40,904	505,403	116,420	1,438,454
2000	1,540,592	124,036	1,416,556	1.32	163,449	1,866,668	1.42	176,630	2,017,197	50	14	36	49,456	564,815	127,173	1,452,382
1999	1,809,747	176,967	1,632,780	1.39	246,694	2,276,112	1.51	266,587	2,459,658	50	15	35	79,976	737,898	186,611	1,721,761
1998	1,952,742	227,266	1,725,476	1.44	328,010	2,490,361	1.56	354,461	2,691,184	50	16	34	113,428	861,179	241,034	1,830,005
1997	2,080,744	274,606	1,806,138	1.47	404,084	2,657,737	1.59	436,669	2,872,057	50	17	33	148,467	976,499	288,202	1,895,558
1996	1,421,139	319,333	1,101,806	1.50	478,077	1,649,525	1.62	516,629	1,782,543	50	18	32	185,986	641,715	330,642	1,140,827
1995	936,716	362,687	574,029	1.54	557,180	881,856	1.66	602,111	952,969	50	19	31	228,802	362,128	373,309	590,841
1994	1,329,706	394,491	935,215	1.56	615,062	1,458,118	1.68	664,660	1,575,701	50	20	30	265,864	630,280	398,796	945,420
1993	749,618	419,512	330,106	1.60	671,011	528,005	1.73	725,121	570,583	50	21	29	304,551	239,645	420,570	330,938
1992	689,412	296,895	392,517	1.63	485,193	641,462	1.77	524,319	693,190	50	22	28	230,700	305,004	293,619	388,186
1991	1,172,353	336,012	836,341	1.68	564,437	1,404,895	1.82	609,953	1,518,186	50	23	27	280,578	698,366	329,375	819,821
1990	1,454,800	372,559	1,082,241	1.74	648,438	1,883,639	1.88	700,728	2,035,536	50	24	26	336,349	977,057	364,379	1,058,479
1989	1,314,494	408,975	905,519	1.84	754,333	1,670,183	1.99	815,163	1,804,867	50	25	25	407,581	902,434	407,581	902,434
1988	1,841,881	444,586	1,397,295	1.95	867,861	2,727,613	2.11	937,845	2,947,568	50	26	24	487,680	1,532,735	450,166	1,414,833
1987	1,339,462	477,707	861,755	2.05	979,340	1,766,671	2.22	1,058,315	1,909,135	50	27	23	571,490	1,030,933	486,825	878,202
1986	1,428,383	509,385	918,998	2.12	1,081,084	1,950,422	2.29	1,168,263	2,107,705	50	28	22	654,227	1,180,315	514,036	927,390
1985	1,508,454	538,914	969,540	2.18	1,175,872	2,115,468	2.36	1,270,694	2,286,060	50	29	21	737,003	1,325,915	533,692	960,145
1984	1,585,069	566,769	1,018,300	2.30	1,302,731	2,340,584	2.48	1,407,783	2,529,329	50	30	20	844,670	1,517,597	563,113	1,011,731
1983	1,614,923	593,048	1,021,875	2.43	1,442,993	2,486,408	2.63	1,559,356	2,686,913	50	31	19	966,801	1,665,886	592,555	1,021,027
1982	1,496,029	601,840	894,189	2.50	1,507,009	2,239,051	2.71	1,628,535	2,419,608	50	32	18	1,042,262	1,548,549	586,272	871,059
1981	1,546,319	118,910	1,427,409	2.67	317,909	3,816,220	2.89	343,546	4,123,960	50	33	17	226,740	2,721,814	116,806	1,402,147
1980	1,689,015	126,371	1,562,644	3.03	383,386	4,740,775	3.28	414,303	5,123,071	50	34	16	281,726	3,483,688	132,577	1,639,383
1979	1,727,910	146,451	1,581,459	3.50	512,015	5,529,024	3.78	553,304	5,974,885	50	35	15	387,313	4,182,420	165,991	1,792,466
1978	846,568	139,706	706,862	4.07	568,464	2,876,224	4.40	614,305	3,108,163	50	36	14	442,300	2,237,877	172,005	870,286
1977	699,346	146,858	552,488	4.48	657,544	2,473,719	4.84	710,569	2,673,200	50	37	13	525,821	1,978,168	184,748	695,032
1976	500,880	152,370	348,510	4.77	726,805	1,662,393	5.15	785,415	1,796,448	50	38	12	596,915	1,365,301	188,499	431,148
1975	505,080	158,245	346,835	5.06	800,816	1,755,196	5.47	865,394	1,896,736	50	39	11	675,007	1,479,454	190,387	417,282
1974	545,897	163,251	382,646	5.54	904,016	2,118,935	5.98	976,917	2,289,806	50	40	10	781,533	1,831,845	195,383	457,961
1973	545,960	166,687	379,273	6.15	1,024,296	2,330,642	6.64	1,106,895	2,518,586	50	41	9	907,654	2,065,240	199,241	453,345
1972	559,456	195,260	364,196	6.55	1,278,131	2,383,950	7.07	1,381,199	2,576,192	50	42	8	1,160,207	2,164,001	220,992	412,191
1971	507,776	19,884	487,892	6.80	135,304	3,319,940	7.35	146,215	3,587,660	50	43	7	125,745	3,085,388	20,470	502,272
1970	399,854	11,322	388,532	7.06	79,979	2,744,620	7.63	86,429	2,965,946	50	44	6	76,058	2,610,033	10,371	355,914
1969	286,268		286,268	7.43	-	2,128,323	8.03	-	2,299,951	50	45	5	0	2,069,956	0	229,995
1968	269,080		269,080	7.82	-	2,104,459	8.45	-	2,274,163	50	46	4	0	2,092,230	0	181,933
1967	237,827		237,827	8.14	-	1,935,438	8.79	-	2,091,512	50	47	3	0	1,966,021	0	125,491
1966	243,112		243,112	8.39	-	2,040,489	9.07	-	2,205,034	50	48	2	0	2,116,833	0	88,201
1965	224,790		224,790	8.54	-	1,920,159	9.23	-	2,075,001	50	49	1	0	2,033,501	0	41,500
1964	199,375		199,375	7.77	-	1,549,240	8.40	-	1,674,171	50	50	0	0	1,674,171	0	0
1963	127,415		127,415	7.87	-	1,003,018	8.51	-	1,083,902	50	51	0	0	1,083,902	0	0
1962	75,500		75,500	7.98	-	602,213	8.62	-	650,775	50	52	0	0	650,775	0	0
1961	75,500		75,500	8.06	-	608,255	8.71	-	657,305	50	53	0	0	657,305	0	0
1960	72,250		72,250	8.14	-	587,971	8.79	-	635,385	50	54	0	0	635,385	0	0
1959	75,500		75,500	8.95	-	675,375	8.95	-	675,375	50	55	0	0	675,375	0	0
	$50,311,547	$9,651,623	$40,659,924		$22,421,405	$97,772,150		$24,224,408	$105,328,567				$14,290,716	$64,924,162	$9,933,692	**$40,404,404**

1. 1959-1962 only id 2 & 3, 1963-1966 - 2,3,5,6,7,9,10, this is the interest which is not already capitalized (previously).

Otay Water District - Water
Exhibit W-4
Summary of Reserve Funds
For the Year Ended June 30, 2013

Account #	OPEB	New Water Supply	Expansion	Replacement	Betterment	Debt Fund	Debt Reserve	Capital Improvement	General	Total	% CF Eligible (1)	Capacity Fee
					Betterment							
RESTRICTED RESERVES												
312201/312241(ID 1)					($5,850,335)	$9,402,124				$3,551,789	0%	$0
312202/312242 (ID 2)					(1,683,179)	314,727				(1,368,452)	0%	0
312203/312243 (ID 3)					(6,308,107)	1,521,924				(4,786,184)	0%	0
312213/312244 (ID 5)					(222,001)	114,381				(107,621)	0%	0
312204/312245 (ID 7)					(804,842)	780,367				(24,476)	0%	0
312205/312246 (ID 9)					(6,117,475)	1,411,602				(4,705,872)	0%	0
312206/312247 (ID 10)					(1,025,174)	871,591				(153,583)	0%	0
312207/312248 (ID 18)					0	0				0	0%	0
312214/312249 (ID 19)					9,404	14,350				23,754	0%	0
312208/312251 (ID 20)					(12,444,252)	3,485,711				(8,958,541)	0%	0
312209/312252 (ID 22)					(7,154,838)	4,680,147				(2,474,691)	0%	0
312210/312253 (ID 25)					(17,833)	0				(17,833)	0%	0
312211/312254 (ID 85)					(18,741,290)	38,724				(18,702,566)	0%	0
312212/312255 (ID 90)					(389,393)	237,609				(151,784)	0%	0
312101 Capacity Fees			5,324,932							5,324,932	100%	5,324,932
312102 Capital Improvement Fund				5,081,116						5,081,116	100%	5,081,116
312103 New Supply Fund		(389,977)								(389,977)	100%	(389,977)
312104 Annex/Developer Fee				0						0	0%	0
312111 New Supply Debt Fund		741,513								741,513	100%	741,513
312112 Expansion Debt Fund			30,701,201							30,701,201	100%	30,701,201
312113 Replacement Debt Fund				6,639,144						6,639,144	0%	0
312121 New Supply CIF			0							0	100%	0
312122 Expansion CIF			0							0	100%	0
312123 Replacement CIF				0						0	0%	0
312261 Betterment CIF					0					0	0%	0
312413 State Loan Reserve							0			0	0%	0
312414 GO Bonds Reserve							917,708			917,708	0%	0
312416 Grants - CIP							0			0	0%	0
312419 2010 COPs Taxable BABs							13,155,639			13,155,639	0%	0
312421 2010 COPs TE - Reserve							1,030,688			1,030,688	0%	0
312422 2010 COPs BABs - Reserve							2,707,418			2,707,418	0%	0
TOTAL RESTRICTED	$0	$351,536	$36,026,133	$11,720,260	($60,749,316)	$22,873,257	$17,811,452	$0	$0	$28,033,323		$41,458,785
DESIGNATED RESERVES												
312229 Designated Betterment					$41,131,682					$41,131,682	0%	0
321203 New Supply Fee Reserve		23,604								23,604	100%	23,604
312412 Expansion Reserve			(22,544,902)							(22,544,902)	100%	(22,544,902)
321201 Replacement Reserve				15,739,451						15,739,451	0%	0
321202 Retiree Health Ins - OPEB (a)	0									0	0%	0
321202 Retiree Health Ins Reserve (b)	149,705									149,705	0%	0
TOTAL DESIGNATED	$149,705	$23,604	($22,544,902)	$15,739,451	$41,131,682	$0	$0	$0	$0	$34,499,540		($22,521,297)
TOAL RESTRICTED & DESIGNATED	**$149,705**	**$375,140**	**$13,481,232**	**$27,459,711**	**($19,617,634)**	**$22,873,257**	**$17,811,452**	**$0**	**$0**	**$62,532,863**		**$18,937,488**
GENERAL FUND (UNRESTRICTED)												
Annexation (Potable)									$11,798,099	$11,798,099	100%	$11,798,099
Annexation (Sewer)										0	0%	0
Operating									3,480,529	3,480,529	0%	0
11-215101 Developer Deposit									375,057	375,057	0%	0
77-215101|215111 Dev/Cell Site Dep									828,445	828,445	0%	0
312415 Lakeview Replacement									231,210	231,210	0%	0
312424 Highlands Golf Course, LLC									43,320	43,320	0%	0
TOTAL GENERAL FUND	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$16,756,661**	**$16,756,661**		**$11,798,099**
TOTALS BY FUND CATEGORY	**$149,705**	**$375,140**	**$13,481,232**	**$27,459,711**	**($19,617,634)**	**$22,873,257**	**$17,811,452**	**$0**	**$16,756,661**	**$79,289,524**		**$30,735,587**

Notes:
(1) Balance available unrestricted for expansion and new supply.

Otay Water District - Water
Exhibit W-5
Development of Equivalent Dwelling Units
For the Year Ended June 30, 2013

		Number of Meters (1)											
Class of Service	**Billed Usage**	**5/8"**	**3/4"**	**1"**	**1 1/2"**	**2"**	**3"**	**4"**	**6"**	**8"**	**10"**	**12"**	**Total**
Number of Meters													
Residential	0	1	43,186	1,463	14	4	0	0	0	0	0	0	44,668
Master Metered	0	0	41	186	245	224	34	61	6	3	0	0	800
Commercial & Public	0	679	336	389	291	404	32	28	8	0	5	0	2,172
Ag, Lds & Construction	0	0	103	262	383	466	5	6	2	0	0	0	1,227
Recycled	0	0	1	102	393	194	4	7	2	0	1	0	704
Temporary	0	0	7	9	6	2	0	67	0	0	0	0	91
Total Billed	0	680	43,674	2,411	1,332	1,294	75	169	18	3	6	0	49,662
Less: Temporary		0	7	9	6	2	0	67	0	0	0	0	91
Total Existing Permanent		680	43,667	2,402	1,326	1,292	75	102	18	3	6	0	49,571

	Equivalent Meters											
Class of Service	**5/8"**	**3/4"**	**1"**	**1 1/2"**	**2"**	**3"**	**4"**	**6"**	**8"**	**10"**	**12"**	
AWWA Weighting - 5/8" Meter	**1.00**	**1.00**	**2.50**	**5.00**	**8.00**	**16.00**	**25.00**	**50.00**	**80.00**	**115.00**	**168.75**	**Total**
Residential	1	43,186	3,658	70	32	0	0	0	0	0	0	46,947
Master Metered	0	41	465	1,225	1,792	544	1,525	300	240	0	0	6,132
Commercial & Public	679	336	973	1,455	3,232	512	700	400	0	575	0	8,862
Ag, Lds & Construction	0	103	655	1,915	3,728	80	150	100	0	0	0	6,731
Recycled	0	1	255	1,965	1,552	64	175	100	0	115	0	4,227
Temporary	0	0	0	0	0	0	0	0	0	0	0	0
Residential Meter Equivalency	**680**	**43,667**	**6,005**	**6,630**	**10,336**	**1,200**	**2,550**	**900**	**240**	**690**	**0**	**72,898**

Projected Ultimate EDUs (2)	**114,303**
Expansion EDUs (2)	**41,405**

Notes:
(1) Based on data from the utility billing system as of FY 2013.
(2) Based on data from the District on Land Use Demand email April 4, 2014.

Otay Water District - Water
Exhibit W-6
Development of Capacity Fee - Future

Count	Project Type	CIPNo	Project Title	Projected Project Cost (000s)	Expansion	Betterment	Replacement	New Supply	% CF Eligible	Capacity Fee
1	C	P2083	PS - 870-2 Pump Station Replacement (11,000 GPM)	$16,500	0.0%	0.0%	100.0%		0%	$0
2	RF	P2267	36-Inch Main Pumpouts and Air/Vacuum Ventilation Installations	435	0.0%	100.0%			0%	0
3	RF	P2282	Vehicle Capital Purchases	5,021	0.0%	0.0%	100.0%		0%	0
4	CF	P2285	Office Equipment and Furniture Capital Purchases	589	0.0%	0.0%	100.0%		0%	0
5	C	P2286	Field Equipment Capital Purchases	1,758	0.0%	0.0%	100.0%		0%	0
6	P	P2366	APCD Engine Replacements and Retrofits	3,488	0.0%	0.0%	100.0%		0%	0
7	P	P2382	Safety and Security Improvements	1,758	40.0%	0.0%	60.0%		40%	703
8	P	P2434	Rancho Del Rey Groundwater Well Development	8,700	0.0%	60.0%	0.0%	40.0%	0%	0
9	M	P2440	I-905 Utility Relocations	1,600	0.0%	0.0%	100.0%		0%	0
10	M	P2451	Otay Mesa Desalination Conveyance and Disinfection SystemOtay Mesa Desalination C	30,000	0.0%	60.0%	0.0%	40.0%	0%	0
11	CF	P2453	SR-11 Utility Relocations	2,250	0.0%	0.0%	100.0%		0%	0
12	C	P2466	Regional Training Facility	300	40.0%	60.0%	0.0%		40%	120
13	M	P2469	Information Technology Network and Hardware	2,509	40.0%	0.0%	60.0%		40%	1,004
14	C	P2470	Financial System Enhancements	2,322	40.0%	0.0%	60.0%		40%	929
15	M	P2477	Res - 624-1 Reservoir Cover Replacement	450	0.0%	0.0%	100.0%		0%	0
16	C	P2485	SCADA Communication System and Software Replacement	1,974	0.0%	0.0%	100.0%		0%	0
17	P	P2486	Asset Management Plan Condition Assessment and Data Acquisition	1,090	0.0%	0.0%	100.0%		0%	0
18	P	P2493	624-2 Reservoir Interior Coating and Upgrades	1,950	0.0%	0.0%	100.0%		0%	0
19	M	P2494	Multiple Species Conservation Plan	900	100.0%	0.0%	0.0%		100%	900
20	M	P2495	San Miguel Habitat Management/Mitigation Area	2,100	100.0%	0.0%	0.0%		100%	2,100
21	C	P2504	Regulatory Site Access Road and Pipeline Relocation	900	0.0%	50.0%	50.0%		0%	0
22	M	P2507	East Palomar Street Utility Relocation	940	0.0%	0.0%	100.0%		0%	0
23	M	P2508	Pipeline Cathodic Protection Replacement Program	300	0.0%	0.0%	100.0%		0%	0
24	M	P2511	North District - South District Interconnection System	37,300	40.0%	60.0%	0.0%		40%	14,920
25	M	P2515	870-1 Reservoir Paving	550	0.0%	0.0%	100.0%		0%	0
26	M	P2518	803-3 Reservoir Interior/Exterior Coating	450	0.0%	0.0%	100.0%		0%	0
27	M	P2519	832-2 Reservoir Interior/Exterior Coating	450	0.0%	0.0%	100.0%		0%	0
28	M	P2520	Motorola Mobile Radio Upgrade	100	0.0%	0.0%	100.0%		0%	0
29	C	P2529	711-2 Reservoir Interior & Exterior Coating	760	0.0%	0.0%	100.0%		0%	0
30	M	P2530	711-1 Reservoir Interior & Exterior Coating	940	0.0%	0.0%	100.0%		0%	0
31	C	P2531	944-1 Reservoir Interior & Exterior Coating	240	0.0%	0.0%	100.0%		0%	0
32	M	P2532	944-2 Reservoir Interior & Exterior Coating	950	0.0%	0.0%	100.0%		0%	0
33	M	P2533	1200-1 Reservoir Interior & Exterior Coating	365	0.0%	0.0%	100.0%		0%	0
34	M	P2534	978-1 Reservoir Interior & Exterior Coating	270	0.0%	0.0%	100.0%		0%	0
35	M	P2535	458-2 Reservoir Interior Coating	640	0.0%	0.0%	100.0%		0%	0
36	M	P2537	Operations Yard Property Acquisition Improvements	350	100.0%	0.0%	0.0%		100%	350
37	CF	P2538	Administration and Operations Building Fire Sprinkler Replacement Program	110	0.0%	0.0%	100.0%		0%	0
38	MF	P2539	South Bay Bus Rapid Transit (BRT) Utility Relocations	375	0.0%	0.0%	100.0%		0%	0
39	MF	P2540	Work Management System Replacement	700	40.0%	0.0%	60.0%		40%	280
40	M	P2541	624 Pressure Zone PRSs	600	0.0%	100.0%	0.0%		0%	0
41	M	P2542	850-3 Reservoir Interior Coating	480	0.0%	0.0%	100.0%		0%	0
42	MF	P2543	850-1 Reservoir Interior/Exterior Coating	460	0.0%	0.0%	100.0%		0%	0
43	MF	P2544	850-2 Reservoir Interior/Exterior Reservoir Coating	940	0.0%	0.0%	100.0%		0%	0
44	M	P2545	980-1 Reservoir Interior Exterior Coating	1,250	0.0%	0.0%	100.0%		0%	0
45	C	P2546	980-2 Reservoir Interior/Exterior Coating	1,250	0.0%	0.0%	100.0%		0%	0
46	M	P2547	Main Breaker Instllation at the District Administration Building	105	40.0%	60.0%	0.0%		40%	42
47	C	P2548	Sump Pump Installation at the 980-1 & 2 Reservoirs	35	0.0%	0.0%	100.0%		0%	0
48	P	P2549	Fuel System upgrade	30	0.0%	0.0%	100.0%		0%	0

Otay Water District - Water
Exhibit W-6
Development of Capacity Fee - Future

Count	Project Type	CIPNo	Project Title	Projected Project Cost (000s)	Expansion	Betterment	Replacement	New Supply	% CF Eligible	Capacity Fee
49	C	P2550	Fuel Island upgrade	75	0.0%	0.0%	100.0%		0%	0
50	C	P2551	Blossom Lane Helix WD and Otay WD Interconnection	400	0.0%	100.0%	0.0%		0%	0
51	CF	P2552	South Barcelona Helix WD and Otay WD Interconnection	1,200	0.0%	100.0%	0.0%		0%	0
52	CF	P2553	Heritage Road Bridge Replacement and Utility Relocation	600	40.0%	0.0%	60.0%		40%	240
53	CF	R2028	RecPL - 8-Inch, 680 Zone, Heritage Road - Santa Victoria/Otay Valley	600	100.0%	0.0%	0.0%		100%	600
54	CF	R2042	RecPL - 8-Inch, 927 Zone, Rock Mountain Road - SR-125/EastLake	140	100.0%	0.0%	0.0%		100%	140
55	CF	R2047	RecPL - 12-Inch, 680 Zone, La Media Road - Birch/Rock Mountain	450	100.0%	0.0%	0.0%		100%	450
56	C	R2048	RecPL - Otay Mesa Distribution Pipelines and Conversions	2,150	100.0%	0.0%	0.0%		100%	2,150
57	C	R2058	RecPL - 16-Inch, 860 Zone, Airway Road - Otay Mesa/Alta	3,500	100.0%	0.0%	0.0%		100%	3,500
58	C	R2077	RecPL - 24-Inch, 860 Zone, Alta Road - Alta Gate/Airway	4,500	100.0%	0.0%	0.0%		100%	4,500
59	R	R2082	RecPL - 24-Inch, 680 Zone, Olympic Parkway - Village 2/Heritage	1,747	100.0%	0.0%	0.0%		100%	1,747
60	R	R2083	RecPL - 20-Inch, 680 Zone, Heritage Road - Village 2/Olympic	400	100.0%	0.0%	0.0%		100%	400
61	R	R2084	RecPL - 20-Inch, 680 Zone, Village 2 - Heritage/La Media	970	100.0%	0.0%	0.0%		100%	970
62	R	R2085	RecPL - 20-Inch, 680 Zone, La Media - State/Olympic	600	100.0%	0.0%	0.0%		100%	600
63	C	R2087	RecPL - 24-Inch, 927 Zone, Wueste Road - Olympic/Otay WTP	7,000	100.0%	0.0%	0.0%		100%	7,000
64	C	R2107	RWCWRF Screening Compactor and Chlorine Injectors Enclosure	215	0.0%	0.0%	100.0%		0%	0
65	R	R2109	Sweetwater River Wooden Trestle Improvement for the Recycled Water Forcemain	600	0.0%	0.0%	100.0%		0%	0
66	C	R2110	RecPS - 944-1 Optimization and Pressure Zone modifications	200	100.0%	0.0%	0.0%		100%	200
67	C	R2111	RWCWRF - RAS Pump Replacement	620	0.0%	0.0%	100.0%		0%	0
68	M	R2112	450-1 Disinfection Facility Rehabilitation	190	0.0%	0.0%	100.0%		0%	0
69	C	R2113	Chlorine 1-ton Cyliner Emergency Close Valve	37	0.0%	100.0%	0.0%		0%	0
70	M	R2114	Large Recycle Pump Replacement	100	0.0%	0.0%	100.0%		0%	0
1		P2002	PS - Proctor Valley PS (10,000 GPM)	11,050	40%	60%	0%		40%	4,420
2		P2017	PL - EastLake Oversizing Reimbursement Agreement	630	40%	60%	0%		40%	252
3		P2033	PL - 16-Inch, 1296 Zone, Melody Road - Campo/Presilla	1,826	100.0%	0.0%	0.0%		100%	1,826
4		P2037	Res - 980-3 Reservoir 13 MG	15,200	100.0%	0.0%	0.0%		100%	15,200
5		P2040	Res - 1655-1 Reservoir 0.5 MG	2,055	0.0%	50.0%	50.0%		0%	0
6		P2053	PL - 20-Inch, 944 Zone, Campo Road - 944-1 Pump Station/944 Reservoirs	725	100.0%	0.0%	0.0%		100%	725
7		P2056	PL - 16-Inch, 1296 Zone, Jamul Drive Parallel	1,325	0.0%	100.0%	0.0%		0%	0
8		P2058	PL - 24-Inch, 1296 Zone, Proctor Valley Road - Pioneer/Campo	1,200	66.0%	34.0%	0.0%		66%	792
9		P2066	PL - 30-Inch, 870 Zone, Otay Mesa R/W - Alta/State Prison	608	50.0%	25.0%	25.0%		50%	304
10		P2067	PL - 24-Inch, 870 Zone, Otay Mesa R/W - State Prison/Otay Mesa	810	20.0%	40.0%	40.0%		20%	162
11		P2104	PL - 12-Inch, 711 Zone, La Media Road - Birch/Rock Mountain	833	100.0%	0.0%	0.0%		100%	833
12		P2106	PL - 12-Inch, 711 Zone, La Media Road - Rock Mountain/Otay Valley	210	100.0%	0.0%	0.0%		100%	210
13		P2107	PL - 12-Inch, 711 Zone, Rock Mountain Road - La Media/SR 125	722	100.0%	0.0%	0.0%		100%	722
14		P2116	PL - 12-Inch, 711 Zone, Rock Mountain Road - SR 125/EastLake	270	100.0%	0.0%	0.0%		100%	270
15		P2122	PL - 20-Inch, 711 Zone, OTC to Hunte Parkway	225	100.0%	0.0%	0.0%		100%	225
16		P2135	PL - 24-Inch, 980 Zone, Otay Lakes Road - Wueste/Loop	390	100.0%	0.0%	0.0%		100%	390
17		P2137	PL - 20-Inch, 980 Zone, Otay Lakes Road - Loop/P2138	190	100.0%	0.0%	0.0%		100%	190
18		P2138	PL - 20-Inch, 980 Zone, Otay Lakes Road to 980-4 Reservoir	390	100.0%	0.0%	0.0%		100%	390
19		P2139	PL - 20-Inch, 980 Zone, Otay Lakes Road - P2138/Loop	535	100.0%	0.0%	0.0%		100%	535
20		P2142	Res - 1296-4 Reservoir 10 MG	11,700	100.0%	0.0%	0.0%		100%	11,700
21		P2146	PL - 20-Inch, 980 Zone, Otay Lakes Road - P2139/End	535	100.0%	0.0%	0.0%		100%	535
22		P2148	PL - 16-Inch, 850 Zone, Jamacha Boulevard - Sweetwater Springs/Trace	550	0.0%	100.0%	0.0%		0%	0
23		P2150	PL - 16-Inch, 458 Zone, East Palomar Street - Medical Center/Raven	384	0.0%	100.0%	0.0%		0%	0
24		P2156	PL - 12-Inch, 1296 Zone, Olive Vista Drive Parallel	225	0.0%	100.0%	0.0%		0%	0
25		P2171	PL - 30-Inch, 1296 Zone, Proctor Valley Road - Pioneer/Melody	563	66.0%	34.0%	0.0%		66%	372
26		P2174	PS - 1090-1 Pump Station Replacement (280 GPM)	820	0.0%	0.0%	100.0%		0%	0
27		P2176	Res - 1090-2 Reservoir 0.5 MG	1,235	50.0%	50.0%	0.0%		50%	618
28		P2177	PL - 30-Inch, 1296 Zone, Melody Road to 1296-4 Reservoir	945	66.0%	34.0%	0.0%		66%	624
29		P2181	PL - 30-Inch, 1296 Zone, Proctor Valley Road - Proctor Valley PS/Millar Ranch	5,900	40.0%	60.0%	0.0%		40%	2,360
30		P2188	PL - 24-Inch, 832 Zone, Campo Road - Steele Canyon/944-1 Pump Station	1,485	100.0%	0.0%	0.0%		100%	1,485
31		P2190	PL - 10-Inch, 1485 Zone, Jamul Highlands Road to Presilla Drive	228	0.0%	100.0%	0.0%		0%	0
32		P2195	PL - 30-Inch, 640 Zone, Campo Road - Regulatory Site/Millar Ranch	2,592	75.0%	0.0%	25.0%		75%	1,944
33		P2196	PL - 30-Inch, 640 Zone, Millar Ranch Road to 832-1 Pump Station	495	75.0%	0.0%	25.0%		75%	371
34		P2197	PL - 24-Inch, 832 Zone, 832-1 Pump Station to 832 Reservoirs	270	100.0%	0.0%	0.0%		100%	270

Otay Water District - Water
Exhibit W-6
Development of Capacity Fee - Future

Count	Project Type	CIPNo	Project Title	Projected Project Cost (000s)	Expansion	Betterment	Replacement	New Supply	% CF Eligible	Capacity Fee
35		P2198	PL - 20-Inch, 832 Zone, 832 Reservoirs to Fair Oaks Drive	810	100.0%	0.0%	0.0%		100%	810
36		P2203	PL - 30-Inch, 1296 Zone, Proctor Valley Road - Millar Ranch/Pioneer	2,700	40.0%	60.0%	0.0%		40%	1,080
37		P2204	PL - 24-Inch, 1296 Zone, Pioneer Way - Proctor Valley/1296 Reservoirs	2,100	40.0%	60.0%	0.0%		40%	840
38		P2228	Res - 870-2 Reservoir 10 MG	11,700	100.0%	0.0%	0.0%		100%	11,700
39		P2233	Res - 640-3 Emergency Reservoir 10 MG	8,000	100.0%	0.0%	0.0%		100%	8,000
40		P2235	Res - 624-4 Emergency Reservoir 40 MG	32,000	100.0%	0.0%	0.0%		100%	32,000
41		P2256	PS - 978-2 Pump Station (1,500 GPM)	900	0.0%	100.0%	0.0%		0%	0
42		P2258	PS - Lower Otay Pump Station Phase 1 (9,000 GPM)	7,805	40.0%	60.0%	0.0%		40%	3,122
43		P2288	Otay WTP Capacity Increase Participation/Purchase (30 MGD)	40,000	40.0%	60.0%	0.0%		40%	16,000
44		P2296	Dis - 624-2 Reservoir Disinfection Facility	1,400	40.0%	60.0%	0.0%		40%	560
45		P2298	Dis - 978-1 Pump Station Disinfection Facility	250	0.0%	100.0%	0.0%		0%	0
46		P2301	Dis - 1296-1 Pump Station Disinfection Facility	850	40.0%	60.0%	0.0%		40%	340
47		P2303	Dis - 1485 Reservoir(s) Recirculation and Disinfection Facility	450	0.0%	100.0%	0.0%		0%	0
48		P2304	Water System Facilities Seismic Upgrades	1,200	40.0%	60.0%	0.0%		40%	480
49		P2306	Engine Power Equipment Repair and Replacement Program	14,000	0.0%	0.0%	100.0%		0%	0
50		P2316	Building Roof Repair and Replacement Program	3,000	0.0%	0.0%	100.0%		0%	0
51		P2318	PL - 20-Inch, 657 Zone, Summit Cross-Tie and 36-Inch Main Connections	600	0.0%	100.0%	0.0%		0%	0
52		P2319	Dis - 870-1 Reservoir Phase 2 Chloramination Facility	400	100.0%	0.0%	0.0%		100%	400
53		P2336	Central Area Operations Yard and Facilities	3,500	40.0%	60.0%	0.0%		40%	1,400
54		P2348	Daley Ranch Well Field Development	6,500	40.0%	60.0%	0.0%		40%	2,600
55		P2356	PL - 12-Inch, 803 Zone, Jamul Drive Permastran Pipeline Replacement	765	0.0%	0.0%	100.0%		0%	0
56		P2374	PL - 30-Inch, 870 Zone, 870-2 Reservoir to 870-1 Reservoir	1,061	100.0%	0.0%	0.0%		100%	1,061
57		P2387	PL - 12-Inch, 832 Zone, Steele Canyon Road - Via Caliente/Campo	440	0.0%	100.0%	0.0%		0%	0
58		P2388	Flexible Membrane Cover Tension System Repair and Replacement	7,200	0.0%	0.0%	100.0%		0%	0
59		P2390	Siempre Viva Bridge Pipeline Crossings	230	100.0%	0.0%	0.0%		100%	230
60		P2392	PS - Lower Otay Pump Station Expansion Phase 2 (9,000 GPM)	450	40.0%	60.0%	0.0%		40%	180
61		P2393	PS - Pointe Hydro Pump Station Expansion (400 GPM)	150	0.0%	100.0%	0.0%		0%	0
62		P2395	Perdue WTP Capacity Participation/Purchase (5 MGD)	15,000	40.0%	60.0%	0.0%		40%	6,000
63		P2399	PL - 30-Inch, 980 Zone, 980 Reservoirs to Hunte Parkway	5,480	100.0%	0.0%	0.0%		100%	5,480
64		P2401	PL - 12-Inch, 624 Zone, Otay Valley Road - Heritage/SR 125	1,251	100.0%	0.0%	0.0%		100%	1,251
65		P2402	PL - 12-Inch, 624 Zone, La Media Road - Village 7/Otay Valley	444	100.0%	0.0%	0.0%		100%	444
66		P2403	PL - 12-Inch, 624 Zone, Heritage Road - Olympic/Otay Valley	925	100.0%	0.0%	0.0%		100%	925
67		P2404	PL - 12-Inch, 624 Zone, Rock Mountain Road - Village 4/Otay Valley	252	100.0%	0.0%	0.0%		100%	252
68		P2405	PL - 624/340 PRS, Paseo Ranchero and Otay Valley Road	125	0.0%	100.0%	0.0%		0%	0
69		P2406	PL - 711/624 PRS, EastLake Parkway and Rock Mountain Road	125	100.0%	0.0%	0.0%		100%	125
70		P2407	Dictionary Hill Fire Flow Capacity Pipeline Enhancements	1,500	0.0%	100.0%	0.0%		0%	0
71		P2411	PL - 1296/944 PRS Upgrade 1296-1 Pump Station Site	350	0.0%	100.0%	0.0%		0%	0
72		P2412	PL - 944/832 PRS Upgrade 944-1 Pump Station Site	550	0.0%	100.0%	0.0%		0%	0
73		P2413	PL - 920/803 PRS Jamul Drive - Alta Loma Drive	700	0.0%	100.0%	0.0%		0%	0
74		P2415	Raw Water Supply Acquisition Feasibility Assessment	500	40.0%	60.0%	0.0%		40%	200
75		P2426	PL - 1296/920 PRS Jamul Drive - Mexican Canyon Road	700	0.0%	100.0%	0.0%		0%	0
76		P2427	PL - 20-Inch, Otay Lakes Road	4,800	40.0%	60.0%	0.0%		40%	1,920
77		P2430	PL - 30-Inch, 980 Zone, Proctor Valley Road - PB Bndy/Proctor Valley PS	10,500	40.0%	60.0%	0.0%		40%	4,200
78		P2431	Res - 980-4 Reservoir 5 MG	5,900	100.0%	0.0%	0.0%		100%	5,900
79		P2433	978-1 Pump Station Sonic Meter	80	0.0%	100.0%	0.0%		0%	0
80		P2435	PL - 30-Inch, 980 Zone, Proctor Valley Road to Proctor Valley PS	6,134	40.0%	60.0%	0.0%		40%	2,454
81		P2437	Dis - 624-4 Reservoir Disinfection Facility	1,400	100.0%	0.0%	0.0%		100%	1,400
82		P2450	Otay River Groundwater Well Demineralization Project	11,030	0.0%	60.0%	0.0%		0%	0
83		P2454	Vaults and Meter, Alta Road and Use Area	465	0.0%	0.0%	100.0%		0%	0
84		P2456	Air and Vacuum Valve Upgrades	2,624	0.0%	26.0%	74.0%		0%	0
85		P2464	San Diego 17 Pump Station and Flow Control Facility	22,000	40.0%	60.0%	0.0%		40%	8,800
86		P2467	San Diego Formation Groundwater Feasibility Study	1,800	0.0%	60.0%	0.0%		0%	0
87		P2471	850/657 PRS at La Presa Pump Station	310	0.0%	100.0%	0.0%		0%	0
88		P2472	Water Supply Feasibility Studies	175	40.0%	60.0%	0.0%		40%	70
89		P2476	Dis - 1090-1 Pump Station Disinfection System Upgrade	150	0.0%	100.0%	0.0%		0%	0
90		P2478	Administration Building Engine/Generator Set	120	0.0%	0.0%	100.0%		0%	0

Otay Water District - Water
Exhibit W-6
Development of Capacity Fee - Future

Count	Project Type	CIPNo	Project Title	Projected Project Cost (000s)	Expansion	Betterment	Replacement	New Supply	% CF Eligible	Capacity Fee
91		P2481	Middle Sweetwater River Basin Groundwater Well System	8,800	0.0%	60.0%	0.0%		0%	0
92		P2482	Otay Mesa Lot 7 Groundwater Well System	4,500	0.0%	60.0%	0.0%		0%	0
93		P2483	PS - 870-1Pump Motor and Switch Gear Replacement	130	0.0%	0.0%	100.0%		0%	0
94		P2496	Otay Lakes Road Utility Relocations	100	0.0%	0.0%	100.0%		0%	0
95		P2497	Solar Power Feasibility Study	150	100.0%	0.0%	0.0%		100%	150
96		P2498	Brine Disposal Pipeline Otay River Demineralization Plant to South Bay Outfall	6,147	0.0%	60.0%	0.0%		0%	0
97		P2499	Otay Mesa Operations Yard and Facilities	3,000	0.0%	0.0%	100.0%		0%	0
98		P2500	Padre Dam - Otay Interconnection Dehesa Valley	800	0.0%	100.0%	0.0%		0%	0
99		P2516	PL - 12-Inch, 640 Zone, Jamacha Road - Darby/Osage	450	0.0%	0.0%	100.0%		0%	0
100		P2517	Chase Avenue Helix and Otay Interconnection	400	0.0%	100.0%	0.0%		0%	0
101		P2522	Potable Water Pipeline Replacement Program	1,200	0.0%	0.0%	100.0%		0%	0
102		P2523	Potable Water Valve Replacement Program	200	0.0%	0.0%	100.0%		0%	0
103		P2524	Potable Water Pipeline Appurtenances Replacement Program	80	0.0%	0.0%	100.0%		0%	0
104		P2525	Potable Water Pump Station Rehabilitation Program	800	0.0%	0.0%	100.0%		0%	0
105		P2526	Potable Water Reservoir Rehabilitation Program	1,000	0.0%	0.0%	100.0%		0%	0
106		P2528	30-Inch Potable Water Pipeline Manifold at 624 Reservoirs	7,000	40.0%	60.0%	0.0%		40%	2,800
107		R2023	RecRes - 450-2 Reservoir 4 MG	4,800	100.0%	0.0%	0.0%		100%	4,800
108		R2034	RecRes - 860-1 Reservoir 4 MG	3,800	100.0%	0.0%	0.0%		100%	3,800
109		R2035	RecPS - 860-1 Pump Station (3,400 GPM)	5,800	100.0%	0.0%	0.0%		100%	5,800
110		R2037	RecPL - 8-Inch, 680 Zone, La Media Road - Rock Mountain/Otay Valley	164	100.0%	0.0%	0.0%		100%	164
111		R2038	RecPL - 8-Inch, 680 Zone, Rock Mountain Road - La Media/Otay Valley	296	100.0%	0.0%	0.0%		100%	296
112		R2043	RecPL - 8-Inch, 927 Zone, Rock Mountain Road - La Media/SR 125	123	100.0%	0.0%	0.0%		100%	123
113		R2052	RecPL - 30-Inch, 450 Zone, Tijuana Valley - Otay Mesa Place/450-2 Reservoir	14,400	100.0%	0.0%	0.0%		100%	14,400
114		R2053	RWCWRF - R.O. Building Remodel and Office Furniture	590	100.0%	0.0%	0.0%		100%	590
115		R2055	RWCWRF - Effluent Meter	90	0.0%	100.0%	0.0%		0%	0
116		R2067	RWCWRF - Waste Backwash Water Pipeline	220	0.0%	100.0%	0.0%		0%	0
117		R2068	RWCWRF - Load Equalization Tank	1,200	0.0%	100.0%	0.0%		0%	0
118		R2072	RecPL - 16-Inch, 860 Zone, Otay Mesa Road - 860-1 Pump Station/Heritage	2,500	100.0%	0.0%	0.0%		100%	2,500
119		R2073	RecPL - 24-Inch, 860 Zone, Alta Road - Airway/Border	4,750	100.0%	0.0%	0.0%		100%	4,750
120		R2075	Brine Disposal Pipeline Otay Mesa to South Bay Outfall	22,300	100.0%	0.0%	0.0%		100%	22,300
121		R2078	RecPL - 8-Inch, 680 Zone, Otay Valley Road - SR 125/Heritage	560	100.0%	0.0%	0.0%		100%	560
122		R2079	RecPL - 6-Inch, 450 Zone, Otay Valley Road - Otay Valley/Entertainment	150	100.0%	0.0%	0.0%		100%	150
123		R2080	RecPL - 24-Inch, 680 Zone, Olympic Parkway - Medical Center/Heritage	2,000	100.0%	0.0%	0.0%		100%	2,000
124		R2081	RecPL - 20-Inch, 927 Zone, Lane Avenue - Proctor Valley/Pond No. 1	1,210	100.0%	0.0%	0.0%		100%	1,210
125		R2088	RecPL - 30-Inch, 860 Zone, County Jail - Roll Reservoir/860-1 Reservoir	3,500	100.0%	0.0%	0.0%		100%	3,500
126		R2089	North District Distribution Pipelines and Conversions	14,220	0.0%	60.0%	0.0%		0%	0
127		R2093	MBR City of Chula Vista	11,000	0.0%	60.0%	0.0%		0%	0
128		R2094	Potable Irrigation Meters to Recycled Water Conversions	2,000	0.0%	60.0%	0.0%		0%	0
129		R2095	RWCWRF - Filter Storage Reservoir Cover Replacement	75	0.0%	0.0%	100.0%		0%	0
130		R2097	RWCWRF - Salt Creek Live Stream Discharge	320	100.0%	0.0%	0.0%		100%	320
131		R2103	Recycled Water Pump Station Rehabilitation Program	150	0.0%	0.0%	100.0%		0%	0
132		R2104	Recycled Water Reservoir Rehabilitation Program	100	0.0%	0.0%	100.0%		0%	0
133		R2105	RWCWRF Systems Replacement/Rehabilitation Program	400	0.0%	0.0%	100.0%		0%	0
134		R2106	Recycled Water Pipeline Replacement Program	240	0.0%	0.0%	100.0%		0%	0
135		R2115	RecPS - 944-1 Pump Station Upgrade Phase 2 (10,000 GPM)	1,400	100.0%	0.0%	0.0%		100%	1,400
Total				**$607,915**					**(in $100s)**	**$283,405**

Expansion Equivalent Dwelling Units				41,405
Future Capacity Water Fee (Per EDU)				$6,845
Plus: ENR update per Ordinance 534				
Current Index	6/2014	10,739.43		
Base Index	06/30/13	10,304.68		
Total Capacity Fee with ENR	Index	1.04		**$7,134**

Otay Water District - Water
Exhibit W-7
Current and Proposed Water Capacity Fee

Item			CF 2013/2014	
Existing Capacity Fee Plant			$592,228,550	See Exhibit W-1
Future Capacity Fee Plant			283,405,230	See Exhibit W-6
Total Capacity Fee			**$875,633,780**	
Existing EDUs			72,898	See Exhibit W-1
Growth EDUs			41,405	See Exhibit W-6
Total EDUs			**114,303**	
Total Capacity Fee			$7,661	
Plus: ENR update per Ordinance 534				
Current Index	6/2014	10,739.43		
Base Index	06/30/13	10,304.68		
Total Capacity Fee with ENR	Index	1.04	**$7,984**	
Current Water Capacity Fee (1)			$8,237	
Calculated Water Capacity Fee (2)			7,984	
		Difference	-$253	

Meter Size (3)	Meter Ratio (4)	Current	Capacity Fee 2013/2014 Calculated
3/4"	1.00	8,237	7,984
1"	2.50	20,593	19,960
1-1/2"	5.00	41,185	39,920
2"	8.00	65,896	63,872
3"	16.00	131,792	127,744
4"	25.00	205,926	199,600
6"	50.00	411,852	399,200
8"	80.00	658,962	638,720
10"	115.00	947,258	918,160

Notes:
(1) Current capacity fee as of ENR adjustment on 6/2014.
(2) Based on "Combined" methodology established in AWWA M1, Sixth Edition, Table VI.2-1, page 273.
(3) Recommended for meter sizes larger than 4-inch should be based on projected usage.
(4) Based on AWWA meter equivalency from AWWA M1 Manual, Sixth Edition, Table VI.2-5, page 274.

Otay Water District - Water
Exhibit W-8
Development of Capacity Fee - New Supply

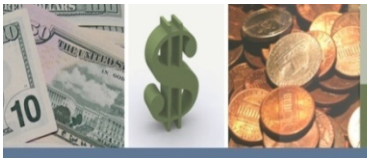
Count	Project Type	CIPNo	Project Title	Projected Project Cost	Expansion	Betterment	Replacement	New Supply	% CF Eligible	Capacity Fee
8		P2434	Rancho Del Rey Groundwater Well Development	$8,700	0.0%	60.0%	0.0%	40.0%	40%	$3,480
10		P2451	Otay Mesa Desalination Conveyance and Disinfection System	30,000	0.0%	60.0%	0.0%	40.0%	40%	12,000
82		P2450	Otay River Groundwater Well Demineralization Project	11,030	0.0%	60.0%	0.0%	40.0%	40%	4,412
86		P2467	San Diego Formation Groundwater Feasibility Study	1,800	0.0%	60.0%	0.0%	40.0%	40%	720
91		P2481	Middle Sweetwater River Basin Groundwater Well System	8,800	0.0%	60.0%	0.0%	40.0%	40%	3,520
92		P2482	Otay Mesa Lot 7 Groundwater Well System	4,500	0.0%	60.0%	0.0%	40.0%	40%	1,800
96		P2498	Brine Disposal Pipeline Otay River Demineralization Plant to South Bay Outfall	6,147	0.0%	60.0%	0.0%	40.0%	40%	2,459
126		R2089	North District Distribution Pipelines and Conversions	14,220	0.0%	60.0%	0.0%	40.0%	40%	5,688
126		R2093	MBR City of Chula Vista	11,000	0.0%	60.0%	0.0%	40.0%	40%	4,400
128		R2094	Potable Irrigation Converting to Recycled Water Conversions	2,000	0.0%	60.0%	0.0%	40.0%	40%	800
				$98,197						$39,279
Total				**$98,197**						**$39,279**

Expansion Equivalent Dwelling Units (1) 41,405

New Supply Water Fee per EDU **$949**

Plus: ENR update per Ordinance 534			
Current Index	6/2014	10,739.43	
Base Index	06/30/13	10,304.68	
Total New Supply with ENR	Index	1.04	**$989**

Notes:
(1) Based on data from the utility billing system as of June 30, 2013 and Land Use Demand email April 4, 2014. See Exhibit W-5.



Sewer Technical Appendix

Otay Water District - Sewer
Exhibit S-1
Development of Capacity Fee - Buy-In

Plant Description	Original Cost (1)	Accumulated Depreciation	Original Cost Less Depr.	Reproduction Cost (2)	Reproduction Cost Less Depr.	Pipe Replacement Cost	Pipe Replacement Cost Less Depr.	Capacity Fee= RCLND + RCLND-Pipe
	OC		OCLD	RC	RCLND	RC-Pipe (3)	RCLND-Pipe	
Sewer								
Land	$28,200	$0	$28,200	$29,724	$29,724	$0	$0	$29,724
Field Equipment	27,298	24,075	3,223	32,833	3,877	0	0	3,877
Chlorination	181,718	117,164	64,554	266,143	94,115	0	0	94,115
Contributed	0	0	0	0	0	0	0	0
Capitalized Interest	862,003	337,631	524,372	1,373,971	821,589	0	0	821,589
Jamacha Sewer Basin	17,750,516	14,284,838	3,465,678	35,047,045	6,443,818	0	0	6,443,818
Maps & Plans	235,966	185,504	50,462	825,150	188,093	0	0	188,093
Main Pipe	604,156	229,236	374,919	974,880	554,612	101,982,000	13,952,550	13,952,550
Pump Stations	3,624	3,624	0	6,472	0	0	0	0
Pumps	22,304	21,526	778	37,856	979	0	0	979
Power	225,767	166,109	59,659	316,710	83,045	0	0	83,045
Repairs	0	0	0	0	0	0	0	0
Security	26,267	26,267	0	71,914	0	0	0	0
Jamacha Sewer Basin	520,959	166,365	354,593	1,022,636	645,256	0	0	645,256
Sewer Pipes	3,235,551	13,352	3,222,199	3,250,273	3,232,006	0	0	3,232,006
Sewer Pumps and Valves	224,650	174,554	50,096	317,331	54,685	0	0	54,685
Sewer Plastic Water Service	99,166	32,721	66,445	192,204	77,114	0	0	77,114
Pump Stations	6,123,709	3,905,678	2,218,031	19,617,649	5,430,564	0	0	5,430,564
Spring Valley Sanitation District	779,470	385,122	394,349	856,775	406,803	0	0	406,803
Total Sewer	$30,951,324	$20,073,766	$10,877,558	$64,239,566	$18,066,280	$101,982,000	$13,952,550	$31,464,219
Total	**$30,951,324**	**$20,073,766**	**$10,877,558**	**$64,239,566**	**$18,066,280**	**$101,982,000**	**$13,952,550**	**$31,464,219**

Less: Outstanding Debt Principal (4)	0
Capital Fund Reserves (5)	0
Past Interest Payments (6)	9,933,692
Total Net Plant	**$41,397,911**
Existing Equivalent Dwelling Units (7)	6,741
Buy-In Capacity Fee per EDU (8)	**$6,141**

Plus: ENR update per Ordinance 534			
Current Index	06/01/14	10,739.43	
Base Index	06/30/13	10,304.68	
Total Capacity Fee with ENR	Index	1.04	**$6,400**

(1) Asset listing as of June 30, 2013.
(2) Based on specific in service date of asset and June 2013 Engineering News Record, for LA construction cost index.
(3) Based on pipe inventory and $25 per inch diameter. See Exhibit S-2
(4) Remaining principal as of June 30, 2013. See Exhibit S-3A.
(5) Cash reserves as of December 2013 which are CF eligible. See Exhibit S-4.
(6) Past interest payments from 1959 to 2008 which were not capitalized; net of depreciation at 50 year average life. See Exhibit S-3B.
(7) Based on 2010 study information, See Exhibit S-5 with added EDUs 2009 to Feb 2014 per District email 4/2014.
(8) Based on "buy-in" methodology established in AWWA M1, Sixth Edition, Table VI.2-1, page 269.

Otay Water District - Sewer
Exhibit S-2
Development of Pipe Replacement Cost

Pipe cost based on dollars per inch diameter 2014 = $25

GRAVITY SEWER MAINS				SEWER FORCE MAINS				TOTAL
DIAMETER INCH	MATERIAL TYPE	LENGTH FEET	REPLACEMENT COST	DIAMETER INCH	MATERIAL TYPE	LENGTH FEET	REPLACEMENT COST	
3	PVC	350	$26,250	2	PVC	340	$17,000	
4	ABS	442	44,200	3	PVC	29	2,175	
4	VCP	31	3,100					
4	PVC	455	45,500	4	PVC	1,830	183,000	
6	DIP	2,612	391,800	6	PVC	1,624	243,600	
6	PVC	38	5,700					
				12	DIP	116	34,800	
8	ABS	143,030	28,606,000	12	PVC	4,909	1,472,700	
8	STL	91	18,200			**Total**	**$1,953,275**	
8	HDPE	199	39,800					
8	PVC	191,430	38,286,000					
8	VCP	35,249	7,049,800					
10	PVC	21,828	5,457,000					
10	VCP	3,045	761,250					
12	ABS	2,612	783,600					
12	DIP	355	106,500					
12	PVC	5,005	1,501,500					
15	PVC	19,813	7,429,875					
18	PVC	10,013	4,505,850					
21	PVC	2,501	1,313,025					
27	PVC	5,413	3,653,775					
		Total	**$100,028,725**					

	Useful Life	Rep. Cost		Useful Life	Rep. Cost	Rep. Cost
Contributed Pipelines		$74,516,350				
Otay Owned	50	25,512,375				
Total		**$100,028,725**	Assume no contributed assets	50	**$1,953,275**	**$101,982,000**
Assume 8" and smaller were contributed						

Yearly Depreciation	Average Age (1)	Accumulated Depreciation	Replacement Cost Less Depreciation	Yearly Depreciation	Average Age (1)	Accumulated Depreciation	Replacement Cost Less Depreciation	Replacement Cost Less Depreciation
$510,248	24.6	$12,552,089	**$12,960,287**	$39,066	24.6	$961,011	**$992,264**	**$13,952,550**

(1) Average age based on 2010 study information.

Otay Water District - Sewer
Exhibit S-3A
Development of Sewer Debt
For the Year Ended June 30, 2013

Debt Name	Principal	Interest		TOTAL (1)
I. Debt Status:				
Original Debt	**$0**			**$0**
# of Years/Rate	0.00%			
II. Principal and Interest Payments:				
2014	$0	$0	$0	$0
2015	0	0	0	0
2016	0	0	0	0
2017	0	0	0	0
2018	0	0	0	0
2019	0	0	0	0
2020	0	0	0	0
2021	0	0	0	0
2022	0	0	0	0
2023	0	0	0	0
2024	0	0	0	0
2025	0	0	0	0
2026	0	0	0	0
2027	0	0	0	0
2028	0	0	0	0
2029	0	0	0	0
2030	0	0	0	0
2031	0	0	0	0
2032	0	0	0	0
2033	0	0	0	0
2034	0	0	0	0
2035	0	0	0	0
2036	0	0	0	0
2037	0	0	0	0
2038	0	0	0	0
2039	0	0	0	0
2040	0	0	0	0
2041	0	0	0	0
TOTAL	**$0**	**$0**	**$0**	**$0**

(1) The sewer debt was paid off in 2011.

Otay Water District - Sewer
Exhibit S-3B
Development of Past Interest Payments

Year	Total	Sewer	Water	CPI Escalation Factor 2008	Present Day Dollars Sewer	Present Day Dollars Water	CPI Escalation Factor 2013	Present Day Dollars Sewer	Present Day Dollars Water	Average Age	YTD	Remaining	Depreciated Sewer	Depreciated Water	Present Dollars Less Depr. Sewer	Present Dollars Less Depr. Water
2008	2,601,252	47,277	2,553,975	1.09	51,683	2,791,997	1.07	$50,788	$2,743,663	50	6	44	$6,095	$329,240	$44,694	$2,414,424
2007	950,479	58,066	892,413	1.03	59,948	921,344	1.12	64,783	995,641	50	7	43	9,070	139,390	55,713	856,252
2006	959,225	68,491	890,734	1.06	72,330	940,660	1.14	78,163	1,016,515	50	8	42	12,506	162,642	65,657	853,872
2005	1,327,844	78,562	1,249,282	1.09	85,786	1,364,158	1.18	92,704	1,474,164	50	9	41	16,687	265,350	76,017	1,208,814
2004	1,252,307	88,293	1,164,014	1.13	99,946	1,317,638	1.22	108,006	1,423,893	50	10	40	21,601	284,779	86,405	1,139,114
2003	947,099	97,695	849,404	1.17	114,629	996,632	1.27	123,873	1,077,001	50	11	39	27,252	236,940	96,621	840,061
2002	1,503,063	106,779	1,396,284	1.22	129,973	1,699,564	1.32	140,454	1,836,617	50	12	38	33,709	440,788	106,745	1,395,829
2001	1,543,336	115,556	1,427,780	1.26	145,585	1,798,801	1.36	157,325	1,943,856	50	13	37	40,904	505,403	116,420	1,438,454
2000	1,540,592	124,036	1,416,556	1.32	163,449	1,866,668	1.42	176,630	2,017,197	50	14	36	49,456	564,815	127,173	1,452,382
1999	1,809,747	176,967	1,632,780	1.39	246,694	2,276,112	1.51	266,587	2,459,658	50	15	35	79,976	737,898	186,611	1,721,761
1998	1,952,742	227,266	1,725,476	1.44	328,010	2,490,361	1.56	354,461	2,691,184	50	16	34	113,428	861,179	241,034	1,830,005
1997	2,080,744	274,606	1,806,138	1.47	404,084	2,657,737	1.59	436,669	2,872,057	50	17	33	148,467	976,499	288,202	1,895,558
1996	1,421,139	319,333	1,101,806	1.50	478,077	1,649,525	1.62	516,629	1,782,543	50	18	32	185,986	641,715	330,642	1,140,827
1995	936,716	362,687	574,029	1.54	557,180	881,856	1.66	602,111	952,969	50	19	31	228,802	362,128	373,309	590,841
1994	1,329,706	394,491	935,215	1.56	615,062	1,458,118	1.68	664,660	1,575,701	50	20	30	265,864	630,280	398,796	945,420
1993	749,618	419,512	330,106	1.60	671,011	528,005	1.73	725,121	570,583	50	21	29	304,551	239,645	420,570	330,938
1992	689,412	296,895	392,517	1.63	485,193	641,462	1.77	524,319	693,190	50	22	28	230,700	305,004	293,619	388,186
1991	1,172,353	336,012	836,341	1.68	564,437	1,404,895	1.82	609,953	1,518,186	50	23	27	280,578	698,366	329,375	819,821
1990	1,454,800	372,559	1,082,241	1.74	648,438	1,883,639	1.88	700,728	2,035,536	50	24	26	336,349	977,057	364,379	1,058,479
1989	1,314,494	408,975	905,519	1.84	754,333	1,670,183	1.99	815,163	1,804,867	50	25	25	407,581	902,434	407,581	902,434
1988	1,841,881	444,586	1,397,295	1.95	867,861	2,727,613	2.11	937,845	2,947,568	50	26	24	487,680	1,532,735	450,166	1,414,833
1987	1,339,462	477,707	861,755	2.05	979,340	1,766,671	2.22	1,058,315	1,909,135	50	27	23	571,490	1,030,933	486,825	878,202
1986	1,428,383	509,385	918,998	2.12	1,081,084	1,950,422	2.29	1,168,263	2,107,705	50	28	22	654,227	1,180,315	514,036	927,390
1985	1,508,454	538,914	969,540	2.18	1,175,872	2,115,468	2.36	1,270,694	2,286,060	50	29	21	737,003	1,325,915	533,692	960,145
1984	1,585,069	566,769	1,018,300	2.30	1,302,731	2,340,584	2.48	1,407,783	2,529,329	50	30	20	844,670	1,517,597	563,113	1,011,731
1983	1,614,923	593,048	1,021,875	2.43	1,442,993	2,486,408	2.63	1,559,356	2,686,913	50	31	19	966,801	1,665,886	592,555	1,021,027
1982	1,496,029	601,840	894,189	2.50	1,507,009	2,239,051	2.71	1,628,535	2,419,608	50	32	18	1,042,262	1,548,549	586,272	871,059
1981	1,546,319	118,910	1,427,409	2.67	317,909	3,816,220	2.89	343,546	4,123,960	50	33	17	226,740	2,721,814	116,806	1,402,147
1980	1,689,015	126,371	1,562,644	3.03	383,386	4,740,775	3.28	414,303	5,123,071	50	34	16	281,726	3,483,688	132,577	1,639,383
1979	1,727,910	146,451	1,581,459	3.50	512,015	5,529,024	3.78	553,304	5,974,885	50	35	15	387,313	4,182,420	165,991	1,792,466
1978	846,568	139,706	706,862	4.07	568,464	2,876,224	4.40	614,305	3,108,163	50	36	14	442,300	2,237,877	172,005	870,286
1977	699,346	146,858	552,488	4.48	657,544	2,473,719	4.84	710,569	2,673,200	50	37	13	525,821	1,978,168	184,748	695,032
1976	500,880	152,370	348,510	4.77	726,805	1,662,393	5.15	785,415	1,796,448	50	38	12	596,915	1,365,301	188,499	431,148
1975	505,080	158,245	346,835	5.06	800,816	1,755,196	5.47	865,394	1,896,736	50	39	11	675,007	1,479,454	190,387	417,282
1974	545,897	163,251	382,646	5.54	904,016	2,118,935	5.98	976,917	2,289,806	50	40	10	781,533	1,831,845	195,383	457,961
1973	545,960	166,687	379,273	6.15	1,024,296	2,330,642	6.64	1,106,895	2,518,586	50	41	9	907,654	2,065,240	199,241	453,345
1972	559,456	195,260	364,196	6.55	1,278,131	2,383,950	7.07	1,381,199	2,576,192	50	42	8	1,160,207	2,164,001	220,992	412,191
1971	507,776	19,884	487,892	6.80	135,304	3,319,940	7.35	146,215	3,587,660	50	43	7	125,745	3,085,388	20,470	502,272
1970	399,854	11,322	388,532	7.06	79,979	2,744,620	7.63	86,429	2,965,946	50	44	6	76,058	2,610,033	10,371	355,914
1969	286,268		286,268	7.43	-	2,128,323	8.03	-	2,299,951	50	45	5	0	2,069,956	0	229,995
1968	269,080		269,080	7.82	-	2,104,459	8.45	-	2,274,163	50	46	4	0	2,092,230	0	181,933
1967	237,827		237,827	8.14	-	1,935,438	8.79	-	2,091,512	50	47	3	0	1,966,021	0	125,491
1966	243,112		243,112	8.39	-	2,040,489	9.07	-	2,205,034	50	48	2	0	2,116,833	0	88,201
1965	224,790		224,790	8.54	-	1,920,159	9.23	-	2,075,001	50	49	1	0	2,033,501	0	41,500
1964	199,375		199,375	7.77	-	1,549,240	8.40	-	1,674,171	50	50	0	0	1,674,171	0	0
1963	127,415		127,415	7.87	-	1,003,018	8.51	-	1,083,902	50	51	0	0	1,083,902	0	0
1962	75,500		75,500	7.98	-	602,213	8.62	-	650,775	50	52	0	0	650,775	0	0
1961	75,500		75,500	8.06	-	608,255	8.71	-	657,305	50	53	0	0	657,305	0	0
1960	72,250		72,250	8.14	-	587,971	8.79	-	635,385	50	54	0	0	635,385	0	0
1959	75,500		75,500	8.95	-	675,375	8.95	-	675,375	50	55	0	0	675,375	0	0
	$50,311,547	$9,651,623	$40,659,924		$22,421,405	$97,772,150		$24,224,408	$105,328,567				$14,290,716	$64,924,162	**$9,933,692**	$40,404,404

1. 1959-1962 only id 2 & 3, 1963-1966 - 2,3,5,6,7,9,10, this is the interest which is not already capitalized (previously).

Otay Water District - Sewer
Exhibit S-4
Summary of Reserve Funds
For the Year Ended June 30, 2013

Account #	OPEB	New Water Supply	Expansion	Replacement	Betterment	Betterment Debt Fund	Debt Reserve	Capital Improvement	General	Total	% CF Eligible (1)	Capacity Fee
RESTRICTED RESERVES												
312201/312241(ID 1)					($5,850,335)	$9,402,124				$3,551,789	0%	$0
312202/312242 (ID 2)					(1,683,179)	314,727				(1,368,452)	0%	0
312203/312243 (ID 3)					(6,308,107)	1,521,924				(4,786,184)	0%	0
312213/312244 (ID 5)					(222,001)	114,381				(107,621)	0%	0
312204/312245 (ID 7)					(804,842)	780,367				(24,476)	0%	0
312205/312246 (ID 9)					(6,117,475)	1,411,602				(4,705,872)	0%	0
312206/312247 (ID 10)					(1,025,174)	871,591				(153,583)	0%	0
312207/312248 (ID 18)					0	0				0	100%	0
312214/312249 (ID 19)					9,404	14,350				23,754	0%	0
312208/312251 (ID 20)					(12,444,252)	3,485,711				(8,958,541)	0%	0
312209/312252 (ID 22)					(7,154,838)	4,680,147				(2,474,691)	0%	0
312210/312253 (ID 25)					(17,833)	0				(17,833)	0%	0
312211/312254 (ID 85)					(18,741,290)	38,724				(18,702,566)	0%	0
312212/312255 (ID 90)					(389,393)	237,609				(151,784)	0%	0
312101 Capacity Fees			5,324,932							5,324,932	0%	0
312102 Capital Improvement Fund				5,081,116						5,081,116	0%	0
312103 New Supply Fund		(389,977)								(389,977)	0%	0
312104 Annex/Developer Fee				0						0	0%	0
312111 New Supply Debt Fund		741,513								741,513	0%	0
312112 Expansion Debt Fund			30,701,201							30,701,201	0%	0
312113 Replacement Debt Fund				6,639,144						6,639,144	0%	0
312121 New Supply CIF			0							0	0%	0
312122 Expansion CIF			0							0	0%	0
312123 Replacement CIF				0						0	0%	0
312261 Betterment CIF					0					0	0%	0
312413 State Loan Reserve							0			0	0%	0
312414 GO Bonds Reserve							917,708			917,708	0%	0
312416 Grants - CIP							0			0	0%	0
312419 2010 COPs Taxable BABs							13,155,639			13,155,639	0%	0
312421 2010 COPs TE - Reserve							1,030,688			1,030,688	0%	0
312422 2010 COPs BABs - Reserve							2,707,418			2,707,418	0%	0
TOTAL RESTRICTED	$0	$351,536	$36,026,133	$11,720,260	($60,749,316)	$22,873,257	$17,811,452	$0	$0	$28,033,323		$0
DESIGNATED RESERVES												
312229 Designated Betterment					$41,131,682					$41,131,682	0%	$0
321203 New Supply Fee Reserve		23,604								23,604	0%	0
312412 Expansion Reserve			(22,544,902)							(22,544,902)	0%	0
321201 Replacement Reserve				15,739,451						15,739,451	0%	0
321202 Retiree Health Ins - OPEB (a)	0									0	0%	0
321202 Retiree Health Ins Reserve (b)	149,705									149,705	0%	0
TOTAL DESIGNATED	$149,705	$23,604	($22,544,902)	$15,739,451	$41,131,682	$0	$0	$0	$0	$34,499,540		$0
TOAL RESTRICTED & DESIGNATED	**$149,705**	**$375,140**	**$13,481,232**	**$27,459,711**	**($19,617,634)**	**$22,873,257**	**$17,811,452**	**$0**	**$0**	**$62,532,863**		**$0**
GENERAL FUND (UNRESTRICTED)												
Annexation (Potable)									$11,798,099	$11,798,099	0%	$0
Annexation (Sewer)										0	100%	0
Operating									3,480,529	3,480,529	0%	0
11-215101 Developer Deposit									375,057	375,057	0%	0
77-215101|215111 Dev/Cell Site Dep									828,445	828,445	0%	0
312415 Lakeview Replacement									231,210	231,210	0%	0
312424 Highlands Golf Course, LLC									43,320	43,320	0%	0
TOTAL GENERAL FUND	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$16,756,661**	**$16,756,661**		**$0**
TOTALS BY FUND CATEGORY	**$149,705**	**$375,140**	**$13,481,232**	**$27,459,711**	**($19,617,634)**	**$22,873,257**	**$17,811,452**	**$0**	**$16,756,661**	**$79,289,524**		**$0**

Otay Water District - Sewer
Exhibit S-5
Development of Equivalent Dwelling Units

	Number of EDUs
Number of 2009 EDUs (1)	6,714
EDUs added 2009 to Feb 2014 (2)	27
Current EDUs	6,741
Expansion EDUs	0

(1) Based on 2010 study.
(2) Based on 2010 study information with added EDUs 2009 to Feb 2014 per District email 4/4/2014.

Otay Water District - Sewer
Exhibit S-6
Development of Capacity Fee - Future

Count	Project Type	CIPNo	Project Title	Projected Project Cost (000s)	Expansion	Betterment	Replacement	% CF Eligible (2)	Capacity Fee
71		S2024	Campo Road Sewer Main Replacement	$5,500	0.0%	100.0%	0.0%	0%	$0
72		S2027	Rancho San Diego Pump Station Rehabilitation	3,500	0.0%	0.0%	100.0%	0%	0
73		S2033	Sewer System Various Locations Rehabilitation	6,000	0.0%	0.0%	100.0%	0%	0
74		S2043	RWCWRF Sludge Handling System	1,500	0.0%	100.0%	0.0%	0%	0
134		S2001	PL - 8-Inch, Russell Square Sewer Lift Station to City of El Cajon System	385	0.0%	100.0%	0.0%	0%	0
135		S2002	PL - 8-Inch, Hidden Mountain Sewer Lift Station to City of El Cajon System	460	0.0%	100.0%	0.0%	0%	0
136		S2012	SVSD Outfall and RSD Replacement and OM Reimbursement	3,030	0.0%	0.0%	100.0%	0%	0
137		S2018	RWCWRF - Secondary Process Automation	50	0.0%	100.0%	0.0%	0%	0
138		S2021	Jamacha Road 8-Inch Sewer Main Replacement	180	0.0%	100.0%	0.0%	0%	0
139		S2035	Sewer Collection System Main Replacement Program	600	0.0%	0.0%	100.0%	0%	0
140		S2036	Sewer Manhole Rehabilitation Program	80	0.0%	0.0%	100.0%	0%	0
141		S2037	Sewer Lift Station Rehabilitation Program	160	0.0%	0.0%	100.0%	0%	0
142		S2038	Sewer Force Main Replacement Program	40	0.0%	0.0%	100.0%	0%	0
				$21,485					$0
Total				$21,485				**(in $000s)**	$0

Expansions Equivalent Dwelliing Units	0
Future Sewer Fee (Per EDU)	**$0**

Otay Water District - Sewer
Exhibit S-7
Current and Proposed Sewer Capacity Fee

Item			CF 2013/2014	Reference
Existing Capacity Fee Plant			$41,397,911	See Exhibit S-1
Future Capacity Fee Plant			0	See Exhibit S-7
Total Capacity Fee			**$41,397,911**	
Existing EDUs			6,741	See Exhibit S-1
Growth EDUs			0	See Exhibit S-7
Total EDUs			**6,741**	
Total Capacity Fee			$6,141	
Plus: ENR update per Ordinance 534				
Current Index	06/01/14	10,739.43		
Base Index	06/30/13	10,304.68		
Total Capacity Fee with ENR	Index	1.04	**$6,400**	
Current Sewer Capacity Fee (1)			$5,986	
Calculated Sewer Capacity Fee (2)			6,400	
		Difference	$415	

Example Customer Classification	Number of EDUs (3)	Current	Capacity Fee 2013/2014 Calculated
Hotel/Motel w/o kitchen; /unit	0.38	$2,275	$2,432
Hotel/Motel with kitchen; per unit	0.60	3,591	3,840
Residential units (single & multi-family, mobile homes - per unit)	1.00	5,986	6,400
Commercial - first 1,000 sq.ft.	1.20	7,183	7,680
Commercial - addt'l 1,000 sq.ft.	0.70	4,190	4,480

Notes:

(1) Current capacity fee as of ENR adjustment on 6/2014, fees effective 7/1/2014.
(2) Based on "Combined" methodology established in AWWA M1, Sixth Edition, Table VI.2-1, page 273.
(3) EDU's are determined by the District's code, Section 53.09. For example, Single-family, multi-family, condos and mobile homes aer charged 1.0 EDU per unit. Churches are charged prorated as 150 seats = 1.0 EDU. Schools range between 24 to 50 students = 1.0 EDU, depending on the type of school (Elementary to High School).

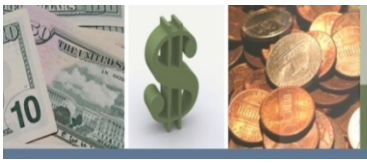
*Churches, theatres, auditoriums - does not include office space, school rooms, day-care facilities, food prep areas, Additional EDUs are assigned for these supplementary/types of uses.

Otay Water District - Sewer
Exhibit S-7A
Calculation of Inside ID Area Capacity Fee - Accounting for Principal and Interest Payments

$6,400	Calculated Sewer Capacity Fee
1,535	**$9.933 M past Interest removed from model (Exh. 3)**
$4,865	Calculated capacity Fee without past interest

$6,400	Calculated Sewer Capacity Fee
773	**Past Principal discount**
$5,627	Calculated capacity Fee without past principal For $5 M 1990 state loan

$6,400	Calculated Sewer Capacity Fee
(1,535)	Reduction for past interest payments
(773)	Reduction for past principal payments
$4,092	**Calculated fee for inside ID areas**



Water and Sewer Annexation Fees

Otay Water District
Exhibit A-1
Summary of Annexation Fee Calculation

(A) Line No.	(B) Item	(C) Original Amount	(D) Present Value	Resource
	Water & Recycled Annexation Fee			
1	Total 1 % General Tax*	$40,494,657	$62,541,413	*Exhibit 3 - Present Value in 2013 Dollars of Tax Collections*
2	Availability Charges	35,605,529	67,000,559	*Exhibit 3 - Present Value in 2013 Dollars of Water Availability Charges*
3	Total Gen Tax & Availability	$76,100,186	$129,541,972	
4	Current EDUs	72,898	72,898	*Exhibit 2 - Water EDUs*
5	**Water & Recycled Annexation Fee**	**$1,044**	**$1,777**	*Exhibit 1 - = Line 3 divided by Line 4*
	Current Fee		1,622	
	Total Increase (Decrease) to Current Fee		$155	
	Sewer Annexation Fee			
6	Total 1 % General Tax*	$0	$0	*1% general tax for water only*
7	Availability Charges	2,948,941	6,861,466	*Exhibit 3 - Present Value in 2013 Dollars of Sewer Availability Charges*
8	Total Gen Tax & Availability	$2,948,941	$6,861,466	*Exhibit 1 - = Line 4 + Line 7*
9	Current EDUs	6,741	6,741	*Exhibit 2 - Sewer EDUs*
10	**Sewer Annexation Fee**	**$437**	**$1,018**	*Exhibit 1 - = Line 8 divided by Line 9*
	Current Fee		0	
	Total Increase (Decrease) to Current Fee		$1,018	

Otay Water District
Exhibit 1A
Summary of Water Annexation Fee by Meter Size

Meter Size (inch)	Hydraulic Capacity Factor [1]	Proposed Water Annexation Fee
5/8"	1.00	$1,777
3/4"	1.00	1,777
1"	2.50	4,443
1-1/2"	5.00	8,885
2"	8.00	14,216
3"	16.00	28,432
4"	25.00	44,425
6"	50.00	88,850
8"	80.00	142,160
10"	115.00	204,355

[1] Based on AWWA capacity rating for 5/8" meter.

Otay Water District
Exhibit A-2
Summary of Water and Sewer EDUs

	Number of Meters (1)										
Class of Service	**5/8"**	**3/4"**	**1"**	**1.5"**	**2"**	**3"**	**4"**	**6"**	**8"**	**10"**	**Total**
Number of Water Meters											
Residential	1	43,186	1,463	14	4	0	0	0	0	0	44,668
Master Metered	0	41	186	245	224	34	61	6	3	0	800
Commercial & Public	679	336	389	291	404	32	28	8	0	5	2,172
Ag, Lds & Construction	0	103	262	383	466	5	6	2	0	0	1,227
Recycled	0	1	102	393	194	4	7	2	0	1	704
Temporary	0	7	9	6	2	0	67	0	0	0	91
Total	680	43,674	2,411	1,332	1,294	75	169	18	3	6	49,662
Less: Temporary	0	7	9	6	2	0	67	0	0	0	91
Total Existing Permanent	680	43,667	2,402	1,326	1,292	75	102	18	3	6	49,571
AWWA Weighting - 5/8" Meter	1.00	1.00	2.50	5.00	8.00	16.00	25.00	50.00	80.00	115.00	
Permanent Existing Water EDUs	**680**	**43,667**	**6,005**	**6,630**	**10,336**	**1,200**	**2,550**	**900**	**240**	**690**	**72,898**

Number of Sewer ASUs (2) **6,741**

Notes:
(1) Based on data from the utility billing system as of FY 2013.
(2) Based on estimate provided by District for FY 2013.

Otay Water District
Exhibit A-3
Summary of Tax Collections and Availability Charges

	Year	State Share of Tax Coll	PV Factor	Present Value in Today's Dollars	Water Avail	Present Value in Today's Dollars	Sewer Avail	Present Value in Today's Dollars
FY 1959	1959	34,446	8.95	$ 308,128		$ -		-
FY 1960	1960	69,628	8.79	$ 612,327		$ -		-
FY 1961	1961	95,352	8.71	$ 830,136		$ -		-
FY 1962	1962	73,400	8.62	$ 632,674		$ -		-
FY 1963	1963	71,693	8.51	$ 609,883	41,883	$ 356,293		-
FY 1964	1964	74,297	8.40	$ 623,879	59,677	$ 501,114		-
FY 1965	1965	65,485	9.23	$ 604,482	66,763	$ 616,279		-
FY 1966	1966	75,554	9.07	$ 685,277	66,175	$ 600,210		-
FY 1967	1967	82,050	8.79	$ 721,569	96,460	$ 848,294		-
FY 1968	1968	57,645	8.45	$ 487,194	94,834	$ 801,501		-
FY 1969	1969	58,675	8.03	$ 471,410	94,876	$ 762,258	3,086	24,794
FY 1970	1970	-	7.63	$ -	112,789	$ 861,000	20,804	158,812
FY 1971	1971	-	7.35	$ -	105,577	$ 776,349	24,549	180,518
FY 1972	1972	120,000	7.07	$ 848,837	141,692	$ 1,002,278	44,112	312,032
FY 1973	1973	128,000	6.64	$ 849,992	114,084	$ 757,582	54,132	359,467
FY 1974	1974	150,000	5.98	$ 897,621	123,266	$ 737,641	60,748	363,524
FY 1975	1975	222,000	5.47	$ 1,214,051	83,416	$ 456,177	60,800	332,497
FY 1976	1976	262,000	5.15	$ 1,350,519	105,200	$ 542,270	60,800	313,403
FY 1977	1977	272,018	4.84	$ 1,316,153	130,708	$ 632,427	60,906	294,692
FY 1978	1978	327,000	4.40	$ 1,437,861	162,949	$ 716,508	58,611	257,720
FY 1979	1979	163,271	3.78	$ 616,852	379,294	$ 1,433,005	67,365	254,511
FY 1980	1980		3.28	$ -	595,000	$ 1,950,686	68,000	222,936
FY 1981	1981		2.89	$ -	682,000	$ 1,970,382	68,000	196,460
FY 1982	1982	137,863	2.71	$ 373,047	757,885	$ 2,050,780	69,000	186,709
FY 1983	1983	110,000	2.63	$ 289,233	909,659	$ 2,391,852	69,000	181,428
FY 1984	1984	108,391	2.48	$ 269,230	766,718	$ 1,904,431	68,000	168,903
FY 1985	1985	107,173	2.36	$ 252,701	837,736	$ 1,975,281	67,000	157,978
FY 1986	1986	94,431	2.29	$ 216,576	797,498	$ 1,829,046	66,000	151,370
FY 1987	1987	110,000	2.22	$ 243,694	759,875	$ 1,683,430	65,000	144,001
FY 1988	1988	200,000	2.11	$ 421,896	897,269	$ 1,892,772	64,000	135,007
FY 1989	1989	300,000	1.99	$ 597,956	856,702	$ 1,707,566	63,000	125,571
FY 1990	1990	400,000	1.88	$ 752,341	893,639	$ 1,680,803	62,000	116,613
FY 1991	1991	500,000	1.82	$ 907,636	1,010,761	$ 1,834,806	61,000	110,732
FY 1992	1992	550,000	1.77	$ 971,306	904,588	$ 1,597,512	60,000	105,961
FY 1993	1993	600,000	1.73	$ 1,037,092	1,086,662	$ 1,878,280	52,166	90,168
FY 1994	1994	650,000	1.68	$ 1,095,155	959,193	$ 1,616,101	54,000	90,982
FY 1995	1995	714,965	1.66	$ 1,186,942	1,167,150	$ 1,937,633	56,995	94,620
FY 1996	1996	734,935	1.62	$ 1,189,006	1,162,252	$ 1,880,335	56,995	92,209
FY 1997	1997	752,852	1.59	$ 1,197,159	1,095,138	$ 1,741,450	56,995	90,631
FY 1998	1998	778,739	1.56	$ 1,214,580	1,072,577	$ 1,672,873	63,353	98,810
FY 1999	1999	852,078	1.51	$ 1,283,590	1,015,615	$ 1,529,946	64,899	97,766
FY 2000	2000	962,353	1.42	$ 1,370,406	1,015,422	$ 1,445,977	64,899	92,417
FY 2001	2001	1,105,495	1.36	$ 1,505,080	1,113,297	$ 1,515,702	68,512	93,276
FY 2002	2002	1,283,514	1.32	$ 1,688,284	1,100,080	$ 1,447,002	69,381	91,261
FY 2003	2003	1,554,975	1.27	$ 1,971,630	1,076,548	$ 1,365,009	69,381	87,971
FY 2004	2004	1,781,421	1.22	$ 2,179,143	1,113,609	$ 1,362,235	82,392	100,787
FY 2005	2005	947,347	1.18	$ 1,117,878	1,091,674	$ 1,288,185	82,588	97,455
FY 2006	2006	1,338,279	1.14	$ 1,527,258	1,085,726	$ 1,239,041	85,310	97,356
FY 2007	2007	2,930,494	1.12	$ 3,269,474	1,111,263	$ 1,239,806	90,370	100,824
FY 2008	2008	3,279,923	1.07	$ 3,523,529	1,118,075	$ 1,201,116	114,259	122,745
FY 2009	2009	3,429,830	1.07	$ 3,685,224	1,103,565	$ 1,185,739	92,029	98,882
FY 2010	2010	3,053,504	1.06	$ 3,238,237	1,125,125	$ 1,193,194	89,313	94,717
FY 2011	2011	2,946,521	1.03	$ 3,032,735	1,097,832	$ 1,129,954	89,801	92,428
FY 2012	2012	2,875,801	1.01	$ 2,913,293	1,127,195	$ 1,141,890	86,951	88,085
FY 2013	2013	2,901,260	1.00	$ 2,901,260	1,118,557	$ 1,118,557	92,439	92,439
		$ 40,494,657	**1.00**	**$ 62,541,413**	**$ 35,605,529**	**$ 67,000,559**	**$ 2,948,941**	**$ 6,861,466**

PV factor calculated based on San Diego CPI. See Exhibit 4.

Otay Water District
Exhibit 4
Summary 20 City Average ENR-CCI to ENR-CCI for LA

Current Year	2013		
ENR-CCI	10,738.68	CPI	260.31

Year	20 City Average ENR-CCI	Change of 20 City CCI	ENR -CCI for LA	PV Factor	San Diego CPI	PV Factor
1959	797.00	5.0%	882.87	12.16	29.10	8.95
1960	824.00	3.4%	912.78	11.76	29.60	8.79
1961	847.00	2.8%	938.26	11.45	29.90	8.71
1962	872.00	3.0%	965.96	11.12	30.20	8.62
1963	901.00	3.3%	998.08	10.76	30.60	8.51
1964	936.00	3.9%	1,036.85	10.36	31.00	8.40
1965	971.00	3.7%	1,075.62	9.98	28.20	9.23
1966	1,019.00	4.9%	1,128.79	9.51	28.70	9.07
1967	1,074.00	5.4%	1,189.72	9.03	29.60	8.79
1968	1,155.00	7.5%	1,279.45	8.39	30.80	8.45
1969	1,269.00	9.9%	1,405.73	7.64	32.40	8.03
1970	1,381.00	8.8%	1,529.80	7.02	34.10	7.63
1971	1,581.00	14.5%	1,751.35	6.13	35.40	7.35
1972	1,753.00	10.9%	1,941.88	5.53	36.80	7.07
1973	1,895.00	8.1%	2,099.18	5.12	39.20	6.64
1974	2,020.00		2,279.66	4.71	43.50	5.98
1975	2,212.00		2,585.93	4.15	47.60	5.47
1976	2,401.00		2,923.33	3.67	50.50	5.15
1977	2,576.00		3,161.75	3.40	53.80	4.84
1978	2,776.00		3,421.25	3.14	59.20	4.40
1979	3,003.00		3,638.81	2.95	68.90	3.78
1980	3,237.00		4,102.37	2.62	79.40	3.28
1981	3,535.00		4,530.96	2.37	90.10	2.89
1982	3,825.00		4,934.14	2.18	96.20	2.71
1983	4,066.00		5,063.89	2.12	99.00	2.63
1984	4,146.00		5,259.93	2.04	104.80	2.48
1985	4,195.00		5,446.69	1.97	110.40	2.36
1986	4,295.00		5,452.20	1.97	113.50	2.29
1987	4,406.00		5,474.14	1.96	117.50	2.22
1988	4,519.00		5,770.84	1.86	123.40	2.11
1989	4,615.00		5,789.77	1.85	130.60	1.99
1990	4,732.00		5,994.55	1.79	138.40	1.88
1991	4,835.00		6,090.12	1.76	143.40	1.82
1992	4,985.00		6,348.55	1.69	147.40	1.77
1993	5,210.00		6,477.84	1.66	150.60	1.73
1994	5,408.00		6,532.95	1.64	154.50	1.68
1995	5,471.00		6,626.22	1.62	156.80	1.66
1996	5,620.00		6,558.44	1.64	160.90	1.62
1997	5,826.00		6,663.55	1.61	163.70	1.59
1998	5,920.00		6,851.95	1.57	166.90	1.56
1999	6,059.00		6,825.97	1.57	172.80	1.51
2000	6,221.00		7,068.04	1.52	182.80	1.42
2001	6,334.00		7,226.92	1.49	191.20	1.36
2002	6,538.00		7,402.75	1.45	197.90	1.32
2003	6,694.00		7,531.77	1.43	205.30	1.27
2004	7,115.00		8,192.14	1.31	212.80	1.22
2005	7,445.98		8,567.42	1.25	220.60	1.18
2006	7,751.20		8,878.97	1.21	228.10	1.14
2007	7,967.25		9,181.67	1.17	233.32	1.12
2008	8,311.12		9,823.19	1.09	242.31	1.07
2009	8,574.84		9,760.69	1.10	242.27	1.07
2010	8,802.40		10,004.30	1.07	245.46	1.06
2011	9,074.08		10,088.80	1.06	252.91	1.03
2012	9,308.15		10,270.93	1.05	256.96	1.01
2013	9,546.61		10,738.68	1.00	260.31	1.00

Attachment H

Otay Water District

September 3, 2014

Water and Sewer Capacity and Annexation Fees

Overview of Presentation

- Purpose and methodology of fees
- Review the results of the District's study
  - Capacity fees
    - Water
    - Sewer
  - New supply fee
  - Annexation fees
    - Water
    - Sewer
- Summary and Next Steps

Purpose of the District's Study

- **Review and update the fees to reflect existing conditions and value of the assets in place and capacity available**
- **To apply the same methodology to both utilities**
  - **Update the existing sewer "annexation fee" to the sewer buy-in capacity fee; develop a sewer annexation fee based on availability fees**
- **Review administrative and implementation of the fees**

Capacity Fees and New Supply Fees - Purpose

- **To charge new customers an equitable share of the cost of infrastructure to serve their needs**
  - "Growth pays for growth"
- **Provides equity between new and existing customers**
  - These one-time fees pay an equitable share of system capacity equal to the value of the funds paid by others
- **Shelters existing customers from impacts of system expansion for growth**
- **Generates revenue for growth related facilities**

Criteria in Determining Capacity Fees

- **Easy to understand**
- **Asset value**
- **System financing**
- **System planning criteria**
- **Customer acceptance**

Methodology for Determining Capacity Fees

- **Methodology used is consistent with past District studies**
  - District uses “generally accepted methods
- **Only capital improvements that provide new capacity are included**
  - Fees are segregated by new supply and other capacity improve.
  - Does not include operations or maintenance
  - Not intended for renewals and replacements
- **Methodology considers:**
  - Existing and future assets needed to serve growth
  - System Planning
    - **Defining and equivalent dwelling unit (EDU)**
  - Method of financing – Debt credit

Review of the Water Capacity and the New Water Supply Fees

Present Water Capacity Fee and New Supply Fee By Meter Size

Present Water Capacity and New Supply Fee			
Meter Size	# of Equiv. EDUs	Capacity Fee	New Water Supply Fee
3/4"	1.00	$8,237	$949
1"	2.50	20,593	2,371
1-1/2"	5.00	41,185	4,743
2"	8.00	65,896	7,589
3"	16.00	131,792	15,177
4"	25.00	205,926	23,715
6"	50.00	411,852	47,430
8"	80.00	658,962	75,887
10"	115.00	947,258	109,088

- **Connections in the Triad development area receive a credit (lower fee) for storage facilities.**

Calculated Water Capacity Fee and New Supply Fee By Meter Size

Calculated Water Capacity and New Supply Fee			
Meter Size	# of Equiv. EDUs	Capacity Fee	New Water Supply Fee
3/4"	1.00	$7,984	$989
1"	2.50	19,960	2,473
1-1/2"	5.00	39,920	4,945
2"	8.00	63,872	7,912
3"	16.00	127,744	15,824
4"	25.00	199,600	24,725
6"	50.00	399,200	49,450
8"	80.00	638,720	79,120
10"	115.00	918,160	113,735

- **Connections in the Triad development area receive a credit (lower fee) on the capacity fee for potable storage facilities. The credit is approximately 25%.**

Comparison of Present and Calculated Water Fees

- **For 3/4-inch meter; 1 EDU:**

Present Fees			Calculated Fees			
Capacity Fee	New Supply Fee	Total	Capacity Fee	New Supply Fee	Total	$ Difference
$8,237	$949	$9,186	$7,984	$989	$8,973	($213)

Sewer Capacity Fees

Overview of Sewer Capacity Fees

- **Methodology similar to the water capacity fee**
  - No future planned assets/improvements
  - Considers only existing sewer assets
- **Planning criteria – same as in last study**
- **Move from "annexation" fee to capacity buy-in fees**
  - Provides consistency in fees between the utilities
- **Reviewed implementation by EDU versus meter size**
  - Maintain EDUs approach
- **Changing nomenclature**

Sewer Capacity Fee*
Per EDU

Present Sewer Capacity Fee		
Example Customer Classifications	Number of EDUs	Capacity Fee
Hotel/Motel w/o kitchen	0.38	$2,275
Hotel/Motel w/ kitchen	0.60	3,591
Residential units - per unit*	1.00	5,986
Commercial - first 1,000 sq.ft.	1.20	7,183
Commercial - addt'l 1,000 sq.ft.	0.70	4,190

*** This fee is described as an *annexation fee* on the current fee schedule. However, it is based on the value of the assets divided by EDUs served.**

EDUs are determined based on District code Section 53.08. Residential units = 1.0 EDU.

Key Policy Issue for Sewer Capacity Fees

- **Customers within ID areas:**
  - Would pay the capacity fee less a debt credit
  - Reductions recognize their previous payments of debt
  - Fee for their share of facilities paid for through rates
- **Customers outside of an ID area:**
  - Would pay capacity fee and annexation fee
- **Provides consistency between utilities**
- **Example to illustrate the issue:**
  - Since 2009, 27 new connection to sewer system
  - 3 have paid the “annexation” capacity fee
  - None have paid an annexation fee such as the water utility’s annexation fee

Calculated Sewer Capacity Fee* Per EDU

Calculated Sewer Capacity Fee			
Example Customer Classifications	Number of EDUs	Capacity Fee Outside ID area	Capacity Fee Inside ID area
Hotel/Motel w/o kitchen	0.38	$2,432	$1,555
Hotel/Motel w/ kitchen	0.60	3,840	2,455
Residential units - per unit*	1.00	6,400	4,092
Commercial - first 1,000 sq.ft.	1.20	7,680	4,911
Commercial - addt'l 1,000 sq.ft.	0.70	4,480	2,865

*Includes multi-family, mobile homes - per unit.

- **EDUs are determined based on District code Section 53.08. Residential units = 1.0 EDU**
- **Customers within an ID area would pay a lower capacity fee, accounting for debt payments paid previously through debt assessments to their property.**

Comparison of Present and Calculated Sewer Fees

- **1 EDU (likely a 3/4-inch meter size)**

Present Fees	Calculated	
Annexation (Capacity) Fee	Capacity Fee	$ Difference
$5,986	$6,400	$414

- **Currently no capacity fee is charged to a new connection within an ID area.**

Annexation Fees

Annexation Fees

- **Purpose: To bring equity to existing customers who have paid the general tax and availability fees into the system over the years and those that have not.**
  - Anyone outside of the service area or ID areas that annexes into the system is subject to pay these fees
  - These are a one-time fee to pay into the system, a share equal to the value to the past fees and taxes paid by others
- **Calculation:** The fee is determined by accumulating the past taxes and availability fees, bringing them into current day dollars (applying CPI), and dividing by current EDUs to determine the "buy-in" share per EDU.

Water Annexation Fee By Meter Size

Present Water Annexation Fee	
Meter Size	Annexation Fee
3/4"	$1,622
1"	4,056
1-1/2"	8,112
2"	12,979
3"	25,958
4"	40,559
6"	81,118
8"	129,789
10"	186,571

- **Currently, there is not a similar annexation fee for sewer; part of this study.**

Water and Sewer Annexation Fee

Calculated Water Annexation Fee	
Meter Size	Annexation Fee
3/4"	$1,777
1"	4,443
1-1/2"	8,885
2"	14,216
3"	28,432
4"	44,425
6"	88,850
8"	142,160
10"	204,355

Calculated Sewer Annexation Fee	
Number of EDUs	Capacity Fee
0.38	$387
0.60	611
1.00	1,018
1.20	1,222
0.70	713
5.00	5,090
15.00	15,270
25.00	25,450
40.00	40,720

- **Under current policy:**
  Sewer annexation fees are collected only for new customers connecting to the system and being added into an ID area.
- **New connections to the sewer system already within an ID area do not pay the annexation fee. They have already been paying availability fees and debt.**

Comparison of Present and Calculated Fees for 1 EDU

Utility	Present Fees				Calculated Fees				
Service Area	Capacity Fee	New Supply Fee	Annex. Fee	Total	Capacity Fee	New Supply Fee	Annex. Fee	Total	$ Difference
Water	$8,237	$949	$1,622	$10,808	$7,984	$989	$1,777	$10,750	($58)
Sewer in ID area	$0	$0	$0	$0	4,092	$0	$0	$4,092	$4,092
Sewer Out of ID	$5,986	$0	$0	$5,986	$6,400	$0	$1,018	$7,418	$1,432

- **New water connections – same as previously implemented**
- **New sewer connections inside the sewer ID areas should pay their share of portions of the sewer system rate funded over the years**
- **Customers outside the sewer ID areas should pay their buy-in share of availability fees and system capacity costs by paying both fees**

Summary and Next Steps

- **Capacity fees are an equitable method to finance the cost of growth and expansion facilities**
- **Updated fees reflect the District's current costs and value of capacity**
- **Full Board presentation September 3rd**

AGENDA ITEM 12a

STAFF REPORT

TYPE MEETING:	Regular Board Meeting	MEETING DATE:	September 3, 2014
SUBMITTED BY:	Mark Watton, General Manager	W.O./G.F. NO:	DIV. NO.
APPROVED BY:	☒ Susan Cruz, District Secretary ☒ Mark Watton, General Manager		
SUBJECT:	Board of Directors 2014 Calendar of Meetings		

GENERAL MANAGER'S RECOMMENDATION:
At the request of the Board, the attached Board of Director's meeting calendar for 2014 is being presented for discussion.

PURPOSE:
This staff report is being presented to provide the Board the opportunity to review the 2014 Board of Director's meeting calendar and amend the schedule as needed.

COMMITTEE ACTION:
N/A

ANALYSIS:
The Board requested that this item be presented at each meeting so they may have an opportunity to review the Board meeting calendar schedule and amend it as needed.

STRATEGIC GOAL:
N/A

FISCAL IMPACT:
None.

LEGAL IMPACT:
None.

Attachment: Calendar of Meetings for 2014

Board of Directors, Workshops and Committee Meetings 2014

Regular Board Meetings:	**Special Board or Committee Meetings (3rd Wednesday of Each Month or as Noted)**
January 7, 2014	January 21, 2014
February 5, 2014	February 19, 2014
March 11, 2014	March 17, 2014
April 8, 2014	April 16, 2014
May 7, 2014	May 21, 2014
June 4, 2014	June 18, 2014
July 2, 2014	July 16, 2014
August 6, 2014	August 20, 2014
September 3, 2014	**September 17, 2014**
October 1, 2014	October 15, 2014
November 5, 2014	November 19, 2014
December 3, 2014	December 17, 2014

SPECIAL BOARD MEETINGS:

BOARD WORKSHOPS:

AGENDA ITEM 13a

STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	September 3, 2014
SUBMITTED BY:	Dan Martin Engineering Manager	PROJECT:	Various DIV. NO. ALL
APPROVED BY:	☒ Rod Posada, Chief of Engineering ☒ German Alvarez, Assistant General Manager ☒ Mark Watton, General Manager		
SUBJECT:	Informational Item – Fourth Quarter Fiscal Year 2014 Capital Improvement Program Report		

GENERAL MANAGER'S RECOMMENDATION:

That the Otay Water District (District) Board of Directors (Board) accept the Fourth Quarter Fiscal Year 2014 Capital Improvement Program (CIP) Report for review and receives a summary via PowerPoint presentation (see Attachment C).

COMMITTEE ACTION:

Please see Attachment A.

PURPOSE:

To update the Board about the status of all CIP project expenditures and to highlight significant issues, progress, and milestones on major projects.

ANALYSIS:

To keep up with growth and to meet our ratepayers' expectations to adequately deliver safe, reliable, cost-effective, and quality water, each year the District staff prepares a Six-Year CIP Plan that identifies the District's infrastructure needs. The CIP is comprised of four categories consisting of backbone capital facilities, replacement/renewal projects, capital purchases, and developer's reimbursement projects.

The Fourth Quarter Fiscal Year 2014 update is intended to provide a detailed analysis of progress in completing these projects within the allotted time and budget of $13.9 million. Expenditures through the Fourth Quarter totaled approximately $8.5 million. Approximately 61% of the Fiscal Year 2014 expenditure budget was spent (see Attachment B).

The expenditures versus forecast for Fiscal Year 2014 were influenced in part by the changes in the economy, external agency driven projects, as well as budgeting flexibility for "Just in time" delivery for District projects as noted below.

1. A majority of the projects contained in the annual CIP budget are multi-year projects that required the project manager to forecast how expenditures would occur over several future fiscal years. Development of the Fiscal Year 2014 budget occurred approximately sixteen months in advance of the fiscal year's completion.

2. The FY 2014 CIP budget contained Developer reimbursement projects and District transmission projects that were programmed into the budget based on the Developer timelines for project delivery. Changes in the economy influenced Developer decisions on when to implement these projects. Staff worked with the Developers to incorporate the best project delivery information into the budgeting process, however, as the economic climate changed during this fiscal year, Developers revised their project delivery schedules.

3. Fifteen (15) percent of the FY 2014 CIP budget consisted of projects that were driven by external agencies including the County of San Diego, the City of Chula Vista, Caltrans, and the San Diego Association of Governments.

4. The CIP also contained a number of projects that experienced reprioritization during the course of this fiscal year. The Otay Mesa Desalination Conveyance and Disinfection System project is an example of this concept, as the District worked with Mexico, California State agencies, and United States Federal agencies on moving the project forward.

FISCAL IMPACT: ☒ Joe Beachem, Chief Financial Officer

No fiscal impact as this is an informational item only.

STRATEGIC GOAL:

The Capital Improvement Program supports the District's Mission statement, "To provide high value water and wastewater services to the customers of the Otay Water District, in a professional, effective, and efficient manner" and the General Manager's Vision, "A District that is at the forefront in innovations to provide water services at affordable rates, with a reputation for outstanding customer service."

LEGAL IMPACT:

None.

DM/RP:jf
P:\Forms\D-Construction\CIP Quarterly Reports\CIP Qtr Reports\FY 2014\Q4\Staff Report\BD 09-03-14, Staff Report, Fourth Quarter FY 2014 CIP Report, (DM-RP).docx

Attachments: Attachment A – Committee Action
Attachment B - Fiscal Year 2014 Fourth Quarter CIP Expenditure Report
Attachment C – Presentation

ATTACHMENT A

SUBJECT/PROJECT: Various	Informational Item – Fourth Quarter Fiscal Year 2014 Capital Improvement Program Report

COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee (Committee) reviewed this item at a Committee Meeting held on August 14, 2014, and the following comments were made:

- Staff provided a PowerPoint presentation to the Committee and indicated that the expenditures through the fourth quarter of FY 2014 totaled approximately $8.5 million, which is about 61% of the District's fiscal year budget.

- Staff indicated that the District's FY 2014 CIP budget consists of 63 projects that total $13.9 million and is divided into four categories:

  - Capital Facilities= $4.4 million
  - Replacement/Renewal= $7.7 million
  - Capital Purchases= $1.6 million
  - Developer Reimbursement= $0.2 million

- The PowerPoint presentation included the following:

  - Total Life-to-Date Expenditures
  - CIP Budget Forecast vs. Expenditures
  - Annual CIP Expenditures vs. Budget
  - Factors that Influence CIP Expenditures
  - Major CIP Projects
  - CIP Projects in Construction
  - Construction Contract Status of projects, contract amount with allowances, net change orders, and percent of project completion
  - Consultant Contract Status of contract amounts, approve payments to date, change orders, dates when contracts were signed and the end date of contracts

- Staff provided a slide that showed how annual expenditures over the five-year period from FY 2009 to FY 2014 ranged from 57% to 78% of the fiscal year budgeted amount. Expenditures for FY 2014 is projected at 61%.

- Staff discussed factors that influenced the CIP expenditures during the fiscal year. Changes in the economy, external agency driven projects, and budgeting flexibility for "Just in time" delivery for District projects found to influence the rate of expenditure. Details of these influential factors are provided on page 2 of the staff report.

- It was also discussed that a majority of projects in the annual CIP budget are multi-year projects that require the project manager to forecast how expenditures will occur over several future fiscal years. Development of the fiscal year budget occurs on average sixteen (16) months in advance of that fiscal year's completion.

- Staff provided an update of the following:

    - 624-2 Reservoir Interior/Exterior Coating & Upgrades. Staff indicated that this project has already been tested and placed into service as of July 2014.

    - 927-1 Recycled Water Reservoir Cover and Liner Replacement was completed and placed into service on June 30, 2014.

    - SR-11 Utility Relocations Sequence I project will relocate existing water to support the construction of SR-11 being performed by Caltrans. Staff indicated that this project is going through submittal review and stated that construction began in July 2014.

Following the discussion, the Committee supported staffs' recommendation and presentation to the full board as an informational item.

Attachment B

FISCAL YEAR 2014
4th QUARTER REPORT
(Expenditures through 6/30/2014)
($000)

CIP No.	Description	Project Manager	FISCAL YEAR-TO-DATE, 06/30/14 FY 2014 Budget	Expenses	Balance	Expense to Budget %	LIFE-TO-DATE, 06/30/14 Budget	Expenses	Balance	Expense to Budget %	Comments
	CAPITAL FACILITY PROJECTS										
p2083	PS - 870-2 Pump Station Replacement (28,000 GPM)	Marchioro	$ 540	$ 316	$ 224	59%	$ 12,581	$ 928	$ 11,653	7%	Project schedule adjusted to add a 3D model to the consultant's scope of work. Value engineering workshop is scheduled for August 2014.
P2190	PL - 10-Inch, 1485 Zone, Jamul Highlands	Martin	-	-	-	0%	228	3	225	1%	No budget for FY 2014.
P2267	36-Inch Main Pumpouts and Air/Vacuum Ventilation Installations	Vasquez	5	-	5	0%	435	234	201	54%	Project moved to FY 2015.
p2403	PL - 12-Inch, 624 Zone, Heritage Road - Olympic/Otay Valley	Martin	-	-	-	0%	925	-	925	0%	No budget for FY 2014.
P2434	Rancho Del Rey Groundwater Well Development	Marchioro	100	9	91	9%	8,700	3,607	5,093	41%	Design is on hold.
P2451	Otay Mesa Desalination Conveyance and Disinfection System	Kennedy	1,500	932	568	62%	30,000	2,561	27,439	9%	The Project schedule has been adjusted to match progress with the Rosarito Beach Desal Project.
P2466	Regional Training Facility	Coburn-Boyd	14	4	10	29%	300	285	15	95%	Project is on hold.
P2486	Asset Management Plan Condition Assessment and Data Acquisition	Zhao	75	24	51	32%	1,090	818	272	75%	The asset management decision-making software will be purchased in FY 2015.
P2511	Otay Interconnect Pipeline	Marchioro	600	306	294	51%	37,300	1,980	35,320	5%	Environmental subconsultant will amend EIR to include new alignment. Design is on hold.
P2514	PL - 30-Inch, 980 Zone, Hunte Parkway - Proctor Valley/Use Area	Martin	130	71	59	55%	1,815	1,740	75	96%	Construction completed. Claims resolution work is completed.
P2528	30-Inch Potable Water Pipeline Manifold at 624 Reservoirs	Marchioro	-	-	-	0%	7,000	18	6,982	0%	No budget for FY 2014.
P2537	Operations Yard Property Acquisition Improvements	Almgren	50	16	34	32%	300	37	263	12%	Project is progressing to 30% design.
P2539	South Bay Bus Rapid Transit (BRT) Utility Relocations	Cameron	80	29	51	36%	320	29	291	9%	SANDAG driven project. Design is at 90%.
P2541	624 Pressure Zone PRSs	Marchioro	300	207	93	69%	600	207	393	35%	Construction bids were rejected at the July 3, 2014 Board meeting. Project to be re-bid at a future date.
P2542	850-3 Reservoir Interior Coating	Cameron	10	-	10	0%	440	-	440	0%	Project moved to FY 2016.
P2543	850-1 Reservoir Interior/Exterior Coating	Cameron	-	-	-	0%	475	-	475	0%	No budget for FY 2014.
P2544	850-2 Reservoir Interior/Exterior Reservoir Coating	Cameron	-	-	-	0%	1,075	-	1,075	0%	No budget for FY 2014.
R2028	RecPL - 8-Inch, 680 Zone, Heritage Road - Santa Victoria/Otay Valley	Martin	-	-	-	0%	600	-	600	0%	No budget for FY 2014.
R2042	RecPL - 8-Inch, 927 Zone, Rock Mountain Road - SR-125/EastLake	Martin	-	-	-	0%	140	-	140	0%	No budget for FY 2014.
R2047	RecPL - 12-Inch, 680 Zone, La Media Road - Birch/Rock Mountain	Martin	-	-	-	0%	450	-	450	0%	No budget for FY 2014.
R2048	RecPL - Otay Mesa Distribution Pipelines and Conversions	Martin	100	5	95	5%	2,200	475	1,725	22%	Developer driven project.
R2058	RecPL - 16-Inch, 860 Zone, Airway Road - Otay Mesa/Alta	Martin	100	1	99	1%	3,500	1,340	2,160	38%	Developer driven project.
R2077	RecPL - 24-Inch, 860 Zone, Alta Road - Alta Gate/Airway	Beppler	135	61	74	45%	4,500	2,804	1,696	62%	Project is on hold as a result of the temporary recycled water moratorium.
R2087	RecPL - 24-Inch, 927 Zone, Wueste Road - Olympic/Otay WTP	Cameron	5	1	4	20%	7,000	1,032	5,968	15%	Project is on hold as a result of the temporary recycled water moratorium.
R2091	RecPS - 927-1 Pump Station Upgrade (10,000 GPM) and System Enhancements	Martin	250	173	77	69%	2,130	2,068	62	97%	Construction completed. Claims resolution work is completed.
R2107	RWCWRF Screening Compactor and Chlorine Injectors Enclosure	Stalker	60	29	31	48%	130	101	29	78%	The remaining balance will be used in FY 2015.
R2108	Res - 927-1 Reservoir Cover Replacement	Martin	100	1,064	(964)	**1064%**	1,400	1,064	336	76%	Project was accelerated. Construction completed.
R2110	RecPS - 927-1 Optimization and Pressure Zone modifications	Marchioro	150	63	87	42%	150	63	87	42%	Distribution system improvements completed; however, pump station control strategy improvements postponed until FY 2015.
S2039	Hidden Mountain Lift Station Enclosure	Stalker	8	7	1	88%	37	37	-	100%	Project completed.
S2043	RWCWRF Sludge Handling System	Beppler	50	37	13	74%	1,500	37	1,463	2%	Project is on hold pending internal review and outcome of Metro cost anaysis of the Point Loma Permit Renewal Upgrades.
	Total Capital Facility Projects	Total:	4,362	3,355	1,007	**77%**	127,321	21,468	105,853	**17%**	
	REPLACEMENT/RENEWAL PROJECTS										
p2366	APCD Engine Replacements and Retrofits	Rahders	5	31	(26)	**620%**	3,488	2,513	975	72%	Due to delays in manufacturing, $16,500 will be moved to FY 2015 budget.
P2382	Safety and Security Improvements	Ramirez	500	116	384	23%	3,397	2,019	1,378	59%	$83K in system upgrades were completed by the end of FY 2014. The remaining balance will be expensed in phase projects during FY 2015 and forward.
P2440	I-905 Utility Relocations	Marchioro	10	4	6	40%	1,600	1,584	16	99%	Staff anticipates that Caltrans will issue an additional $33,493 credit to the District; however, the $33k credit on hold is pending Caltrans' receipt of final accounting numbers from the City of San Diego's sewer contractor.

FISCAL YEAR 2014
4th QUARTER REPORT
(Expenditures through 6/30/2014)
($000)

			FISCAL YEAR-TO-DATE, 06/30/14				LIFE-TO-DATE, 06/30/14				
CIP No.	**Description**	**Project Manager**	**FY 2014 Budget**	**Expenses**	**Balance**	**Expense to Budget %**	**Budget**	**Expenses**	**Balance**	**Expense to Budget %**	**Comments**
p2453	SR-11 Utility Relocations	Marchioro	125	74	51	59%	2,250	233	2,017	10%	Construction contract awarded January 2014; however, construction schedule is tied to large Caltrans' freeway project. Majority of water relocation construction anticipated in FY 2015.
P2477	Res - 624-1 Reservoir Cover Replacement	Martin	50	31	19	62%	1,000	927	73	93%	Project accepted by the District on July 1, 2013. The two-year contract warranty will expire on July 1, 2015.
P2485	SCADA Communication System and Software Replacement	Stalker	540	400	140	74%	1,846	1,168	678	63%	Spending was delayed due to delays in the SCADA Replacement and South District Radio Installation projects.
P2493	624-2 Reservoir Interior/Exterior Coating	Cameron	1,550	1,451	99	94%	1,950	1,467	483	75%	Construction is 95% complete. Project acceptance anticipated for the end of July 2014.
P2494	Multiple Species Conservation Plan	Coburn-Boyd	60	12	48	20%	887	811	76	91%	Project on hold FY 2014, but work will begin again in FY 2015.
P2495	San Miguel Habitat Management/Mitigation Area	Coburn-Boyd	140	138	2	99%	2,040	1,032	1,008	51%	This is a continuing project. Fiscal Year budget spent as expected.
P2496	Otay Lakes Road Utility Relocations	Martin	70	24	46	34%	325	300	25	92%	Construction is substantially completed. Project acceptance by the Distict is pending the City of Chula Vista's acceptance of the work.
P2504	Regulatory Site Access Road and Pipeline Relocation	Cameron	325	13	312	4%	900	327	573	36%	Project is on hold.
P2507	East Palomar Street Utility Relocation	Cameron	230	337	(107)	**147%**	900	620	280	69%	Caltrans driven project. Utility agreements are in place for reimbursement. Anticipated completion in July 2015.
P2508	Pipeline Cathodic Protection Replacement Program	Marchioro	60	46	14	77%	300	49	251	16%	PDR completed June 30, 2014. Final design of 14-inch forcemain cathodic protection rehab will be completed to 90% level by August 2014.
P2513	East Orange Avenue Bridge Crossing	Cameron	300	142	158	47%	1,350	1,307	43	97%	Project completed.
P2515	870-1 Reservoir Paving	Almgren	490	96	394	20%	550	153	397	28%	Design completed. Construction to begin in November 2014.
P2518	803-3 Reservoir Interior/Exterior Coating	Cameron	125	116	9	93%	750	626	124	83%	Construction is complete. Project is in warranty period.
p2519	832-2 Reservoir Interior/Exterior Coating	Cameron	335	376	(41)	**112%**	775	645	130	83%	Construction is complete. Project is in warranty period.
P2520	Motorola Mobile Radio Upgrade	Martinez	30	12	18	40%	100	77	23	77%	$35K was added to FY 2015 for a new project total of $135K. The additional funds are to provide handheld devices with increased range during an emgerency response.
P2521	Large Meter Vault Upgrade Program	Mendez-Schomer	105	23	82	22%	600	219	381	37%	Retrofit of the vault sites finished under budget. After inspections and reviews, the amount of work needed was less than expected. Any additional work will be moved to a work order and this CIP will be closed this Fiscal Year.
P2529	711-2 Reservoir Interior & Exterior Coating	Cameron	-	-	-	0%	600	-	600	0%	No budget for FY 2014.
P2530	711-1 Reservoir Interior & Exterior Coating	Cameron	-	-	-	0%	725	-	725	0%	No budget for FY 2014.
P2531	944-1 Reservoir Interior & Exterior Coating	Cameron	5	7	(2)	**140%**	175	7	168	4%	Design 90% completed. Construction to begin in November 2014.
P2532	944-2 Reservoir Interior & Exterior Coating	Cameron	5	8	(3)	**160%**	725	8	717	1%	Design 90% completed. Construction to begin in November 2014.
P2533	1200-1 Reservoir Interior & Exterior Coating	Cameron	-	-	-	0%	325	-	325	0%	No budget for FY 2014.
P2534	978-1 Reservoir Interior & Exterior Coating	Cameron	-	-	-	0%	225	-	225	0%	No budget for FY 2014.
P2535	458-2 Reservoir Interior Coating	Cameron	345	7	338	2%	425	14	411	3%	Design 90% completed. Construction to begin in November 2014.
P2538	Administration and Operations Building Fire Sprinkler Replacement Program	Cameron	100	22	78	22%	400	22	378	6%	The project's scope was modified from a full replacement to repair and treatment. This will significantly reduce the cost. Repairs are complete. Treatment system to be installed in July 2014.
R2109	Sweetwater River Wooden Trestle Improvement for the Recycled Water Forcemain	Beppler	100	32	68	32%	350	32	318	9%	Preliminary design report is underway with draft due August 2014. Remaining balance moved to FY 2015.
R2111	RWCWRF - RAS Pump Replacement	Beppler	100	57	43	57%	100	57	43	57%	30% design completed in June 2014. Final design anticipated in September 2014. Remaining balance moved to FY 2015.

FISCAL YEAR 2014
4th QUARTER REPORT
(Expenditures through 6/30/2014)
($000)

			FISCAL YEAR-TO-DATE, 06/30/14				LIFE-TO-DATE, 06/30/14				
CIP No.	Description	Project Manager	FY 2014 Budget	Expenses	Balance	Expense to Budget %	Budget	Expenses	Balance	Expense to Budget %	Comments
S2012	San Diego County Sanitation District Outfall and RSD Outfall Replacement	Kennedy	450	17	433	4%	3,550	834	2,716	23%	Expenses on projects the County plans, designs, and builds. Remaining budget will be moved to FY 2015.
S2024	Campo Road Sewer Main Replacement	Beppler	275	136	139	49%	5,500	181	5,319	3%	Preliminary design report is underway with draft due in September 2014.
S2027	Rancho San Diego Pump Station Rehabilitation	Beppler	500	18	482	4%	2,900	57	2,843	2%	70% design submittal reviewed in July 2014. Remaining balance moved to FY 2015.
S2033	Sewer System Rehabilitation	Beppler	800	375	425	47%	6,000	607	5,393	10%	Design completed. Awaiting permits from the County of San Diego. Construction to begin in November 2014. Remaining balanced moved to FY 2015.
	Total Replacement/Renewal Projects	Total:	7,730	4,121	3,609	53%	47,008	17,896	29,112	38%	
	CAPITAL PURCHASE PROJECTS										
P2282	Vehicle Capital Purchases	Rahders	266	25	241	9%	5,021	2,900	2,121	58%	Due to delays in manufacturing, $175,877 will be moved to FY 2015 budget.
P2285	Office Equipment and Furniture Capital Purchases	Payne	55	20	35	36%	589	524	65	89%	Expenditures under budget.
p2286	Field Equipment Capital Purchases	Rahders	149	128	21	86%	1,758	1,291	467	73%	CIP completed.
P2469	Information Technology Network and Hardware	Segura	350	290	60	83%	2,509	1,675	834	67%	To accommodate a better and more thorough bidding process for the purchase of the Storage Area Network Equipment, $60K will be moved to FY 2015.
P2470	Financial System Enhancements	Stevens	130	52	78	40%	2,322	1,671	651	72%	Staffing changes delayed contractor spending.
P2540	Work Order Management System Replacement	Stevens	300	118	182	39%	700	118	582	17%	Money will be spent during FY 2015.
S2042	Sewer Vehicle Capital Purchases	Rahders	367	367	-	100%	367	367	-	100%	CIP completed.
	Total Capital Purchase Projects	Total:	1,617	1,000	617	62%	13,266	8,546	4,720	64%	
	DEVELOPER REIMBURSEMENT PROJECTS										
P2104	PL - 12-Inch, 711 Zone, La Media Road - Birch/Rock Mountain	Martin	-	-	-	0%	833	-	833	0%	No budget for FY 2014.
P2107	PL - 12-Inch, 711 Zone, Rock Mountain Road - La Media/SR 125	Martin	-	-	-	0%	722	-	722	0%	No budget for FY 2014.
R2082	RecPL - 24-Inch, 680 Zone, Olympic Parkway - Village 2/Heritage	Martin	1	-	1	0%	1,747	-	1,747	0%	Developer driven project. No major activity anticpated for FY 2014.
R2083	RecPL - 20-Inch, 680 Zone, Heritage Road - Village 2/Olympic	Martin	1	-	1	0%	400	-	400	0%	Developer driven project. No major activity anticpated for FY 2014.
R2084	RecPL - 20-Inch, 680 Zone, Village 2 - Heritage/La Media	Martin	1	-	1	0%	971	1	970	0%	Developer driven project. No major activity anticpated for FY 2014.
R2085	RecPL - 20-Inch, 680 Zone, La Media - State/Olympic	Martin	1	-	1	0%	600	-	600	0%	Developer driven project. No major activity anticpated for FY 2014.
R2094	Potable Irrigation Meters to Recycled Water Conversions	Martin	150	38	112	25%	1,700	1,603	97	94%	Project complete.
	Total Developer Reimbursement Projects	Total:	154	38	116	25%	6,973	1,604	5,369	23%	
	GRAND TOTAL		$ 13,863	$ 8,514	$ 5,349	61%	$ 194,568	$ 49,514	$ 145,054	25%	

Attachment C

Otay Water District
Capital Improvement Program

Fiscal Year 2014
Fourth Quarter
(through June 30, 2014)

624-2 Reservoir Exterior Coating

Background

The approved CIP Budget for Fiscal Year 2014 consists of 63 projects that total $13.9 million. These projects are broken down into four categories.

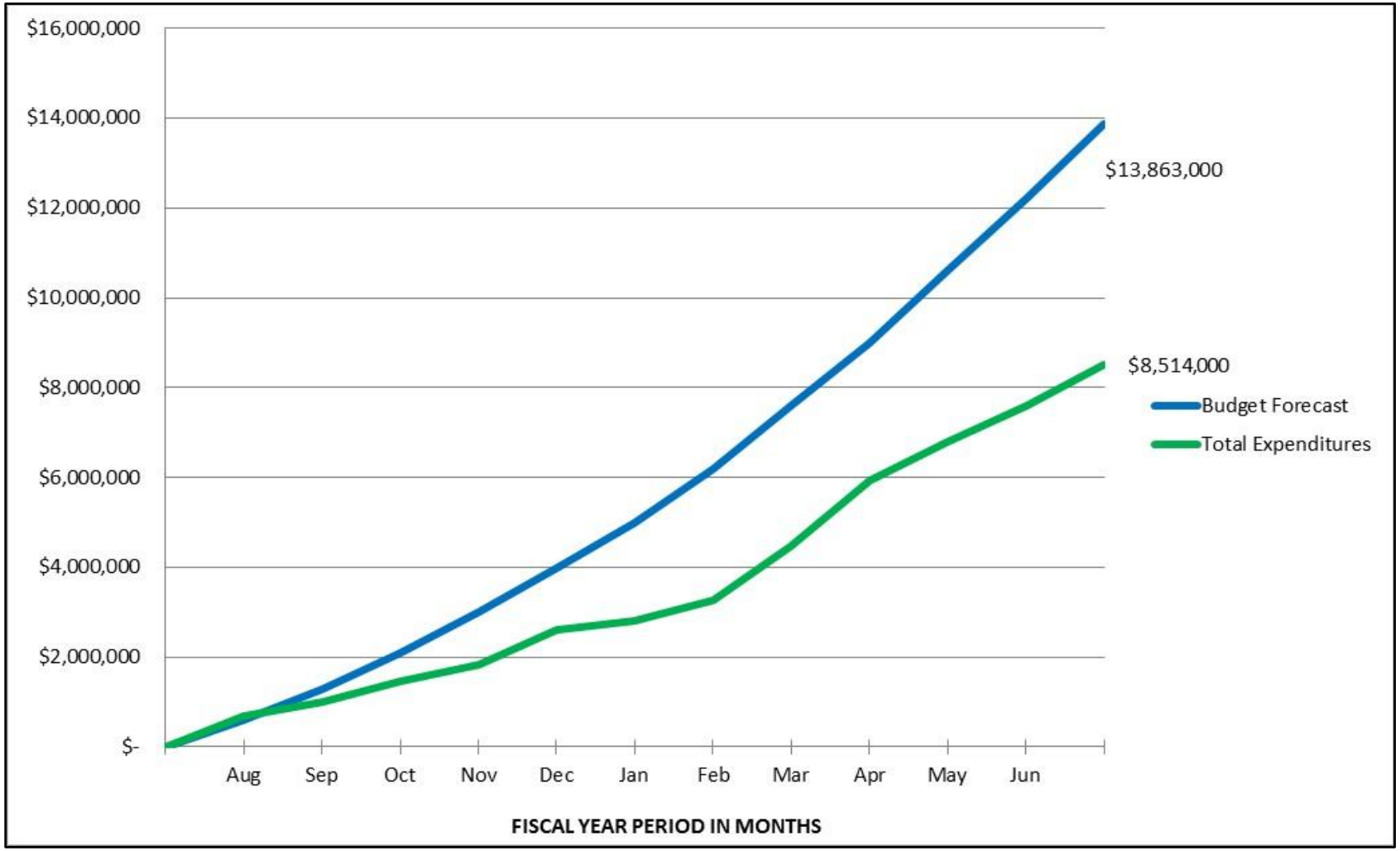
1.	Capital Facilities	$ 4.4 million
2.	Replacement/Renewal	$ 7.7 million
3.	Capital Purchases	$ 1.6 million
4.	Developer Reimbursement	$ 0.2 million

Overall expenditures through the Fourth Quarter of Fiscal Year 2014 totaled $8.5 million, which is approximately 61% of the Fiscal Year budget.

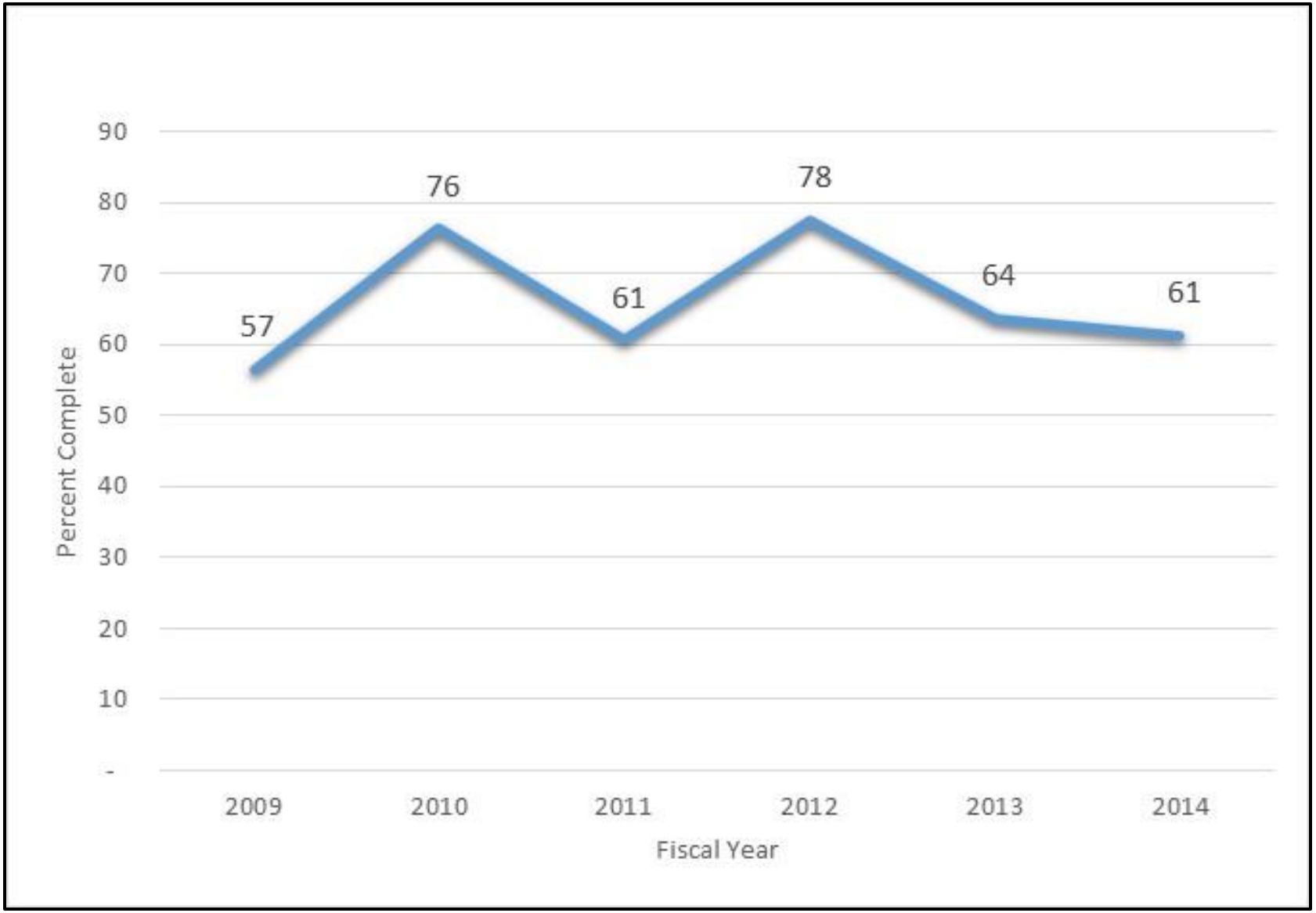
Fiscal Year 2014
Fourth Quarter Update
($1,000)

CIP CAT	Description	**FY 2014 Budget**	**FY 2014 Expenditures**	**% FY 2014 Budget Spent**	Total Life-to-Date Budget	Total Life-to-Date Expenditures	% Life-to-Date Budget Spent
1	**Capital Facilities**	$4,362	$3,355	77%	$127,321	$21,468	17%
2	**Replacement/ Renewal**	$7,730	$4,121	53%	$47,008	$17,896	38%
3	**Capital Purchases**	$1,617	$1,000	62%	$13,266	$8,546	64%
4	**Developer Reimbursement**	$154	$38	25%	$6,973	$1,604	23%
	Total:	$13,863	$8,514	61%	$194,568	$49,514	25%

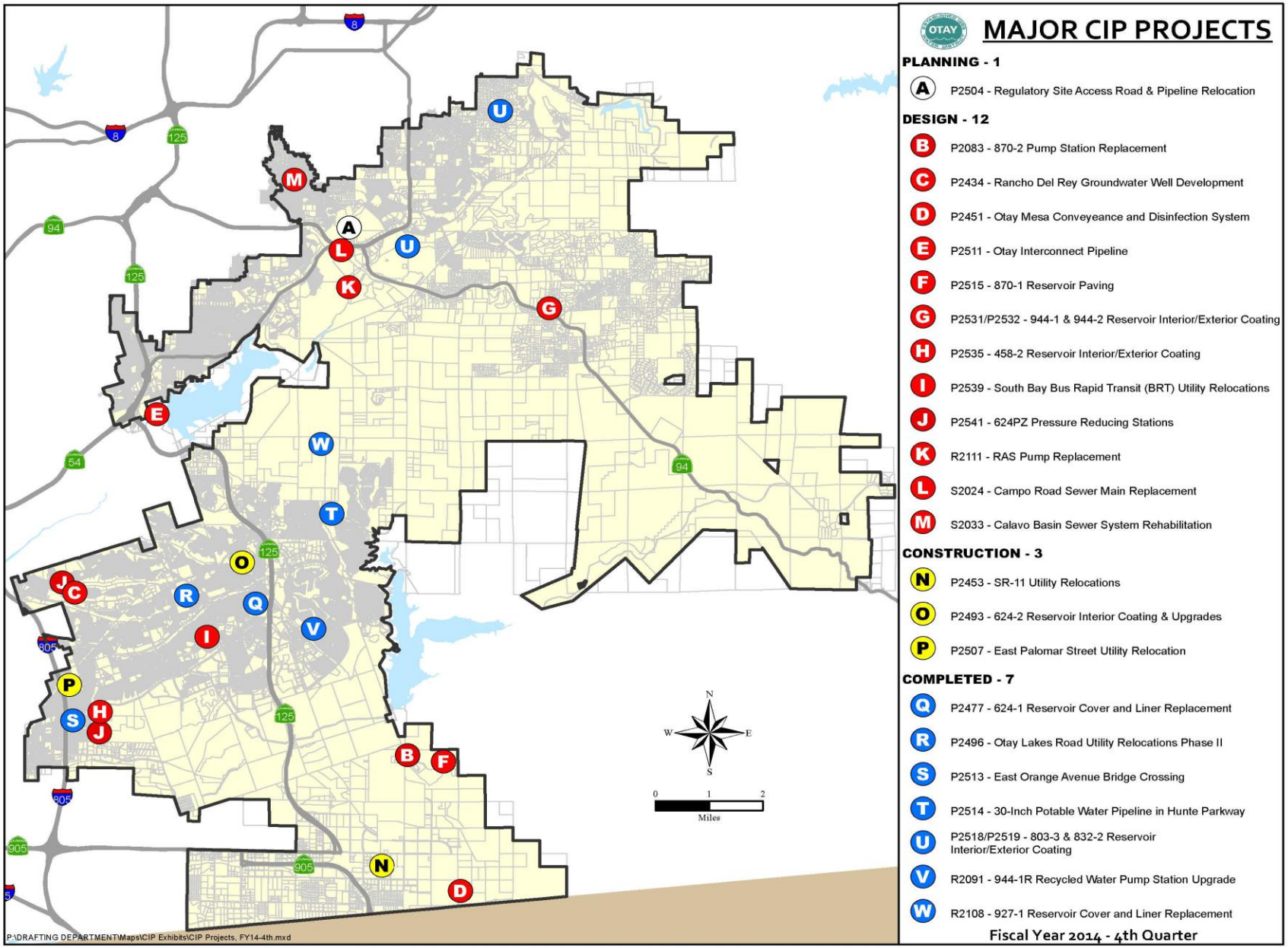
Fiscal Year 2014
Fourth Quarter
CIP Budget Forecast vs. Expenditures



Annual CIP Expenditures vs. Budget



District Map of Major CIP Projects



CIP Projects in Construction

- 624-2 Reservoir Interior/Exterior Coating & Upgrades (P2493)
- Remove and Replace Deteriorating Reservoir Coating
- Structural Modifications Including Level Indicator Replacement and Anode Replacement
- $1.95M Budget
- Start: January 2014
- Estimated Completion: July 2014

624-2 Reservoir
Completed Exterior Coating

CIP Projects in Construction

- 927-1 Recycled Water Reservoir Cover and Liner Replacement (R2108)
- Removal and Replacement of the reservoir liner and cover
- $1.40M Budget
- Start: November 2013
- Completion: June 30, 2014

927-1 Reservoir

Completed Project

CIP Projects in Construction

- SR-11 Utility Relocations Sequence I (P2453)
- Relocate Existing Water Facilities to support SR-11 Construction
- $2.25M Budget
- Start: February 2014
- Estimated Completion: July 2016

Aerial View of Project Location

Future SR-11/Sanyo Avenue

Construction Contract Status

CIP NO.	PROJECT TITLE	CONTRACTOR	BASE BID AMOUNT	CONTRACT AMOUNT W/ ALLOWANCES	NET CHANGE ORDERS LTD*		CURRENT CONTRACT AMOUNT	TOTAL EARNED TO DATE	% CHANGE ORDERS W/ ALLOWANCE CREDIT**	% COMPLETE	EST. COMP. DATE
					PROJECT TOTAL	%					
R2091	944-1R Recycled Pump Station Upgrade & System Enhancements	Sepulveda	$1,099,423	$1,162,423	$90,505	8.2%	$1,252,928	$1,252,928	7.8%	100.0%	**Complete February 2014**
R2108	927-1 Recycled Water Reservoir Cover and Liner Replacement	Layfield	$833,400	$873,400	$5,558	0.7%	$878,958	$878,958	0.6%	100.0%	**Complete June 2014**
P2453	SR-11 Potable Water Utility Relocations - Sequence 1	Coffman Specialties, Inc.	$947,380	$992,380	$0	0.0%	$947,380	$0	-4.5%	0.0%	**July 2016**
P2493	624-2 Reservoir Coating	Advanced Industrial Services	$1,169,000	$1,199,000	$0	0.0%	$1,180,770	$1,180,770	-1.5%	100.0%	**July 2014**
P2514	Hunte Parkway 30" Potable Water Installation	Sepulveda	$1,172,257	$1,212,257	$126,233	10.8%	$1,312,508	$1,312,508	8.3%	100.0%	**Complete June 2013**
P2513	Orange Avenue/ I-805 12" Potable Water Installation	Basile	$767,000	$872,000	$19,290	2.5%	$891,290	$891,290	2.2%	100.0%	**Complete August 2013**
P2518/ P2519	803-3 & 832-2 Reservoir Coating	Advanced Industrial Services	$876,900	$946,900	($3,339)	-0.4%	$873,561	$873,561	-7.7%	100.0%	**Complete December 2013**
		TOTALS:	***$6,865,360***	***$7,258,360***	***$238,247***	**3.5%**	***$7,337,395***	***$6,390,014***	**1.1%**		

*NET CHANGE ORDERS DO NOT INCLUDE ALLOWANCE ITEM CREDITS. IT'S A TRUE CHANGE ORDER PERCENTAGE FOR THE PROJECT

**THIS CHANGE ORDER RATE INCLUDES THE CREDIT FOR UNUSED ALLOWANCES

Consultant Contract Status

Consultant	CIP No.	Project Title	Original Contract Amount	Total Change Orders	Revised Contract Amount	Approved Payment To Date	% Change Orders	% Project Complete	Date of Signed Contract	End Date of Contract
PLANNING										
ATKINS	Varies	2015 WATER FACILITIES MASTER PLAN UPDATE	$ 434,731.00	$ -	$ 434,731.00	$ 46,864.94	0.0%	10.8%	1/28/2014	12/31/2016
ARCADIS U.S., INC.	Varies	WASTEWATER MANAGEMENT PLAN FY12-13	$ 349,979.36	$ -	$ 349,979.36	$ 349,971.86	0.0%	100.0%	8/3/2011	COMPLETE 12/31/2013
BROWN AND CALDWELL	P1210	IWRP 2013 UPDATE	$ 5,000.00	$ -	$ 5,000.00	$ 3,001.00	0.0%	60.0%	9/17/2013	COMPLETE 12/31/2013
NARASIMHAN CONSULTING	Varies	HYDRAULIC MODELING SERVICES	$ 175,000.00	$ -	$ 175,000.00	$ 111,384.70	0.0%	63.6%	5/2/2011	COMPLETE 6/30/2014
DESIGN										
AECOM	P2451	OTAY MESA CONVEYANCE AND DISINFECTION SYSTEM (DESIGN ENGINEER)	$ 3,910,297.00	$ 136,409.00	$ 4,046,706.00	$ 902,796.53	3.5%	22.3%	1/3/2011	6/30/2016
AEGIS ENGINEERING MGMT INC	Varies	AS-NEEDED DESIGN SERVICES FY13-14	$ 300,000.00	$ -	$ 300,000.00	$ 174,477.78	0.0%	58.2%	11/1/2012	6/30/2015
ARCADIS U.S., INC.	P2434, P2511	VALUE ENGINEERING AND CONSTRUCTIBILITY REVIEW	$ 153,628.00	$ -	$ 153,628.00	$ 70,208.73	0.0%	45.7%	1/18/2012	6/30/2016
ATKINS	Varies	AS-NEEDED ENGINEERING DESIGN SERVICES FY12-13	$ 175,000.00	$ -	$ 175,000.00	$ 154,521.56	0.0%	88.3%	10/25/2011	6/30/2015
BSE ENGINEERING INC	Varies	AS-NEEDED ELECTRICAL SERVICES	$ 100,000.00	$ -	$ 100,000.00	$ 18,455.73	0.0%	18.5%	6/1/2012	6/30/2015
BUSTAMANTE & ASSOCIATES	P2451	OTAY MESA CONVEYANCE AND DISINFECTION SYSTEM (BINATIONAL WATER AND RELATED ISSUES)	$ 39,500.00	$ -	$ 39,500.00	$ 7,000.00	0.0%	17.7%	1/1/2013	COMPLETE 10/31/2013
CAROLLO ENGINEERS INC	P2083	DESIGN/CONSTRUCTION FOR 870-2 PS	$ 624,910.00	$ 29,000.00	$ 653,910.00	$ 157,725.51	4.6%	24.1%	10/11/2013	12/31/2017
DARNELL & ASSOCIATES	Varies	AS-NEEDED TRAFFIC ENGINEERING SERVICES	$ 125,000.00	$ -	$ 125,000.00	$ 27,920.00	0.0%	22.3%	6/12/2012	6/30/2015
HDR ENGINEERING INC	Varies	CORROSION SERVICES FY14-FY16	$ 684,750.00	$ -	$ 684,750.00	$ 140,843.69	0.0%	20.6%	11/22/2013	12/31/2015
HECTOR MARES-COSSIO	P2451	OTAY MESA CONVEYANCE AND DISINFECTION SYSTEM (BINATIONAL WATER AND RELATED ISSUES)	$ 120,000.00	$ -	$ 120,000.00	$ 93,600.00	0.0%	78.0%	4/1/2013	3/31/2015

Consultant Contract Status

Consultant	CIP No.	Project Title	Original Contract Amount	Total Change Orders	Revised Contract Amount	Approved Payment To Date	% Change Orders	% Project Complete	Date of Signed Contract	End Date of Contract
LEE & RO INC	P2511	OTAY INTERCONNECT PIPELINE	$ 2,769,119.00	$ -	$ 2,769,119.00	$ 1,093,450.93	0.0%	39.5%	11/4/2010	12/31/2015
MICHAEL D.KEAGY REAL ESTATE	Varies	AS-NEEDED APPRAISAL SERVICES FY13-14	$ 45,000.00	$ -	$ 45,000.00	$ 31,000.00	0.0%	68.9%	9/5/2012	6/30/2015
RICK ENGINEERING COMPANY	S2024	CAMPO ROAD SEWER MAIN REPLACEMENT PROJECT	$ 805,705.00	$ -	$ 805,705.00	$ 30,551.66	0.0%	3.8%	5/27/2014	12/31/2017
SILVA SILVA CONSULTING	P2451	OTAY MESA CONVEYANCE AND DISINFECTION SYSTEM (BINATIONAL WATER AND RELATED ISSUES)	$ 104,000.00	$ -	$ 104,000.00	$ 104,000.00	0.0%	100.0%	5/1/2012	COMPLETE 6/30/2014
SILVA SILVA CONSULTING	P2451	OTAY MESA CONVEYANCE AND DISINFECTION SYSTEM (BINATIONAL WATER AND RELATED ISSUES)	$ 115,000.00	$ -	$ 115,000.00	$ -	0.0%	0.0%	5/1/2014	6/30/2016
SIMON WONG ENGINEERING	R2109	WOODEN TRESTLE IMPROVEMENT	$ 26,790.00	$ -	$ 26,790.00	$ 7,467.56	0.0%	27.9%	5/1/2014	12/31/2015
SOUTHERN CALIFORNIA SOIL	Varies	GEOTECHNICAL SERVICES FY13-15	$ 175,000.00	$ -	$ 175,000.00	$ 46,628.79	0.0%	26.6%	12/10/2012	6/30/2015
TETRA TECH, INC	P2434	RANCHO DEL REY WELL - PHASE 2	$ 724,493.50	$ 23,749.00	$ 748,242.50	$ 404,445.17	3.3%	54.1%	4/21/2011	12/31/2014
V & A CONSULTING	Varies	VALUE ENGINEERING AND CONSTRUCTIBILITY REVIEW	$ 392,729.00	$ -	$ 392,729.00	$ 298,601.09	0.0%	76.0%	6/23/2011	COMPLETE 9/30/2013
CONSTRUCTION SERVICES										
AIRX UTILITY SURVEYORS	Varies	AS-NEEDED SURVEYING SERVICES FY 14-15	$ 175,000.00	$ -	$ 175,000.00	$ 52,369.00	0.0%	29.9%	9/18/2013	6/30/2015
ALTA LAND SURVEYING, INC.	Varies	AS-NEEDED SURVEYING SERVICES	$ 175,000.00	$ -	$ 175,000.00	$ 171,198.75	0.0%	97.8%	8/15/2011	COMPLETE 6/30/2014
ALYSON CONSULTING	Varies	CONSTRUCTION MGMT/INSPECTION FY 13-15	$ 350,000.00	$ -	$ 350,000.00	$ 197,065.00	0.0%	56.3%	10/24/2012	6/30/2015
CLARKSON LAB & SUPPLLY	Varies	AS-NEEDED BACTERIOLOGICAL TESTING FY 14	$ 15,000.00	$ -	$ 15,000.00	$ 15,000.00	0.0%	100.0%	7/1/2013	COMPLETE 6/30/2014
HARPER & ASSOCIATES	P2493	COATING INSPECTION SERVICES ON THE 624-2 & 458-2 RESERVOIR	$ 75,160.00	$ -	$ 75,160.00	$ 75,155.00	0.0%	100.0%	8/27/2013	COMPLETE 7/3/2014
ENVIRONMENTAL										
ICF INTERNATIONAL (aka JONES & STOKES ASSOCIATES)	Varies	AS-NEEDED ENVIRONMENTAL CONSULTING SERVICES	$ 375,000.00	$ -	$ 375,000.00	$ 341,762.43	0.0%	91.1%	9/9/2010	COMPLETE 6/30/2014

Consultant Contract Status

Consultant	CIP No.	Project Title	Original Contract Amount	Total Change Orders	Revised Contract Amount	Approved Payment To Date	% Change Orders	% Project Complete	Date of Signed Contract	End Date of Contract
MERKEL & ASSOCIATES	Varies	SAN MIGUEL HABITAT MANAGEMENT AREA AND CIP-ASSOCIATED MITIGATION PROJECTS	$ 359,079.00	$ 26,750.00	$ 385,829.00	$ 359,634.92	7.4%	93.2%	12/14/2011	12/31/2014
RECON	P2494	PREPARATION OF THE SUBAREA PLAN	$ 270,853.00	$ -	$ 270,853.00	$ 193,262.61	0.0%	71.4%	3/28/2008	6/30/2015
WATER RESOURCES										
MICHAEL R. WELCH	Varies	ENGINEERING PLANNING SVCS.	$ 40,000.00	$ -	$ 40,000.00	$ 39,960.00	0.0%	99.9%	3/25/2009	COMPLETE 6/30/2015
MICHAEL R. WELCH	Varies	ENGINEERING PLANNING SVCS.	$ 100,000.00	$ -	$ 100,000.00	$ 1,800.00	0.0%	1.8%	3/31/2014	6/30/2019
PUBLIC SERVICES										
AEGIS ENGINEERING MANAGEMENT	Varies	RECYCLED WATER PLAN CHECKING, RETROFIT, AND INSPECTION SERVICES FOR DEVELOPER PROJECTS	$ 300,000.00	$ -	$ 300,000.00	$ 296,020.96	0.0%	98.7%	1/20/2010	COMPLETE 12/30/2013
AEGIS ENGINEERING MANAGEMENT	Varies	RECYCLED WATER PLAN CHECKING, RETROFIT, AND INSPECTION SERVICES FOR DEVELOPER PROJECTS	$ 300,000.00	$ 35,000.00	$ 335,000.00	$ 309,105.24	11.7%	92.3%	11/24/2010	COMPLETE 12/30/2013
AEGIS ENGINEERING MANAGEMENT	Varies	AS-NEEDED DEVELOPER PROJECTS FY 14-15	$ 350,000.00	$ -	$ 350,000.00	$ 151,022.56	0.0%	43.1%	8/20/2013	6/30/2015
		TOTALS:	$ 15,240,723.86	$ 250,908.00	$ 15,491,631.86	$ 6,478,273.70	1.6%			

QUESTIONS?

AGENDA ITEM 13b

STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	September 3, 2014
		PROJECT:	DIV. NO.: ALL
SUBMITTED BY:	Michael Kerr, Information Technology Manager		
APPROVED BY:	☒ Adolfo Segura, Assistant Chief Admin/IT Services ☒ Geoff Stevens, Chief Information Officer ☒ German Alvarez, Assistant General Manager ☒ Mark Watton, General Manager		
SUBJECT:	REDESIGN OF DISTRICT'S WEBSITE		

GENERAL MANAGER'S RECOMMENDATION:

No recommendation. This is an informational item only.

COMMITTEE ACTION:

See "Attachment A".

PURPOSE:

To inform the Board of the District's intent to redesign the current public facing website.

ANALYSIS:

Continuing our effort to keep the District's web presence and technology current, IT staff commenced the redesign task of the District's public facing website. The new website will provide a customer-centric layout that facilitates user-friendly navigation and social media benefits. The new website will continue to address the increasing technological expectations of Otay's customer base. In addition, the new website will enhance Otay's ability to provide extensive information and services without requiring physical interaction with customers.

The redesign effort is being conducted by internal staff and through a small professional as-needed services agreement of $24,000, which is also used for the District's Microsoft server support. Cost to host the District's website externally will remain at $125 per month. The monthly hosting fee includes a server platform, operating system, database, and backup support. No additional cost will be incurred.

The new site will provide additional mobile functionality, improved social media interactivity, enhanced visual elements, standardized content, optimized performance, and improved security.

Staff continues to hold group meetings with internal stakeholders to obtain feedback on appearance, functionality and presentation. Prior to launch, specific staff will be trained on content administration. Staff expects to launch the new website by the beginning of September 2014.

FISCAL IMPACT: ☒ Joe Beachem, Chief Financial Officer

None. This is an informational item only.

STRATEGIC GOAL:

N/A.

LEGAL IMPACT:

None.

Attachments: Attachment A – Committee Action Report

ATTACHMENT A

SUBJECT/PROJECT:	REDESIGN OF DISTRICT'S WEBSITE

COMMITTEE ACTION:

The Finance, Administration and Communications Committee reviewed this item at a meeting held on August 18, 2014 and the following comments were made:

- Staff has redesigned the district's public facing website and it is anticipated that the new site will be launched in the early part of September 2014.

- The new website was developed in tandem with the current website and features a new responsive design that will adapt the page layout and content to the size of the user's display or mobile device, which will improve the accessibility of content on the site for mobile devices, tablets, and traditional desktop computers.

- The homepage was redesigned, the content has been standardized, the informational architecture was improved, and the over interactivity has been increased.

- The project to redesign the District's website was started about three (3) months ago with input and assistance from different departments. Staff also benchmarked both commercial companies and government agencies in identifying and establishing website governance.

- The District's new website will provide a customer centric layout that facilitates navigation to key services that will help address the increasing technological expectations of Otay's technically savvy customer base.

- Features of the new site include:

  - Increased responsiveness
  - New Layout Redesign
  - In-Place Video
  - Simple color schemes

  - High definition and transitional imagery
  - Heavier focus on Mobile technology

- It was noted that updating or changing content on the website is also easier which will make it easier to maintain.

- Staff shared that they found that if video is placed on the homepage versus the YouTube page, the public will view it. Video that was posted on the homepage received 11,000 views versus a few views from the YouTube page. Staff feels the more information that is placed on the homepage, the more information will be received by the public.

- It was also discussed that there was an intent to have an automated language translator icon (English to Spanish, etc.) provided on the website, however, there is concern that google and other automated translation services don't do a very good job with the translations. Instead, the District will have the articles translated which will provide more control over the translations. It was indicated that the customer web pages have been translated into Spanish and there is a limited number of articles available in Spanish. Staff will add to this as the District has more resource options (in-house, an outside vendor and its current Public Relations firm) for translating information to Spanish.

Upon completion of the discussion, the committee received staffs' report and supported presentation to the full board as an informational item.