

OTAY WATER DISTRICT
ENGINEERING, OPERATIONS & WATER RESOURCES COMMITTEE MEETING
and
SPECIAL MEETING OF THE BOARD OF DIRECTORS

2554 SWEETWATER SPRINGS BOULEVARD
SPRING VALLEY, CALIFORNIA
Board Room

WEDNESDAY
March 23, 2011
4:00 P.M.

This is a District Committee meeting. This meeting is being posted as a special meeting in order to comply with the Brown Act (Government Code Section §54954.2) in the event that a quorum of the Board is present. Items will be deliberated, however, no formal board actions will be taken at this meeting. The committee makes recommendations to the full board for its consideration and formal action.

AGENDA

1. ROLL CALL
2. 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

DISCUSSION ITEMS

3. APPROVE AN AGREEMENT FOR PROFESSIONAL AS-NEEDED HYDRAULIC MODELING SERVICES WITH NARASIMHAN CONSULTING SERVICES, INC. IN AN AMOUNT NOT-TO-EXCEED \$175,000 DURING FISCAL YEARS 2011, 2012 AND 2013 (ENDING JUNE 30, 2013) [KENNEDY] [5 minutes]
4. APPROVE THE WATER ASSESSMENT REPORT DATED FEBRUARY 2011 FOR THE RABAGO TECHNOLOGY PARK PROJECT AS REQUIRED BY SENATE BILL 610 (KENNEDY) [10 minutes]
5. ADOPT RESOLUTION NO. 4171 ANNEXING PROPERTY OWNED BY DAVID L. AND SUZANNE M. DUKE (APN: 519-281-07-00) TO THE OTAY WATER DISTRICT'S IMPROVEMENT DISTRICT NO. 18 (CHARLES) [5 minutes]
6. APPROVE A CONSTRUCTION CONTRACT TO SEPULVEDA CONSTRUCTION FOR THE 944-1R PUMP STATION UPGRADE PROJECT IN AN AMOUNT NOT-TO-EXCEED \$1,162,423 (KAY) [5 minutes]
7. APPROVE REVISIONS TO THE COOPERATIVE AGREEMENT FOR THE UNITED STATES BUREAU OF RECLAMATION TITLE XVI FUNDING FOR THE OTAY WATER DISTRICT RECYCLED WATER INFRASTRUCTURE PROGRAM (PEASLEY) [5 minutes]
8. APPROVE AMENDMENTS TO TWO (2) UTILITY AGREEMENTS (NOs. 31755 AND 31926) WITH THE CALIFORNIA DEPARTMENT OF TRANSPORTATION (SILVERMAN) [5 minutes]

9. APPROVE A PROFESSIONAL SERVICES CONTRACT WITH TETRA TECH, INC. FOR THE DESIGN OF PHASE 2 OF THE RANCHO DEL REY WELL PROJECT IN AN AMOUNT NOT-TO-EXCEED \$724,493.50 (SILVERMAN) [5 minutes]
10. APPROVE THE ISSUANCE OF A PURCHASE ORDER TO SLOAN ELECTROMECHANICAL SERVICE & SALES FOR THE PROCUREMENT OF FIVE (5) PUMPS, MOTORS AND DISCHARGE HEADS FOR THE 711-1 PUMP STATION IMPROVEMENT PROJECT IN AN AMOUNT NOT-TO-EXCEED \$204,934.45 (CAMERON) [5 minutes]
11. FISCAL YEAR 2011 STRATEGIC PLAN AND PERFORMANCE MEASURES UPDATE REPORT (STEVENS) [10 minutes]
12. SAN DIEGO COUNTY WATER AUTHORITY UPDATE (WATTON) [10 minutes]
13. ADJOURNMENT

BOARD MEMBERS ATTENDING:

Jose Lopez, Chair
Gary Croucher

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 that would require accommodation in order to enable you to participate in this meeting, please call the District Secretary at 670-2280 at least 24 hours prior to the meeting.

Certification of Posting

I certify that on March 18, 2011 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 24 hours in advance of the meeting of the Board of Directors (Government Code Section §54954.2).

Executed at Spring Valley, California on March 18, 2011.



Susan Cruz, District Secretary



STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	April 6, 2011
SUBMITTED BY:	Bob Kennedy <i>BK</i> Associate Civil Engineer	PROJECT/ SUBPROJECT:	Various DIV.NO. ALL
	Ron Ripperger <i>WR</i> Engineering Manager		
APPROVED BY: (Chief)	Rod Posada <i>R. Posada</i> Chief, Engineering		
APPROVED BY: (Asst. GM):	Manny Magaña <i>M. Magaña</i> Assistant General Manager, Engineering and Operations		
SUBJECT:	Award of As-Needed Hydraulic Modeling Engineering Services Contract for Fiscal Years 2011, 2012, and 2013		

GENERAL MANAGER'S RECOMMENDATION:

That the Otay Water District (District) Board of Directors (Board) authorizes the General Manager to enter into an agreement for professional services for As-Needed Hydraulic Modeling Services with Narasimhan Consulting Services, Inc. (NCS) in an amount not-to-exceed \$175,000 during Fiscal Years 2011, 2012 and 2013 (ending June 30, 2013).

COMMITTEE ACTION:

Please see Attachment A.

PURPOSE:

To obtain Board authorization for the award of a professional services contract for hydraulic modeling services on an as-needed basis with NCS. The contract amount is not-to-exceed \$175,000 for Fiscal Years 2011, 2012, and 2013.

ANALYSIS:

The District will require the professional services of a hydraulic modeling consultant on an as-needed basis in support of the District's Fiscal Years 2011, 2012, and 2013 Capital Improvement Program (CIP) projects, developer funded studies, Engineering planning studies, Information Technology studies. These services

will also be used to integrate GIS updates into the existing model and support Operations in the field. The As-Needed Hydraulic Modeling Engineering Services contract will provide the District with the ability to obtain consulting services in a timely and efficient manner and on an as-needed basis.

The District will require the expertise of a hydraulic modeling consultant to maintain the current hydraulic model developed with the Water Resource Master Plan completed last year. This will include integrating new facilities or GIS updates into the model and performing planning studies for the Engineering, Operations, and Information Technology departments. The consultant will perform fire flow calculations in support of new or existing developments and prepare developer funded studies.

It is more efficient and cost effective to issue a contract on an as-needed basis. This concept has also been used in the past for other disciplines like civil engineering, geotechnical, electrical, and environmental services.

The District will issue task orders to the consultant for specific projects during the contract period. The consultant will prepare a detailed scope of work, schedule, and cost estimate for each task order assigned under the contract. Upon written task order authorization from the District, the consultant shall then proceed with the project as described in the scope of work.

The CIP projects that are estimated to require hydraulic modeling services for Fiscal Years 2011, 2012, and 2013, at this time, are listed below:

CIP	DESCRIPTION	ESTIMATED COST
P2451	Otay Mesa Conveyance and Disinfection System	\$20,000
P2083	PS 870-2 Pump Station Replacement	\$15,000
P2502	803-1 Pump Station Modifications	\$10,000
P2503	850-2 Pump Station Modifications	\$10,000
P2511	North District-South District Interconnection	\$15,000
P2473	PS 711-1 Pump Station Improvements	\$10,000
R2091	Rec PS 944-1 Pump Station Upgrade	\$10,000
P2434	Rancho del Rey Groundwater Well Development	\$10,000
R2058	Rec PL Airway Road-Otay Mesa Road	\$10,000
R2077	Rec PL Alta Road	\$10,000
R2087	Rec PL Wueste Road	\$10,000
	TOTAL:	\$130,000

The hydraulic modeling services scopes for the above projects are estimated from preliminary information and past projects.

Therefore, staff believes that a \$175,000 cap on the As-Needed Hydraulic Modeling Services contract is adequate, while still providing a buffer.

The contract is not-to-exceed \$175,000 for all task orders. Fees for professional services will be charged to the CIP projects or to the Fiscal Year Operations budget.

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

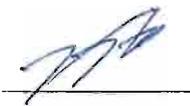
The District solicited hydraulic modeling engineering services by placing an advertisement on the District website, San Diego Union Tribune, and the San Diego Daily Transcript. Sixteen (16) firms submitted a letter of interest and a statement of qualifications. The Request for Proposal (RFP) for As-Needed Hydraulic Modeling Services was sent to all sixteen (16) firms resulting in five (5) proposals received on February 11, 2011. They are as follows:

- Stetson Engineers, Inc.
- Aegis Engineering Management
- Narasimhan Consulting Services, Inc.
- PBS&J, an Atkins Company
- IDModeling

The nine (9) firms that chose not to propose are Lee & Ro, Inc., J.C. Heden and Associates, Inc., DHI Water & Environment, Inc., Proteus Consulting, CVALDO Corporation, Poggemeyer Design Group, Ludwig Engineering, RBF Consulting, and Marrs Services, Inc. Two other firms, Psomas and Northwest Hydraulic Consultants joined with IDModeling as sub-consultants.

In accordance with the District's Policy 21, staff evaluated and scored all written proposals. NCS received the highest score for their services based on their experience, understanding of the scope of work, proposed method to accomplish the work, and their composite hourly rate. NCS was the most qualified consultant with the best overall proposal. The District has not worked with NCS on any project, but they are a highly rated company and are readily available to provide the services required. A summary of the complete evaluation is shown in Attachments B.

FISCAL IMPACT:



The funds for this contract will be expended from various CIP project budgets and the Operating budget. The fees for professional services requested herein are available in the authorized CIP project budgets and in the Fiscal Year 2011 Operating budget. This contract is for 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 professional services on a specific project.

The Project Manager anticipates that the Fiscal Years 2012 and 2013 budgets will be sufficient to support the professional services required in addition to the CIP project budgets for the specific CIP projects.

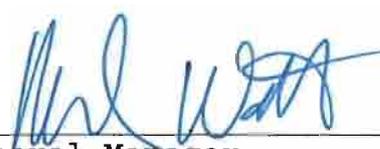
Finance has determined that funding is available from the Operating budget and the various CIP project budgets listed above.

STRATEGIC GOAL:

This project supports the District's Mission statement, "To provide the best quality of water and wastewater service to the customers of the Otay Water District, in a professional, effective, and efficient manner," and the District's Strategic Goal, in planning for infrastructure and supply to meet current and future potable water demands.

LEGAL IMPACT:

None.



General Manager

P:\WORKING\As Needed Services\Hydraulic Modeling\Fiscal Year 11-13\Staff Report\BD 04-06-11, As-Needed Hydraulic Modeling Services (BK-RR).doc

BK/RR/RP:jf

Attachments: Attachment A
Attachment B



ATTACHMENT A

SUBJECT/PROJECT: Various	Award of As-Needed Hydraulic Modeling Engineering Services Contract for Fiscal Years 2011, 2012, and 2013
------------------------------------	---

COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee reviewed this item at a meeting held on March 23, 2011. The Committee supported Staff's recommendation.

NOTE:

The "Committee Action" is written in anticipation of the Committee moving the item forward for Board approval. This report will be sent to the Board as a Committee approved item, or modified to reflect any discussion or changes as directed from the Committee prior to presentation to the full Board.

**ATTACHMENT B
SUMMARY OF PROPOSAL RANKINGS
As-Needed Hydraulic Modeling**

		WRITTEN							REFERENCES	
		Qualifications of Staff	Understanding of Scope, Schedule and Resources	Soundness and Viability of Proposed Project Plan	INDIVIDUAL SUBTOTAL - WRITTEN	AVERAGE SUBTOTAL - WRITTEN	Proposed Rates*	Consultant's Commitment to DBE		TOTAL SCORE
MAXIMUM POINTS		30	25	30	86	85	16	Y/N	100	Poor/Good/Excellent
Stetson Engineers, Inc.	David Charles	24	21	24	69	68	3	Y	71	
	Roger Holly	21	17	20	58					
	Ming Zhao	30	23	28	81					
	Daniel Kay	25	18	21	64					
	Kevin Cameron	25	19	23	67					
Aegis Engineering Management	David Charles	24	23	24	71	65	12	Y	77	
	Roger Holly	20	17	18	55					
	Ming Zhao	20	20	22	62					
	Daniel Kay	23	21	25	69					
	Kevin Cameron	24	20	22	66					
NCS Engineers	David Charles	25	24	27	76	75	15	Y	90	Good
	Roger Holly	27	20	21	68					
	Ming Zhao	25	25	26	76					
	Daniel Kay	24	22	27	73					
	Kevin Cameron	29	24	28	81					
PBS&J, an Atkins Company	David Charles	26	23	25	74	77	11	Y	88	
	Roger Holly	29	24	29	82					
	Ming Zhao	25	25	28	78					
	Daniel Kay	25	23	27	75					
	Kevin Cameron	28	23	27	78					
IDModeling	David Charles	26	24	27	77	75	1	Y	76	
	Roger Holly	27	19	21	67					
	Ming Zhao	28	20	25	73					
	Daniel Kay	25	23	26	74					
	Kevin Cameron	30	23	29	82					

Review Panel does not see or consider rates when scoring other categories. Rates are scored by the PM, who is not on Review Panel.

RATES SCORING CHART			
Consultant	Proposed Rates	Position	Score
NCS Engineers	\$442	lowest	15
Aegis Engineering	\$480		12
PBS&J	\$503		11
Stetson Engineers	\$610		3
IDModeling	\$645	highest	1

The fees were evaluated by comparing rates for four positions. These positions include Principal, Project Manager, Hydraulic Modeling, and GIS technician. The sum of these four rates are noted on the table above.

Quality Assurance Approval Sheet

Subject: Award of As-Needed Hydraulic Modeling
Engineering Services Contract for Fiscal Years
2011, 2012, and 2013

Project No.: Various

Document Description: Staff Report for April 6, 2011 Board Meeting

Author:	 _____ Signature	<u>3/9/11</u> _____ Date
	<u>Bob Kennedy</u> _____ Printed Name	
QA Reviewer:	 _____ Signature	<u>3/9/11</u> _____ Date
	<u>Gary Silverman</u> _____ Printed Name	
Manager:	 _____ Signature	<u>3/9/11</u> _____ Date
	<u>Ron Ripperger</u> _____ Printed Name	

The above signatures attest that the attached document has been reviewed and to the best of their ability the signers verify that it meets the District quality standard by clearly and concisely conveying the intended information; being grammatically correct and free of formatting and typographical errors; accurately presenting calculated values and numerical references; and being internally consistent, legible and uniform in its presentation style.



STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	April 6, 2011
SUBMITTED BY:	Bob Kennedy <i>BK</i> Associate Civil Engineer	W.O./G.F. No.:	D0833- DIV.NO. 2 090093
	Ron Ripperger <i>RR</i> Engineering Manager		
APPROVED BY: (Chief)	Rod Posada <i>RP</i> Chief, Engineering		
APPROVED BY: (Asst. GM)	Manny Magaña <i>M Magaña</i> Assistant General Manager, Engineering and Operations		
SUBJECT:	Approval of Water Supply Assessment Report (February 2011) for the Rabago Technology Park		

GENERAL MANAGER' S RECOMMENDATION:

That the Otay Water District (District) Board of Directors (Board) approve the Water Supply Assessment Report (WSA Report) dated February 2011 for the Rabago Technology Park (Rabago) Project, as required by Senate Bill 610 (see Exhibit A for Project location).

COMMITTEE ACTION:

Please see Attachment A.

PURPOSE:

To obtain Board approval of the February 2011 WSA Report for the Rabago Project, as required by Senate Bill 610 (SB 610).

ANALYSIS:

SB 610 requires a city or county to evaluate whether total water supplies will meet the projected water demand for certain "projects" that are otherwise subject to the requirement of the

California Environmental Quality Act (CEQA). SB 610 provides its own definition of "project" in Water Code Section 10912. The County of San Diego (County) submitted a request for a WSA to the District pursuant to SB 610. SB 610 requires that, upon request of the city or county, a water purveyor, such as the District, prepare a water supply assessment to be included in the CEQA documentation.

The requirements of SB 610 are addressed by the WSA Report for the Rabago Project. Prior to transmittal to the County, the WSA Report must be approved by the District Board. Additional information of the intent of SB 610 is provided in Exhibit B and the Rabago Project WSA Report is attached as Exhibit C.

For the Rabago Project, the County is the responsible land use agency that requested the SB 610 water supply assessment from the District, as the water purveyor for the proposed Rabago Technology Park Project. The request for the WSA Report, in compliance with SB 610 requirements, was made by the County because the Rabago Project meets or exceeds one or both of the following SB 610 criteria:

- A proposed industrial, manufacturing or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of area.
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

The Rabago Project development plan proposes the development of 19 industrial business park lots on 71.1 acres.

The District, as the proposed water purveyor for the Rabago Project, does not have to comply with the requirements of Senate Bill 221 (SB 221) because the Project is an industrial subdivision and SB 221 applies to residential subdivisions.

Pursuant to SB 610, the WSA Report incorporates by reference the current Urban Water Management Plans and other water resources planning documents of the District, the San Diego County Water Authority (Water Authority), and the Metropolitan Water District of Southern California (Metropolitan). The District prepared the WSA Report in consultation with Dexter Wilson Engineering, Inc., and the Water Authority which demonstrates and documents that sufficient water supplies are planned for and are intended to be made available over a 20-year planning horizon under

supply conditions and in single and multiple dry years to meet the projected demand of the Rabago Project and other planned development projects within the District.

The expected demand for the Rabago Project is 67.5 acre-feet per year. This is consistent with the estimated demands in the District's 2009 Water Resources Master Plan Updated November 2010 (WRMP). The projected recycled water demand for the Rabago Project is 8.7 acre-feet per year, representing about 11 percent of the total water demand.

Metropolitan's Integrated Resource Plan (IRP) identifies a mix of resources (imported and local) that, when implemented, will provide 100 percent reliability for full-service demands through the attainment of regional targets set for conservation, local supplies, State Water Project supplies, Colorado River supplies, groundwater banking, and water transfers. Metropolitan's 2010 update to the IRP (2010 IRP Update) includes a water supply planning buffer to mitigate the risk associated with implementation of local and imported supply programs. The planning buffer identifies an additional increment of water that could potentially be developed if other supplies are not implemented as planned. As part of the establishment of the planning buffer, Metropolitan periodically evaluates supply development to ensure that the region is not under- or over-developing supplies. If managed properly, the planning buffer, along with other alternative supplies, will help ensure that the Southern California region, including San Diego County, will have adequate supplies to meet future demands.

The County Water Authority Act, Section 5, Subdivision 11, states the Water Authority, "as far as practicable, shall provide each of its member agencies with adequate supplies of water to meet their expanding and increasing needs."

The intent of the SB 610 legislation is that the land use agencies and the water agencies coordinate their efforts in planning for new development and thus plan for sufficient water supplies to meet the needs.

As per the requirements of SB 610, if the water supply assessment finds that the supply is sufficient, then the governing body of the water supplier (District) must approve the water supply assessment and deliver it to the lead agency (County) within 90 days. The County's WSA request letter dated December 22, 2010 was received by the District January 10, 2011. At the request of the District, the County of San Diego modified

the SB Compliance Request letter February 8, 2010 to focus the request for the Rabago Technology Park to comply with SB 610.

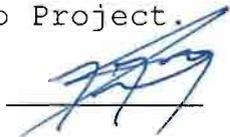
Pursuant to SB 610, if the water supply assessment finds overall supplies are insufficient, the water supplier shall provide to the lead agency "its plans for acquiring additional water supplies, setting forth measures that are being undertaken to acquire and develop those water supplies," and the water supplier governing body must approve the assessment and deliver it to the lead agency within 90 days. If the water supplier does conclude that additional water supplies are required, the water supplier should indicate the status or stage of development of the actions identified in the plans it provides. Identification of a potential future action in such plans does not by itself indicate that a decision to approve or to proceed with the action has been made.

Once either of the two actions listed above are accomplished, the District's SB 610 water supply assessment responsibilities are complete.

SB 610 provides that if the SB 610 water supply assessment is not received by the lead agency from the water supplier within the prescribed 90 day period, and any requested time extension, the lead agency may seek legal relief, such as writ of mandamus. The County's request letter dated December 22, 2010 was received by the District January 10, 2011 so the 90 day deadline for the District to provide the WSA Report to the County is April 9, 2011.

Water supply agencies throughout California continue to face climatological, environmental, legal, and other challenges that impact water source supply conditions, such as the court ruling regarding the Sacramento-San Joaquin Delta issues. Challenges such as these are always present. The regional water supply agencies, the Water Authority, Metropolitan, and the District nevertheless fully intend to have sufficient, reliable supplies to serve the Rabago Project.

FISCAL IMPACT:

A handwritten signature in blue ink, appearing to be "J. J. [unclear]", is written over a horizontal line.

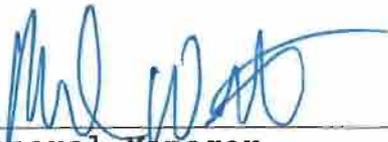
The District has been reimbursed \$8,000 for all costs associated with the preparation of the Rabago Project WSA Report. The reimbursement was accomplished via an \$8,000 deposit the Project proponents placed with the District on February 2, 2011.

STRATEGIC GOAL:

The preparation and approval of the Rabago Project WSA Report supports the District's Mission statement, "To provide the best quality of water and wastewater services to the customers of the Otay Water District, in a professional, effective, and efficient manner" and the District's Strategic Goal, in planning for infrastructure and supply to meet current and future potable water demands.

LEGAL IMPACT: _____

Approval of a WSA Report for the Rabago Project in form and content satisfactory to the Board of Directors would allow the District to comply with the requirements of Senate Bill 610.



General Manager

P:\WORKING\WO D0833-Rabago Tech Park\Staff Report\BD 04-06 11, Staff Report, Rabago Tech Park WSA (BK-RR).doc

BK/RR:jf

- Attachments:
- Attachment A - Committee Actions
 - Exhibit A - Project Location Map
 - Exhibit B - Explanation of the Intent of SB 610
 - Exhibit C - Rabago Technology Park WSA Report
 - Exhibit D - Presentation



ATTACHMENT A

SUBJECT/PROJECT: D0833-090093	Approval of Water Supply Assessment Report (February 2011) for the Rabago Technology Park
---	--

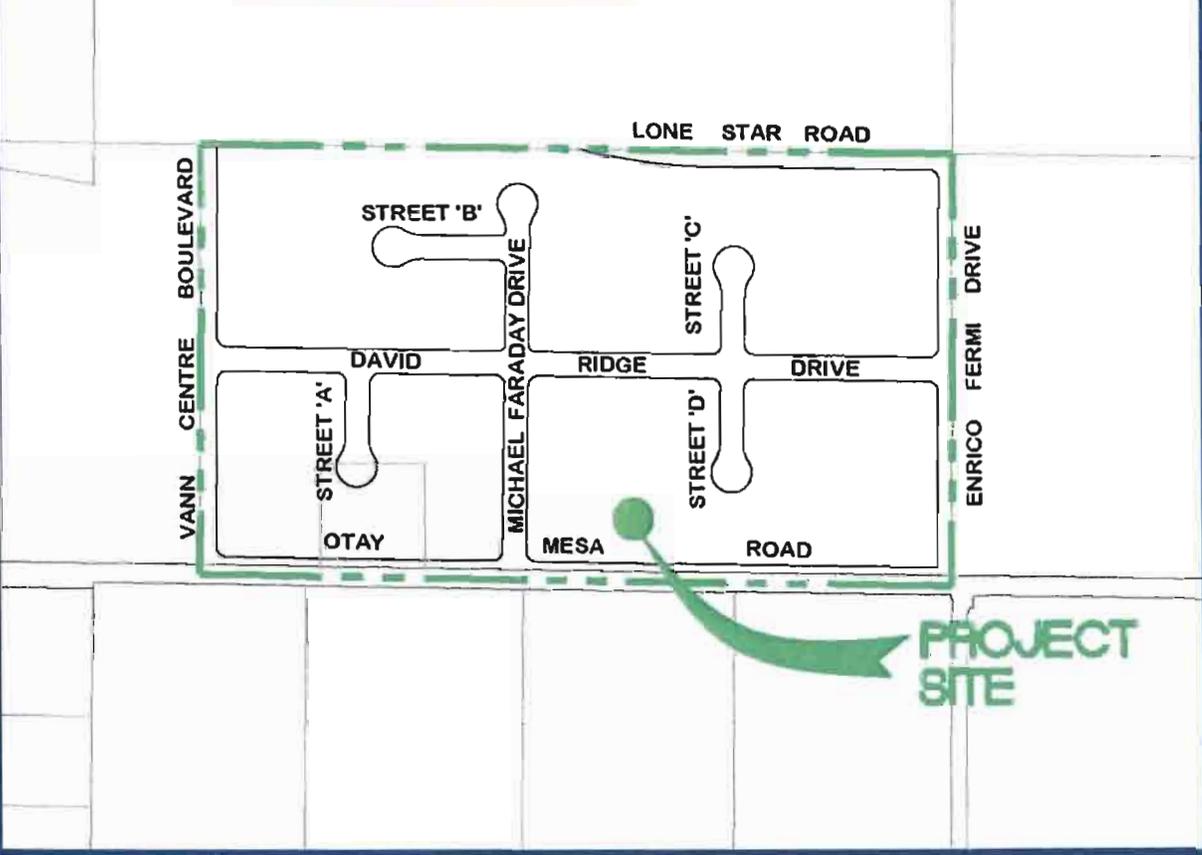
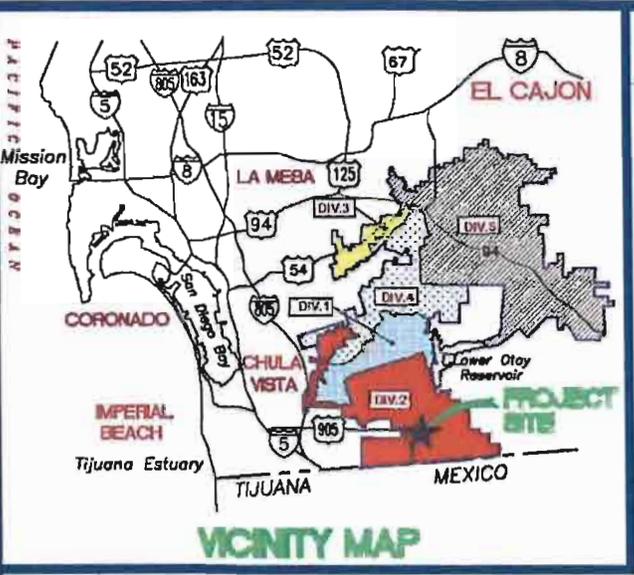
COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee reviewed this item at a meeting held on March 23, 2011. The Committee supported Staff's recommendation.

NOTE:

The "Committee Action" is written in anticipation of the Committee moving the item forward for Board approval. This report will be sent to the Board as a Committee approved item, or modified to reflect any discussion or changes as directed from the Committee prior to presentation to the full Board.

P:\WORKING\WO D0833--Rabago Tech Park\Staff Report\0833--090093--Exhibit A.dwg 2/23/2011 7:41:13 PM PST



OTAY WATER DISTRICT
 RABAGO TECHNOLOGY PARK
 LOCATION MAP

D0833--090093

EXHIBIT A

EXHIBIT B

Background Information

The Otay Water District (District) prepared the February 2011 Water Supply Assessment Report (WSA Report) for the Rabago Technology Park Project (Rabago Project) development proposal at the request of the County of San Diego (County). The County's WSA request letter dated December 22, 2010 was received by the District on January 10, 2011 so the 90 day deadline for the District to provide the Board approved WSA Report to the County ends April 9, 2011. The Rabago Investment Group LLC, A California Limited Liability Company submitted an entitlement application to the County for the development of the Rabago Project.

The Rabago Project is located within the jurisdictions of the District, the San Diego County Water Authority (Water Authority), and the Metropolitan Water District of Southern California (Metropolitan). See Exhibit A for Project location. To obtain permanent imported water supply service, land areas are required to be within the jurisdictions of the District, Water Authority, and Metropolitan.

The February 2011 WSA Report for the Rabago Project has been prepared by the District in consultation with Dexter Wilson Engineering, Inc., the Water Authority, and the County pursuant to Public Resources Code Section 21151.9 and California Water Code Sections 10631, 10656, 10910, 10911, 10912, and 10915 referred to as Senate Bill (SB) 610. SB 610 amended state law, effective January 1, 2002, intending to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 requires that the water purveyor of the public water system prepare a water supply assessment to be included in the California Environmental Quality Act (CEQA) environmental documentation and approval process of certain proposed projects. The requirements of SB 610 are addressed in the February 2011 WSA Report for the Rabago Project.

The Rabago Investment Group, LLC proposes the development of 19 industrial business park lots on 71.1 acres.

The expected demands for the Rabago Project is 60,290 gallons per day (gpd) or about 67.5 acre feet per year (ac-ft/yr). This is consistent with the estimated demands in the District's Water Resource Master Plan Updated November 2010 (WRMP). The projected recycled water demand for the proposed Rabago Project is approximately 7,740 gpd pr 8.7 ac-ft/yr, representing about 11% of the total Rabago Project water demand.

The District currently depends on the Water Authority and the Metropolitan for all of its potable water supplies and regional water resource planning.

The District's 2005 Urban Water Management Plan (UWMP) relies heavily on the UWMP's and Integrated Water Resources Plans (IRPs) of the Water Authority and Metropolitan for documentation of supplies available to meet projected demands. These plans are developed to manage the uncertainties and variability of multiple supply sources and demands over the long-term through preferred water resources strategy adoption and resource development target approvals for implementation.

The new uncertainties that are significantly affecting California's water resources include:

- The recent Federal Court ruling on previous operational limits on Sacramento-San Joaquin Delta to protect the Delta species; Water agencies are still trying to determine what effect the ruling will have on state water project deliveries. Actual supply curtailments for Metropolitan are contingent upon fish distribution, behavioral patterns, weather, Delta flow conditions, and how water supply reductions are divided between state and federal projects.
- Extended drought conditions.

These uncertainties have rightly caused concern among Southern California water supply agencies regarding the validity of the current water supply documentation.

Metropolitan's October 9, 2007 IRP Implementation Report acknowledges that significant challenges in some resource areas will likely require changes in strategies and implementation approaches in order to reach long-term IRP water supply targets. Significant progress in program implementation is being realized in most resource areas. However, a further examination of the uncertainty of State Water Project supplies, among other uncertainties, will be required to assess the ability of achieving the long-term IRP targets.

Metropolitan is currently involved in several proceedings concerning Delta operations to evaluate and address environmental concerns. In addition, at the State level, the Delta Vision and Bay-Delta Conservation Plan processes are defining long-term solutions for the Delta. Metropolitan is actively engaged in these processes and in October 2010, approved the update of their IRP. An approved implementation strategy update may not be forthcoming for a year or more.

The State Water Project (SWP) represents approximately 9% of Metropolitan's 2025 Dry Resources Mix with the supply buffer included. A 22% cutback in SWP supply represents an overall 2% (22% of 9% is 2%) cutback in Metropolitan supplies in 2025. Neither the Water Authority nor Metropolitan has stated that there is insufficient water for future planning in Southern California. Each agency is in the process of reassessing and reallocating their water resources.

Under preferential rights, Metropolitan can allocate water without regard to historic water purchases or dependence on Metropolitan. Therefore, the Water Authority and its member agencies are taking measures to reduce dependence on Metropolitan

through development of additional supplies and a water supply portfolio that would not be jeopardized by a preferential rights allocation.

As calculated by Metropolitan, the Water Authority's current preferential right is 17.22% of Metropolitan's supply, while the Water Authority accounted for approximately 25% of Metropolitan's total revenue. So Metropolitan could theoretically take a 7.8% cut out of the Water Authority's supply and theoretically, the Water Authority should have alternative water supply sources to make up for the difference.

In the Water Authority's 2005 UWMP, they had already planned to reduce reliance on Metropolitan supplies to 372,922 acre-feet per year by 2030, which is a 28% reduction from the Fiscal Year 2005 Water Authority purchase from Metropolitan. This reduction is planned to be achieved through diversification of their water supply portfolio.

The Water Authority's Drought Management Plan (May 2006) provides the Water Authority and its member agencies with a series of potential actions to engage when faced with a shortage of imported water supplies due to prolonged drought conditions. Such actions help avoid or minimize impacts of shortages and ensure an equitable allocation of supplies throughout the San Diego County region.

The District Board of Directors should acknowledge the ever-present challenge of balancing water supply with demand and the inherent need to possess a flexible and adaptable water supply implementation strategy that can be relied upon during normal and dry weather conditions. The responsible regional water supply agencies have and will continue to adapt their resource plans and strategies to meet climatological, environmental, and legal challenges so that they may continue to provide water supplies to their service areas. The regional water suppliers (i.e., the Water Authority and Metropolitan), along with the District, fully intend to maintain sufficient reliable supplies through the 20-year planning horizon under normal, single, and multiple dry year conditions to meet projected demand of the Rabago Project, along with existing and other planned development projects within the District's service area.

If the regional water suppliers determine additional water supplies will be required, or in this case, that water supply portfolios need to be reassessed and redistributed with the intent to serve the existing and future water needs throughout Southern California, the agencies must indicate the status or stage of development of actions identified in the plans they provide. Metropolitan's 2010 IRP update will then cause the Water Authority to update its IRP and UWMP, which will then provide the District with the necessary water supply documentation. Identification of a potential future action in such plans does not by itself indicate that a decision to approve or to proceed with the action has been made. The District's Board approval of the Rabago Project WSA Report does not in any way guarantee water supply to the Rabago Project.

Alternatively, if the WSA Report is written to state that water supply is or will be unavailable; the District must include, in the assessment, a plan to acquire additional water supplies. At this time, the District should not state there is insufficient water supply.

So the best the District can do right now is to state the current water supply situation clearly, indicating intent to provide supply through reassessment and reallocation by the regional, as well as, the local water suppliers. In doing so, it is believed that the Board has met the intent of the SB 610 statute, that the land use agencies and the water agencies are coordinating their efforts in planning water supplies for new development.

With District Board approval of the Rabago Project WSA Report, the Project proponents can proceed with the draft environmental documentation required for the CEQA review process. The water supply issues will be addressed in these environmental documents, consistent with the WSA Report.

The District, as well as others, can comment on the draft EIR with recommendations that water conservation measures and actions be employed on the Rabago Project.

Some recent actions regarding water supply assessments and verification reports by entities within Southern California are as follows:

- The City approved water supply assessment reports for both the La Jolla Crossings Project and the Quarry Falls Project in September 2007.
- Padre Dam Municipal Water District approved a water supply assessment report for the City of Santee's Fanita Ranch development project in April 2006. In October 2007, a follow-up letter was prepared stating the current uncertainties associated with the regional water supply situation. However, the letter concludes that sufficient water exists over the long run in reliance upon the assurances, plans, and projections of the regional water suppliers (Metropolitan and Water Authority).
- The District unanimously approved in July 2007 the Eastern Urban Center Water Supply and Assessment Report. The Board also approved the Judd Company Otay Crossings Commerce Park WSA Report on December 5, 2007 and the Otay Ranch L.P. Otay Ranch Preserve and Resort Project Water Supply Assessment and Verification Report on February 4, 2009.
- The District approved water supply assessment and verification reports for the City of Chula Vista Village 8 West Sectional Plan Area and Village 9 Sectional Plan Area. The District also approved the water supply assessment report for the San Diego-Tijuana Cross Border Facility. The Pio Pico Power Plant on

Alta Road within the County of San Diego may also require a WSA for the temporary use of potable water to serve the power plant.

Water supplies necessary to serve the demands of the proposed Rabago Project, along with existing and other projected future users, as well as the actions necessary to develop these supplies, have been identified in the water supply planning documents of the District, the Water Authority, and Metropolitan.

The WSA Report includes, among other information, an identification of existing water supply entitlements, water rights, water service contracts, or agreements relevant to the identified water supply needs for the proposed Rabago Project. The WSA Report demonstrates and documents that sufficient water supplies are planned and are intended to be available over a 20-year planning horizon, under normal conditions and in single and multiple dry years to meet the projected demand of the proposed Rabago Project and the existing and other planned development projects within the District.

Accordingly, after approval of a WSA Report for the Rabago Project by the District's Board of Directors, the WSA Report may be used to comply with the requirements of the legislation enacted by Senate Bills 610 as follows:

Senate Bill (SB) 610 Water Supply Assessment: The District's Board of Directors approved WSA Report may be incorporated into the California Environmental Quality Act (CEQA) compliance process for the Rabago Project as a water supply assessment report consistent with the requirements of the legislation enacted by SB 610. The County, as lead agency under the CEQA for the Rabago Project environmental documentation, may cite the approved WSA Report as evidence that a sufficient water supply is planned and intended to be available to serve the Rabago Project.

EXHIBIT C



OTAY WATER DISTRICT

WATER SUPPLY ASSESSMENT REPORT
for the
Rabago Technology Park

Prepared by:

Bob Kennedy, P.E.
Associate Civil Engineer
Otay Water District
in consultation with
Dexter Wilson Engineering, Inc.
and
San Diego County Water Authority

February 2011

**Otay Water District
Water Supply Assessment Report
February 2011
Rabago Technology Park**

Table of Contents

Executive Summary	1
Section 1 - Purpose	5
Section 2 - Findings	6
Section 3 - Project Description	8
Section 4 – Otay Water District	9
Section 5 – Historical and Projected Water Demands	11
5.1 Demand Management (Water Conservation)	16
Section 6 - Existing and Projected Supplies	18
6.1 Metropolitan Water District of Southern California 2005 Regional Urban Water Management Plan	19
6.2 San Diego County Water Authority Regional Water Supplies	21
6.2.1 Availability of Sufficient Supplies and Plans for Acquiring Additional Supplies	22
6.3 Otay Water District	33
6.3.1 Availability of Sufficient Supplies and Plans for Acquiring Additional Supplies	34
Section 7 – Conclusion: Availability of Sufficient Supplies	49
Source Documents	55

Appendices

- Appendix A: Rabago Technology Park Vicinity Map
- Appendix B: Rabago Technology Park Development Plan

Otay Water District Water Supply Assessment Report February 2011

Rabago Technology Park

Executive Summary

The Otay Water District (WD) prepared this Water Supply Assessment Report (WSA Report) at the request of the County of San Diego (County) for the Rabago Technology Park (Rabago) Project. Rabago Investment Group LLC, a California Limited Liability Company submitted an entitlement application to the County for the development of the Rabago Project.

The Rabago Project is located within the jurisdictions of the Otay WD, the San Diego County Water Authority (Water Authority), and the Metropolitan Water District of Southern California (Metropolitan). To obtain permanent imported water supply service, land areas are required to be within the jurisdictions of the Otay WD, Water Authority, and Metropolitan..

The Rabago Project development plan proposes the development of 19 industrial business park lots on 71.1 acres. The development plan is consistent with the East Otay Mesa Specific Plan.

The expected demands for the Rabago Project is 60,290 gallons per day (gpd) or about 67.5 acre feet per year (ac-ft/yr). This is consistent with the estimated demands in the District's Water Resource Master Plan Updated November 2010 (WRMP). The projected recycled water demand for the proposed Rabago Project is approximately 7,740 gpd or 8.7 ac-ft/yr, representing about 11% of the total Rabago Project water demand.

The Rabago Project development proponents are required to use recycled water for irrigation and other potential purposes. The primary benefit of using recycled water is that it will offset the potable water demand by an estimated 8.7 ac-ft/yr. The WRMP and 2005 Urban Water Management Plan (UWMP) anticipated that the Rabago Project site would use both potable and recycled water.

Planned Imported Water Supplies from the Water Authority and Metropolitan

The Water Authority and Metropolitan have an established process that ensures supplies are being planned to meet future growth. Any annexations and revisions to established land use

plans are captured in the San Diego Association of Governments (SANDAG) updated forecasts for land use planning, demographics, and economic projections. SANDAG serves as the regional, intergovernmental planning agency that develops and provides forecast information. The Water Authority and Metropolitan update their demand forecasts and supply needs based on the most recent SANDAG forecast approximately every five years to coincide with preparation of their Urban Water Management Plans (UWMP). Prior to the next forecast update, local jurisdictions with land use authority may require water supply assessment and/or verification reports for proposed land developments that are not within the Otay WD, Water Authority, or Metropolitan jurisdictions (i.e. pending or proposed annexations) or that have revised land use plans with either lower or higher development intensities than reflected in the existing growth forecasts. Proposed land areas with pending or proposed annexations, or revised land use plans, typically result in creating higher demand and supply requirements than previously anticipated. The Otay WD, Water Authority, and Metropolitan next demand forecast and supply requirements and associated planning documents would then capture any increase or decrease in demands and required supplies as a result of annexations or revised land use planning decisions.

The California Urban Water Management Planning Act (Act), which is included in the California Water Code, requires all urban water suppliers within the state to prepare an UWMP and update it every five years. The purpose and importance of the UWMP has evolved since it was first required 25 years ago. State agencies and the public frequently use the document to determine if agencies are planning adequately to reliably meet future demands. As such, UWMPs serve as an important element in documenting supply availability for the purpose of compliance with state laws, Senate Bill 610, linking water supply sufficiency to large land-use development approval. Agencies must also have a UWMP prepared, pursuant to the Act, in order to be eligible for state funding and drought assistance.

The Water Authority has started their update to their 2005 UWMP however a new legislative mandate, SBX 7-7 (2009) requires retail agencies to report their target for a 20 percent reduction in urban per capita use by December 31, 2020. To address the new per capita water use reduction measures, the bill grants a 6-month extension to urban retail water suppliers to submit their approved UWMP to the California Department of Water Resources (DWR) by July 1, 2011.

The District's WRMP updated November, 2010 includes the 67.5 acre-foot per year demand estimate in the District's demand projections that was forwarded to the Water Authority for inclusion in their UWMP update. The Series 12 update was also used by Metropolitan for their demand projections for their 2010 Integrated Resource Plan (IRP) Update. Metropolitan's IRP identifies a mix of resources (imported and local) that, when implemented, will provide 100 percent reliability for full-service demands through the attainment of regional targets set for conservation, local supplies, State Water Project supplies, Colorado River supplies, groundwater banking, and water transfers. The 2004 update to the IRP (2004 IRP Update) includes a planning buffer supply intended to mitigate

against the risks associated with implementation of local and imported supply programs and for the risk that future demands could be higher than projected. The planning buffer identifies an additional increment of water that could potentially be developed when needed and if other supplies are not fully implemented as planned. As part of implementation of the planning buffer, Metropolitan periodically evaluates supply development, supply conditions, and projected demands to ensure that the region is not under or over developing supplies. Managed properly, the planning buffer will help ensure that the southern California region, including San Diego County, will have adequate water supplies to meet long-term future demands.

Water supply agencies throughout California continue to face climate, environmental, legal, and other challenges that impact water source supply conditions, such as the court rulings regarding the Sacramento-San Joaquin Delta issues and the current ongoing drought impacting the western states. Challenges such as these essentially always will be present. The regional water supply agencies, the Water Authority and Metropolitan, along with Otay WD nevertheless fully intend to have sufficient, reliable supplies to serve demands.

In Section II.4 of their 2005 Regional Urban Water Management Plan (RUWMP), Metropolitan states that through effective management of its water supply, they fully expect to be 100 percent reliable in meeting all non-discounted non-interruptible demands throughout the next twenty-five years. Metropolitan's 2005 RUWMP identifies potential reserve supplies in the supply capability analysis (Tables II-7, II-8, and II-9), which could be available to meet the anticipated demands such as those related to the Rabago Project.

The County Water Authority Act, Section 5 subdivision 11, states that the Water Authority "as far as practicable, shall provide each of its member agencies with adequate supplies of water to meet their expanding and increasing needs."

As part of preparation of a written water supply assessment report, an agency's shortage contingency analysis should be considered in determining sufficiency of supply. Section 9 of the Water Authority's 2005 Updated UWMP contains a detailed shortage contingency analysis that addresses a regional catastrophic shortage situation and drought management. The analysis demonstrates that the Water Authority and its member agencies, through the Emergency Response Plan, Emergency Storage Project, and Drought Management Plan (DMP) are taking actions to prepare for and appropriately handle an interruption of water supplies. The DMP, completed in May 2006, provides the Water Authority and its member agencies with a series of potential actions to take when faced with a shortage of imported water supplies from Metropolitan due to prolonged drought or other supply shortfall conditions. The actions will help the region avoid or minimize the impacts of shortages and ensure an equitable allocation of supplies.

Otay WD Water Supply Development Program

In evaluating the availability of sufficient water supply, the Rabago Project development proponents will be required to participate in the water supply development program being implemented by the Otay WD. This is intended to be achieved through financial participation in several local and/or regional water supply development projects envisioned by the Otay WD. These water supply projects are in addition to those identified as sustainable supplies in the current Water Authority and Metropolitan UWMP, IRP, Master Plans, and other planning documents. These new water supply projects are in response to the regional water supply issues. These new additional water supply projects are not currently developed and are in various stages of the planning process. Imported water supplies along with the Otay WD water supply development projects supplies are planned to be developed and are intended to increase water supplies to serve the Rabago Project water supply needs and that of other similar situated development projects. The Otay WD water supply development program includes but is not limited to projects such as the Middle Sweetwater River Basin Groundwater Well project, the North District Recycled Water Supply Concept, the Rosarito Ocean Desalination Facility project, and the Rancho del Rey Groundwater Well project. The Water Authority and Metropolitan's next forecasts and supply planning documents would capture any increase in water supplies resulting from any new water resources developed by the Otay WD.

Findings

This WSA Report for the Rabago Project has been prepared by the Otay WD in consultation with Dexter Wilson Engineering, Inc., the Water Authority, and the County pursuant to Public Resources Code Section 21151.9 and California Water Code Sections 10631, 10656, 10657, 10910, 10911, 10912, and 10915 referred to as Senate Bill (SB) 610. SB 610 amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 requires that the water purveyor of the public water system prepare a water supply assessment to be included in the California Environmental Quality Act (CEQA) environmental documentation and approval process of certain proposed projects. The County requested that Otay WD prepare a water supply assessment as per the requirements of SB 610. The requirements of SB 610 are being addressed by this WSA Report.

The Rabago Project development concept exceeds the thresholds contained in the legislation enacted by SB 610 and therefore requires preparation of a WSA report. The Rabago Project is considered as an industrial development and is not a residential subdivision project of more than 500 units and hence it is not subject to the requirements of Senate Bill 221 for preparation of a Water Supply Verification Report.

The WSA Report identifies and describes the processes by which water demand projections for the proposed Rabago Project will be fully included in the water demand and supply forecasts of the Urban Water Management Plans and other water resources planning

documents of the Water Authority and Metropolitan. Water supplies necessary to serve the demands of the proposed Rabago Project, along with existing and other projected future users, as well as the actions necessary and status to develop these supplies, have been identified in the Rabago Project WSA Report and will be included in the future water supply planning documents of the Water Authority and Metropolitan.

This WSA Report includes, among other information, an identification of existing water supply entitlements, water rights, water service contracts, water supply projects, or agreements relevant to the identified water supply needs for the proposed Rabago Project. This WSA Report demonstrates, and documents that sufficient water supplies are planned for and are intended to be available over a 20-year planning horizon, under normal conditions and in single and multiple dry years to meet the projected demand of the proposed Rabago Project and the existing and other planned development projects to be served by the Otay WD.

Accordingly, after approval of a WSA Report for the Rabago Project by the Otay WD Board of Directors (Board), the WSA Report may be used to comply with the requirements of the legislation enacted by Senate Bill 610 as follows:

Senate Bill 610 Water Supply Assessment: The Otay WD Board approved Rabago Project WSA Report may be incorporated into the California Environmental Quality Act (CEQA) compliance process for the Rabago Project as a water supply assessment report consistent with the requirements of the legislation enacted by SB 610. The County, as lead agency under CEQA for the Rabago Project EIR, may cite the approved WSA Report as evidence that a sufficient water supply is planned for and is intended to be made available to serve the Rabago Project.

Section 1 - Purpose

Rabago Technology Park, LLC submitted an entitlement application to the County of San Diego (County) for the development of the Rabago Technology Park (Rabago) Project. The County requested that the Otay Water District (WD) prepare a Water Supply Assessment (WSA) Report for the Rabago Project. The Rabago Project description is provided in Section 3 of this WSA Report.

This WSA Report for the Rabago Project has been prepared by the Otay WD in consultation with Dexter Wilson Engineering, Inc., the San Diego County Water Authority (Water Authority), and the County pursuant to Public Resources Code Section 21151.9 and California Water Code Sections 10631, 10656, 10910, 10911, 10912, and 10915 referred to as Senate Bill (SB) 610. SB 610 amended state law, effective January 1, 2002, intending to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 requires that the water purveyor of the public water system prepare a water supply assessment to be included in the California

Environmental Quality Act (CEQA) environmental documentation and approval process of certain proposed projects. The requirements of SB 610 are being addressed by this WSA Report.

The Rabago Project development concept exceeds the thresholds contained in the legislation enacted by SB 610 and therefore requires preparation of a WSA report. The Rabago Project is considered as an industrial development and is not a residential subdivision project of more than 500 units and hence it is not subject to the requirements of Senate Bill 221 for preparation of a Water Supply Verification Report.

This WSA Report evaluates water supplies that are planned to be available during normal, single dry year, and multiple dry water years during a 20-year planning horizon to meet existing demands, expected demands of the Rabago Project, and reasonably foreseeable planned future water demands to be served by Otay WD. The Otay WD Board of Directors approved WSA Report is planned to be used by the County in its evaluation of the Rabago Project under the CEQA approval process procedures.

Section 2 - Findings

The Otay WD prepared this WSA Report at the request of the County for the Rabago Project. Rabago Technology Park, LLC submitted an entitlement application to the County for the development of the Rabago Project.

The Rabago Project is located within the jurisdictions of the Otay WD, the Water Authority, and the Metropolitan Water District of Southern California (Metropolitan). To obtain permanent imported water supply service, land areas are required to be within the jurisdictions of the Otay WD, Water Authority, and Metropolitan to utilize imported water supply.

The expected demand for the Rabago Project is 60,290 gallons per day (gpd) or about 67.5 acre feet per year (ac-ft/yr). This is unchanged from the demand estimate in the District's WRMP. The projected recycled water demand for the proposed Rabago Project is approximately 7,740 gpd or 8.7 ac-ft/yr, representing about 11% of the total Rabago Project water demand.

The Rabago Project development proponents are required to use recycled water for irrigation and appropriate uses. The primary benefit of using recycled water is that it will offset the potable water demands by an estimated 8.7 ac-ft/yr. The Otay WD WRMP and 2005 Urban Water Management Plan (UWMP) anticipated that the land area to be utilized for the Rabago Project would use both potable and recycled water.

In evaluating the availability of sufficient water supply, the Rabago project proponents are required to participate in the development of alternative water supply project(s). This can be achieved through payment of the New Water Supply Fee adopted by the Otay Water District Board in May 2010. These water supply projects are in addition to those identified as sustainable supplies in the current Water Authority and Metropolitan UWMP, IRP, Master Plans, and other planning documents. These new water supply projects are in response to the regional water supply issues related to the Sacramento-San Joaquin Delta and the current ongoing western states drought conditions. These new additional water supply projects are not currently developed and are in various stages of the planning process. A few examples of these alternative water supply projects include the Middle Sweetwater River Basin Groundwater Well project, the North District Recycled Water Supply Concept, the Rosarito Ocean Desalination Facility project, and the Rancho del Rey Groundwater Well project. The Water Authority and Metropolitan next forecast and supply planning documents would capture any increase in water supplies resulting from any new water resources developed by the Otay WD.

The Water Authority and Metropolitan have an established process that ensures supplies are being planned to meet future growth. Any annexations and revisions to established land use plans are captured in the San Diego Association of Governments (SANDAG) updated forecasts for land use planning, demographics, and economic projections. SANDAG serves as the regional, intergovernmental planning agency that develops and provides forecast information. The Water Authority and Metropolitan update their demand forecasts and supply needs based on the most recent SANDAG forecast approximately every five years to coincide with preparation of their urban water management plans. Prior to the next forecast update, local jurisdictions may require water supply assessment and/or verification reports for proposed land developments that are not within the Otay WD, Water Authority, or Metropolitan jurisdictions (i.e. pending or proposed annexations) or that have revised land use plans with lower or higher land use intensities than reflected in the existing growth forecasts. Proposed land areas with pending or proposed annexations, or revised land use plans, typically result in creating higher demand and supply requirements than anticipated. The Otay WD, the Water Authority, and Metropolitan next demand forecast and supply requirements and associated planning documents would then capture any increase or decrease in demands and required supplies as a result of annexations or revised land use planning decisions.

This process is utilized by the Water Authority and Metropolitan to document the water supplies necessary to serve the demands of any proposed development project, along with existing and other projected future users, as well as the actions necessary to develop any required water supplies. Through this process the necessary demand and supply information is thus assured to be identified and incorporated within the water supply planning documents of the Water Authority and Metropolitan.

This WSA Report includes, among other information, an identification of existing water supply entitlements, water rights, water service contracts, proposed water supply projects, and

agreements relevant to the identified water supply needs for the proposed Rabago Project. This WSA Report incorporates by reference the current Urban Water Management Plans and other water resources planning documents of the Otay WD, the Water Authority, and Metropolitan. The Otay WD prepared this WSA Report to assess and document that sufficient water supplies are planned for and are intended to be acquired to meet projected water demands of the Rabago Project as well as existing and other reasonably foreseeable planned development projects within the Otay WD for a 20-year planning horizon, in normal supply years and in single dry and multiple dry years.

Based on a normal water supply year, the five-year increments for a 20-year projection indicate projected potable and recycled water supply is being planned for and is intended to be acquired to meet the estimated water demand of the Otay WD (49,812 acre-feet (ac-ft) in 2010 to 82,405 ac-ft in 2030 per the Otay WD 2005 UWMP). Based on dry year forecasts, the estimated water supply is also being planned for and is intended to be acquired to meet the projected water demand, during single dry and multiple dry year scenarios. On average, the dry-year demands are about 7% higher than the normal demands. The Otay WD recycled water supply is assumed to be drought-proof and not subject to reduction during dry periods.

Together, these findings assess, demonstrate, and document that sufficient water supplies are planned for and are intended to be acquired, as well as the actions necessary and status to develop these supplies are and will be further documented, to serve the proposed Rabago Project and the existing and other reasonably foreseeable planned development projects within the Otay WD in both normal and single and multiple dry year forecasts for a 20-year planning horizon.

Section 3 - Project Description

The Rabago Project is located within the Otay Mesa Specific Plan (OMSP) area in the County of San Diego. Refer to Appendix A for a vicinity map of the proposed Rabago Project. The Rabago Project is located at the northwest corner of the intersection of Otay Mesa Road and Enrico Fermi Drive. The Rabago Project is within the jurisdictions of the Otay WD, the Water Authority, and Metropolitan Water District of Southern California (Metropolitan). Although the proposed development is subject to the County's land use jurisdiction, the Otay WD is the potable and recycled water purveyor.

The proposed development concept for the approximately 71.1 acre Rabago Project is planned as industrial business park lots as shown in Table 1.

Table 1
Rabago Project Proposed Land Uses

Project Element	Land Use	Gross Area	Lots
Rabago Technology Park	Industrial	71.1 acres	19

The Rabago Project is on approximately 71.1 acres and is planned to include 19 industrial business park lots ranging from 1.7 to 8.0 acres in size. As each of these lots develops in the future, it would be subject to the project approval and permitting processes of the County and Otay WD. Refer to Appendix B for the proposed development plan of the Rabago Project.

The County has discretionary authority on land use decisions for the Rabago Project and can establish actions and/or permit approval requirements. The projected potable and recycled water demands associated with the Rabago Project have considered the anticipated County discretionary actions and/or permit approvals and are incorporated into and used in this WSA Report. The water demands for the proposed Rabago Project are included in the projected water demand estimates provided in Section 5 – Historical and Projected Water Demands.

Section 4 – Otay Water District

The Otay WD is a municipal water district formed in 1956 pursuant to the Municipal Water District Act of 1911 (Water Code §§ 71000 et seq.). The Otay WD joined the Water Authority as a member agency in 1956 to acquire the right to purchase and distribute imported water throughout its service area. The Water Authority is an agency responsible for the wholesale supply of water to its 24 public agency members in San Diego County.

The Otay WD currently relies on the Water Authority for 100 percent of its treated water supply. The Water Authority is the agency responsible for the supply of imported water into San Diego County through its membership in Metropolitan. The Water Authority currently obtains about half of its imported supply from Metropolitan, but is in the process of further diversifying its available supplies.

The Otay WD provides water service to residential, commercial, industrial, and agricultural customers, and for environmental and fire protection uses. In addition to providing water throughout its service area, Otay WD also provides sewage collection and treatment services to a portion of its service area known as the Jamacha Basin. The Otay WD also owns and operates the Ralph W. Chapman Water Reclamation Facility (RWCWRF) which has an effective treatment capacity of 1.2 million gallons per day (mgd) or about 1,300 acre feet per year (ac-ft/yr) to produce recycled water. On May 18, 2007 an additional source of recycled water supply, at least 6 mgd, or about 6,720 ac-ft/yr, became available to Otay WD from the City of San Diego's South Bay Water Reclamation Plant (SBWRP).

The Otay WD jurisdictional area is generally located within the south central portion of San Diego County and includes approximately 125 square miles. The Otay WD serves portions of the unincorporated communities of southern El Cajon, La Mesa, Rancho San Diego, Jamul, Spring Valley, Bonita, and Otay Mesa, the eastern portion of the City of Chula Vista and a portion of the City of San Diego on Otay Mesa. The Otay WD jurisdiction boundaries are roughly bounded on the north by the Padre Dam Municipal Water District, on the northwest by the Helix Water District, and on the west by the South Bay Irrigation District (Sweetwater Authority) and the City of San Diego. The southern boundary of Otay WD is the international border with Mexico.

The planning area addressed in the Otay WD 2009 WRMP and the Otay WD revised 2005 Urban Water Management Plan (2005 UWMP) includes the land within the jurisdictional boundary of the Otay WD and those areas outside of the present Otay WD boundaries considered to be in the Area of Influence of the Otay WD. Figure 2-1 contained within the Otay WD 2009 WRMP shows the jurisdictional boundary of the Otay WD and the Area of Influence. The planning area is approximately 143 square miles, of which approximately 125 square miles are within the Otay WD current boundaries and approximately 18 square miles are in the Area of Influence. The area east of Otay WD is rural and currently not within any water purveyor jurisdiction and potentially could be served by the Otay WD in the future if the need for imported water becomes necessary, as is the case for the Area of Influence.

The City of Chula Vista, the City of San Diego, and the County of San Diego are the three land use planning agencies within the Otay WD jurisdiction. Data on forecasts for land use planning, demographics, economic projections, population, and the future rate of growth within Otay WD were obtained from the San Diego Association of Governments (SANDAG). SANDAG serves as the regional, intergovernmental planning agency that develops and provides forecast information through the year 2050. Population growth within the Otay WD service area is expected to increase from the 2005 figure of approximately 179,000 to an estimated 268,000 by 2025, and is estimated to be 277,000 at ultimate build out. Land use information used to develop water demand projections are based upon Specific or Sectional Planning Areas, the Otay Ranch General Development Plan/Sub-regional Plan, East Otay Mesa Specific Plan Area, San Diego County Community Plans, and City of San Diego, City of Chula Vista, and County of San Diego General Plans.

The Otay WD long-term historic growth rate has been approximately 3% per year. Up until the recent economic downturn, growth was occurring at a faster rate due to accelerated residential development in the eastern portion of the City of Chula Vista. The growth rate has significantly slowed due to the current economic conditions and it is expected to slow as the inventory of developable land is diminished.

Climatic conditions within the Otay WD service area are characteristically Mediterranean near the coast, with mild temperatures year round. Inland areas are both hotter in summer and cooler in winter, with summer temperatures often exceeding 90 degrees and winter temperatures occasionally dipping to below freezing. Most of the region's rainfall occurs

during the months of December through March. Average annual rainfall is approximately 9.4 inches per year.

Historic climate data were obtained from the Western Regional Climate Center for Station 042706 (El Cajon). This station was selected because its annual temperature variation is representative of most of the Otay WD service area. While there is a station in the City of Chula Vista, the temperature variation at the City of Chula Vista station is more typical of a coastal environment than the conditions in most of the Otay WD service area.

Urban Water Management Plan

In accordance with the California Urban Water Management Planning Act, the Otay WD Board of Directors adopted an Urban Water Management Plan in December 2005 and subsequently submitted the plan to the California Department of Water Resources (DWR). DWR required Otay WD to make revisions to the submitted plan. The Otay WD Board of Directors adopted the revised Otay WD 2005 UWMP in July 2007. As required by law, the Otay WD 2005 UWMP includes projected water supplies required to meet future demands through 2030. In accordance with Water Code Section 10910 (c)(2) and Government Code Section 66473.7 (c)(3), information from the Otay WD 2005 UWMP along with supplemental information from the Otay WD 2009 WRMP updated November, 2010 have been utilized to prepare this WSA Report and are incorporated herein by reference.

Section 5 – Historical and Projected Water Demands

The projected demands for the Otay WD are based on Specific or Sectional Planning Areas, the Otay Ranch General Development Plan/Sub-regional Plan, the East Otay Mesa Specific Plan Area, San Diego County Community Plans, and City of San Diego, City of Chula Vista, and County of San Diego General Plans. This land use information is also used by SANDAG as the basis for its most recent forecast data. This land use information is utilized in the preparation of the Otay WD 2009 WRMP updated November, 2010 and Otay WD 2005 UWMP to develop the forecasted demands and supply requirements.

In 1994, the Water Authority selected the Institute for Water Resources-Municipal and Industrial Needs (MAIN) computer model to forecast municipal and industrial water use for the San Diego region. The MAIN model uses demographic and economic data to project sector-level water demands (i.e. residential and non-residential demands). This econometric model has over a quarter of a century of practical application and is used by many cities and water agencies throughout the United States. The Water Authority's version of the MAIN model was modified to reflect the San Diego region's unique parameters and is known as CWA-MAIN.

The foundation of the water demand forecast is the underlying demographic and economic projections. This was a primary reason, why, in 1992 the Water Authority and SANDAG entered into a Memorandum of Agreement (MOA), in which the Water Authority agreed to use the SANDAG current regional growth forecast for water supply planning purposes. In addition, the MOA recognizes that water supply reliability must be a component of San Diego County's regional growth management strategy required by Proposition C, as passed by the San Diego County voters in 1988. The MOA ensures a strong linkage between local general plan land use forecasts and water demand projections and resulting supply needs for the San Diego region.

Consistent with the previous CWA-MAIN modeling efforts, on February 26, 2010, the SANDAG Board of Directors accepted the Series 12: 2050 Regional Growth Forecast. The 2050 Regional Growth Forecast will be used by SANDAG as the foundation for the next Regional Comprehensive Plan update. SANDAG forecasts also are used by local governments for planning, including the San Diego County Water Authority 2010 Urban Water Management Plan update. The SANDAG Series 12: 2050 Regional Growth Forecast included the current land use of the County of San Diego General Plan that forms the basis for the entitlement densities and intensities of development for this project.

The municipal and industrial forecast also included an updated accounting of projected conservation savings based on projected regional implementation of the California Urban Water Conservation Council (CUWCC) Best Management Practices and SANDAG demographic information for the period 2005 through 2030. These savings estimates were then factored into the baseline municipal and industrial demand forecast.

A separate agricultural model, also used in prior modeling efforts, was used to forecast agricultural water demands within the Water Authority service area. This model estimates agricultural demand to be met by the Water Authority's member agencies based on agricultural acreage projections provided by SANDAG, crop distribution data derived from the Department of Water Resources and the California Avocado Commission, and average crop-type watering requirements based on California Irrigation Management Information System data.

The Water Authority and Metropolitan update their water demand and supply projections within their jurisdictions utilizing the SANDAG most recent growth forecast to project future water demands. This provides for the important strong link between demand and supply projections to the land use plans of the cities and the county. This provides for consistency between the retail and wholesale agencies water demand projections, thereby ensuring that adequate supplies are and will be planned for the Otay WD existing and future water users. Existing land use plans, any revisions to land use plans, and annexations are captured in the SANDAG updated forecasts. The Water Authority and Metropolitan will update their demand forecasts based on the SANDAG most recent forecast approximately every five years to coincide with preparation of their urban water management plans. Prior to the next forecast update, local jurisdictions may require water supply assessment and/or verification reports

consistent with Senate Bills 610 and 221 for proposed land use developments that either have pending or proposed annexations into the Otay WD, Water Authority, and Metropolitan or that have revised land use plans than originally anticipated. The Water Authority and Metropolitan's next forecasts and supply planning documents would then capture any increase or decrease in demands caused by annexations or revised land use plans.

The state of California Business and Professions Code Section 11010 and Government Code Sections 65867.5, 66455.3, and 66473.7, are referred to as SB 221, requires affirmative written verification from the water purveyor of the public water system that sufficient water supplies are to be available for certain residential subdivisions of property prior to approval of a tentative map. SB 221 compliance does not apply to the Rabago Project as it is an industrial subdivision.

In evaluating the availability of sufficient water supply, the Rabago Project development proponents will be required to participate in the development of alternative water supply project(s). This can be achieved through payment of the New Water Supply Fee adopted by the Otay Water District Board in May 2010. These water supply projects are in addition to those identified as sustainable supplies in the current Water Authority and Metropolitan UWMP, IRP, Master Plans, and other planning documents. These new water supply projects are in response to the regional water supply issues related to climatological, environmental, legal, and other challenges that impact water source supply conditions, such as the court rulings regarding the Sacramento-San Joaquin Delta and the current ongoing western states drought conditions. These new additional water supply projects are not currently developed and are in various stages of the planning process. The Otay WD water supply development program includes but is not limited to projects such as the Middle Sweetwater River Basin Groundwater Well project, the North District Recycled Water Supply Concept, the Rosarito Ocean Desalination Facility project, and the Rancho del Rey Groundwater Well project. The Water Authority and Metropolitan's next forecasts and supply planning documents would capture any increase in water supplies resulting from any new water resources developed by the Otay WD.

In addition, Metropolitan's 2005 Regional Urban Water Management Plan identified potential reserve supplies in the supply capability analysis (Tables II-7, II-8, and II-9), which could be available to meet any unanticipated demands. The Water Authority and Metropolitan's next forecasts and supply planning documents would capture any increase in necessary supply resources resulting from any new water supply resources.

Demand Methodology

The Otay WD water demand projection methodology utilizes a component land use approach. This is done by applying representative values of water use to the acreage of each land use type and then aggregating these individual land use demand projections into an overall total demand for the Otay WD. This is called the water duty method, and the water duty is the amount of water used in gallons per day per acre per year. This approach is used for all the

land use types except residential development where a demand per dwelling unit was applied. In addition, commercial and industrial water use categories are further subdivided by type including separate categories for golf courses, schools, jails, prisons, hospitals, etc. where specific water demands are established.

To determine water duties for the various types of land use, the entire water meter database of the Otay WD is utilized and sorted by the appropriate land use types. The metered consumption records are then examined for each of the land uses, and water duties are determined for the various types of residential, commercial, industrial, and institutional land uses. For example the water duty factors for commercial and industrial land uses are estimated using 1,785 and 893 gallons per day per acre (gpd/acre) respectively. Residential water demand is established based on the same data but computed on a per-dwelling unit basis. The focus is to ensure that for each of the residential land use categories (very low, low, medium, and high densities), the demand criteria used is adequately represented based upon actual data. This method is used because residential land uses constitute a substantial percentage of the total developable planning area of the Otay WD.

The underlying land use designation for the Rabago Project lots will be the industrial land use designation.

The 2009 WRMP calculates potable water demand by taking the gross acreage of a site and applying a potable water reduction factor (PWRF), which is intended to represent the percentage of acreage to be served by potable water and that not served by recycled water for irrigation. For industrial land use, as an example, the PWRF is 0.95 (i.e., 95% of the site is assumed to be served by potable water, 5% of the site is assumed to be irrigated with recycled water). The potable net acreage is then multiplied by the unit demand factor corresponding to its respective land use. This approach is used in the 2009 WRMP for all the land use types except residential development where a demand per dwelling unit is applied. In addition, commercial and industrial water use categories are further subdivided by type including separate categories for golf courses, schools, jails, prisons, hospitals, etc. where specific water demands are allocated.

Otay WD Projected Demand

By applying the established water duties to the proposed land uses, the projected water demand for the entire Otay WD planning area at ultimate development is determined. Projected water demands for the intervening years were determined using growth rate projections consistent with data obtained from SANDAG and the experience of the Otay WD.

The historical and projected potable water demands for Otay WD are shown in Table 2.

Table 2
Historical and Projected Potable Water Fiscal Year Demands (acre-feet)
Incorporating Water Conservation BMP Efforts¹

Water Use Sectors	1995	2000	2005	2010	2015	2020	2025	2030
Single Family Residential	10,604	15,331	19,850	25,442	29,130	33,316	37,211	42,089
Multi-Family Residential	1,880	1,986	2,893	3,708	4,245	4,855	5,423	6,134
Commercial & Industrial	1,650	3,043	1,549	1,986	2,274	2,600	2,904	3,285
Institutional & Governmental	1,680	2,089	2,115	2,711	3,104	3,550	3,965	4,485
Landscape	3,983	6,256	8,512	10,910	12,491	14,286	15,956	18,048
Agricultural	487	171	2,268	2,907	3,328	3,806	4,251	4,809
Known Losses	*	*	511	655	749	857	957	1,083
System Losses	*	1,733	1,076	1,494	1,711	1,957	2,186	2,472
Totals	20,284	30,609	38,774	49,813	57,032	65,227	72,853	82,405

¹ Source: Otay WD 2005 UWMP.

* Known losses (i.e. unaccounted for water in the Otay WD 2005 UWMP) and system losses unavailable.

The historical and projected recycled water demands for Otay WD are shown in Table 3.

Table 3
Historical and Projected Recycled Water Fiscal Year Demands (acre-feet)
Incorporating Water Conservation BMP Efforts¹

Water Use Sector	1995	2000	2005	2010	2015	2020	2025	2030
Landscape	614	1,274	1,155	4,040	4,684	5,430	6,294	7,297
Totals	614	1,274	1,155	4,040	4,684	5,430	6,294	7,297

¹ Source: Otay WD 2005 UWMP.

Rabago Project Projected Water Demand

Using the land use demand projection noted above, the projected potable water demand and projected recycled water demand for the proposed Rabago Project are shown in Table 4 and Table 5 respectively. The projected potable water demand is 60,290 gpd, or about 67.5 ac-ft/yr. The projected recycled water demand is 7,740 gpd, or about 8.7 ac-ft/yr, representing about 11% of the total Rabago Project demand.

**Table 4
 Rabago Facility Project Projected Potable
 Water Annual Average Demands**

Location (Land Use)	Gross Acreage	Potable Water Factor	Net Potable Acreage/Units	Unit Rate	Average Demand
Industrial Lots	71.1	95%	67.5 ac	893 gpd/ac	60,290 gpd

The Rabago Project development proponents are required to use recycled water for irrigation and for other appropriate uses. The primary benefit of using recycled water is that it will offset the potable water demands by an estimated 13 ac-ft/yr. The 2009 WRMP and 2005 UWMP anticipated that the Rabago Project site would use both potable and recycled water.

**Table 5
 Rabago Project Projected Recycled
 Water Average Demands**

Location (Land Use)	Gross Acreage	Recycled Water Factor	Net Recycled Acreage	Unit Rate	Average Demand
Industrial Lots	71.1 acres	5%	3.6 acres	2,151 gpd/acre	7,740 gpd

The Otay WD 2009 WRMP projected a potable water demand for the project site based on land uses in the East Otay Mesa Specific Plan. The current development plan does not propose any changes to the Specific Plan land uses and, therefore, the proposed development has been accounted for in the Otay WD planning documents.

5.1 Demand Management (Water Conservation)

Demand management, or water conservation is a critical part of the Otay WD 2005 UWMP and its long term strategy for meeting water supply needs of the Otay WD customers. Water conservation, is frequently the lowest cost resource available to any water agency. The goals of the Otay WD water conservation programs are to:

- Reduce the demand for more expensive, imported water.
- Demonstrate continued commitment to the Best Management Practices (BMP).
- Ensure a reliable water supply.

The Otay WD is signatory to the Memorandum of Understanding (MOU) Regarding Urban Water Conservation in California, which created the California Urban Water Conservation Council (CUWCC) in 1991 in an effort to reduce California's long-term water demands.

Water conservation programs are developed and implemented on the premise that water conservation increases the water supply by reducing the demand on available supply, which is vital to the optimal utilization of a region's water supply resources. The Otay WD participates in many water conservation programs designed and typically operated on a shared cost participation program basis among the Water Authority, Metropolitan, and their member agencies. The demands shown in Tables 2, 3, 4, and 5 take into account implementation of water conservation measures within Otay WD.

As one of the first signatories to the MOU Regarding Urban Water Conservation in California, the Otay WD has made BMP implementation for water conservation the cornerstone of its conservation programs and a key element in its water resource management strategy. As a member of the Water Authority, Otay WD also benefits from regional programs performed on behalf of its member agencies. The BMP programs implemented by Otay WD and regional BMP programs implemented by the Water Authority that benefit all their member agencies are addressed in the Otay WD 2005 UWMP. In partnership with the Water Authority, the County of San Diego, City of San Diego, City of Chula Vista, and developers, the Otay WD water conservation efforts are expected to grow and expand. The resulting savings directly relate to additional available water in the San Diego County region for beneficial use within the Water Authority service area, including the Otay WD.

Additional conservation or water use efficiency measures or programs practiced by the Otay WD include the following:

Supervisory Control and Data Acquisition System

The Otay WD implemented and has operated for many years a Supervisory Control and Data Acquisition (SCADA) system to control, monitor, and collect data regarding the operation of the water system. The major facilities that have SCADA capabilities are the water flow control supply sources, transmission network, pumping stations, and water storage reservoirs. The SCADA system allows for many and varied useful functions. Some of these functions provide for operating personnel to monitor the water supply source flow rates, reservoir levels, turn on or off pumping units, etc. The SCADA system aids in the prevention of water reservoir overflow events and increases energy efficiency.

Water Conservation Ordinance

California Water Code Sections 375 et seq. permit public entities which supply water at retail to adopt and enforce a water conservation program to reduce the quantity of water used by the people therein for the purpose of conserving water supplies of such public entity. The Otay WD Board of Directors established a comprehensive water conservation program pursuant to California Water Code Sections 375 et seq., based upon the need to conserve water supplies and to avoid or minimize the effects of any future shortage. A water shortage could exist based upon the occurrence of one or more of the following conditions:

1. A general water supply shortage due to increased demand or limited supplies.
2. Distribution or storage facilities of the Water Authority or other agencies become inadequate.
3. A major failure of the supply, storage, and distribution facilities of Metropolitan, Water Authority, and/or Otay WD.

The Otay WD water conservation ordinance finds and determines that the conditions prevailing in the San Diego County area require that the available water resources be put to maximum beneficial use to the extent to which they are capable, and that the waste or unreasonable use, or unreasonable method of use, of water be prevented and that the conservation of such water be encouraged with a view to the maximum reasonable and beneficial use thereof in the interests of the people of the Otay WD and for the public welfare.

As a signatory to the MOU Regarding Urban Water Conservation in California, the Otay WD is required to submit biannual reports that detail the implementation of current water conservation practices. The Otay WD voluntarily agreed to implement the fourteen water conservation Best Management Practices beginning in 1992. The Otay WD submits its report to the CUWCC every two years. The Otay WD BMP Reports for 2001 to 2004, as well as the BMP Coverage Report for 2003-04, are included in the Otay WD 2005 UWMP.

The Rabago Project will implement the CUWCC Best Management Practices for water conservation such as installation of ultra low flow toilets, development of a water conversation plan, and potential beneficial use of recycled water, all of which are typical requirements of development projects within the County of San Diego.

Section 6 - Existing and Projected Supplies

The Otay WD currently does not have an independent raw or potable water supply source. The Otay WD is a member public agency of the Water Authority. The Water Authority is a member public agency of Metropolitan. The statutory relationships between the Water Authority and its member agencies, and Metropolitan and its member agencies, respectively, establish the scope of the Otay WD entitlement to water from these two agencies.

The Water Authority through two delivery pipelines, referred to as Pipeline No. 4 and the La Mesa Sweetwater Extension Pipeline, currently supply the Otay WD with 100 percent of its potable water. The Water Authority in turn, currently purchases about half of its water from Metropolitan. Due to the Otay WD reliance on these two agencies, this WSA Report includes referenced documents that contain information on the existing and projected supplies, supply programs, and related projects of the Water Authority and Metropolitan. The Otay WD, Water Authority, and Metropolitan are actively pursuing programs and projects to further diversify their water supply resources.

The description of local recycled water supplies available to the Otay WD is also discussed below.

6.1 Metropolitan Water District of Southern California 2005 Regional Urban Water Management Plan

In November 2005, Metropolitan adopted its 2005 Regional Urban Water Management Plan (RUWMP). The 2005 RUWMP provides Metropolitan's member agencies, retail water utilities, cities, and counties within its service area with, among other things, a detailed evaluation of the supplies necessary to meet future demands, and an evaluation of reasonable and practical efficient water uses, recycling, and conservation activities. During the preparation of the 2005 RUWMP, Metropolitan also utilized the previous SANDAG regional growth forecast in calculating regional water demands for the Water Authority service area.

6.1.1 Availability of Sufficient Supplies and Plans for Acquiring Additional Supplies

Metropolitan is a wholesale supplier of water to its member public agencies and obtains its supplies from two primary sources: the Colorado River, via the Colorado River Aqueduct (CRA), which it owns and operates, and Northern California, via the State Water Project (SWP). The 2005 RUWMP documents the availability of these existing supplies and additional supplies necessary to meet future demands.

6.1.1.1 Metropolitan Supplies

Metropolitan's Integrated Resources Plan (IRP) identifies a mix of resources (imported and local) that, when implemented, will provide 100 percent reliability for full-service demands through the attainment of regional targets set for conservation, local supplies, State Water Project supplies, Colorado River supplies, groundwater banking, and water transfers. The 2010 update to the IRP (2010 IRP Update) includes a planning buffer supply intended to mitigate against the risks associated with implementation of local and imported supply programs and for the risk that future demands could be higher than projected. The planning buffer identifies an additional increment of water that could potentially be developed when needed and if other supplies are not fully implemented as planned. As part of implementation of the planning buffer, Metropolitan periodically evaluates supply development, supply conditions, and projected demands to ensure that the region is not under or over developing supplies. Managed properly, the planning buffer will help ensure that the southern California region, including San Diego County, will have adequate water supplies to meet future demands.

In November 2005, Metropolitan adopted its 2005 RUWMP in accordance with state law. The resource targets included in the preceding 2004 IRP Update serve as the foundation for the planning assumptions used in the 2005 RUWMP. Metropolitan's 2005 RUWMP contains a water supply reliability assessment that includes a detailed evaluation of the supplies necessary to meet demands over a 25-year period in average, single dry year, and multiple dry

year periods. As part of this process, Metropolitan also uses the current SANDAG regional growth forecast in calculating regional water demands for the Water Authority's service area.

As stated in Metropolitan's 2005 RUWMP, that plan may be used as a source document for meeting the requirements of SB 610 and SB 221 until the next scheduled update is completed in 2011. The 2005 RUWMP includes a "Justifications for Supply Projections" in Appendix A.3, that provides detailed documentation of the planning, legal, financial, and regulatory basis for including each source of supply in the plan. A copy of Metropolitan's 2005 RUWMP can be found on the internet at the following site address:

http://www.mwdh2o.com/mwdh2o/pages/yourwater/RUWMP/RUWMP_2005.pdf

SANDAG has included the proposed land use density from this project in their latest Series 12 Update. Now that Metropolitan has updated their IRP, both Metropolitan and the Water Authority will be updating their UWMPs. The UWMP for both Metropolitan and the Water Authority will include the increase in demand projections included in SANDAG's Series 12 Update and from the projections from Otay WD 2009 WRMP updated November, 2010.

Water supply agencies throughout California continue to face climate, environmental, legal, and other challenges that impact water source supply conditions, such as the court rulings regarding the Sacramento-San Joaquin Delta and the current western states drought conditions. Challenges such as these essentially always will be present. The regional water supply agencies, the Water Authority and Metropolitan, along with Otay WD nevertheless fully intend to have sufficient, reliable supplies to serve demands.

6.1.1.2 Pipeline 6

Metropolitan completed its System Overview Study (SOS) in fall 2005 based on the 2004 IRP. The SOS determines if Metropolitan's current system is capable of delivering the supplies to meet the demands shown in the older 2004 IRP.

Pipeline 6 is included in the SOS as an untreated water pipeline to deliver additional Metropolitan supplies to the San Diego County region. The addition of Pipeline 6 would allow the Water Authority and Metropolitan to convert one of the existing untreated water pipelines to a treated water pipeline. With the conversion, the capacity to import both treated and untreated water would increase significantly, thereby enabling Metropolitan to increase both treated and untreated imported water delivery capacity to the San Diego County region.

Based on current planning assumptions of the Water Authority and Metropolitan, new imported supplies delivered through Pipeline 6 would be required no earlier than 2018, absent development of new supplies from seawater desalination or some combination of new local supplies, totaling 56,000 ac-ft/yr (see Section 6.2.1 below). With development of 56,000 ac-ft/yr, Pipeline 6 would not be needed until 2023. Activities associated with implementation of Pipeline 6 include the following:

- Coordination between Metropolitan and the Water Authority regarding planning and design of Pipeline 6 is ongoing.
- An alignment for the entire approximately 30-mile pipeline was identified in the original 1993 Environmental Impact Report. Metropolitan is conducting a feasibility study to revisit the 1993 alignment and evaluate alternative alignments north of the San Luis Rey River in light of changed conditions since 1993. The Water Authority plans to conduct a similar feasibility study of Pipeline 6 alignments south of the San Luis Rey River. Based on these updated feasibility studies, an updated environmental analysis for the project is also planned.

6.1.2 Metropolitan Capital Investment Plan

Metropolitan prepares a Capital Investment Plan as part of its annual budget approval process. The cost, purpose, justification, status, progress, etc. of Metropolitan's infrastructure projects to deliver existing and future supplies are documented in the Capital Investment Plan. The financing of these projects is addressed as part of the annual budget approval process.

Metropolitan's Capital Investment Plan includes a series of projects identified from Metropolitan studies of projected water needs, which, when considered along with operational demands on aging facilities and new water quality regulations, identify the capital projects needed to maintain infrastructure reliability and water quality standards, improve efficiency, and provide future cost savings. All projects within the Capital Investment Plan are evaluated against an objective set of criteria to ensure they are aligned with the Metropolitan's goals of supply reliability and quality.

6.2 San Diego County Water Authority Regional Water Supplies

The Water Authority has adopted plans and is taking specific actions to develop adequate water supplies to help meet existing and future water demands within the San Diego region. This section contains details on the supplies being developed by the Water Authority. A summary of recent actions pertaining to development of these supplies includes:

- In accordance with the Urban Water Management Planning Act, the Water Authority adopted their 2005 UWMP in November 2005 and updated the 2005 UWMP in April 2007. The updated Water Authority 2005 UWMP identifies a diverse mix of local and imported water supplies to meet future demands. A copy of the updated Water Authority 2005 UWMP can be found on the internet at <http://www.sdcwa.org>
- Deliveries of conserved agricultural water from the Imperial Irrigation District (IID) to San Diego County have increased annually since 2003, with 70,000 ac-ft of deliveries in Fiscal Year (FY) 2010.

- As part of the October 2003 Quantification Settlement Agreement (QSA), the Water Authority was assigned Metropolitan's rights to 77,700 ac-ft/yr of conserved water from the All-American Canal (AAC) and Coachella Canal (CC) lining projects. The Water Authority has nearly completed implementation of these projects, with the CC project now complete and deliveries being made to the San Diego County region.

Through implementation of the Water Authority and member agency planned supply projects, along with reliable imported water supplies from Metropolitan, the region anticipates having adequate supplies to meet existing and future water demands.

To ensure sufficient supplies to meet projected growth in the San Diego region, the Water Authority uses the SANDAG most recent regional growth forecast in calculating regional water demands. The SANDAG regional growth forecast is based on the plans and policies of the land-use jurisdictions with San Diego County. The existing and future demands of the member agencies are included in the Water Authority's projections.

6.2.1 Availability of Sufficient Supplies and Plans for Acquiring Additional Supplies

The Water Authority currently obtains imported supplies from Metropolitan, conserved water from the AAC and CC lining projects, and an increasing amount of conserved agricultural water from IID. Of the twenty-seven member agencies that purchase water supplies from Metropolitan, the Water Authority is Metropolitan's largest customer. In FY 2006, the Water Authority purchased 577,944 ac-ft from Metropolitan, an increase of approximately 4,000 ac-ft over the FY 2005 amount.

Section 135 of Metropolitan's Act defines the preferential right to water for each of its member agencies. As calculated by Metropolitan, the Water Authority's current preferential right is 17.22% of Metropolitan's supply, while the Water Authority accounted for approximately 25% of Metropolitan's total revenue. Under preferential rights, Metropolitan could allocate water without regard to historic water purchases or dependence on Metropolitan. The Water Authority and its member agencies are taking measures to reduce dependence on Metropolitan through development of additional supplies and a water supply portfolio that would not be jeopardized by a preferential rights allocation. Metropolitan has stated, consistent with Section 4202 of its Administrative Code that it is prepared to provide the Water Authority's service area with adequate supplies of water to meet expanding and increasing needs in the years ahead. When and as additional water resources are required to meet increasing needs, Metropolitan stated it will be prepared to deliver such supplies. In Section II.4 of their 2005 RUWMP, Metropolitan states that through effective management of its water supply, they fully expect to be 100 percent reliable in meeting all non-discounted non-interruptible demands throughout the next twenty-five years.

The Water Authority has made large investments in Metropolitan's facilities and will continue to include imported supplies from Metropolitan in the future resource mix. As discussed in the Water Authority's 2005 UWMP, the Water Authority and its member agencies are

planning to diversify the San Diego regions supply portfolio and reduce purchases from Metropolitan.

As part of the Water Authority’s diversification efforts, the Water Authority is now taking delivery of conserved agricultural water from IID and water saved from the AAC and CC lining projects. The CC lining project is complete and the Water Authority has essentially completed construction of the AAC lining project. Table 7 summarizes the Water Authority’s supply sources with detailed information included in the sections to follow. Deliveries from Metropolitan are also included in Table 7, which is further discussed in Section 6.1 above. The Water Authority’s member agencies provided the verifiable local supply targets for groundwater, groundwater recovery, recycled water, and surface water, which are discussed in more detail in Section 5 of the Water Authority’s 2005 UWMP.

Table 7
Projected Verifiable Water Supplies – Water Authority Service Area
Normal Year (acre feet)

Water Supply Sources	2010	2015	2020	2025	2030
Water Authority Supplies					
Metropolitan Supplies	445,858	399,855	331,374	342,870	372,922
Water Authority/IID Transfer	70,000	100,000	190,000	200,000	200,000
AAC and CC Lining Projects	77,700	77,700	77,700	77,700	77,700
Member Agency Supplies					
Local Surface Water	59,649	59,649	59,649	59,649	59,649
Recycled Water	33,668	40,662	45,548	46,492	47,584
Seawater Desalination	0	34,689	36,064	37,754	40,000
Groundwater	17,175	18,945	19,775	19,775	19,775
Groundwater Recovery	11,400	11,400	11,400	11,400	11,400
Total Projected Supplies	715,450	742,900	771,510	795,640	829,030

Source: The Water Authority 2005 Urban Water Management Plan.

Section 5 of the Water Authority’s 2005 UWMP also includes a discussion on the local supply target for seawater desalination. Seawater desalination supplies represent a significant future local resource in the Water Authority’s service area. Poseidon Resources is pursuing the development of a local, privately owned desalination project located adjacent to the Encina Power Station. As of June 2007, Poseidon has contracted with the Carlsbad Municipal Water District (MWD) (up to 28,000 ac-ft/yr depending on demands), Valley Center MWD (7,500 ac-ft/yr), Rincon Del Diablo MWD (4,000 ac-ft/yr), and Sweetwater Authority (2,400 ac-ft/yr) to supply up to 41,900 ac-ft/yr of desalinated seawater. The verifiable seawater desalination figure is based on the contract amounts and projected seawater desalination deliveries to Carlsbad MWD. As shown in Table 7, the verifiable projected local seawater desalination supplies vary each year based on the Carlsbad MWD demands (which are less than their desalinated seawater contract amount of 28,000 ac-ft/yr). There are several

contingencies related to Poseidon's agreements with these member agencies and the Water Authority that must be satisfied before implementation of the project and its ultimate yield can be determined. These contingencies include obtaining legal entitlements for construction of the project, determination of a mutually acceptable delivery interconnection points and delivery charge, and engagement of a third party exchange agency partner where physical delivery to the contracting agency is not practical. The Water Authority is negotiating specific elements for a water purchase agreement with Poseidon which include water purchase price, allocation of risk and options to eventually purchase the project's pipeline and the entire desalination plant. This agreement will supersede the contracts Poseidon has negotiated with the four Districts. Before negotiations begin on a final agreement, Poseidon must secure sufficient financial commitments from private investors to meet requirements for fully funding project construction. In addition, Poseidon must execute all agreements for construction and operation of the project and finalize the documents needed to finance the project in the bond market.

The Water Authority's existing and planned supplies from the IID transfer and canal lining projects are considered "drought-proof" supplies and should be available at the yields shown in Table 7 in normal, single dry, and multiple dry year scenarios. For dry year yields from Metropolitan supplies, refer to Metropolitan's 2005 RUWMP, discussed in Section 6.1 above.

As part of preparation of a written water supply assessment and/or verification report, an agency's shortage contingency analysis should be considered in determining sufficiency of supply. Section 9 of the Water Authority's 2005 UWMP contains a detailed shortage contingency analysis that addresses a regional catastrophic shortage situation and drought management. The analysis demonstrates that the Water Authority and its member agencies, through the Emergency Response Plan, Emergency Storage Project, and Drought Management Plan (DMP) are taking actions to prepare for and appropriately handle an interruption of water supplies. The DMP, completed in May 2006, provides the Water Authority and its member agencies with a series of potential actions to take when faced with a shortage of imported water supplies from Metropolitan due to prolonged drought or other supply shortfall conditions. The actions will help the region avoid or minimize the impacts of shortages and ensure an equitable allocation of supplies throughout the San Diego region.

6.2.1.1 Water Authority-Imperial Irrigation District Water Conservation and Transfer Agreement

The QSA was signed in October 2003, and resolves long-standing disputes regarding priority and use of Colorado River water and creates a baseline for implementing water transfers. With approval of the QSA, the Water Authority and IID were able to implement their Water Conservation and Transfer Agreement. This agreement not only provides reliability for the San Diego region, but also assists California in reducing its use of Colorado River water to its legal allocation.

On April 29, 1998, the Water Authority signed a historic agreement with IID for the long-term transfer of conserved Colorado River water to San Diego County. The Water Authority-IID Water Conservation and Transfer Agreement (Transfer Agreement) is the largest agriculture-to-urban water transfer in United States history. Colorado River water will be conserved by Imperial Valley farmers who voluntarily participate in the program and then transferred to the Water Authority for use in San Diego County.

Implementation Status

On October 10, 2003, the Water Authority and IID executed an amendment to the original 1998 Transfer Agreement. This amendment modified certain aspects of the 1998 Agreement to be consistent with the terms and conditions of the QSA and related agreements. It also modified other aspects of the agreement to lessen the environmental impacts of the transfer of conserved water. The amendment was expressly contingent on the approval and implementation of the QSA, which was also executed on October 10, 2003.

On November 5, 2003, IID filed a complaint in Imperial County Superior Court seeking validation of 13 contracts associated with the Transfer Agreement and the QSA. Imperial County and various private parties filed additional suits in Superior Court, alleging violations of the California Environmental Quality Act (CEQA), the California Water Code, and other laws related to the approval of the QSA, the water transfer, and related agreements. The lawsuits have been coordinated for trial. The IID, Coachella Valley Water District, Metropolitan, the Water Authority, and State are defending these suits and coordinating to seek validation of the contracts. Implementation of the transfer provisions is proceeding during litigation. For further and the latest information regarding the litigation and current progress, please contact the Water Authority's General Counsel.

Expected Supply

Deliveries into San Diego County from the transfer began in 2003 with an initial transfer of 10,000 ac-ft. The Water Authority received 20,000 ac-ft in 2004, 30,000 in 2005, and 40,000 in 2006. The quantities will increase annually to 200,000 ac-ft by 2021 then remain fixed for the duration of the Transfer Agreement. The initial term of the Transfer Agreement is 45 years, with a provision that either agency may extend the agreement for an additional 30-year term.

During dry years, when water availability is low, the conserved water will be transferred under the IID Colorado River rights, which are among the most senior in the Lower Colorado River Basin. Without the protection of these rights, the Water Authority could suffer delivery cutbacks. In recognition for the value of such reliability, the 1998 contract required the Water Authority to pay a premium on transfer water under defined regional shortage circumstances. The shortage premium period duration is the period of consecutive days during which any of the following exist: 1) a Water Authority shortage; 2) a shortage condition for the Lower Colorado River as declared by the Secretary; and 3) a Critical Year. Under terms of the October 2003

amendment, the shortage premium will not be included in the cost formula until Agreement Year 16.

Transportation

The Water Authority entered into a water exchange agreement with Metropolitan on October 10, 2003, to transport the Water Authority-IID transfer water from the Colorado River to San Diego County. Under the exchange agreement, Metropolitan will take delivery of the transfer water through its Colorado River Aqueduct. In exchange, Metropolitan will deliver to the Water Authority a like quantity and quality of water. The Water Authority will pay Metropolitan's applicable wheeling rate for each acre-foot of exchange water delivered. According to the water exchange agreement, Metropolitan will make delivery of the transfer water for 35 years, unless the Water Authority elects to extend the agreement another 10 years for a total of 45 years.

Cost/Financing

The costs associated with the transfer are proposed to be financed through the Water Authority's rates and charges. In the agreement between the Water Authority and IID, the price for the transfer water started at \$258 per acre-foot and increases by a set amount for the first five years. The 2005 price for transfer water is \$276 per acre-foot. Procedures are in place to evaluate and determine market-based rates following the first five-year period.

In accordance with the October 2003 amended exchange agreement between Metropolitan and the Water Authority, the initial cost to transport the conserved water was \$253 per acre-foot. Thereafter, the price would be equal to the charge or charges set by Metropolitan's Board of Directors pursuant to applicable laws and regulation, and generally applicable to the conveyance of water by Metropolitan on behalf of its member agencies. The transportation charge in 2005 was \$258 per acre-foot.

The Water Authority is providing \$10 million to help offset potential socioeconomic impacts associated with temporary land fallowing. IID will credit the Water Authority for these funds during years 16 through 45. At the end of the fifth year of the transfer agreement (2007), the Water Authority will prepay IID an additional \$10 million for future deliveries of water. IID will credit the Water Authority for this up-front payment during years 16 through 30.

As part of implementation of the QSA and water transfer, the Water Authority also entered into an environmental cost sharing agreement. The agreement specifies that the Water Authority will contribute \$64 million for the purpose of funding environmental mitigation costs and contributing to the Salton Sea Restoration Fund.

Written Contracts or Other Proof

The supply and costs associated with the transfer are based primarily on the following documents:

Agreement for Transfer of Conserved Water by and between IID and the Water Authority (April 29, 1998). This Agreement provides for a market-based transaction in which the Water Authority would pay IID a unit price for agricultural water conserved by IID and transferred to the Water Authority.

Revised Fourth Amendment to Agreement between IID and the Water Authority for Transfer of Conserved Water (October 10, 2003). Consistent with the executed Quantification Settlement Agreement (QSA) and related agreements, the amendments restructure the agreement and modify it to minimize the environmental impacts of the transfer of conserved water to the Water Authority.

Amended and Restated Agreement between Metropolitan and Water Authority for the Exchange of Water (October 10, 2003). This agreement was executed pursuant to the QSA and provides for delivery of the transfer water to the Water Authority.

Environmental Cost Sharing, Funding, and Habitat Conservation Plan Development Agreement among IID, Coachella Valley Water District (CVWD), and Water Authority (October 10, 2003). This Agreement provides for the specified allocation of QSA-related environmental review, mitigation, and litigation costs for the term of the QSA, and for development of a Habitat Conservation Plan.

Quantification Settlement Agreement Joint Powers Authority Creation and Funding Agreement (October 10, 2003). The purpose of this agreement is to create and fund the QSA Joint Powers Authority and to establish the limits of the funding obligation of CVWD, IID, and Water Authority for environmental mitigation and Salton Sea restoration pursuant to SB 654 (Machado).

Federal, State, and Local Permits/Approvals

Federal Endangered Species Act Permit. The U.S. Fish and Wildlife Service (USFWS) issued a Biological Opinion on January 12, 2001, that provides incidental take authorization and certain measures required to offset species impacts on the Colorado River regarding such actions.

State Water Resources Control Board (SWRCB) Petition. SWRCB adopted Water Rights Order 2002-0016 concerning IID and Water Authority's amended joint petition for approval of a long-term transfer of conserved water from IID to the Water Authority and to change the point of diversion, place of use, and purpose of use under Permit 7643.

Environmental Impact Report (EIR) for Conservation and Transfer Agreement. As lead agency, IID certified the Final EIR for the Conservation and Transfer Agreement on June 28, 2002.

U. S. Fish and Wildlife Service Draft Biological Opinion and Incidental Take Statement on the Bureau of Reclamation's Voluntary Fish and Wildlife Conservation Measures and Associated Conservation Agreements with the California Water Agencies (12/18/02). The U. S. Fish and Wildlife Service issued the biological opinion/incidental take statement for water transfer activities involving the Bureau of Reclamation and associated with IID/other California water agencies' actions on listed species in the Imperial Valley and Salton Sea (per the June 28, 2002 EIR).

Addendum to EIR for Conservation and Transfer Agreement. IID as lead agency and Water Authority as responsible agency approved addendum to EIR in October 2003.

Environmental Impact Statement (EIS) for Conservation and Transfer Agreement. Bureau of Reclamation issued a Record of Decision on the EIS in October 2003.

CA Department of Fish and Game California Endangered Species Act Incidental Take Permit #2081-2003-024-006. The California Department of Fish and Game issued this permit (10/22/04) for potential take effects on state-listed/fully protected species associated with IID/other California water agencies' actions on listed species in the Imperial Valley and Salton Sea (per the June 28, 2002 EIR).

California Endangered Species Act (CESA) Permit. A CESA permit was issued by California Department of Fish and Game (CDFG) on April 4, 2005, providing incidental take authorization for potential species impacts on the Colorado River.

6.2.1.2 All-American Canal and Coachella Canal Lining Projects

As part of the QSA and related contracts, the Water Authority was assigned Metropolitan's rights to 77,700 ac-ft/yr of conserved water from projects that will line the All-American Canal (AAC) and Coachella Canal (CC). The projects will reduce the loss of water that currently occurs through seepage, and the conserved water will be delivered to the Water Authority. This conserved water will provide the San Diego region with an additional 8.5 million acre-feet over the 110-year life of the agreement.

Implementation Status

The Coachella Canal lining project is complete and operational and the All-American Canal lining project is operational complete with some remaining construction activities to be concluded.

Earthwork for the Coachella Canal lining project began in November 2004 and involves approximately 37 miles of canal. National Environmental Policy Act (NEPA) and CEQA

documentation is complete, including an amended Record of Decision by the U.S. Bureau of Reclamation (USBR). The amendment was required after revising the project design: instead of lining the canal in place, the project entailed the construction of a parallel canal. The project was completed in 2006, and deliveries of conserved water started in 2007.

The construction related activities are mostly complete on the AAC lining project. The lining project consists of constructing a concrete-lined canal parallel to 24 miles of the existing AAC from Pilot Knob to Drop 3.

In July 2005, a lawsuit (*CDEM v United States*, Case No. CV-S-05-0870-KJD-PAL) was filed in the U. S. District Court for the District of Nevada on behalf of U.S. and Mexican groups challenging the lining of the AAC. The lawsuit, which names the Secretary of the Interior as a defendant, claims that seepage water from the canal belongs to water users in Mexico. California water agencies note that the seepage water is actually part of California's Colorado River allocation and not part of Mexico's allocation. The plaintiffs also allege a failure by the United States to comply with environmental laws. Federal officials have stated that they intend to vigorously defend the case.

Expected Supply

The AAC lining project will yield 67,700 acre-feet per year of Colorado River water for allocation upon completion of construction. The CC lining project will yield 26,000 acre-feet of Colorado River water each year available for allocation upon completion of construction. The October 10, 2003, Allocation Agreement states that 16,000 acre-feet per year of conserved CC lining water will be allocated to the San Luis Rey Indian Water Rights Settlement Parties. The remaining amount, 10,000 acre-feet per year from the CC lining conserved water plus the 67,700 acre-feet per year AAC lining conserved water totaling 77,700 acre-feet per year, will be available to the Water Authority. According to the Allocation Agreement, IID has call rights to a portion (5,000 acre-feet per year) of the conserved water upon termination of the QSA for the remainder of the 110 years of the Allocation Agreement and upon satisfying certain conditions. The term of the QSA is for up to 75 years.

Transportation

The October 10, 2003, Exchange Agreement between the Water Authority and Metropolitan also provides for the delivery of the conserved water from the canal lining projects. The Water Authority will pay Metropolitan's applicable wheeling rate for each acre-foot of exchange water delivered. In the Agreement, Metropolitan will deliver the canal lining water for the term of the Allocation Agreement (110 years).

Cost/Financing

Under California Water Code Section 12560 et seq., the Water Authority will receive \$200 million in state funds for construction of the projects. In addition, under California Water Code Section 79567, \$20 million from Proposition 50 is also available for the lining projects. Additionally, the Water Authority will receive \$35 million for groundwater conjunctive use projects as part of the agreement. The Water Authority would be responsible for additional expenses above the funds provided by the state.

The rate to be paid to transport the canal lining water will be equal to the charge or charges set by Metropolitan's Board of Directors pursuant to applicable law and regulation and generally applicable to the conveyance of water by Metropolitan on behalf of its member agencies.

In accordance with the Allocation Agreement, the Water Authority will also be responsible for a portion of the net additional Operation, Maintenance, and Repair (OM&R) costs for the lined canals. Any costs associated with the lining projects as proposed, are to be financed through the Water Authority's rates and charges.

Written Contracts or Other Proof

The expected supply and costs associated with the lining projects are based primarily on the following documents:

U.S. Public Law 100-675 (1988). Authorized the Department of the Interior to reduce seepage from the existing earthen AAC and CC. The law provides that conserved water will be made available to specified California contracting water agencies according to established priorities.

California Department of Water Resources - Metropolitan Funding Agreement (2001). Reimburse Metropolitan for project work necessary to construct the lining of the CC in an amount not to exceed \$74 million. Modified by First Amendment (2004) to replace Metropolitan with the Authority. Modified by Second Amendment (2004) to increase funding amount to \$83.65 million, with addition of funds from Proposition 50.

California Department of Water Resources - IID Funding Agreement (2001). Reimburse IID for project work necessary to construct a lined AAC in an amount not to exceed \$126 million.

Metropolitan - CVWD Assignment and Delegation of Design Obligations Agreement (2002). Assigns design of the CC lining project to CVWD.

Metropolitan - CVWD Financial Arrangements Agreement for Design Obligations (2002). Obligates Metropolitan to advance funds to CVWD to cover costs for CC lining project design and CVWD to invoice Metropolitan to permit the Department of Water Resources to be billed for work completed.

Allocation Agreement among the United States of America, The Metropolitan Water District of Southern California, Coachella Valley Water District, Imperial Irrigation District, San Diego County Water Authority, the La Jolla, Pala, Pauma, Rincon, and San Pasqual Bands of Mission Indians, the San Luis Rey River Indian Water Authority, the City of Escondido, and Vista Irrigation District (October 10, 2003). This agreement includes assignment of Metropolitan's rights and interest in delivery of 77,700 acre-feet of Colorado River water previously intended to be delivered to Metropolitan to the Water Authority. Allocates water from the AAC and CC lining projects for at least 110 years to the Water Authority, the San Luis Rey Indian Water Rights Settlement Parties, and IID, if it exercises its call rights.

Amended and Restated Agreement between Metropolitan and Water Authority for the Exchange of Water (October 10, 2003). This agreement was executed pursuant to the QSA and provides for delivery of the conserved canal lining water to the Water Authority.

Agreement between Metropolitan and Water Authority regarding Assignment of Agreements related to the AAC and CC Lining Projects. This agreement was executed in April 2004 and assigns Metropolitan's rights to the Water Authority for agreements that had been executed to facilitate funding and construction of the AAC and CC lining projects:

Assignment and Delegation of Construction Obligations for the Coachella Canal Lining Project under the Department of Water Resources Funding Agreement No. 4600001474 from the San Diego County Water Authority to the Coachella Valley Water District, dated September 8, 2004.

Agreement Regarding the Financial Arrangements between the San Diego County Water Authority and Coachella Valley Water District for the Construction Obligations for the Coachella Canal Lining Project, dated September 8, 2004.

Agreement No. 04-XX-30-W0429 Among the United States Bureau of Reclamation, the Coachella Valley Water District, and the San Diego County Water Authority for the Construction of the Coachella Canal Lining Project Pursuant to Title II of Public Law 100-675, dated October 19, 2004.

California Water Code Section 12560 et seq. This Water Code Section provides for \$200 million to be appropriated to the Department of Water Resources to help fund the canal lining projects in furtherance of implementing California's Colorado River Water Use Plan.

California Water Code Section 79567. This Water Code Section identifies \$20 million as available for appropriation by the California Legislature from the Water Security, Clean Drinking Water, Coastal, and Beach Protection Fund of 2002 (Proposition 50) to DWR for grants for canal lining and related projects necessary to reduce Colorado River water use. According to the Allocation Agreement, it is the intention of the agencies that those funds will be available for use by the Water Authority, IID, or CVWD for the AAC and CC lining projects.

California Public Resources Code Section 75050(b)(1). This section identifies up to \$36 million as available for water conservation projects that implement the Allocation Agreement as defined in the Quantification Settlement Agreement.

Federal, State, and Local Permits/Approvals

AAC Lining Project Final EIS/EIR (March 1994). A final EIR/EIS analyzing the potential impacts of lining the AAC was completed by the Bureau of Reclamation (Reclamation) in March 1994. A Record of Decision was signed by Reclamation in July 1994, implementing the preferred alternative for lining the AAC. A re-examination and analysis of these environmental compliance documents by Reclamation in November 1999 determined that these documents continued to meet the requirements of the NEPA and the CEQA and would be valid in the future.

CC Lining Project Final EIS/EIR (April 2001). The final EIR/EIS for the CC lining project was completed in 2001. Reclamation signed the Record of Decision in April 2002. An amended Record of Decision has also been signed to take into account revisions to the project description.

Mitigation, Monitoring, and Reporting Program for Coachella Canal Lining Project, SCH #1990020408; prepared by Coachella Valley Water District, May 16, 2001.

Environmental Commitment Plan for the Coachella Canal Lining Project, approved by the US Bureau of Reclamation (Boulder City, NV) on March 4, 2003.

Environmental Commitment Plan and Addendum to the All-American Canal Lining Project EIS/EIR California State Clearinghouse Number SCH 90010472 (June 2004, prepared by IID).

Addendum to Final EIS/EIR and Amendment to Environmental Commitment Plan for the All-American Canal Lining Project (approved June 27, 2006, by IID Board of Directors).

6.2.2 Water Authority Capital Improvement Program and Financial Information

The Water Authority's capital improvement program (CIP) budget document includes a description of each of the projects and programs being implemented to ensure existing and future facilities are adequate to deliver water supplies throughout the region. The project costs, along with information on the activities that need to be completed, are included in the CIP document. The Water Authority's Master Plan identifies future facilities and other improvements to the Water Authority's system that are necessary to maintain reliability throughout the region. A programmatic environmental impact report was certified by the Water Authority Board of Directors for the Master Plan in November 2003. Projects identified in the Master Plan will be included in the CIP based on Water Authority Board of Directors' approval. Information on the Water Authority's most recent CIP can be found on the internet at www.sdcwa.org/infra/cip.phtml.

One of the highest priority projects identified in the Master Plan is the development of additional treatment capacity within the region. During recent summers, the Water Authority experienced peak-demand conditions that have exceeded the region's rated treatment capacity. The Master Plan recommended development of an additional 50 mgd of treatment capacity immediately and another 50 mgd capacity by 2010. In response to this recommendation, the Water Authority board of directors in September 2005, approved construction of a 100 mgd water treatment plant. The water treatment plant was completed and placed into operation in 2008.

The Master Plan also identified carryover storage as a way to improve water supply reliability for the region. The Water Authority identified the three main benefits of carryover storage as: 1) enhance water supply reliability by providing a reliable and readily available source of water during periods of potential shortage, such as during dry years; 2) increase system efficiency by providing operational flexibility to serve above normal demands, such as those occurring in dry years, from storage rather than by the over-sizing of the Water Authority's imported water transmission facilities; and 3) better management of water supplies to allow the Water Authority to accept additional imported deliveries during periods of availability, such as during wet years, to ensure water availability during dry years. The Water Authority prepared an EIR/EIS for a carryover storage project, with the preferred alternative being an expansion of the San Vicente Reservoir.

The Water Authority Board of Directors is provided a semi-annual and annual report on the status of development of the CIP projects. As described in the Water Authority's biennial budget, a combination of long and short term debt and cash (pay-as-you-go) will provide funding for capital improvements. Additional information is included in the Water Authority's biennial budget, which also contains selected financial information and summarizes the Water Authority's investment policy.

6.3 Otay Water District

The Otay WD 2009 Water Resource Master Plan updated November, 2010 provides projected demands at build out and the 2005 Urban Water Management Plan contains comparisons of projected supply and demands through the year 2030. Projected potable water resources to meet planned demands as documented were planned to be supplied entirely with imported water received from the Water Authority. Recycled water resources to meet projected demands are planned to be supplied from local wastewater treatment plants. The Otay WD currently has no local supply of raw water, potable water, or groundwater resources. The development and/or acquisition of potential groundwater, recycled water market expansion, and seawater desalination supplies by the Otay WD have evolved and are planned to occur in response to the regional water supply issues. These water supply projects are in addition to those identified as sustainable supplies in the current Water Authority and Metropolitan UWMP, IRP, Master Plans, and other planning documents. These new additional water supply projects are not currently developed and are in various stages of the

planning process. These local and regional water supply projects will allow for less reliance upon imported water and are considered a new water supply resource for the Otay WD.

The Otay WD expansion of the market areas for the use of recycled water within the watersheds upstream of the Sweetwater Reservoir and the Lower Otay Reservoir, and Otay Mesa will increase recycled water use and thus require less dependence on imported water for irrigation purposes.

The supply forecasts contained within this WSA Report do consider development and/or acquisition of potential groundwater, recycled water market expansion, and seawater desalination supplies by the Otay WD.

6.3.1 Availability of Sufficient Supplies and Plans for Acquiring Additional Supplies

The availability of sufficient potable water supplies and plans for acquiring additional potable water supplies to serve existing and future demands of the Otay WD is founded upon the preceding discussions regarding Metropolitan's and the Water Authority's water supply resources and water supplies to be acquired by the Otay WD. Historic imported water deliveries from the Water Authority to Otay WD and recycled water deliveries from the Otay WD Ralph W. Chapman Water Reclamation Facility (RWCWRF) are shown in Table 8. Since the year 2000 through mid May 2007, recycled water demand has exceeded the recycled water supply capability typically in the summer months. The RWCWRF is limited to a maximum production of about 1,300 ac-ft/yr. The recycled water supply shortfall had been met by supplementing with potable water into the recycled water storage system as needed by adding potable water supplied by the Water Authority. On May 18, 2007 an additional source of recycled water supply from the City of San Diego's South Bay Water Reclamation Plant (SBWRP) became available. The supply of recycled water from the SBWRP is a result of completing construction and commencement of operations of the transmission, storage, and pump station systems necessary to link the SBWRP recycled water supply source to the existing Otay WD recycled water system.

Table 8
Otay Water District
Historic Imported and Local Water Supplies

Calendar Year	Imported Water (acre-feet)	Recycled Water (acre-feet)	Total (acre-feet)
1980	12,558	0	12,558
1985	14,529	0	14,529
1990	23,200	0	23,200
1995	20,922	614	21,536
2000	30,936	948	31,884
2005	40,322	1,227	41,549
2009	37,566	4,533	42,099

Source: Otay WD operational records.

6.3.1.1 Imported and Regional Supplies

The availability of sufficient imported and regional potable water supplies to serve existing and planned uses within Otay WD is demonstrated in the above discussion on Metropolitan and the Water Authority’s water supply reliability. The County Water Authority Act, Section 5 subdivision 11, states that the Water Authority “as far as practicable, shall provide each of its member agencies with adequate supplies of water to meet their expanding and increasing needs.” The Water Authority provides between 75 to 95 percent of the total supplies used by its 24 member agencies, depending on local weather and supply conditions. In calendar year 2009 the supply to Otay WD was 37,566 ac-ft of supply from the Water Authority. An additional 4,533 ac-ft of recycled water was received from the City of San Diego and from the District’s Ralph W. Chapman Water Reclamation Facility. The demand for potable water within the Otay WD is expected to increase to about 72,900 ac-ft by 2025 as per the Otay WD 2005 UWMP. These figures take into account the amount of local supply (i.e. groundwater, conservation, recycling, etc.) that is expected to meet demands within Otay WD service area.

Potable Water System Facilities

The Otay WD continues to pursue diversification of its water supply resources to increase reliability and flexibility. The Otay WD also continues to plan, design, and construct potable water system facilities to obtain these supplies and to distribute potable water to meet customer demands. The Otay WD has successfully negotiated two water supply diversification agreements that enhance reliability and flexibility, which are briefly described as follows.

- The Otay WD entered into an agreement with the City of San Diego, known as the Otay Water Treatment Plant (WTP) Agreement. The Otay WTP Agreement provides for raw water purchase from the Water Authority and treatment by the City of San Diego at their

Otay WTP for delivery to Otay WD. The supply system link to implement the Otay WTP Agreement to access the regions raw water supply system and the local water treatment plant became fully operational in August 2005. This supply link consists of the typical storage, transmission, pumping, flow measurement, and appurtenances to receive and transport the treated water to the Otay WD system. The City of San Diego obligation to supply 10 mgd of treated water under the Otay WTP Agreement is contingent upon there being available 10 mgd of surplus treatment capacity in the Otay WTP until such time as Otay WD pays the City of San Diego to expand the Otay WTP to meet the Otay WD future needs. In the event that the City of San Diego's surplus is projected to be less than 10 mgd the City of San Diego will consider and not unreasonably refuse the expansion of the Otay WTP to meet the Otay WD future needs. The Otay WTP existing rated capacity is 40 mgd with an actual effective capacity of approximately 34 mgd. The City of San Diego's typical demand for treated water from the Otay WTP is approximately 20 mgd. It is at the City of San Diego's discretion to utilize either imported raw water delivered by the Water Authority Pipeline No. 3 or local water stored in Lower Otay Reservoir for treatment to supply the Otay WD demand.

- The Otay WD entered into an agreement with the Water Authority, known as the East County Regional Treated Water Improvement Program (ECRTWIP Agreement). The ECRTWIP Agreement provides for transmission of raw water to the Helix WD R. M. Levy WTP for treatment and delivery to Otay WD. The supply system link to implement the ECRTWIP Agreement is complete allowing access to the regions raw water supply system and the local water treatment plant. This supply link consists of the typical transmission, pumping, storage, flow control, and appurtenances to receive and transport the potable water from the R. M. Levy WTP to Otay WD. The Otay WD is required to take a minimum of 10,000 ac-ft/yr of treated water from the R.M. Levy WTP supplied from the regions raw water system.

Cost and Financing

The capital improvement costs associated with water supply and delivery are financed through the Otay WD water meter capacity fee and user rate structures. The Otay WD potable water sales revenue are used to pay for the wholesale cost of the treated water supply and the operating and maintenance expenses of the potable water system facilities.

Written Agreements, Contracts, or Other Proof

The supply and cost associated with deliveries of treated water from the Otay WTP and the R.M. Levy WTP is based on the following documents.

Agreement for the Purchase of Treated Water from the Otay Water Treatment Plant between the City of San Diego and the Otay Water District. The Otay WD entered into an agreement dated January 11, 1999 with the City of San Diego that provides for 10 mgd of surplus treated water to the Otay WD from the existing Otay WTP capacity. The agreement allows for the purchase of treated water on an as available basis from the Otay WTP. The Otay WD pays the Water

Authority at the prevailing raw water rate for raw water and pays the City of San Diego at a rate equal to the actual cost of treatment to potable water standards.

Agreement between the San Diego County Water Authority and Otay Water District Regarding Implementation of the East County Regional Treated Water Improvement Program. The ECRTWIP Agreement requires the purchase of at least 10,000 ac-ft per year of potable water from the Helix WD R.M. Levy WTP at the prevailing Water Authority treated water rate. The ECRTWIP Agreement is dated April 27, 2006.

Agreement between the San Diego County Water Authority and Otay Water District for Design, Construction, Operation, and Maintenance of the Otay 14 Flow Control Facility Modification. The Otay WD entered into the Otay 14 Flow Control Facility Modification Agreement dated January 24, 2007 with the Water Authority to increase the physical capacity of the Otay 14 Flow Control Facility. The Water Authority and Otay WD to 50% share the capital cost to expand its capacity from 8 mgd to 16 mgd.

Federal, State, and Local Permits/Approvals

The Otay WD constructed the pipeline and pump station associated with the Otay WTP supply source and for the 640-1 and 640-2 water storage reservoirs project associated with the ECRTWIP after securing all of the permits and completing the CEQA documentation.

The transmission main project constructed about 26,000 feet of a 36-inch diameter steel pipeline from the Otay 14 Flow Control Facility to the 640-1 and 640-2 Reservoirs project. The Otay 14 Flow Control Facility modification increased the capacity of the existing systems from 8 mgd to 16 mgd. CEQA documentation is complete for both projects. Construction of both of these projects was completed October 2010.

The City of San Diego and the Helix Water District are required to meet all applicable federal, state, and local health and water quality requirements for the potable water produced at the Otay WTP and the R.M. Levy WTP respectively.

6.3.1.2 Recycled Water Supplies

Wastewater collection, treatment, and disposal services provided by the Otay WD is limited to a relatively small area within what is known as the Jamacha Basin, located within the Middle Sweetwater River Basin watershed upstream of the Sweetwater Reservoir and downstream of Loveland Reservoir. Water recycling is defined as the treatment and disinfection of municipal wastewater to provide a water supply suitable for non-potable reuse. The Otay WD owns and operates the Ralph W. Chapman Water Reclamation Facility, which produces recycled water treated to a tertiary level for landscape irrigation purposes. The recycled water market area of the Otay WD is located primarily within the eastern area of the City of Chula Vista and on the Otay Mesa. The Otay WD distributes recycled water to a substantial market

area that includes but is not limited to the U.S. Olympic Training Center, the EastLake Golf Course, Otay Ranch, and other development projects.

The Otay WD projects that annual average demands for recycled water will increase to about 6,294 ac-ft/yr by 2025 and are estimated to approach 10,000 ac-ft/yr at ultimate build out for irrigation purposes. About 1,300 ac-ft/yr of supply is generated by the RWCWRF, with the remainder planned to be supplied to Otay WD by the City of San Diego's SBWRP.

North District Recycled Water Concept

The Otay WD is a recognized leader in the use of recycled water for irrigation and other commercial uses. The Otay WD continues the quest to investigate all viable opportunities to expand the successful recycled water program into areas that are not currently served. One of these areas is in the portion of the service area designated as the North District, located within the Middle Sweetwater River Basin watershed upstream of the Sweetwater River. The close proximity of the recycled water markets in the North District to the Otay WD source of recycled water, the RWCWRF, means that the distribution system to serve this area could be constructed relatively cost effectively. This makes the North District a logical location for the expansion of the Otay WD recycled water system and market area.

The purpose of the North District Recycled Water System Development Project, Phase I Concept Study, is to identify the feasibility of using recycled water in the North District and to investigate and assess any limitations or constraints to its use. The Phase I study components of the North District Recycled Water Concept encompassed the preparation of six technical memorandums including the project definition, a discussion of the regulatory process, a discussion of the protection of the watershed that would be affected by recycled water use in the North District, identification of stakeholders, public outreach, and an implementation plan.

Several opportunities that could be realized with the implementation of the use of recycled water in the North District were identified. These include a reduction of demand on the potable water system and maximizing recycled water resources which in turn minimizes treated wastewater discharges to the local ocean outfall. Other opportunities are a possible partnership with Sweetwater Authority to monitor any benefits and impacts of increased recycled water use in the watershed and stakeholder outreach to resolve any water quality concerns and to retain consumer confidence. Also identified were two major constraints associated with the North District Recycled Water System Development Project. One constraint is the water quality objectives for the Middle Sweetwater Basin that will affect the effluent limitations for the recycled water produced at the RWCWRF. At this time, the effluent limit that is of concern is total nitrogen. An examination as to how the treatment process might be modified to enhance nitrogen removal and a design is underway to remedy the total nitrogen issue. The other major constraint is the cost of the infrastructure needed to convey and store recycled water in the North District. These costs are estimated to be in the range of \$14 to \$15 million dollars.

There are two additional phases proposed for the North District Recycled Water System Development Project. Phase II would include further investigation of the issues identified in Phase I as requiring further study. These include stakeholder outreach, regulatory issues, and facility planning. The third phase of the effort would include the facility planning, permitting, environmental compliance, design, and construction of the improvements necessary for delivery of recycled water to the North District markets.

The estimated amount of imported water saved at full implementation of the North District Recycled Water System Development Project is 1,200 ac-ft/yr. This saved imported water could than be used to offset new potable water demands.

Recycled Water System Facilities

The Otay WD has and continues to construct recycled water storage, pumping, transmission, and distribution facilities to meet projected recycled water market demands. For nearly 20 years, millions of dollars of capital improvements have been constructed. The supply link consisting of a transmission main, storage reservoir, and a pump station to receive and transport the recycled water from the City of San Diego's SBWRP are complete and recycled water deliveries began on May 18, 2007.

Cost and Financing

The capital improvement costs associated with the recycled water supply and distribution systems are financed through the Otay WD water meter capacity fee and user rate structures. The Otay WD recycled water sales revenue, along with Metropolitan and the Water Authority's recycled water sales incentive programs are used to help offset the costs for the wholesale purchase and production of the recycled water supply, the operating and maintenance expenses, and the capital costs of the recycled water system facilities.

Written Agreements, Contracts, or Other Proof

The supply and cost associated with deliveries of recycled water from the SBWRP is based on the following document.

Agreement between the Otay Water District and the City of San Diego for Purchase of Reclaimed Water from the South Bay Water Reclamation Plant. The agreement provides for the purchase of at least 6,721 ac-ft per year of recycled water from the SBWRP at an initial price of \$350 per acre-foot. The Otay WD Board of Directors approved the final agreement on June 4, 2003 and the San Diego City Council approved the final agreement on October 20, 2003.

Federal, State, and Local Permits/Approvals

The Otay WD has in place an agreement with Metropolitan for their recycled water sales incentive program for supplies from the RWCWRF and the SBWRP. Also, the Otay WD has in place an agreement with the Water Authority for their recycled water sales incentive program for supplies from the RWCWRF and the SBWRP. The Water Authority sales incentive agreement was approved by Water Authority on July 26, 2007 and by Otay WD on August 1, 2007. All permits for the construction of the recycled water facilities to receive, store, and pump the SBWRP supply have been acquired through the typical planning, environmental approval, design, and construction processes.

The California Regional Water Quality Control Board San Diego Region (RWQCB) “Master Reclamation Permit for Otay Water District Ralph W. Chapman Reclamation Facility” was adopted on May 9, 2007 (Order No. R9-2007-0038). This order establishes master reclamation requirements for the production, distribution, and use of recycled water in the Otay WD service area. The order includes the use of tertiary treated water produced and received from the City of San Diego’s SBWRP. Recycled water received from and produced by the SBWRP is regulated by Regional Board Order No. 2000-203 and addenda. The City of San Diego is required to meet all applicable federal, state, and local health and water quality requirements for the recycled water produced at the SBWRP and delivered to Otay WD in conformance with Order No. 2000-203.

6.3.1.3 Potential Groundwater Supplies

The Otay WD 2009 WRMP, 2005 UWMP, and the Otay WD March 2007 Integrated Water Resources Plan (2007 IRP) both contain a description of the development of potential groundwater supplies. Over the past several years, Otay WD has studied numerous potential groundwater supply options that have shown, through groundwater monitoring well activities, poor quality water and/or insufficient yield from the basins at a cost effective level. The Otay WD has developed capital improvement program projects to continue the quest to develop potential groundwater resources. Local Otay WD groundwater supply development is currently considered as a viable water supply resource to meet projected demands.

The development and/or acquisition of potential groundwater supply projects by the Otay WD have evolved and have been resurrected in response to the regional water supply issues related to water source supply conditions. Local ground water supply projects will allow for less reliance upon imported water, achieve a level of independence of the regional wholesale water agencies, and diversify the Otay WD water supply portfolio consistent the Otay WD 2007 IRP.

In recognition of the need to develop sufficient alternative water supplies, the Otay WD has taken the appropriate next steps towards development of production groundwater well projects.

There are four groundwater well projects that the Otay WD is actively pursuing to develop as new local water supplies. They are known as the Middle Sweetwater River Basin Groundwater Well, the Otay Mesa Lot 7 Groundwater Well, the Rancho del Rey Groundwater Well, and the Otay River Groundwater Well Desalination project.

Middle Sweetwater River Basin Groundwater Well

The Middle Sweetwater River Basin Groundwater Well is a new additional water supply project had been thoroughly studied and documented in the 1990's. The Middle Sweetwater River Basin is located within the Sweetwater River watershed and is that reach of the river from Sweetwater Reservoir to the upstream Loveland Reservoir. The next step in development of the Middle Sweetwater River Basin Groundwater Well is the implementation of a pilot well project.

The Otay WD in cooperation with Sweetwater Authority and the Water Authority prepared a water resources audit for the Middle Sweetwater River Groundwater Basin in June 1991. The document was prepared by NBS Lowry and is entitled "Middle Sweetwater River System Study Water Resources Audit". The report was prepared as part of an overall study to identify and evaluate water management alternatives within the Middle Sweetwater River System (MSRS). The report graphically summaries water resources data for the MSRS.

The Otay WD in cooperation with Sweetwater Authority and the Water Authority prepared an alternatives evaluation study of the Middle Sweetwater River System Study Water Resources Audit in May 1993. The document was prepared by Michael R. Welch and is entitled "Middle Sweetwater River System Study Alternatives Evaluation". The overall goal of the study was to identify physical projects and/or management strategies which could enhance the availability and quality of surface and ground waters within the MSRS.

The Otay WD prepared potential conjunctive use strategies for the Middle Sweetwater River Basin in September 1994. A report was prepared by Michael R. Welch and is entitled "Middle Sweetwater River Basin Conjunctive Use Alternatives". The report was prepared for the consideration of the Otay WD and Sweetwater Authority. The conceptual level planning information within report identifies and evaluates eight conjunctive use alternatives within the Middle Sweetwater River Basin.

The ultimate objective of the Otay WD is to develop a groundwater well production system within the Middle Sweetwater River Basin capable of producing a sustainable yield of potable water as a local supply.

The purpose of the Middle Sweetwater River Basin Groundwater Well Pilot project is to identify the feasibility of developing a groundwater resource production system and to determine and assess any limitations or constraints that may arise.

The Middle Sweetwater River Basin Groundwater Well Pilot Project scope of work will accomplish six primary goals as follows:

- Update project setting
- Update applicable project alternatives analysis
- Prepare groundwater well pilot project implementation plan
- Construct and test pilot monitoring and extraction wells
- Provide recommendations regarding costs and feasibility to develop a groundwater well production system within the Middle Sweetwater River Basin capable of producing a sustainable yield of potable water
- Prepare groundwater well production project implementation plan and scope of work

The groundwater conjunctive use concept planned to be developed is described as the extraction of the quantity of water from the groundwater basin that was placed there by customers of the Otay WD by means of their use of imported treated water that contributed to the overall volume of groundwater within the basin. This quantity has been estimated to be on the order of 12.5% of the total consumption of the Otay WD customers within that basin as measured by their water meters. In the 1994/1995 time frame 810 ac-ft/yr was the estimated quantity that was placed into the groundwater basin. Currently, that 12.5% quantity could be on the order of 1,000 ac-ft/yr. The consultant contract scope of work will address this Phase I concept while further development of the groundwater basin as an additional supply resource is appropriately considered.

Further development of the groundwater basin to enhance the total groundwater production could be accomplished by the Otay WD by means of additional extraction of water from the basin that is placed there by means of either injection and/or spreading basins using imported untreated water as the resource supply (Phase II). The existing La Mesa Sweetwater Extension Pipeline, owned by the Water Authority, once converted to an untreated water deliver system, could be the conveyance system to transport untreated water for this conjunctive use concept.

These two distinct water resource supply conjunctive use concepts will be addressed so they may coexist and to allow for their development as separate phases.

The scope of work to complete Middle Sweetwater River Basin Groundwater Well Pilot Project consists of many major tasks and is to address the groundwater supply concepts outlined above. It is anticipated that the cost for the entire scope of work, will be on the order of \$2,000,000, which includes a contingency and may take up to one and a half years to complete.

The primary desired outcome of the Middle Sweetwater River Basin Groundwater Well Pilot Project is for the engineering consultant to determine and make recommendations if it is financially prudent and physically feasible to develop a Phase I groundwater well production system within the Middle Sweetwater River Basin capable of producing a sustainable yield of

up to 1,500 ac-ft/yr of potable water for the Otay WD. If it is deemed that a Middle Sweetwater River Basin Groundwater Well Production Project is viable than the consultant will develop and provide a groundwater well production project implementation plan and related scope of work.

Otay Mesa Lot 7 Groundwater Well

In early 2001 the Otay WD was approached by a landowner representative about possible interest in purchasing an existing well or alternatively, acquiring groundwater supplied from the well located on Otay Mesa. The landowner, National Enterprises, Inc., reportedly stated that the well could produce 3,200 ac-ft/yr with little or no treatment required prior to introducing the water into the Otay WD potable water system or alternatively, the recycled water system. In March 2001 authorization to proceed with testing of the Otay Mesa Lot 7 Groundwater Well was obtained and the Otay WD proceeded with the investigation of this potential groundwater supply opportunity.

The May 2001 Geoscience Support Services, Inc. completed for the Otay WD the preparation of a report entitled, "Otay Mesa Lot 7 Well Investigation," to assess the Otay Mesa Lot 7 Well. The scope of work included a geohydrologic evaluation of the well, analyses of the water quality samples, management and review of the well video log, and documentation of well pump testing.

The primary findings, as documented in the report, formed the basis of the following recommendations:

- For the existing well to be use as a potable water supply resource, a sanitary seal must be installed in accordance with the CDPH guidelines.
- Drawdown in the well must be limited to avoid the possibility of collapsing the casing.
- Recover from drawdown from pumping is slow and extraction would need to be terminated for up to 2 days to allow for groundwater level recovery.
- The well water would need to be treated and/or blended with potable water prior to introduction into the potable water distribution system.

In October 2001, the outcome and recommendations of the Geoscience Support Services, Inc. Otay Mesa Lot 7 Well efforts were presented to the Otay WD Board of Directors. The existing Otay Mesa Lot 7 Well, based upon the above findings, was determined not to be a reliable municipal supply of potable water and that better water quality and quantity perhaps could be discovered deeper or at an alternative location within the San Diego Formation.

The Otay WD is continuing to pursue the Otay Mesa groundwater well opportunity with due consideration of the recommendations of the existing report and plans to develop a groundwater well production facility to extract perhaps at least 600 ac-ft/yr. The steps necessary to put such a well into production are as follows:

- Review the results of available water quality data, video survey for casing and screen condition, and pump testing.
- Investigate, discover, and confirm a reliable sufficient quality and quantity of source water.
- Establish feasibility and cost effectiveness of a production well system.
- Negotiate the purchase of a well site.
- Proceed with the planning, environmental compliance, permitting, design, and construction of a groundwater well production system.

Rancho del Rey Groundwater Well

In 1991, the McMillin Development Company drilled the Rancho del Rey Groundwater Well to augment grading water supplies for their Rancho del Rey development projects. Although the well was considered a “good producer,” little was known regarding its water quality and sustainable yield for the water was used solely for earthwork (i.e. dust control and soil compaction). The well was drilled to 865 feet, with a finished depth of 830 feet and produced approximately 400 ac-ft/yr of low quality water for four years until its use was discontinued in April 1995 as McMillin Development Company no longer needed the well. McMillin Development Company had previously notified the Otay WD of its intent to sell off the groundwater well asset.

The Otay WD continued discussions with McMillin Development Company and decided to determine if the Otay WD could use the water from the well and establish if purchase the property along with the existing well were appropriate. The Otay WD retained Quality Assurance Laboratories to conduct water quality testing in February 1995. It was established that the water from the well had a high total dissolved solids levels that exceeded well over 2,000 milligrams per liter. The Otay WD also retained engineering and well drilling firms, Barrett Consulting Group and Multi Water Systems respectively, which performed pump draw down tests in December 1995. The results of these efforts established the well’s long term yield to be about 629 ac-ft/yr. In February 1996 the Otay WD retained Boyle Engineering Corporation to prepare a feasibility study to compare alternatives for treating and using the groundwater and to provide a benefit/cost analysis. The September 1996 Boyle Engineering Corporation, “Groundwater Treatment Feasibility Study Ranch del Ray Well Site,” report concluded that a Rancho del Rey Groundwater Well project could be feasible. It was established that both capital and operation and maintenance costs would require the well to produce at least 700 ac-ft/yr for a minimum of ten years to make the project economically viable. In October 1997 the Otay WD became owners of the property and well.

In May 1997 the Otay WD prepared and submitted to CDPH an Application for an Amended Operating Permit to add as a source water supply the Rancho del Rey Groundwater Well. The CDPH established that it would not issue an amended permit for the operation of the Rancho del Rey Groundwater Well and any related treatment facilities until the system design and specifications have reviewed and approved and the facilities must pass field inspection following construction.

In April 1998 the Otay WD received four proposals from consultants interested in designing the project. These proposals came in at almost double the estimated cost and in March 2000 the Otay WD decided to suspend further work on the developing the Rancho del Rey Groundwater Well until the project becomes economically viable or other circumstance would make it desirable to pursue development of the well.

In 2009 the Otay WD decided to reestablish the pursuit of the Rancho del Rey Groundwater Well project based upon the current water supply and water pricing conditions. Toward this end, in January 2010, the Board authorized Phase I of the project, the drilling and development of the Ranch del Rey Well. A new 12-inch production well was drilled 900 feet below through the groundwater formation and into fractured bedrock below. Testing completed in September 2010, showed the long-term yield to be 450 gpm, higher than the previous studies had estimated.

Separation Processes, Inc. (SPI) conducted a detailed economic analysis to confirm the annualized unit cost of the new water source was economically viable. The SPI study was complete in November 2010 and on January, 2011, the Board authorized staff to proceed with the design of a wellhead treatment facility.

Otay River Groundwater Desalination Facility

Many local entities in San Diego County have studied the San Diego Formation and are interested in its potable water supply potential. These include the Sweetwater Authority, the Water Authority, City of San Diego, Otay WD, and the United States Geological Service. The San Diego Formation extends from the California-Mexico border to near Mission Bay in San Diego County, a distance of approximately 16 miles and from the coast to approximately six miles inland.

What is known about the San Diego Formation is that the geology is complex, and at present, only partly understood. The heterogeneity of the aquifer makes it extremely difficult to accurately predict groundwater flow or well performance. Few, if any, investigations have been performed on the San Diego Formation in the Otay River Valley. Most of the knowledge is based in the Sweetwater River Valley and the Tijuana River Valley. Therefore, the Otay River Groundwater Desalination Facility (Otay River) project would produce valuable and useful data to aid in characterizing the San Diego Formation that could ultimately lead to the production of potable water.

The objective of Otay WD and Sweetwater Authority is to plan, and potentially permit, design, and construct an Otay River project within the Lower Otay River Basin capable of producing a sustainable yield of potable water as a local supply. The Lower Otay River Basin is located within the Otay River watershed and is that reach of the river below the Lower Otay

Reservoir. The San Diego Formation is the principal aquifer in the South San Diego Bay area and underlies the Otay River Basin and other river basins.

The purpose of the Otay River project is to increase the quantity of local water supply within the South San Diego Bay region by development of a brackish groundwater well and desalination production system to extract, to the maximum extent practical, groundwater from the San Diego Formation; thereby, reducing imported and treated water demand from the Water Authority and Metropolitan.

The development of the Otay River project is being developed in a phased approach. The Sweetwater Authority and Otay WD are proceeding with the Otay River project and are participating in all phases of development and intend share equally all aspects and outcomes such as costs, risks, water supply, benefits, etc.

The Otay River project effort is currently being accomplished in two phases. Phase I, which is well underway, is envisioned as the planning and feasibility aspects of the project intended to determine the viability of extracting brackish groundwater from the San Diego Formation with the purpose to eventually construct brackish groundwater desalination treatment and transport facilities. Phase II is envisioned as proceeding with a pilot project, environmental compliance, permitting, design, construction, operation, maintenance, and other requirements of the Otay River project production and transport facilities to treat the groundwater and deliver the produced potable water to customers of both Sweetwater Authority and Otay WD. Proceeding with Phase II is dependent upon the outcomes of the Phase I efforts.

In 2006, Sweetwater Authority, in partnership with Otay WD received notification from the California Department of Water Resources (DWR) that Sweetwater Authority had been selected to receive a matching grant for the Otay River Basin Brackish Groundwater Desalination Study. The grant amount from DWR is \$242,000. The combined Sweetwater Authority and Otay WD contribution is \$357,000, for a total of \$599,000 to accomplish the DWR grant study. Through the Otay River Basin Brackish Groundwater Desalination Study, Sweetwater Authority and Otay WD will determine the feasibility of extracting brackish groundwater from the San Diego Formation. A portion of the work involves the United States Geological Society (USGS) services to construct multi-depth monitoring wells near the Otay River. The monitoring wells have been constructed.

In 2007, Sweetwater Authority, in partnership with Otay WD received notification from the Water Authority that Sweetwater Authority had been selected to receive a matching grant from the Water Authority Local Investigations and Studies Assistance (LISA) grant funding program for the USGS Study of the San Diego Formation for Potential In-lieu Conjunctive Use concept. The grant amount is \$1,500,000. The combined Sweetwater Authority and Otay WD contribution is \$1,500,000, for a total of \$3,000,000 to complete the LISA grant study.

The USGS Study of the San Diego Formation for Potential In-lieu Conjunctive Use effort has two primary objectives as follows.

- Develop an integrated, comprehensive understanding of the geology and hydrology of the San Diego Formation and the overlying alluvial deposits. With this understanding, the sustainable yield of the San Diego Formation can be determined founded upon good science.
- Use this understanding to evaluate use of the alluvial deposits and the San Diego Formation for an in-lieu conjunctive use project for expanded extraction.

The study phase, Phase I, of the Otay River project is to collect necessary geologic, groundwater, and water quality data that can be used to determine the safe yield from the aquifer and to develop a solidified plan for completing a Otay River project that could potentially yield at least 4,500 ac-ft/yr of desalinated potable water.

The achievable goals of the Otay River project are as follows:

- Obtain valuable well data that can be used to determine the hydro geological condition of the San Diego Formation in the Otay River Basin.
- Determine the water quality of the aquifer in this region.
- Conceptually layout the facilities needed to collect, treat, and deliver desalinated water to potable water customers of Sweetwater Authority and Otay WD.
- Develop a long-range monitoring program for well development and an implementation plan that clearly identifies the steps needed to complete the ultimate project.

The Otay River project will allow the partnering each agency to complete a significant step towards developing a new potable water source from brackish groundwater that is currently not used.

6.3.1.4 Potential Ocean Desalination Supplies

The Otay WD is currently investigating the feasibility of purchasing desalinated water from a seawater reverse osmosis plant that is planned to be located in Rosarito, Mexico. This project is known as the Rosarito Ocean Desalination Facility (Rosarito) project. The treatment facility is intended to be designed, constructed, and operated in Mexico by a third party. On June 21, 2010 a report was prepared for the Otay WD by Camp Dresser & McKee, Inc. entitled Rosarito Desalination Facility Conveyance and Disinfection System Project.

The Rosarito Desalination Facility Conveyance and Disinfection System Project report discusses the likely issues to be considered in terms of water treatment and monitoring, potential conveyance options within the United States from the international border to potential delivery points, and environmental, institutional, and permitting considerations for Otay WD to import the Rosarito project product water as a new local water supply resource.

The three main treatment considerations addressed are:

- Treatment required for a reliable, high quality source, which blends effectively with the existing water supply.
- Treatment and monitoring required for compliance with the California Department of Public Health (CDPH) regulations.
- Treatment required for public perception concerns.

While the treatment facility for the Rosarito project will likely not be designed or operated by the Otay WD as the lead agency, it is important that Otay WD maintain involvement with the planning, design, and construction of the facility to ensure that the implemented processes provide a product water of acceptable quality for distribution and use within the Otay WD system as well as potentially in other agencies' systems in the region that may use the product water, e.g. City of San Diego, the Water Authority, etc. A seawater reverse osmosis treatment plant removes constituents of concern from the seawater, producing a water quality that far exceeds established United States and California drinking water regulations for most parameters, however, a two-pass treatment system may be required to meet acceptable concentrations of boron and chlorides, similar to the levels seen within the existing Otay WD supply sources. The Rosarito Desalination Facility Conveyance and Disinfection System Project report addresses product water quality that is considered acceptable for public health and distribution.

The Otay WD, or any other potential participating agencies, will be required to get approval from the CDPH in order to use the desalinated seawater as a water source. Three alternatives approaches are identified for getting this approval: 1) Certification of the Rosarito project in Mexico by CDPH; 2) Disinfection treatment only in the United States, receiving a waiver of specific filtration requirements through CDPH; and 3) Full filtration and disinfection treatment of water entering the United States with waiver of certain typical Watershed Sanitary Survey requirements. These alternatives vary in their cost and their likelihood of meeting CDPH approval.

The Rosarito Desalination Facility Conveyance and Disinfection System Project report addresses two supply targets for the desalinated water (i.e. local and regional). The local alternative assumes that only Otay WD would participate and receive desalinated water, while the regional alternative assumes that other regional and/or local agencies would also participated in the Rosarito project.

On November 3, 2010, the District authorized the General Manager to enter into an agreement with AECOM for the engineering design, environmental documentation, and the permitting for the construction of the conveyance pipeline, pump station, and disinfection facility to be constructed within the District. The supply target is assumed to be 50 mgd.

The Otay WD is proceeding with negotiations among the parties to establish water supply resource acquisition terms through development of a Principles of Understanding document.

6.3.2 Otay WD Capital Improvement Program

The Otay WD plans, designs, constructs, and operates water system facilities to acquire sufficient supplies and to meet projected ultimate demands placed upon the potable and recycled water systems. In addition, the Otay WD forecasts needs and plans for water supply requirements to meet projected demands at ultimate build out. The necessary water facilities and water supply projects are implemented and constructed when development activities proceed and require service to achieve timely and adequate cost effective water service.

New water facilities that are required to accommodate the forecasted growth within the entire Otay WD service area are defined and described within the Otay WD 2009 WRMP updated November, 2010. These facilities are incorporated into the annual Otay WD Six Year Capital Improvement Program (CIP) for implementation when required to support development activities. As major development plans are formulated and proceed through the land use jurisdictional agency approval processes, Otay WD prepares water system requirements specifically for the proposed development project consistent with the Otay WD 2009 WRMP updated November, 2010. These requirements document, define, and describe all the potable water and recycled water system facilities to be constructed to provide an acceptable and adequate level of service to the proposed land uses, as well as the financial responsibility of the facilities required for service. The Otay WD funds the facilities identified as CIP projects. Established water meter capacity fees and user rates are collected to fund the CIP project facilities. The developer funds all other required water system facilities to provide water service to their project.

Section 7 – Conclusion: Availability of Sufficient Supplies

The Rabago Project is currently located within the jurisdictions of the Otay WD, Water Authority, and Metropolitan. To obtain permanent imported water supply service, land areas are required to be within the jurisdictions of the Otay WD, Water Authority, and Metropolitan to utilize imported water supply.

The Water Authority and Metropolitan have an established process that ensures supplies are being planned to meet future growth. Any annexations and revisions to established land use plans are captured in the San Diego Association of Governments (SANDAG) updated forecasts for land use planning, demographics, and economic projections. SANDAG serves as the regional, intergovernmental planning agency that develops and provides forecast information. The Water Authority and Metropolitan update their demand forecasts and supply needs based on the most recent SANDAG forecast approximately every five years to coincide with preparation of their urban water management plans. Prior to the next forecast

update, local jurisdictions with land use authority may require water supply assessment and/or verification reports for proposed land developments that are not within the Otay WD, Water Authority, or Metropolitan jurisdictions (i.e. pending or proposed annexations) or that have revised land use plans with either lower or higher development intensities than reflected in the existing growth forecasts. Proposed land areas with pending or proposed annexations, or revised land use plans, typically result in creating higher demand and supply requirements than previously anticipated. The Otay WD, Water Authority, and Metropolitan next demand forecast and supply requirements and associated planning documents would then capture any increase or decrease in demands and required supplies as a result of annexations or revised land use planning decisions.

Metropolitan's Integrated Resources Plan (IRP) identifies a mix of resources (imported and local) that, when implemented, will provide 100 percent reliability for full-service demands through the attainment of regional targets set for conservation, local supplies, State Water Project supplies, Colorado River supplies, groundwater banking, and water transfers. The 2010 update to the IRP includes a planning buffer supply intended to mitigate against the risks associated with implementation of local and imported supply programs and for the risk that future demands could be higher than projected. The planning buffer identifies an additional increment of water that could potentially be developed when needed and if other supplies are not fully implemented as planned. As part of implementation of the planning buffer, Metropolitan periodically evaluates supply development, supply conditions, and projected demands to ensure that the region is not under or over developing supplies. Managed properly, the planning buffer will help ensure that the southern California region, including San Diego County, will have adequate water supplies to meet long-term future demands.

In Section II.4 of their 2005 Regional Urban Water Management Plan (RUWMP), Metropolitan states that through effective management of its water supply, they fully expect to be 100 percent reliable in meeting all non-discounted non-interruptible demands throughout the next twenty-five years. Metropolitan's 2005 RUWMP identifies potential reserve supplies in the supply capability analysis (Tables II-7, II-8, and II-9), which could be available to meet the unanticipated demands.

The County Water Authority Act, Section 5 subdivision 11, states that the Water Authority "as far as practicable, shall provide each of its member agencies with adequate supplies of water to meet their expanding and increasing needs."

As part of preparation of a written water supply assessment report, an agency's shortage contingency analysis should be considered in determining sufficiency of supply. Section 9 of the Water Authority's 2005 Updated UWMP contains a detailed shortage contingency analysis that addresses a regional catastrophic shortage situation and drought management. The analysis demonstrates that the Water Authority and its member agencies, through the Emergency Response Plan, Emergency Storage Project, and Drought Management Plan (DMP) are taking actions to prepare for and appropriately handle an interruption of water supplies. The DMP, completed in May 2006, provides the Water Authority and its member

agencies with a series of potential actions to take when faced with a shortage of imported water supplies from Metropolitan due to prolonged drought or other supply shortfall conditions. The actions will help the region avoid or minimize the impacts of shortages and ensure an equitable allocation of supplies.

The WSA Report identifies and describes the processes by which water demand projections for the proposed Rabago Project will be fully included in the water demand and supply forecasts of the Urban Water Management Plans and other water resources planning documents of the Water Authority and Metropolitan. Water supplies necessary to serve the demands of the proposed Rabago Project, along with existing and other projected future users, as well as the actions necessary and status to develop these supplies, have been identified in the Rabago Project WSA Report and will be included in the future water supply planning documents of the Water Authority and Metropolitan.

This WSA Report includes, among other information, an identification of existing water supply entitlements, water rights, water service contracts, water supply projects, or agreements relevant to the identified water supply needs for the proposed Rabago Project. This WSA Report assesses, demonstrates, and documents that sufficient water supplies are planned for and are intended to be available over a 20-year planning horizon, under normal conditions and in single and multiple dry years to meet the projected demand of the proposed Rabago Project and the existing and other planned development projects to be served by the Otay WD.

Table 9 presents the forecasted balance of water demands and required supplies for the Otay WD service area under average or normal year conditions. The OWD 2005 UWMP demand projection for FY 2010 of 49,812 acre feet is substantially higher than the actual demand for that fiscal year. The total actual demand for FY 2010 was 36,500 acre feet. The demand for FY 2010 is 6,500 acre feet lower than the peak demand of FY 2006 of 43,000 acre feet. The drop in demand is a result of the unit price of water, the conservation efforts of users as a result of the prolonged drought, and the economy.

The projected potable demand and supply requirements shown the Tables 9, 10, and 11 are from the Otay WD revised 2005 UWMP.

Hot, dry weather may generate urban water demands that are about 7 percent greater than normal. This percentage was utilized to generate the dry year demands shown in Tables 10 and 11. The recycled water and groundwater supplies are assumed to experience no reduction in a dry year.

Table 9
Projected Balance of Water Demands and Supplies
Normal Year Conditions (acre feet)

Description	FY 2010	FY 2015	FY 2020	FY 2025	FY 2030
Demands					
Otay WD Demand	49,812	57,033	65,229	72,854	82,405
Total Demand	49,812	57,033	65,229	72,854	82,405
Supplies					
Water Authority Supply	45,772	52,349	59,799	66,560	75,108
Recycled Water Supply	4,040	4,684	5,430	6,294	7,297
Otay WD Groundwater Supply	0	600	600	600	600
Total Supply	49,812	57,033	65,229	72,854	82,405
Supply Surplus/(Deficit)	0	0	0	0	0

Table 10 presents the forecasted balance of water demands and supplies for the Otay WD service area under single dry year conditions.

Table 10
Projected Balance of Water Demands and Supplies
Single Dry Year Conditions (acre feet)

Description	FY 2010	FY 2015	FY 2020	FY 2025	FY 2030
Demands					
Otay WD Demand	53,299	61,025	69,795	77,954	88,173
Total Demand	53,299	61,025	69,795	77,954	88,173
Supplies					
Water Authority Supply	49,259	56,341	64,365	71,660	80,876
Recycled Water Supply	4,040	4,684	5,430	6,294	7,297
Total Supply	53,299	61,025	69,795	77,954	88,173
Supply Surplus/(Deficit)	0	0	0	0	0

Dry year demands assumed to generate a 7% increase in demand over normal conditions for each year in addition to new demand growth.

Table 11 presents the forecasted balance of water demands and supplies for the Otay WD service area under multiple dry year conditions for the five year period ending in 2015 as from the Otay WD revised 2005 UWMP adjusted to reflect additional groundwater supply

development of 600 ac-ft/yr by the Otay WD. The multiple dry year conditions for periods ending 2020, 2025, and 2030 are provided in the Otay WD revised 2005 UWMP.

Table 11
Projected Balance of Water Demands and Supplies
Multiple Dry Year Conditions (acre feet)

Description	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Demands					
Otay WD Demand	54,844	56,389	57,935	59,480	61,025
Total Demand	54,844	56,389	57,935	59,480	61,025
Supplies					
Water Authority Supply	50,675	52,091	53,509	54,925	56,341
Recycled Water Supply	4,169	4,298	4,426	4,555	4,684
Total Supply	54,844	56,389	57,935	59,480	61,025
Supply Surplus/(Deficit)	0	0	0	0	0

Dry year demands assumed to generate a 7% increase in demand over normal conditions for each year in addition to new demand growth.

In evaluating the availability of sufficient water supply, the Rabago Project development proponents will be required to participate in the development of alternative water supply project(s). This can be achieved through payment of the New Water Supply Fee adopted by the Otay Water District Board in May 2010. These water supply projects are in addition to those identified as sustainable supplies in the current Water Authority and Metropolitan UWMP, IRP, Master Plans, and other planning documents. These new water supply projects are in response to the regional water supply issues related to climatological, environmental, legal, and other challenges that impact water source supply conditions, such as the court rulings regarding the Sacramento-San Joaquin Delta and the current ongoing western states drought conditions. These new additional water supply projects are not currently developed and are in various stages of the planning process. The Otay WD water supply development program includes but is not limited to projects such as the Middle Sweetwater River Basin Groundwater Well project, the North District Recycled Water Supply Concept, the Rosarito Ocean Desalination Facility project, and the Rancho del Rey Groundwater Well project. The Water Authority and Metropolitan's next forecasts and supply planning documents would capture any increase in water supplies resulting from any new water resources developed by the Otay WD.

The Otay WD acknowledges the ever-present challenge of balancing water supply with demand and the inherent need to possess a flexible and adaptable water supply implementation strategy that can be relied upon during normal and dry weather conditions. The responsible regional water supply agencies have and will continue to adapt their resource

plans and strategies to meet climate, environmental, and legal challenges so that they may continue to provide water supplies to their service areas. The regional water suppliers along with Otay WD fully intend to maintain sufficient reliable supplies through the 20-year planning horizon under normal, single, and multiple dry year conditions to meet projected demand of the Rabago Project, along with existing and other planned development projects within the Otay WD service area.

This WSA Report assesses, demonstrates, and documents that sufficient water supplies are planned for and are intended to be acquired, as well as the actions necessary and status to develop these supplies, to meet projected water demands of the Rabago Project as well as existing and other reasonably foreseeable planned development projects within the Otay WD for a 20-year planning horizon, in normal and in single and multiple dry years.

Source Documents

County of San Diego, December 22, 2010, Letter Request to Initiate the Preparation of a Water Supply Assessment for the Rabago Technology Park, SB 610 and SB 221 Compliance. Compliance request letter received January 10, 2011.

County of San Diego, February 8, 2010, Letter Request to Initiate the Preparation of a Water Supply Assessment for the Rabago Technology Park, TM 5568, SB 610 Compliance. Compliance request letter received February 9, 2011.

City of Chula Vista, "Otay Ranch General Development Plan/Sub-regional Plan, The Otay Ranch Joint Planning Project," October 1993 amended June 1996.

County of San Diego, "East Otay Mesa Specific Plan Area," adopted July 27, 1994.

Otay Water District, "2009 Water Resources Master Plan Update," dated November, 2010..

MWH Americas, Inc. and Otay Water District, "Otay Water District 2005 Urban Water Management Plan," December 2005 amended July 2007.

Camp Dresser & McKee, Inc., "Otay Water District Integrated Water Resources Plan," March 2007

San Diego County Water Authority, "Urban Water Management Plan 2005 Update," November 2005 amended May 2007.

Metropolitan Water District of Southern California, "Regional Urban Water Management Plan," November 2005.

Camp Dresser & McKee, Inc., "Rosarito Desalination Facility Conveyance and Disinfection System Project," June 21, 2010.

PBS&J, "Draft Otay Water District North District Recycled Water System Development Project, Phase I Concept Study," December 2008.

NBS Lowry, "Middle Sweetwater River System Study Water Resources Audit," June 1991.

Michael R. Welch, "Middle Sweetwater River System Study Alternatives Evaluation," May 1993.

Michael R. Welch, "Middle Sweetwater River Basin Conjunctive Use Alternatives," September 1994.

Geoscience Support Services, Inc., "Otay Mesa Lot 7 Well Investigation," May 2001.

Boyle Engineering Corporation, "Groundwater Treatment Feasibility Study Ranch del Ray Well Site," September 1996.

Agreement for the Purchase of Treated Water from the Otay Water Treatment Plant between the City of San Diego and the Otay Water District.

Agreement between the San Diego County Water Authority and Otay Water District regarding Implementation of the East County Regional Treated Water Improvement Program.

Agreement between the San Diego County Water Authority and Otay Water District for Design, Construction, Operation, and Maintenance of the Otay 14 Flow Control Facility Modification.

Agreement between the Otay Water District and the City of San Diego for Purchase of Reclaimed Water from the South Bay Water Reclamation Plant.

Appendix A

Rabago Technology Park Vicinity Map



OTAY WATER DISTRICT

RABAGO TECHNOLOGY PARK

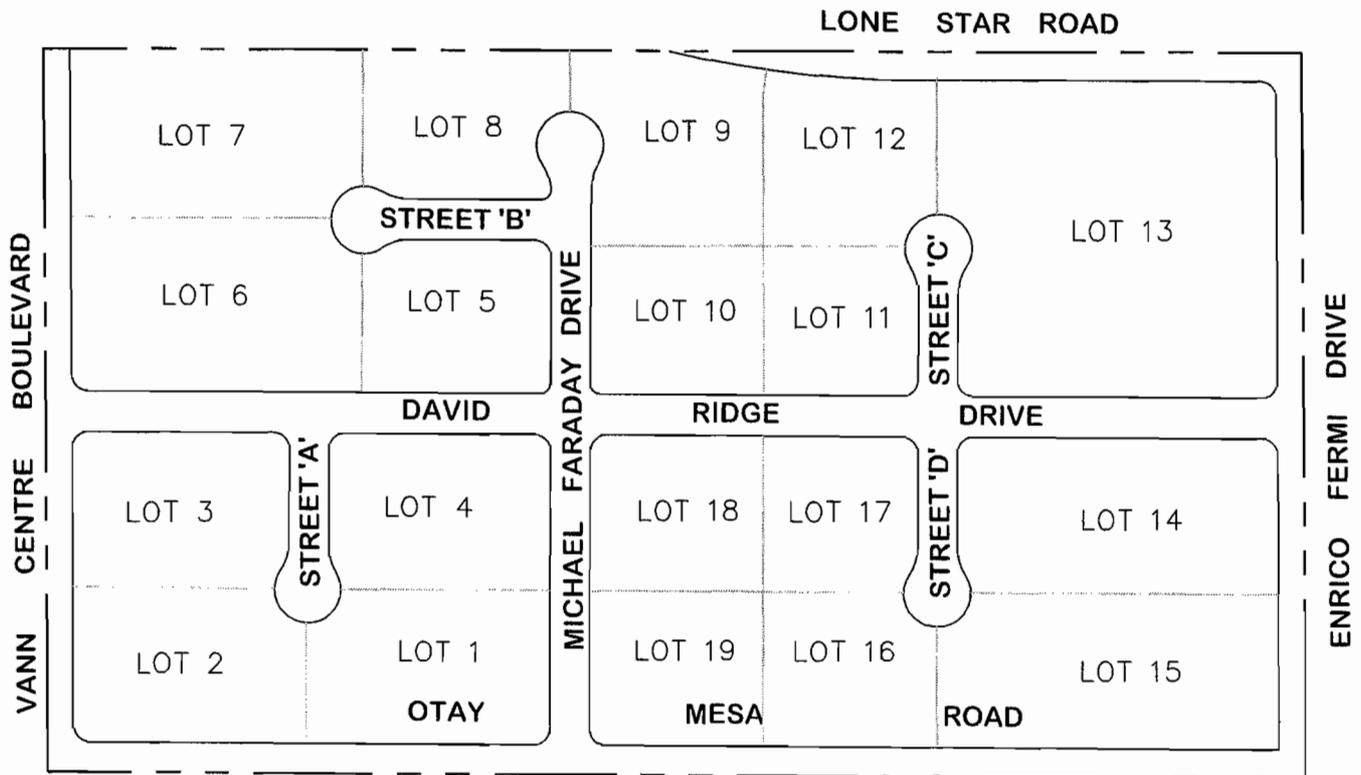
VICINITY MAP

D0833-090093

APPENDIX A

Appendix B

Rabago Technology Park Development Plan



AREA TOTALS

LOT TOTAL	55.70 AC
PUBLIC ROADS TOTAL	15.37 AC
SUBDIVISION TOTAL	71.07 AC

LOT AREAS

GROSS AREA = OVERALL LOT AREA

LOT NO.	GROSS AREA (AC)
1	2.82
2	2.75
3	2.64
4	2.70
5	2.19
6	3.90
7	3.83
8	2.20
9	2.65
10	2.03

LOT NO.	GROSS AREA (AC)
11	1.74
12	2.20
13	8.05
14	3.92
15	4.02
16	1.98
17	1.84
18	2.15
19	2.09

LAND USE: COMMERCIAL/INDUSTRIAL



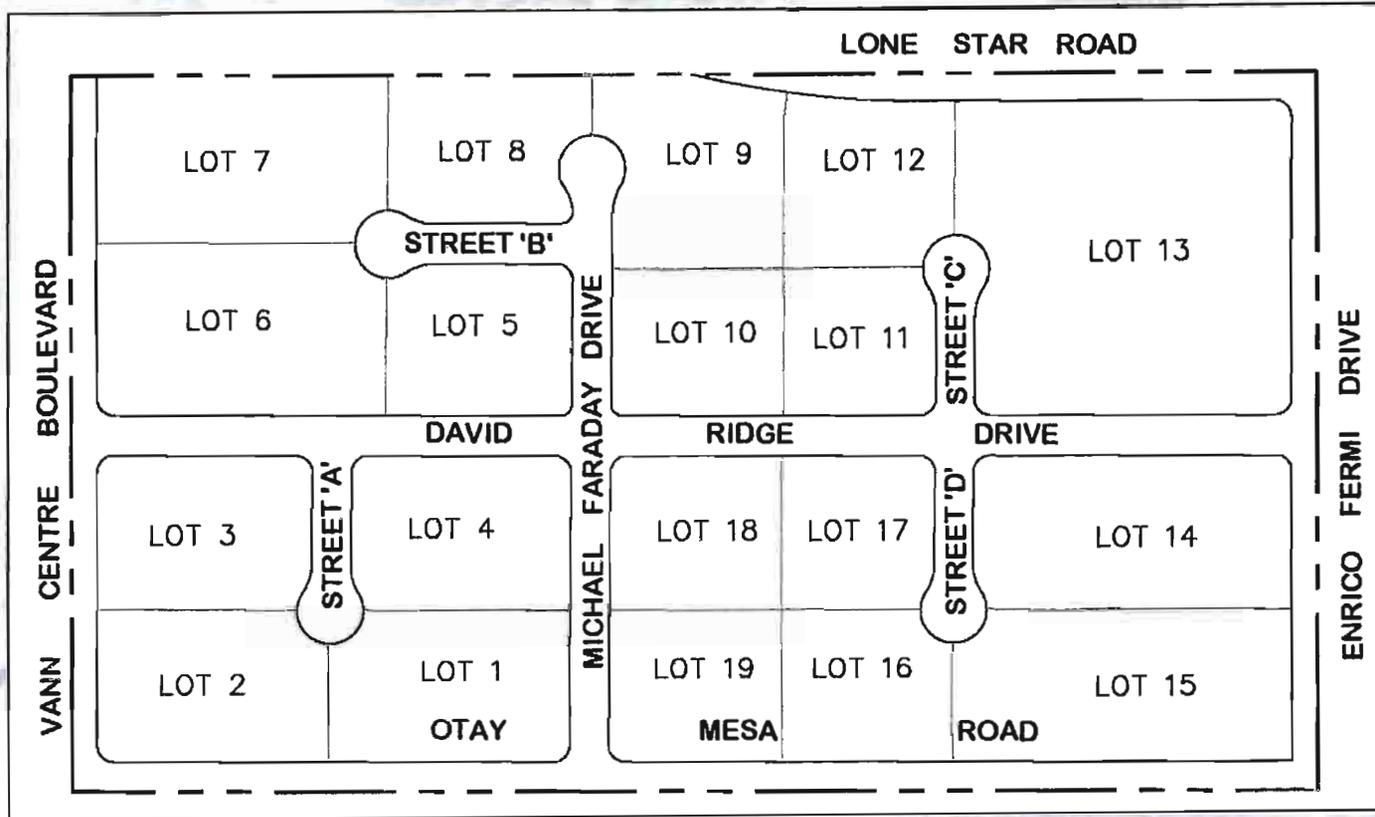
OTAY WATER DISTRICT

RABAGO TECHNOLOGY PARK
DEVELOPMENT PLAN

D0833-090093

APPENDIX B

Otay Water District Board of Directors Meeting April 6, 2011



Water Supply Assessment Report for the Rabago Technology Park SB 610 Compliance



Background

Senate Bills 610 and 221 became effective on January 1, 2002, with the primary intent to improve the link between water supply availability and land use decisions.

SB 610 Water Supply Assessment (WSA):

- **Requires water purveyor to prepare a Water Supply Assessment report for inclusion in land use agency CEQA documentation.**

SB 221 Water Supply Verification:

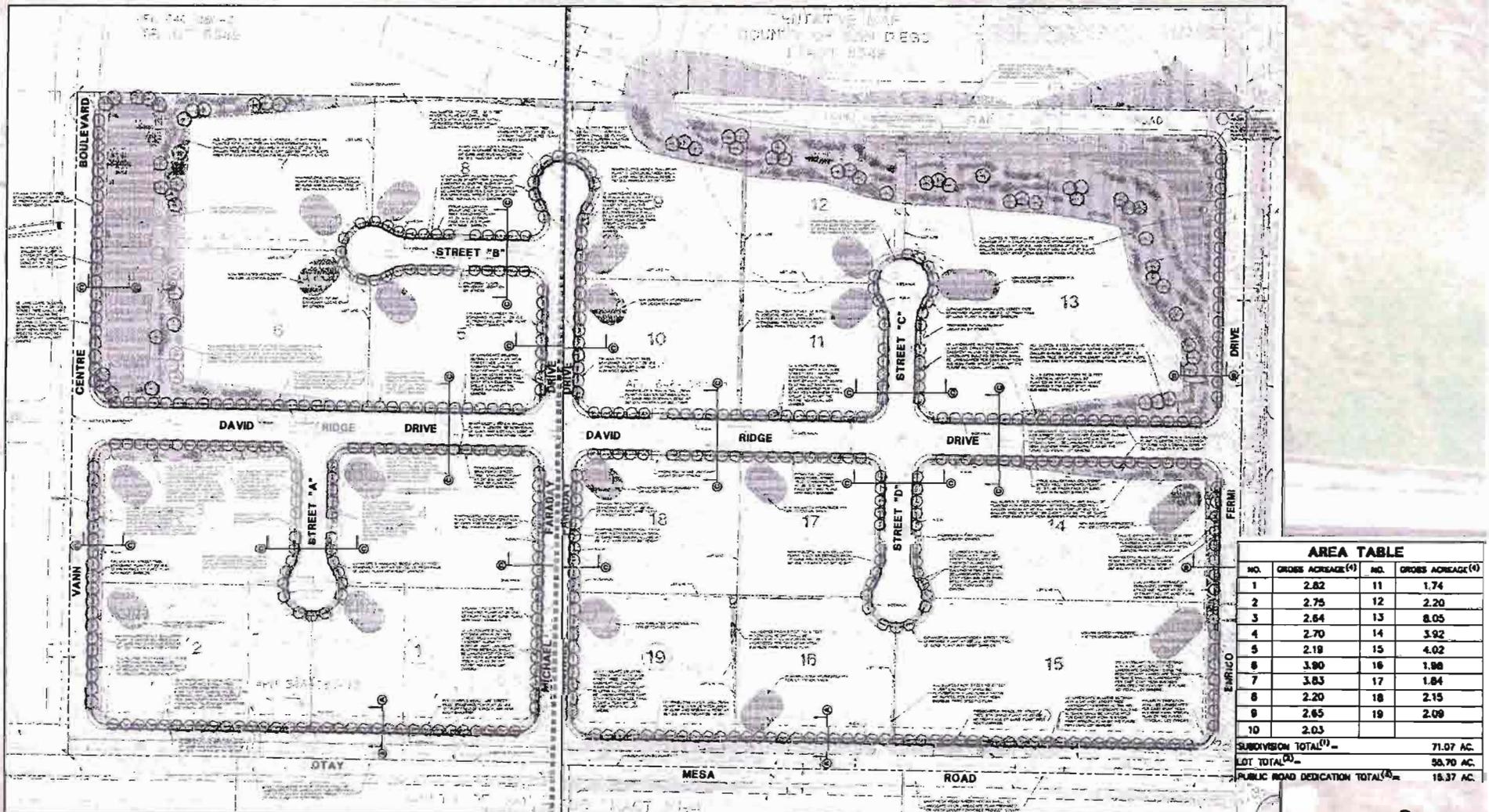
- **Does not apply to the Rabago Project for it is an industrial subdivision.**

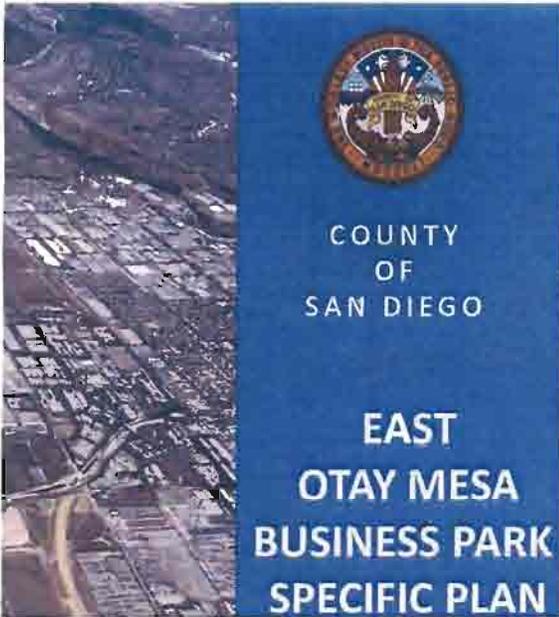
The Rabago Project Water Supply Assessment Report

- **Board approval required for submittal of the WSA to the County of San Diego.**

Rabago Technology Park

- 19 Industrial Lots on 71.1 acres
- Potable Demand: 67.5 AFY / Recycled Demand 8.7 AFY





2010 REGIONAL GROWTH FORECAST # is Number of Pages

Introduction
 During the last 14 months SANDAG staff and representatives and elected officials from each of the San Diego region's 19 jurisdictions have worked together to develop a long-range growth forecast for the San Diego region and its neighborhood. The result of that effort are contained in detail below.

Recommendation
 The Regional Planning Committee recommends that the Board of Directors adopt the 2010 Regional Growth Forecast for use in the 2010 Regional Transportation Plan and other planning efforts.

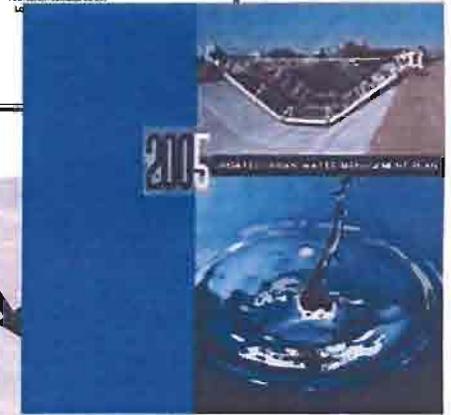
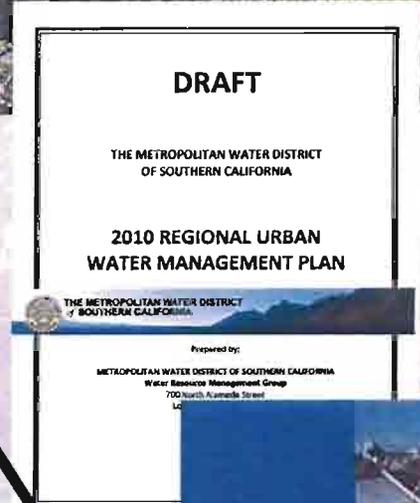
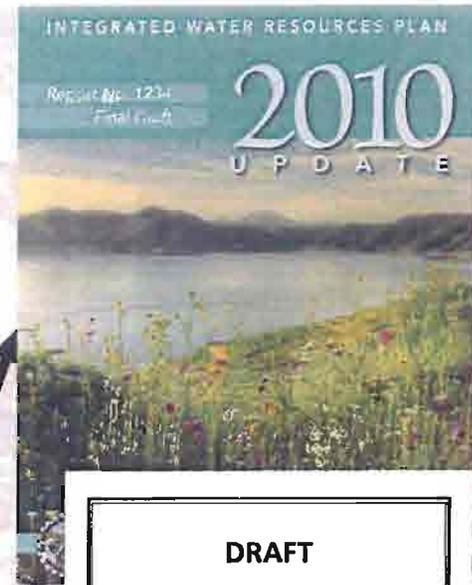
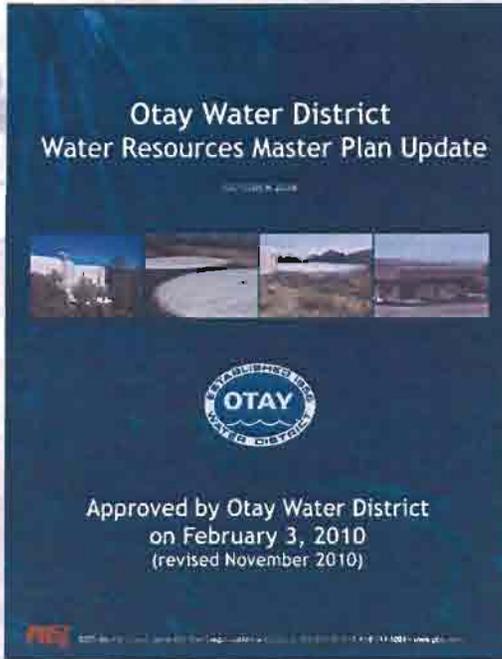
Discussion

Goals and Purpose of the 2010 Forecast
 The purpose of the 2010 Regional Growth Forecast is to provide a starting point for regional planning. The forecast is not intended to be a prescription for future growth. Rather, the forecast is intended to show possible future development patterns based on regional projections and local input.

The 2010 Regional Growth Forecast is one of the first steps in developing the 2010 Regional Transportation Plan (RTP), and a new "vision" for the development of the region, the Sustainable Communities Strategy (SCS), a new component of the RTP, and the Regional Housing Needs Assessment (RHNA) for California, to use and 375 (Chapter 210, Statutes of 2008) in addition. The forecast information will be used to estimate future water needs for the region's "Smart Growth" Initiative Program and support local capital investments and water resource planning throughout the region. This forecast also provides a baseline for regional water needs regarding the RTP, SCS, and RHNA from SB 375 and the California Transportation Commission Draft RTP Guidelines.

The SANDAG staff growth forecast is closely aligned with input from local jurisdiction staff and members of local planning and land use commissions. Based on the direction of the Board of Directors last July, SANDAG staff solicited input on the forecast from each jurisdiction at City Council Board of Supervisors and Planning Commission meetings during the last six months. The information and comments collected during these meetings and subsequent consultation with a major stakeholder on formulating the region's most likely development pattern over the next 10 years.

In addition to working with local jurisdictions, SANDAG staff worked closely with local water agencies and service providers to incorporate any relevant supply information into the forecast as well.

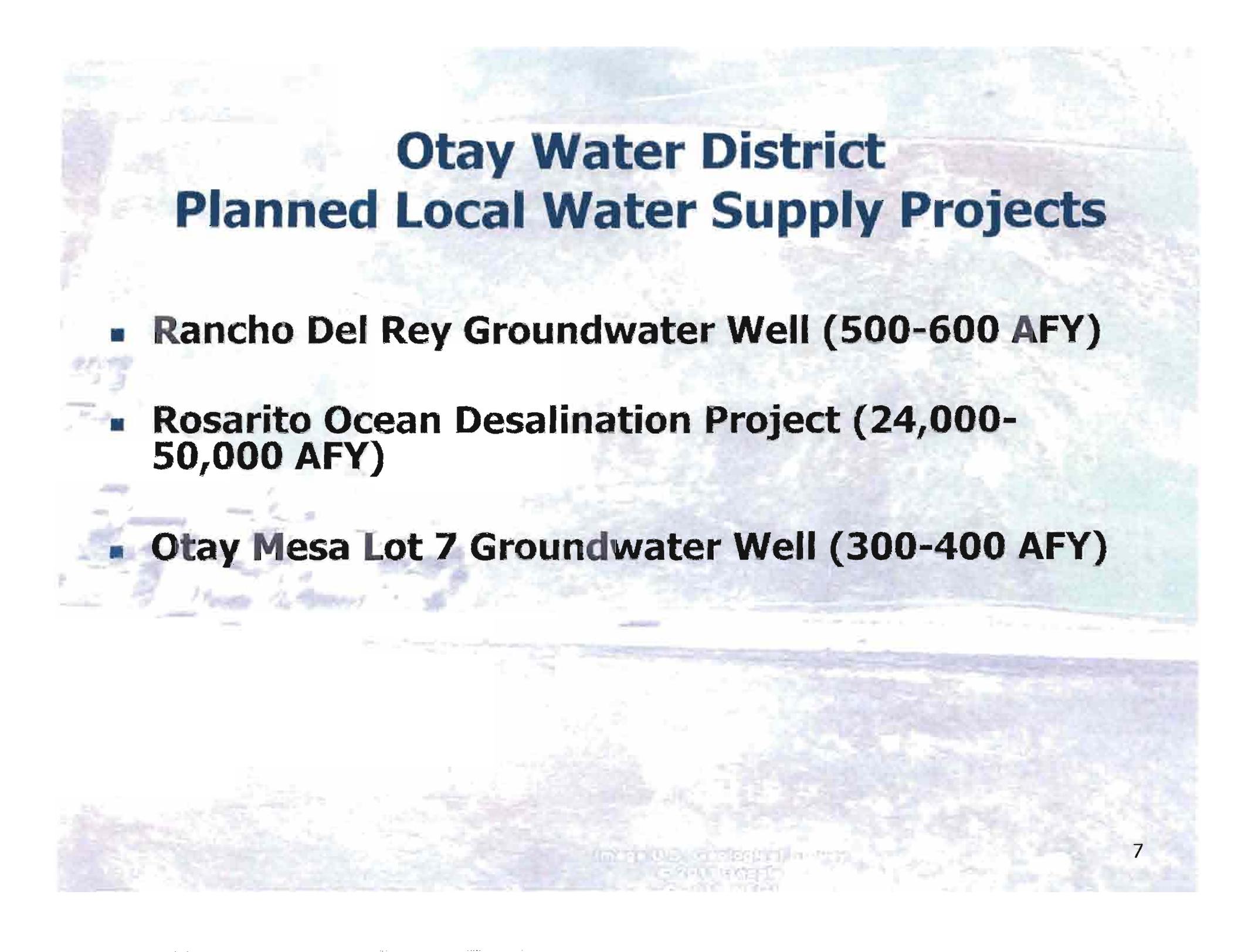


Rabago Project Water Supply Assessment

- **The regional and local water supply agencies acknowledge the challenges and fully intend to develop sufficient, reliable supplies to meet demands.**
- **Water suppliers recognize additional water supplies are necessary and portfolios need to be reassessed and redistributed with intent to serve existing and future needs.**

Rabago Project Water Supply Assessment

- **The WSA Report documents the planned water supply projects and the actions necessary to develop the supplies.**
- **Water supply for the Rabago Project and for existing and future developments within the District for a 20-year planning horizon, under normal and in single and multiple dry years are planned for and are intended to be made available.**

An aerial photograph of a coastal region, likely in San Diego, showing a road, fields, and the ocean. The text is overlaid on the top half of the image.

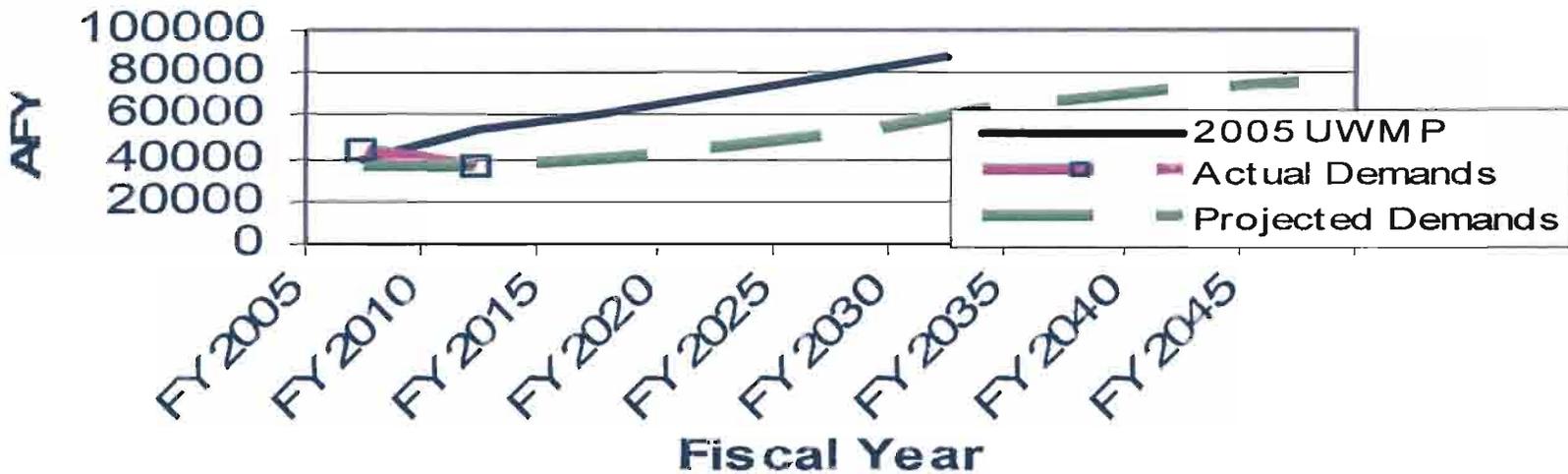
Otay Water District Planned Local Water Supply Projects

- **Rancho Del Rey Groundwater Well (500-600 AFY)**
- **Rosarito Ocean Desalination Project (24,000-50,000 AFY)**
- **Otay Mesa Lot 7 Groundwater Well (300-400 AFY)**

Projected Balance of Potable Water Supplies and Demands Normal Year Conditions (AFY)

Description	FY 2010	FY 2015	FY 2020	FY 2025	FY 2030
Demands					
Otay WD Demand	49,812	57,033	65,229	72,854	82,405
Total Demand	49,812	57,033	65,229	72,854	82,405
Supplies					
Water Authority Supply	45,772	52,349	59,799	66,560	75,108
Recycled Water Supply	4,040	4,684	5,430	6,294	7,297
Total Supply	49,812	57,033	65,229	72,854	82,405
Supply Surplus/(Deficit)	0	0	0	0	0

Actual Demand vs. 2005 UWMP

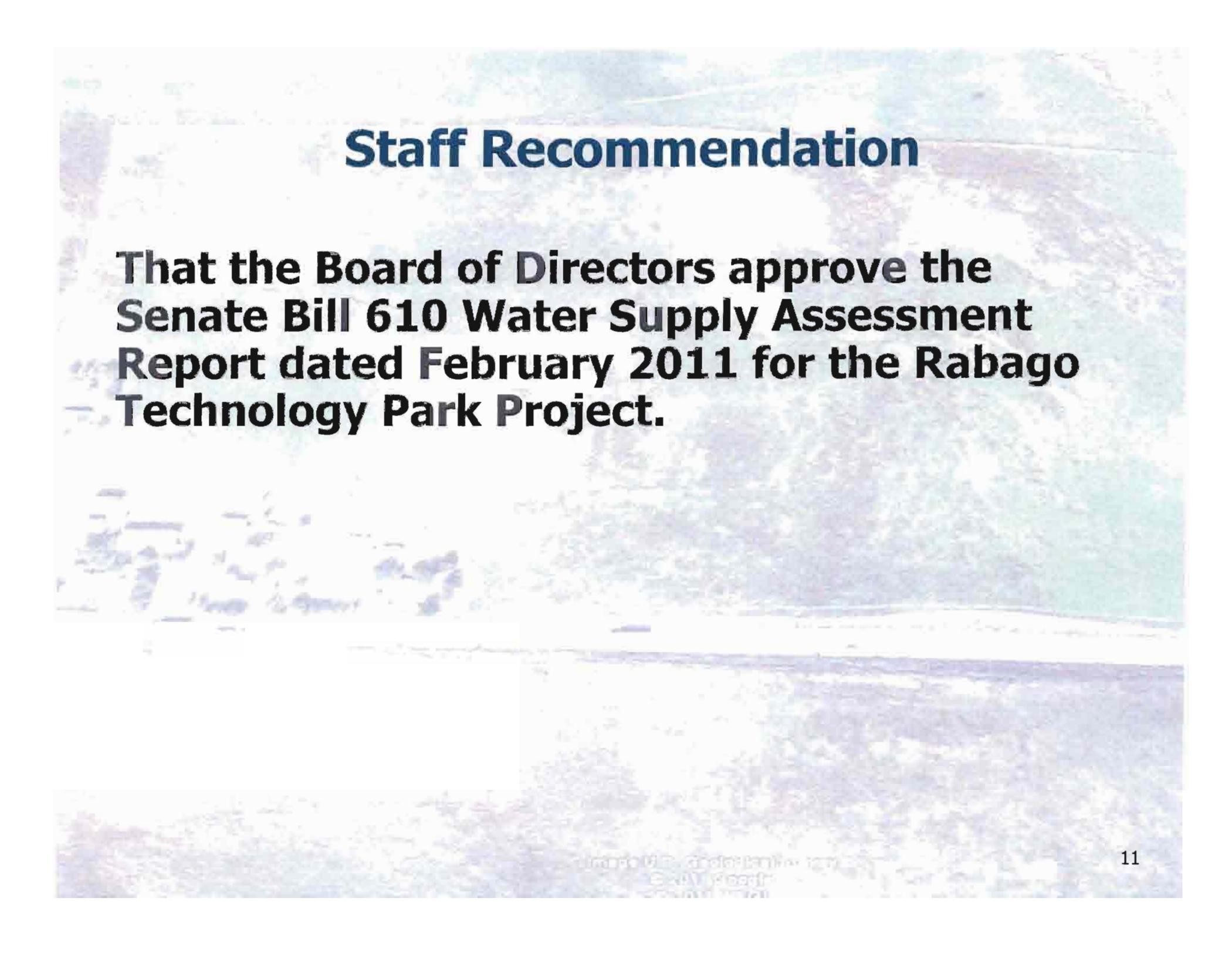


Conclusion

- **Water demand and supply forecasts are included in the planning documents of Metropolitan, Water Authority, and the Otay Water District.**
- **Actions necessary to develop the identified water supplies are documented.**
- **Rabago Project SB 610 WSA demonstrates and documents that sufficient water supplies are planned for and are intended to be available over the next 20 years.**

Conclusion continued

- **It is believed that the Board has met the intent of SB 610 statute in that:**
 - 1) Land use agencies and water suppliers have demonstrated strong linkage.**
 - 2) The Rabago Project Water Supply Assessment clearly documents the current water supply situation.**



Staff Recommendation

That the Board of Directors approve the Senate Bill 610 Water Supply Assessment Report dated February 2011 for the Rabago Technology Park Project.



STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	April 6, 2011
SUBMITTED BY:	David Charles, <i>[Signature]</i> Public Services Manager	FILE NO:	0210- DIV. NO. 5 20.309
APPROVED BY: (Chief)	Rod Posada, Chief, Engineering <i>[Signature]</i>		
APPROVED BY: (Asst. GM):	Manny Magana, Asst. GM Engineering & Operations <i>[Signature]</i>		
SUBJECT:	Duke Sewer Annexation to the Otay Water District Improvement District No. 18 (APN: 519-281-07-00)		

GENERAL MANAGER'S RECOMMENDATION:

Adopt Resolution No. 4171, the annexation of the property owned by David L. and Suzanne M. Duke to the Otay Water District Improvement District No. 18.

COMMITTEE ACTION:

Please see Attachment A.

PURPOSE:

The purpose of the proposed annexation is to provide sewer service to a parcel located at 3279 Cottonwood Springs Lane, Jamul, California 91935. (APN 519-281-07-00)

ANALYSIS:

A written request and Petition signed by David L. and Suzanne M. Duke, has been received for annexation of APN 519-281-07-00 into Improvement District No. 18 for sewer service. The total acreage to be annexed is 1.08 acres. The property is within the sphere of Otay Water District and will be part of Improvement District 18 after the Board of Directors approves this request. The property is located at 3279 Cottonwood Springs Lane, in Jamul and County of San Diego.

FISCAL IMPACT:



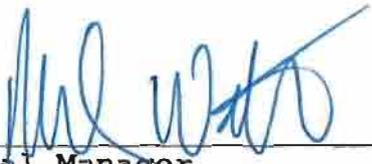
The property owners will be charged \$10 per year for availability fees.

STRATEGIC GOAL:

Provide sewer service to meet increasing customer needs.

LEGAL IMPACT:

No legal impact.



General Manager



ATTACHMENT A

SUBJECT/PROJECT:	Duke Sewer Annexation to the Otay Water District Improvement District No. 18 (APN: 519-281-07-00)
-------------------------	---

COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee reviewed this item at a meeting held on March 23, 2011 and supported staff's recommendation.

Note:

The "Committee Action" is written in anticipation of the Committee moving the item forward for board approval. This report will be sent to the Board as a committee approved item, or modified to reflect any discussion or changes as directed from the committee prior to presentation to the full board.

RESOLUTION NO. 4171

A RESOLUTION OF THE BOARD OF DIRECTORS OF OTAY WATER DISTRICT APPROVING THE ANNEXATION TO OTAY WATER DISTRICT IMPROVEMENT DISTRICT NO. 18 OF THOSE LANDS DESCRIBED AS "DUKE SEWER ANNEXATION" (FILE NO. 0210-20.309/DIV. 5)

WHEREAS, a letter has been submitted by David L. and Suzanne M. Duke, the owners 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 No. 18 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 ID 18 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 sewer 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 ID 18 will be benefited by such annexation and that the property currently within ID 18 will also be benefited and not injured by such annexation because after the annexation a

larger tax base will be available to finance the sewer facilities and improvements of ID 18.

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 processing fee at the time of application;

(2) State Board of Equalization filing fees in the amount of \$350;

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

(4) Yearly assessment fees will be collected through the County Tax Assessor's office in the amount of \$10 for APN 519-281-07-00;

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

(6) Payment by the owners of APN 519-281-07-00 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 ID 18 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 APN 519-281-07-00 to the District's Improvement District 18 is hereby designated as the "DUKE SEWER ANNEXATION".

8. Pursuant to Section 57202(a) of the Government Code, the effective date of the DUKE SEWER 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 6th day of April, 2011.

President

ATTEST:

District Secretary

Exhibit A
Land Description
State Board of Equalization Change in Jurisdictional Boundary

A tract of land situated in the of Town of Jamul, the County of San Diego, and the State of California, lying in part of the North Half of Fractional Section 32, Township 16 South, Range 1 East, San Bernardino Meridian, being Lot 14 of Map No. 9664, filed in the office of the County Recorder of San Diego County, May 28, 1980 and more particularly described as follows:

From the point of commencement which is the Northeast corner of said Fractional Section 32:

Course 1. South 88° 33' 54" West a distance of 1318.84 feet

Course 2. North 88° 43' 35" West a distance of 1894.86 feet to the Northeast corner of said Lot 14, being the POINT OF BEGINNING of the tract herein described;

From the point of beginning:

Course 3. South 32° 23' 45" West a distance of 361.53 feet to the Southeast corner of said Lot 14;

Course 4. Being the beginning of a non tangent curve, concave Southerly, having a radius of 328.00 feet, a radial line to said point bears North 32° 23' 45" East; thence Westerly along said curve 101.05 feet through a central angle of 17° 39' 06" to the Southwest corner of said Lot 14;

Course 5. North 14° 44' 39" East a distance of 278.98 feet to the Northwest corner of said Lot 14.

Course 6. South 88° 43' 35" East a distance of 215.00 feet to the Northeast corner of said Lot 14;

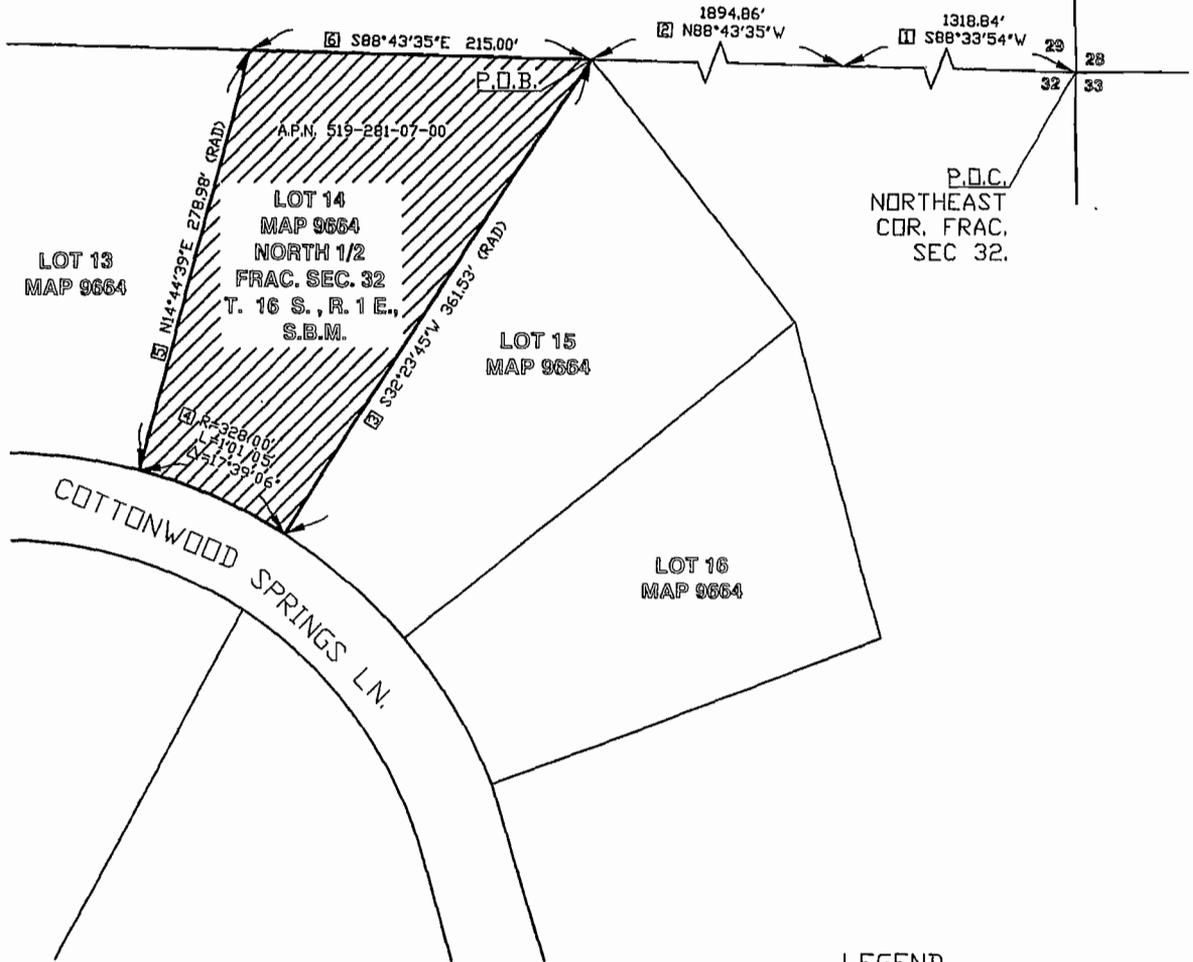
Contains 1.076 acres, more or less, according to the County of San Diego Assessor records.



EXHIBIT B ANNEXATION PLAT

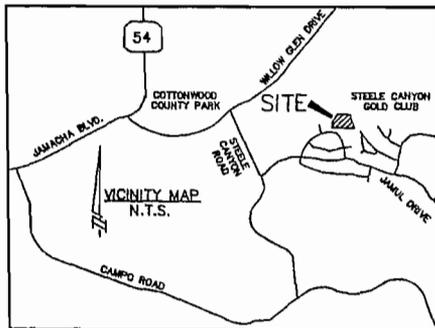


IVANHOE RANCH LS 386
SEC. 29 T. 16 S. R. 1 E.



LEGEND

- BOUNDARY OF PROJECT AREA TO BE ANNEXED INTO THE OTAY WATER DISTRICT
- INDICATES COURSE NUMBER



OTAY WATER DISTRICT

ANNEXATION PLAT
STATE BOARD OF EQUALIZATION CHANGE IN JURISDICTIONAL BOUNDARY

REV.	DATE	DESCRIPTION	COORDINATES	

RECORDERS F/P	_____	MAP NO.	_____
REC. DATE	_____	SCALE:	1"=80'
OTAY W.D. DEED NO.	_____	DATE:	3-9-11
IMP. DIST. NO.	_____	DRAWN BY:	_____

F:\GCSURVEY\Survey\SewerAnnexation\lot14map9664annexation.dwg.dwg

Quality Assurance Approval Sheet

Subject: Duke Sewer Annexation to the Otay Water District
Improvement District No. 18 (APN: 519-281-07-00)

Project No.: 0210-20.309

Document Description: Staff Report for April 6, 2011 Board Meeting

Author:  _____
Signature Date 3/16/11

David Charles
Printed Name

QA Reviewer:  _____
Signature Date 3/16/11

Gary Silverman
Printed Name

Manager:  _____
Signature Date 3/16/11

Rod Posada
Printed Name

The above signatures attest that the attached document has been reviewed and to the best of their ability the signers verify that it meets the District quality standard by clearly and concisely conveying the intended information; being grammatically correct and free of formatting and typographical errors; accurately presenting calculated values and numerical references; and being internally consistent, legible and uniform in its presentation style.

AGENDA ITEM 6



STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	April 6, 2011
SUBMITTED BY:	Daniel Kay <i>DK</i> Associate Civil Engineer	PROJECT/ SUBPROJECT:	R2091- DIV. 1 001103 NO.
	Ron Ripperger <i>R. Ripperger</i> Engineering Manager		
APPROVED BY: (Chief)	Rod Posada <i>R. Posada</i> Chief, Engineering		
APPROVED BY: (Asst. GM):	Manny Magaña <i>m. magaña</i> Assistant General Manager, Engineering and Operations		
SUBJECT:	Award a Construction Contract to Sepulveda Construction, Inc. for the 944-1R Recycled Water Pump Station Upgrades and System Enhancements Project		

GENERAL MANAGER'S RECOMMENDATION:

That the Otay Water District (District) Board of Directors (Board) awards a construction contract to Sepulveda Construction Inc. (Sepulveda) in the amount of \$1,162,423 for the 944-1R Recycled Water Pump Station Upgrades and System Enhancements Project (see Exhibit A for Project locations).

COMMITTEE ACTION: _____

Please see Attachment A.

PURPOSE:

To obtain Board authorization for the General Manager to enter into a construction contract with Sepulveda for the 944-1R Recycled Water Pump Station Upgrades and System Enhancements Project in an amount not to exceed \$1,162,423.

ANALYSIS:

The 944-1 Recycled Water Pump Station is a key pumping facility for the District's recycled water distribution system. Based on the 2002 Water Resources Master Plan (WRMP) the Pump Station was

originally designed to only provide service to the Central Service Area. The supply to the Central Service Area comes from a 30-inch recycled water transmission main from the City of San Diego's South Bay Water Reclamation Plant (SBWRP). The water is pumped through the 450 pump station and the 680-1 pump station before it reaches the 944-1 Pump Station.

The 2002 WRMP also proposes the Otay Mesa Service Area to receive recycled water from the same 30-inch transmission main. However, after a study done by Harris & Associates in 2005, the Otay Mesa Service Area was found to be better supplied by a pipeline constructed in Wueste and Airway Roads. This alignment is better known today as the "Otay Mesa Recycled Water Supply Link." These changes resulted in significant cost savings for the District's CIP.

Due to the new location of the Otay Mesa Service Area supply, the 944-1 Pump Station will serve both the Central and Otay Mesa Service Areas. The additional service area and the updated demands in the November 2010 WRMP require capacity upgrades to the 944-1 Pump Station. In order to achieve the higher capacity, a third pump and motor system must be installed. This added pump system will not only provide the additional capacity to meet the higher demands, but will provide redundancy in the event that a pump requires repairs and must be taken out of service.

The new pump and motor will require a variety of electrical and instrumentation upgrades to the Pump Station. HVAC improvements are also planned with this Project to improve the air flow through the facility and thereby lower the temperature while the pumps are operating. A new air gap is also being installed with this Project between the potable feed to the 680-1 Recycled Reservoir.

Part of the scope of this Project will also include providing a solution to several areas within the 944 pressure zone that are now experiencing higher than acceptable pressures. In order to resolve the high pressure, three (3) Pressure Reducing Stations (PRS) will be installed in Olympic Parkway, Eastlake Parkway, and Otay Lakes Road. The PRSs will reduce the pressure in three (3) areas of the 944 system and create new lower pressure zones. This solution is much more cost affective than replacing the existing pipelines in the three (3) areas along with valves that are currently receiving the higher pressure.

The Project was advertised for bid on January 14, 2011 on the District's website and several other publications including the Union Tribune and San Diego Daily Transcript.

A non-mandatory Pre-Bid Meeting was held on February 8, 2011. A presentation was given by District staff to explain the Project and discuss any questions or concerns from the contractors. There were nineteen (19) contractors and suppliers that attended the meeting and meeting minutes were published.

Subsequently, three (3) addenda were sent out to all bidders and planhouses to address questions and clarifications to the contract documents during the bidding period. Bids were publicly opened on March 3, 2011 with the following results:

<u>CONTRACTOR</u>	<u>TOTAL BID AMOUNT</u>	<u>CORRECTED BID AMOUNT</u>
1. Sepulveda Construction Inc.	\$1,162,423	
2. NEWest Construction Co., Inc.	\$1,272,200	
3. Falcon General Engineering Inc.	\$1,295,810	\$1,308,810
4. HPS Mechanical Inc.	\$1,345,150	
5. Spiess Construction Co., Inc.	\$1,387,650	
6. TC Construction Co., Inc.	\$1,398,500	
7. Ahrens Corporation	\$1,412,000	\$1,411,700
8. CCL Contracting, Inc.	\$1,516,000	
9. Eastern Valley General Engineering Inc.	\$1,548,900	
10. Cass Construction Inc.	\$1,557,000	
11. Metro Builders & Engineers Group, Ltd.	\$1,647,000	

The Engineer's Estimate is \$1,375,000.

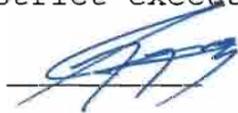
The evaluation process included reviewing all bids submitted for conformance to the contract documents. The lowest bidder, Sepulveda, submitted a responsible bid and holds a Class A Contractor's license which expires on December 1, 2011. Staff checked the six (6) references Sepulveda provided and found that two (2) references provided positive feedback. The other four (4) references did not provide feedback because the projects were either out of date or their project managers were no longer available for comment. Staff requested Sepulveda to provide additional references to verify their experience. Sepulveda provided two active projects with the Los Angeles County Sanitation District and their feedback was positive, however the progress of the projects were in the early stages of construction. Sepulveda also provided additional information including an extensive resume of their assigned project manager, a letter certifying that their project manager will be assigned to the project and a letter of recommendation from the University of California Los Angeles (Exhibit B). In summary,

Sepulveda, as a company, has limited feedback with positive results and their project manager, as an individual, has extensive feedback with positive results. Staff has determined that the references are valid and that Sepulveda is a "good" rated company.

District staff also received a bid protest from the second low bidder, NEWest Construction (Exhibit C) claiming that Sepulveda's bid was unresponsive. Their bid protest claimed that Sepulveda did not provide a proper certification letter by the electrical subcontractor to provide a complete integration system, as required by the contract documents, which could result in "bid shopping." District staff and general counsel analyzed the protest along with Sepulveda's bid package and determined that their bid was responsive and the omission of the certification letter was inconsequential. See the District response to the bid protest in Exhibit D.

Staff has verified that the bid bond provided by First National Insurance is valid. Once Sepulveda signs the contract, they will furnish the performance bond. Staff will verify the performance bond before the District executes the contract.

FISCAL IMPACT:



The total budget for CIP R2091, as approved in the FY 2011 budget, is \$3,950,000. Total expenditures, plus outstanding commitments and forecast, are \$1,749,273. See Attachment B for budget detail.

This Project will cover Phase I of the 944-1R Recycled Water Pump Station Improvements. Phase II, which consists of replacing another pump, will be installed at a future date. Based on a review of the financial budgets, the Project Manager has determined that the budget is sufficient to support the Project.

Finance has determined that 100% of the funding is available from the Expansion Fund for CIP R2091.

STRATEGIC GOAL:

This Project supports the District's Mission statement, "To provide the best quality of water and wastewater service to the customers of the Otay Water District in a professional, effective, and efficient manner," as well as the General Manager's vision, "...prepared for the future..." by guaranteeing the District will always be able to meet future water supply obligations and plan, design, and construct new facilities.

LEGAL IMPACT: _____

None.



General Manager

P:\WORKING\CIP R2091 - 927-1 PS Recycled PS Upgrade\Staff Reports\BD 04-06-11, Staff Report, 944-1R Recycled Water Pump Station Upgrades and System Enhancements, (DK-RR).doc

DK/RR/RP:jf

- Attachments:
- Attachment A - Committee Action
 - Attachment B - Budget Detail
 - Exhibit A - Location Map
 - Exhibit B - Reference Material Provided by Sepulveda
 - Exhibit C - Bid Protest from Newest Construction
 - Exhibit D - District Response to Bid Protest



ATTACHMENT A

SUBJECT/PROJECT: R2091-001103	Award a Construction Contract to Sepulveda for the 944-1R Recycled Water Pump Station Upgrades and System Enhancements Project
---	--

COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee reviewed this item at a meeting held on March 23, 2011. The Committee supported Staff's recommendation.

NOTE:

The "Committee Action" is written in anticipation of the Committee moving the item forward for Board approval. This report will be sent to the Board as a Committee approved item, or modified to reflect any discussion or changes as directed from the Committee prior to presentation to the full Board.

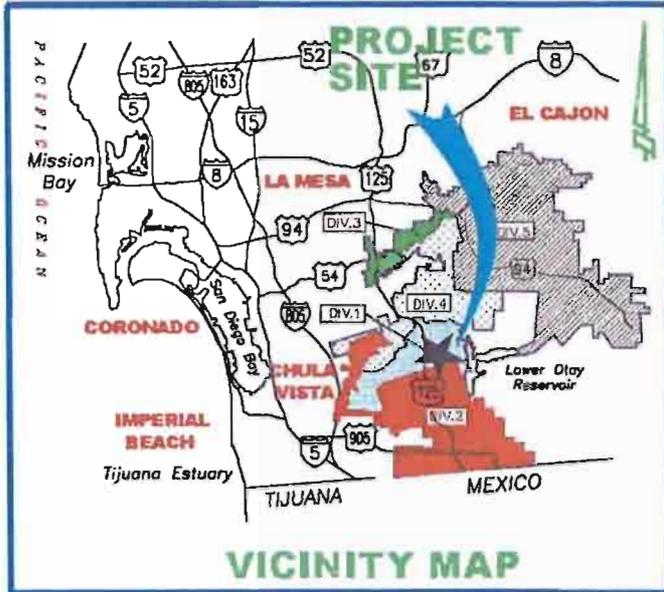


ATTACHMENT B

Otay Water District
R2091 - RecPS-944-1 Pump Station Upgrade

Date Updated: February 25, 2011

<i>Budget</i>	<i>Committed</i>	<i>Expenditures</i>	<i>Outstanding Commitment & Forecast</i>	<i>Projected Final Cost</i>	<i>Vendor/Comments</i>
3,950,000					
Planning					
Labor	16,011	16,011	-	16,011	
Consultant Contracts	19,775	19,775	-	19,775	HDR ENGINEERING INC
	5,817	5,817	-	5,817	PBS&J
Service Contracts	414	414	-	414	SAN DIEGO UNION-TRIBUNE LLC
Total Planning	42,017	42,017	-	42,017	
Design					
Labor	149,759	149,759	-	149,759	
Other Agency Fees	5,000	5,000	-	5,000	CITY OF CHULA VISTA
Consultant Contracts	20,833	20,833	-	20,833	JC HEDEN AND ASSOCIATES INC
	350	350	-	350	MWH CONSTRUCTORS INC
	70,263	70,263	-	70,263	HDR ENGINEERING INC
	56,095	56,095	-	56,095	ENGINEERING PARTNERS INC, THE
	5,451	5,451	-	5,451	FLOW SCIENCE INC
	2,276	2,276	-	2,276	PBS&J
Infrastructure Equipment	13	13	-	13	US BANK CORPORATE PAYMENT
Total Design	310,039	310,039	-	310,039	
Construction					
Labor	37,469	37,469	62,531	100,000	
Infrastructure Equipment & Mate	1,860	1,860	-	1,860	MINARIK CORPORATION
	1,981	1,981	-	1,981	USA BLUE BOOK
	170	170	-	170	Use Tax
	295	295	-	295	PENHALL COMPANY
	459	459	-	459	T M PEMBERTON
	425	425	-	425	DENNY'S CONCRETE PUMPING
	38	38	-	38	US BANK CORPORATE PAYMENT
Service Contracts	920	920	-	920	TECHKNOWSION INC
	84	84	-	84	SAN DIEGO DAILY TRANSCRIPT
	2,168	2,168	-	2,168	MAYER REPROGRAPHICS INC
Equipment Rental	152	152	-	152	US BANK CORPORATE PAYMENT
Construction Contract	1,162,423	-	1,162,423	1,162,423	Sepulveda Construction Inc.
10% Conntingency	-	-	116,242	116,242	
Closeout	-	-	10,000	10,000	
Total Construction	1,208,444	46,021	1,351,196	1,397,217	
Grand Total	1,560,500	398,077	1,351,196	1,749,273	



PROCTOR VALLEY RD
 HUNTE PARKWAY
 LANE AVE
 LAKES ROAD

PRS No. 3 ★

OTAY SR-125

944-1R PUMP STATION

PALOMAR ST

SOUTH EASTLAKE
 GREENSVIEW DR
 PARKWAY

PRS No. 1 ★
PRS No. 2 ★

LA MEDIA RD

OLYMPIC PARKWAY



OTAY WATER DISTRICT
 944-1R RECYCLED WATER PUMP STATION UPGRADE
 AND SYSTEM ENHANCEMENTS

LOCATION MAP

CIP R2091

EXHIBIT A

P:\WORKING\CIP_R2091 - 927-1 PS Recycled PS Upgrade\Graphics\Exhibits\Figures\Exhibit A.dwg

EXHIBIT B



233 W. Cervitos Avenue
Anaheim, CA 92805
(714) 683-0818
(714) 683-1105 fax
www.SepulvedaConst.com

March 11, 2011

Mr. Daniel Kay, P.E.
Associate Civil Engineer
Otay Water District
2554 Sweetwater Springs Blvd.,
Spring Valley, CA 91978-2004

**Subject: 944-1R Recycled Water Pump Station Upgrade and System Enhancements
(CIP R2091) Bid**

Dear Daniel,

Upon your request, I am submitting a comprehensive experience matrix of our staff at Sepulveda Construction Inc to supplement and clarify the reference information we submitted for the subject bid.

Mr. Dean Chesnut is the Construction Manager at Sepulveda Construction. At such a role, he is personally responsible for the management and delivery of the 944-1R Recycled Water Pump Station Upgrade and System Enhancements Project. He has more than 25 years of experience as a contractor and/or superintendent including working for the Kiewit Companies, a major heavy civil construction company in Southern California for fourteen years. He has worked many years at various other construction firms prior to joining Sepulveda Construction. As a contractor and/or superintendent, he has managed many civil, mechanical, and structural construction projects, large or small, and in similar natures to the 944-1R Recycled Water Pump Station Upgrade and System Enhancements Project. A comprehensive project list and resume for Dean is attached for your review.

Mr. Chesnut is supported by **Mr. Mike Hofmann**, the Estimator/Project Manager at Sepulveda Construction. Mr. Hofmann has worked with Mr. Chesnut in the past in similar projects. A few of similar project experience for Mr. Hofmann is attached for your review as well.

Serving public agencies as such Otay Water Districts is a special focus for Sepulveda Construction. Currently, we are working on two projects for the Los Angeles Sanitation District with similar piping, mechanical, and electrical work. I believe we have the requisite experience and ability to complete the 944-1R Recycled Water Pump Station Upgrade and System Enhancements Project based on the evidence we have provided to you.

EXHIBIT B

Mr. Kay
March 11, 2011
Page 2 of 2

If you would desire, Mr. Chesnut and I are happy to meet you to present our experience and technical ability for the project in person and explain to you how we plan to build the project for the District.

If you need any additional information, please don't hesitate to contact me at (714) 683-0471 or pliu@SepulvedaConst.com.

Sincerely,



Peter Liu, P.E.
President
Sepulveda Construction

Encl: Chesnut and Hofmann project reference matrix
Chesnut Resume
Recommendation letter from UCLA

EXHIBIT B



Dean Chesnut, General Contractor
233 W Cerritos Avenue
Anaheim, CA 92805
714-683-0818
714-683-1105 fax
dchesnut@SepulvedaConst.com

PROFESSIONAL EXPERIENCE

- 2009 – Present** **Sepulveda Construction, Inc.**
Construction Division, Chief
- Manage the operations of the division
 - Supervise office and field staff and personnel
 - Lead in investigation, evaluation, and bidding of projects
 - Chief estimating
 - Project Manager and Manager of Superintendents
- 2007– 2009** **APMFG**
Vice-president of Construction
- Manage the construction of the Town of Yucca Valley Solar Carport
 - The fabrication of overhead monorail for the LRT Eastside Extension.
 - Roosevelt HS bleachers. Fabrication and Installation.
 - Sylmar HS Bleachers. Fabrication and Installation
 - LACSD Marina 1 and 2 Force main replacement, new valve structure and Junction structure.
 - Estimating
- 2005-2007** **Cora Constructor Inc.**
Project Manager
- Construction of booster pump station for San Bernardino Water Authority and The City of Rialto.
 - Estimating
- 1991-2005** **Kiewit Companies**
Superintendent, Project Manager
- The construction of water pumps station, wwtp, wtp, reservoirs, co-gen, rail roads, pipelines and bridges.

EXHIBIT B

Construction Manager, Dean Chesnut's Job History and Reference

Dates	Projects	Description	Relevance to Otay Proj	Dollar Value	Owner	Working for	Role	Contact/phone
Oct 1990 Nov 1991	UCLA Cogen	Generating Plant on the UCLA campus	Structural, Piping, Mechanical, Electrical	\$90,000,000	UCLA Facilities	Kiewit Companies	Superintendent	David Johnson 310-825-3402
Nov 1991 Feb 1993	Central Commercial	Build Commercial unit and Business Center in Veracruz Mexico	Concrete, Steel Structure and Electrical	\$7,000,000	Constructora Mazon	Kiewit Companies	Project Engineer	N/A
Feb 1993 Dec 1993	TWS	14 Miles of rail refurbish	Rail Road Work	\$10,000,000	MTA/MetroLink/Amtrak	Kiewit Companies	Superintendent	N/A
Dec 1993 March 1994	Magonigle RR Bridge	Replace Bridge span in a 12hr window for Coaster/MetroLink	Rail Road Work and Structural Steel Bridge	\$ 500,000.00	Southern California Railroad/MetroLink/Coaster	Kiewit Companies	Project Manager	N/A
June 1994 Feb 1995	Black Mountain Reservoir Rate of Flow Control	Build a RFC, tie in to existing reservoir and add a building	Structural, Piping, Mechanical, Electrical	\$ 5,000,000.00	Southern Nevada Water Authority	Kiewit Companies	Project Manager	N/A
April 1995 Jan 1996	City of Albuquerque Water Treatment Plant Expansion	Closing out the project at 85% complete	Structural, Piping, Mechanical, Electrical	\$ 34,000,000.00	City of Albuquerque	Kiewit Companies	Project Manager	N/A
May 1996 Aug 1997	Miramar Reservoir	3 Million Gal Reservoir and Booster Pumps	Structural, Piping, Mechanical, Electrical	\$ 11,000,000.00	San Diego Water Authority	Kiewit Companies	Project Manager	N/A
Sep 1997 Jan 1998	Point Loma Waste Water Treatment Plant	Build 2 digester, flare stack, and appurtenances	Structural, Piping, Mechanical, Electrical	\$ 23,000,000.00	City of San Diego	Kiewit Companies	Project Manager	N/A
Mar 1999 Sep 1999	Storm Water Pump Station 45k GPM	Concrete forebay, 3 deep well pumps, stand by gen, 2x 14" pipe and electrical	Structural, Piping, Mechanical, Electrical	\$6,000,000	Port of Long Beach	Kiewit Companies	Project Manager	Craig Johnson 714.564.2704
Jan 2000 Dec 2000	Wastewater Treatment Plant Up-grade	Control RM, 2 trickling filters, 2 Digester Tanks, 2 Clarifiers and Co-gen set.	Structural, Piping, Mechanical, Electrical	\$29,000,000	City of Bakersfield	Kiewit Companies	Project Manager	N/A
Jan 2001 Jun 2002	Thermal Energy Storage Tank	5MG Chilled water storage tank, Mechanical and Electrical	Structural, Piping, Mechanical, Electrical	\$12,000,000	UCLA Facilities	Kiewit Companies	Project Manager	Tom Lukas 310.206.8844
Jun 2002 Jan 2003	Block Rock Reservoir	12MG Reservoir with a Flow control Building	Structural, Piping, Mechanical, Electrical	\$8,000,000	Taylor-Woodrow	Kiewit Companies	Project Manager	N/A
Feb 2003 Jun 2005	Gold Line From Union Station to Monrovia	Build 14 Miles of track, 2 Cut and Cover Tunnels, and 9 Train Stations	Rail Road Work, Structural and civil work	\$300,000,000	MTA	Kiewit Companies	Quality Control Manager	N/A
Jul 2005 Feb 2006	Lake Skinner Water Treatment Plant Expansion with Ozone Contactor	Build Clarifier, Sed Basins, Ozone Contactor	Structural, Piping, Mechanical, Electrical	\$175,000,000	MWD	Shimmick Construction	Structural Superintendent	Parsons as owner's construction manager, contact not available.
Jun 2006 Aug 2007	6-2 Booster Pump Station	Set 6 Can and pumps, Construct Building and Electrical	Structural, Piping, Mechanical, Electrical	\$1,200,000	West Valley Water District	Cora Constructors	Estimator, PM, Superintendent	Harry Cain 909.213.6188 **
Feb 2008 Sep 2008	Yucca Valley Solar Carport	Build a Carport with Solar Power Roof to sell power back to the Grid 30KWH	Structural and Electrical	\$400,000	The Town of Yucca Valley	All Purpose Manufacturing	Estimator, PM, Superintendent	Deane Gasaway 760-369-6579 **
Feb 2009 Dec 2009	Redondo Beach Solar Bike Path Lighting	Design, Fabricate and Install Solar Lighting on bike path	Structural and Electrical	\$ 175,000.00	City of Redondo Beach	All Purpose Manufacturing	Estimator, PM, Superintendent	Bob Boerman 310.318.0661 **
Feb 2009 Dec 2009	LAUSD bleacher replacement Roosevelt HS	Demo, Manufacture and Install 1600 seat bleachers with 2 ADA ramps	Structural concrete and steel	\$ 640,000.00	LAUSD	All Purpose Manufacturing	Estimator, PM, Superintendent	Shant Chobanian 213.560.6995 **
Feb 2009 Dec 2009	LAUSD bleacher replacement Sylmar HS	Demo, Upgrade existing bleacher to ADA compliance, Concrete ADA Ramp and HR	Structural concrete and steel	\$ 450,000.00	LAUSD	All Purpose Manufacturing	Estimator, PM, Superintendent	Clark Sullivan 818.394.2483 no longer work there
Feb 2009 Feb 2010	Marina 1 and 2 force main replacement	Replace 1200 lf of 12 DI pipe, new Junction structure and new valve structure	Structural, Piping, Mechanical, Electrical	\$ 475,000.00	Los Angeles County Sanitation	All Purpose Manufacturing	Estimator, PM, Superintendent	Oscar Morales 310-830-8050 **
Sep 2010 Nov 2010	Joshua Tree Road Stripping, Pino Basin Road Route 11 at Joshua Tree National Park	Joshua Tree Road Stripping and Safety Improvements	Civil, Road work	\$ 58,819.00	National Park Service, US Dept of Interior	sepulveda Construction (Contracted under it's parent company PacRim Engineering Inc.)	Assist PM Roy Kim in Coordinate construction activities and subcontractors	Joe Dowel, Joshua Tree National Park 760.401.3436

EXHIBIT B

Feb 2011 on going	Herondo Street Pumping Plant installation of Standby Generator and Enclosure	Place concrete enclosure SOG and Walls. Set Generator and Electrical Installation	Structural, Piping, Mechanical, Electrical	\$ 85,000.00	The Sanitation District of LA County	Sepulveda Construction Inc.	Estimator, PM, Superintendent	Irene Chang 310.638.1161 ext 6888
Feb 2011 on going	Puente Hills Landfill Drainage Improvements-2011	Construct 2000' of Trapezoid and V channel, Junction Structure and HDPE and CMP under road crossings	Earthwork, concrete	\$ 265,000.00	The Sanitation District of LA County	Sepulveda Construction Inc.	Estimator, PM, Superintendent	Kurt Greeb 562.908.4288 ext 6087
Nov 2009 on going	Keyes European Facility Solar Project	Design/build a 413 kw solar panel installation atop of the roof slab of the new Keyes European Facility Building	Structural, Electrical	\$ 2,950,000.00	Keyes Motors	Sepulveda Construction (Contracted under it's parent company PacRim Engineering Inc.)	Assist PM Peter Liu in Coordinate construction activities and subcontractors	Larry Abiomson 818.587.4458

Estimator/Proj Manager, Mike Hofmann's Job History and Reference

Nov 2009 Aug 2010	Santiago Booster Pump Station	Build booster Pump Station with pumps, pipe, electrical, building and hardscape	Structural, Piping, Mechanical, Electrical	\$ 2,000,000.00	City of Orange	Cora Constructors	Estimator, PM, Superintendent	Tua Cao PE 714.288.2475 **
April 2005 Feb 2006	West Valley Lytle Creek Storage Reservoir	Build 4 M/G, 3 M/G and Mod a 2M/G reservoir, Mechanical and Hardscape	Structural, Piping, Mechanical, Electrical	\$ 2,000,000.00	Pacific Tank for West Valley Water District	Cora Constructors	Estimator, PM, Superintendent	Harry Cain 909.213.6188 **
Sep 2008 April 2009	Well 31	Pump Station, Pumps, and piping, Chemical Bldg and piping, electrical, Hardscape	Structural, Piping, Mechanical, Electrical	\$ 1,300,000.00	Monte Vista Water District	Cora Constructors	Estimator, PM, Superintendent	Jeff Malone 909.538.8290 **

** — Recent similar projects for Dean and Mike

EXHIBIT B

UNIVERSITY OF CALIFORNIA, LOS ANGELES

UCLA

BERKELEY . DAVIS . IRVINE . LOS ANGELES . MERCED . RIVERSIDE . SAN DIEGO . SAN FRANCISCO . SANTA BARBARA . SANTA CRUZ

FACILITIES MANAGEMENT · DESIGN & PROJECT MANAGEMENT
731 CHARLES E. YOUNG DRIVE SOUTH, 3RD FLOOR
POST OFFICE BOX 951526
LOS ANGELES, CALIFORNIA 90095-1526

March 1, 2011

Letter of Recommendation

946160 Thermal Energy Storage Tank Project
UCLA Energy Services

To Whom it May Concern,

This letter is my personal recommendation for Dean Chesnut. I had the opportunity to work with Dean when I managed the design and construction of the UCLA Thermal Energy Storage Tank Project. Dean was the designated Construction Manager for this \$14 million dollar project which installed a 5 million gallon underground concrete tank and associated mechanical infrastructure. The successful completion of this project added more than 30,000 ton hours of chilled water capacity to the University district energy system.

I have always found Dean to be an excellent and efficient Construction Manager who always came to work with a can do attitude. The depth of his engineering and construction knowledge was a key element in the completion of the project. Dean demonstrated excellent interpersonal skills when dealing with the various architects, engineers and sub contractors associated with the project. In design and construction meetings, Dean always presented innovative ideas and strategies. Throughout years of the project Dean implemented a number of innovative and successful construction strategies that kept the project budget and schedule manageable for a major Capital Project.

I highly recommend Dean Chesnut for your consideration. Dean would make a great asset for any project team.

Sincerely,



Tom Lukas
Principal Project Manager
Design, Landscape & Project Management
Facilities Management Building, Third Floor
731 Young Drive South
Los Angeles CA 90095-1526

EXHIBIT C

Lic.#847555

7847 Dunbrook Road
Suite C
San Diego, CA 92126
Ph. 858-537-0774
Fax 858-537-9653

March 4, 2011

Mr. Mark Watton, General Manager
Otay Water District
2554 Sweetwater Springs Blvd
Spring Valley, CA 91978
Fax # 619-670-8920

Re.: Bid for 944-1R Recycled Water Pump Station
Upgrade and System Enhancements
CIP R2091

Dear Mr. Walton,

On March 3, 2011 bids were received for the above referenced project. The apparent low bid is listed as Sepulveda Construction. Sepulveda Construction's bid package contained multiple I&C system integrator certifications. This is in violation of specification section 17000, paragraph 1.03.D., which states, "The complete control system shall be furnished by a single integration firm who shall assume total responsibility for satisfactory performance of the complete system." By listing multiple companies the apparent low bidder's bid should be deemed non-responsive. The District has no assurance to which integrator the apparent low bidder will use or intended to use, which could result in bid shopping. Bid shopping is not allowed in accordance with Public Contract Code 4100-4114.

We request that no award be made on this project until we have ample time to review the rejection from the District and respond accordingly. We believe that our bid meets the contract requirements and we are the low responsive bidder for this project. An award of the contract to any bidder besides NEWest Construction would violate California Government Code, standards and practices applicable to competitive bidding on public works projects.

If you have any questions please feel free to contact me at 858-537-0774.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Jennette", written over a horizontal line.

Mark Jennette
President

EXHIBIT D



...Dedicated to Community Service

2554 SWEETWATER SPRINGS BOULEVARD, SPRING VALLEY, CALIFORNIA 91978-2004
TELEPHONE: 670-2222, AREA CODE 619 www.otaywater.gov

March 16, 2011

Project No.: R2091-001103

Mark Jennette
NEWest Construction Company, Inc.
7847 Dunbrook Rd., Ste C
San Diego, CA 92126

SUBJECT: Response to Bid Protest for the 944-1R Recycled Water
Pump Station Upgrade and System Enhancements

Dear Mr. Jennette:

The District received your formal bid protest, dated March 4, 2011, for the above subject project. District staff and legal counsel have reviewed and analyzed the protest and have determined that Sepulveda Construction's (Sepulveda) bid package is responsive.

The protest appears to be based on a claim that Sepulveda could engage in bid shopping by providing certifications from several potential systems integration subcontractors. A reasonable interpretation of section 1.04(A) of Section 17000 actually seems to require certifications for each prospective systems integrator; thus, not only would the multiple certifications not be in violation of the bid requirements, they would actually be in compliance with it. Further, Sepulveda's bid package appears to be responsive notwithstanding the omission of a certification for the listed subcontractor, Southern Construction Company (Southern), as that discrepancy would seem to be inconsequential. Sepulveda listed only one electrical subcontractor, Southern, and thus would appear to comply with the requirement of a single systems integration firm.

The District is moving forward with a recommendation to award the contract to Sepulveda at the April 6th Board Meeting. Should you have any questions or comments, please contact me at (619) 670-2247, or by email at daniel.kay@otaywater.gov

Sincerely,
OTAY WATER DISTRICT

A handwritten signature in black ink, appearing to read "Daniel Kay", is written over the printed name.

Daniel Kay, P.E.
Associate Engineer

DK:jf

cc: Rod Posada
Ron Ripperger
Richard Romero, Stutz Artiano Shinoff & Holtz

Quality Assurance Approval Sheet

Subject: Award a Construction Contract to Sepulveda
for the 944-1R Recycled Water Pump Station
Upgrades and System Enhancements Project

Project No.: R2091-001103

Document Description: Staff Report for the April 6, 2011 Board Meeting

Author:  3/17/11
Signature Date

Daniel Kay
Printed Name

QA Reviewer:  3/17/11
Signature Date

Gary Silverman
Printed Name

Manager:  3/17/11
Signature Date

Rod Posada
Printed Name

The above signatures attest that the attached document has been reviewed and to the best of their ability the signers verify that it meets the District quality standard by clearly and concisely conveying the intended information; being grammatically correct and free of formatting and typographical errors; accurately presenting calculated values and numerical references; and being internally consistent, legible and uniform in its presentation style.



STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	April 6, 2011		
SUBMITTED BY:	James Peasley <i>James Peasley</i> Engineering Manager	PROJECT/ SUBPROJECTS:	P1210- 017000	DIV. NO.	n/a
APPROVED BY: (Chief):	Rod Posada <i>Rod Posada</i> Chief, Engineering				
APPROVED BY: (Asst. GM):	Manny Magaña <i>M. Magaña</i> Assistant General Manager, Engineering and Operations				
SUBJECT:	Revision to the Cooperative Agreement for the United States Bureau of Reclamation Title XVI Funding for the Otay Water District Recycled Water Infrastructure Program				

GENERAL MANAGER'S RECOMMENDATION:

That the Otay Water District (District) Board of Directors (Board) authorizes the General Manager to execute a revision to the Cooperative Agreement for the United States Bureau of Reclamation Title XVI Funding for the Otay Water District Recycled Water Infrastructure Program.

COMMITTEE ACTION:

Please see Attachment A.

PURPOSE:

To obtain Board authorization for the General Manager to execute a revision to the Cooperative Agreement between the United States Bureau of Reclamation (USBR) and the City of San Diego (City) for the USBR Title XVI funding for the Otay Water District Recycled Water Infrastructure Program. The single purpose of the Cooperative Agreement revision is to replace the City of San Diego, Public Utilities Department, with the Otay Water District, as the recipient of federal funds per terms of the Cooperative Agreement.

ANALYSIS:

The Reclamation Wastewater and Groundwater Study and Facilities Act of 1992, Public Law 102-575, Title XVI, Section 1612 authorizes the Secretary of the Interior to participate in the construction of water reclamation projects in the San Diego area, with Federal financial participation limited up to 25 percent of eligible project costs. It had been determined by the previous USBR's legal counsel that the City of San Diego is the agency authorized to receive Federal funding under this authority. Therefore, the existing Cooperative Agreement between the City and USBR executed on August 4, 2006 and the existing Cooperative Sub-Agreement between the City and the District provided the vehicle for the flow of Federal funding to Otay through the City for the District's Recycled Water Infrastructure Program. The Board authorized the General Manager to execute the Cooperative Sub-Agreement on March 13, 2006.

The purpose of the Cooperative Agreement and the Cooperative Sub-Agreement provides Federal funding to plan, design, and construct the District's Recycled Water Infrastructure Program that will distribute recycled water for beneficial use. The Cooperative Agreement covers the cost of activities necessary for the construction of the District's Recycled Water Infrastructure Program. The total estimated cost of these projects within the Cooperative Agreement is \$80,645,000.

Also, under the terms of the Cooperative Agreement the District is entitled to incur costs, in a total amount not to exceed \$10,000,000, for allowable costs incurred on or after January 1, 2001, which incurred after execution of the Cooperative Agreement. In accordance with the Cooperative Agreement, the District is eligible to receive reimbursement for a portion of total allowable costs in an amount up to and not to exceed \$2,500,000 (i.e., 25% of \$10,000,000).

It is the District's promise to perform the contractual obligations under the terms of the Cooperative Agreement; otherwise the City would not have entered into the Cooperative Agreement and the Cooperative Sub-Agreement. The City's role under the current Cooperative Agreement and the Cooperative Sub-Agreement is merely to act as a "pass-through" agency in order for District to obtain Title XVI funding. As such, the City's sole obligation under the Cooperative Agreement is related to submitting funding requests and accepting funding.

The single purpose of the Cooperative Agreement revision is to replace the City of San Diego, Public Utilities Department, with the Otay Water District, as the recipient of federal funds per terms of the

Cooperative Agreement. In other words, the District will receive the Federal funds directly from USBR.

See Attachment B for a copy of the revision to the Cooperative Agreement. The City has executed the revision to the Cooperative Agreement.

FISCAL IMPACT: 

Within the Cooperative Agreement there is an estimate of \$80,645,000 for the Otay Water District Recycled Water Infrastructure Program and \$10,000,000, for allowable costs incurred on or after January 1, 2001, in which costs incurred after execution of the Cooperative Agreement.

USBR staff states that Federal money for Title XVI funding will be paid eventually at the total of 25 percent even though less is expected to be appropriated in the near term. This is the intention and has been their policy in the past. As additional funds become available, USBR will continue to obligate funds to agreements until they are fully funded. The intent is that the full 25 percent will be provided over time, as long as funds continue to be appropriated by Congress.

The total estimated amount of USBR Title XVI funding available to Otay Water District over time could be as much as 25 percent of \$90,645,000 or about \$22,600,000.

The District has expended nearly \$47,511,000 for our Recycled Water Infrastructure Program since January 1, 2001 through December 31, 2010. To date USBR has paid and the District has received \$9,510,000. As of December 31, 2010, the USBR owes the District almost \$2,368,000 and the District should get paid over time when Congress appropriates the funds.

STRATEGIC GOAL:

The USBR Title XVI grant funding supports the District's Mission statement, "To provide the best quality of water and wastewater services to the customers of the Otay Water District, in a professional, effective, and efficient manner." The Project fulfills the District's strategic goal, in planning for infrastructure and supply to meet current and future potable water demands.

LEGAL IMPACT: _____

None.



General Manager

P:\jpeasley\BD 04-06-11, Staff Report, USBR Title XVI Cooperative Agreement Grant Recipient Revision, (JP-RP).doc

JFP/RP:jf

Attachment: Attachment A - Committee Action
 Attachment B - Assistance Agreement



ATTACHMENT A

SUBJECT/PROJECT: P1210-017000	Revision to the Cooperative Agreement for the United States Bureau of Reclamation Title XVI Funding for the Otay Water District Recycled Water Infrastructure Program
---	---

COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee reviewed this item at a meeting held on March 23, 2011. The Committee supported Staff's recommendation.

NOTE:

The "Committee Action" is written in anticipation of the Committee moving the item forward for Board approval. This report will be sent to the Board as a Committee approved item, or modified to reflect any discussion or changes as directed from the Committee prior to presentation to the full Board.

Quality Assurance Approval Sheet

Subject: Revision to the Cooperative Agreement for the United States Bureau of Reclamation Title XVI Funding for the Otoy Water District Recycled Water Infrastructure Program

Project No.: P1210-017000

Document Description: Staff Report for April 6, 2011 Board Meeting

Author:  3/17/11
Signature Date
James Peasley
Printed Name

QA Reviewer:  3/17/11
Signature Date
Bob Kennedy
Printed Name

Manager:  3/17/11
Signature Date
Rod Posada
Printed Name

The above signatures attest that the attached document has been reviewed and to the best of their ability the signers verify that it meets the District quality standard by clearly and concisely conveying the intended information; being grammatically correct and free of formatting and typographical errors; accurately presenting calculated values and numerical references; and being internally consistent, legible and uniform in its presentation style.

ATTACHMENT B

7-2279 (05-22-09)
Bureau of Reclamation

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF RECLAMATION ASSISTANCE AGREEMENT

Page 1 of 2

1A. AGREEMENT NUMBER R06AC35182	1B. MOD NUMBER 016	2. TYPE OF AGREEMENT [] GRANT [X] COOPERATIVE AGREEMENT	3. CLASS OF RECIPIENT Special District
4. ISSUING OFFICE (NAME, ADDRESS) SCAO-2000 Southern California Area Office Bureau of Reclamation 27708 Jefferson Avenue, Suite 202 Temecula, CA 92590		5. RECIPIENT (NAME, ADDRESS, TELEPHONE) Otay Water District 2554 Sweetwater Springs Blvd. Spring Valley CA 91978-2096	
		EIN #:	95-2049267
		County:	San Diego
		DUNS #:	078726031
		Congress. Dist:	CA-51
6. ADMINISTRATIVE POINT OF CONTACT (NAME, ADDRESS, TELEPHONE, E-MAIL) Dennis D. Wolfe, SCAO-2000 Bureau of Reclamation 27708 Jefferson Avenue, Suite 202 Temecula, CA 92590 Phone: 951-695-5310, E-mail: dwolfe@usbr.gov		7. RECIPIENT PROJECT MANAGER (NAME, ADDRESS, TELEPHONE, E-MAIL) Jim Peasley Otay Water District 2554 Sweetwater Springs Blvd. Spring Valley CA 91978-2096 Phone: 619-670-2242, E-mail: JPeasley@otaywater.gov	
8. GRANTS OFFICER TECHNICAL REPRESENTATIVE (NAME, ADDRESS, TELEPHONE, E-MAIL) Dennis D. Wolfe, SCAO-2000 Bureau of Reclamation 27708 Jefferson Avenue, Suite 202 Temecula, CA 92590 Phone: 951-695-5310, E-mail: dwolfe@usbr.gov		9A. INITIAL AGREEMENT EFFECTIVE DATE: August 4, 2006	9B. MODIFICATION EFFECTIVE DATE: Date signed by Grants Officer
		10. COMPLETION DATE June 30, 2021	
11. PROGRAM STATUTORY AUTHORITY Section 1612 Title XVI of Pub. L. 102-575, as amended			CFDA 15.504
12. FUNDING INFORMATION	RECIPIENT/CYBER	RECLAMATION	13. REQUISITION NUMBER
Total Estimated Amount of Agreement	\$60,483,750	\$20,161,250	14A. ACCOUNTING AND APPROPRIATION DATA Cost Authority: A10-1712-6000-195-20-0-0 Cost Center: 3501000 Object Code: 411C
This Obligation	0	0	
Previous Obligation	\$71,135,000	\$9,510,000	
Total Obligation	\$71,135,000	\$9,510,000	
Cost-Share %	75%	25%	14B. TREASURY ACCOUNT FUNDING SYMBOL 14X0680
15. PROJECT TITLE AND BRIEF SUMMARY OF PURPOSE AND OBJECTIVES OF PROJECT The cooperative agreement titled Otay Water District, Recycled Water Infrastructure Program, San Diego Water Reclamation Project is modified as follows: 1. The recipient is changed from the City of San Diego to the Otay Water District. 2. The agreement number is changed from 06FC350182 to R06AC35182.			
16a. Acceptance of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the above-named Recipient SEE SIGNATURE PAGE BY: _____ DATE: _____		17a. Award of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the United States of America, Bureau of Reclamation SEE SIGNATURE PAGE BY: _____ DATE: _____	
16b. NAME, TITLE, AND TELEPHONE NUMBER OF SIGNER <input type="checkbox"/> Additional signatures are attached		17b. NAME OF GRANTS OFFICER	

Cooperative Agreement No. R06AC35182

Modification No. 016

Otay Water District, Recycled Water Infrastructure Program, San Diego Water Reclamation Project

SIGNATURE PAGE:

The City of San Diego, Public Utilities Department, is hereby replaced as the recipient of this cooperative agreement by the Otay Water District. The transfer will be effective upon execution of this modification by the two agencies and the Grants Officer, which will mean:

The City of San Diego, Public Utilities Department, is relieved of all responsibilities related to cooperative agreement R06AC35182, previously known as 6FC350182.

By: R. S. Bailey Date: 3/7/11

Roger S. Bailey
Director of Public Utilities
City of San Diego

The Otay Water District assumes all responsibilities related to this agreement.

By: _____ Date: _____

Mark Watton
General Manager
Otay Water District

The transfer of responsibilities from the City of San Diego to the Otay Water District is hereby approved.

By: _____ Date: _____

William J. Steele
Grants Officer



STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	April 6, 2011
SUBMITTED BY:	Gary Silverman <i>GS</i> Senior Civil Engineer	PROJECT/	P2440- DIV. 2
	Ron Ripperger <i>RR</i> Engineering Manager	SUBPROJECTS:	001000 & NO. P2440- 005000
APPROVED BY: (Chief):	Rod Posada <i>RP</i> Chief, Engineering		
APPROVED BY: (Asst. GM):	Manny Magaña <i>M Magaña</i> Assistant General Manager, Engineering and Operations		
SUBJECT:	Amendments to Utility Agreements with Caltrans related to Construction of the SR-905 Utility Relocations		

GENERAL MANAGER'S RECOMMENDATION:

That the Otay Water District (District) Board authorizes the General Manager to sign Amendments to two Utility Agreements (Nos. 31755 and 31926) with the California Department of Transportation (Caltrans) (see Exhibit A for project location).

COMMITTEE ACTION: _____

Please see Attachment A.

PURPOSE:

To obtain Board authorization for the General Manager to sign Amendments to two Utility Agreements with Caltrans (Nos. 31755 and 31926; see Exhibits B-1 and B-2).

ANALYSIS:

In 2003, Caltrans notified the District of its intent to construct SR-905 from Heritage Road to SR-125 within Otay Mesa. Subsequently, the District entered into several Utility Agreements with Caltrans to establish prior rights and cost sharing for relocation of existing and proposed District

utilities that were in conflict with Caltrans' design. This current action addresses Amendments to two of the existing Utility Agreements.

The cost estimates that determined the original value of the subject two Utility Agreements were based on known conditions and understandings at the time each Agreement was executed. Due to changes in field conditions, conflicts with other utilities, other agencies planned utilities, and Caltrans' requested design changes, the project costs exceeded the estimated costs.

The work associated with both Utility Agreements is complete. The amount of each Amendment was determined based on the actual final costs. The District has already invoiced Caltrans for the amounts of the previous Agreements. Upon execution of these Amendments, the District will invoice Caltrans for the additional costs, as shown in the table below. Caltrans has assured Staff that the amounts to be reimbursed to the District in the Amendments have been set aside in the authorized funding for the SR-905 construction.

Agreement Number	Previous Agreement	New Agreement	Reimbursement to District
31755	\$141,140	\$292,000	\$150,860
31926	\$ 35,000	\$ 79,000	\$ 44,000
Total	\$176,140	\$371,000	\$194,860

FISCAL IMPACT:



Approval of these amendments will allow the District to invoice Caltrans an additional \$194,860.

STRATEGIC GOAL:

This project supports the District's Mission statement, "To provide the best quality of water and wastewater service to the customers of the Otay Water District, in a professional, effective, and efficient manner." As well as the General Manager's vision, "... prepared for the future..." by guaranteeing that the District will always be able to meet future water supply obligations and plan, design, and construct new facilities.

LEGAL IMPACT:

Legal counsel reviewed these Utility Agreements for consistency and content.



General Manager

P:\WORKING\CIP P2440 - SR-905 Utility Relocations\Staff Reports\BD 04-06-11, Staff Report, Amendments to Utility Agreements with Caltrans for SR-905 Utility Relocations (GPS-RR).doc

GPS/RR/RP:jf

- Attachments:
- Attachment A - Committee Action
 - Exhibit A - Location Map
 - Exhibit B-1 - Utility Agreement for No. 31755
 - Exhibit B-2 - Utility Agreement for No. 31926

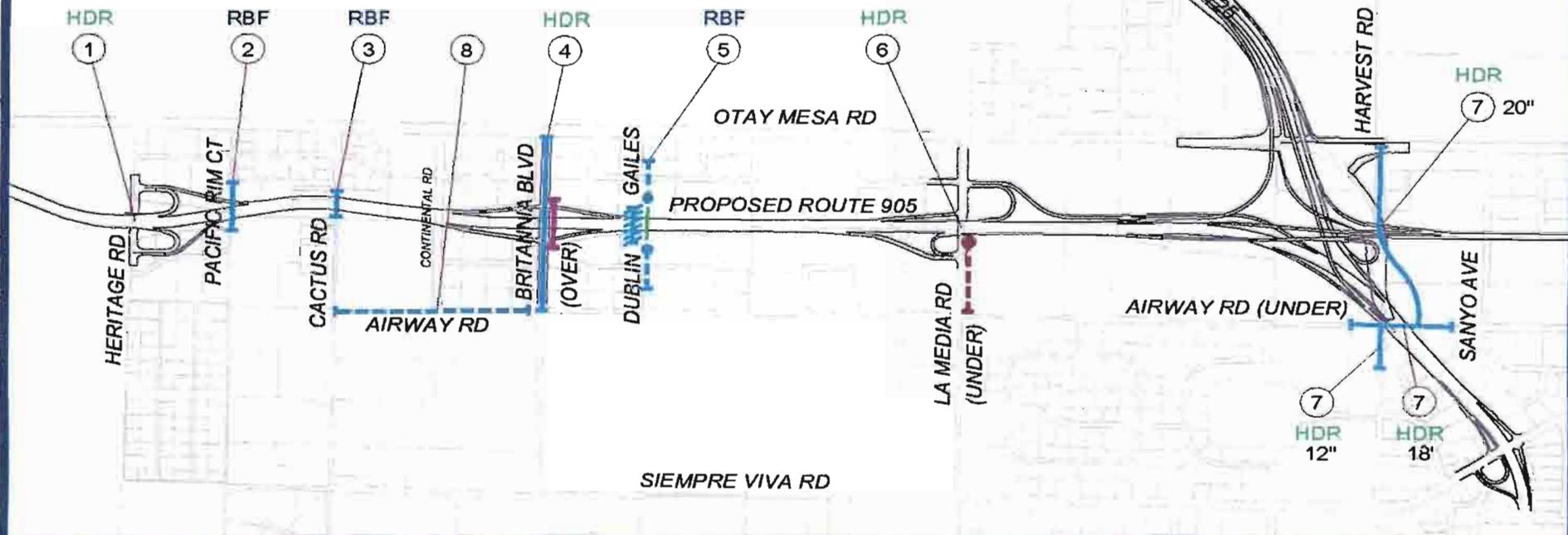
○	UTILITY AGREEMENT	CONSTRUCTION STATUS	POTABLE	RECYCLED
1	Future	Future	TBD	TBD
2	31758	100%	12"	N/A
3	31759	100%	10" to 12" to 10"	N/A
4	31756, 31817	100%	20"	12"
5	31757, 31921	100%	None	None
6	31728, 31779	100%	Keep existing 16"	*
7	31755	100%	See Plan	*
8	31926	100%	Keep existing 16"	N/A

⑤ Crossing Number, Work Area

- Potable - New
- Potable Cap - Existing
- Potable - Existing to remain
- Potable Abandoned - Existing
- Recycled - New
- Recycled Cap - Existing
- Sewer - New



* The District's Subarea Master Plan shows proposed recycled. Recycled will be placed after Route 905.



P:\WORKING\CIP P2440 - SR-905 Utility Relocations\Graphics\Drawings\Exhibit A 3-7-11.dwg



OTAY WATER DISTRICT

ROUTE 905 UTILITY RELOCATIONS

CIP P2440

EXHIBIT A

EXHIBIT B-1

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION
AMENDMENT TO UTILITY AGREEMENT

DATE: January 26, 2011
13-EX-24 (REV 4/2002)
Page 1 of 2

<u>Dist</u> 11	<u>Co</u> SD	<u>Rte</u> 905	<u>KP (P.M.)</u> R13.9/R18.6	<u>EA</u> 091821 1100000070
Federal Aid No:		A905 (015)		
Owner's File: CU12242				
FEDERAL PARTICIPATION:				
			On the Project	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
			On the Utilities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

SECOND AMENDMENT TO UTILITY AGREEMENT NO. 31755

WHEREAS, the State of California, acting by and through its Department of Transportation, hereinafter called STATE and OTAY WATER DISTRICT, hereinafter called OWNER, have entered into that certain Utility Agreement No. 31755 dated July 14, 2006 and First Amendment dated November 21, 2008 which Agreements sets forth the terms and conditions pursuant to which OWNER has relocated its water facilities in Airway Road and Harvest Road, to accommodate STATE's construction on Route 905, Project No. 091821; and,

WHEREAS, in the performance of said work, increased costs over and above those estimated at the time of the execution of said Agreement were incurred primarily due to the increase of additional services required due to additional design, plan check, construction management, inspection, and operations services.

WHEREAS, it has been determined that, since final costs have overrun the amount shown in said Agreement by 107% when the increased cost exceeds by 25% the estimated amount set forth in said Agreement, said Agreement shall be amended to show the increased cost of the work to the STATE; and,

WHEREAS, the estimated cost to the STATE of the work to be performed under said Agreement was \$141,140.00, and by reason of the increased costs referred to above, the amended estimated cost to the STATE is \$292,000.00.

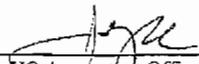
NOW, THEREFORE, it is agreed between the parties as follows:

1. The estimated cost to the STATE of \$141,140.00 as set forth in said Agreement is hereby amended to read Phase 9 funds increase to \$292,000.00.
2. All other terms and conditions of said Agreement remain unchanged.

AMENDMENT TO UTILITY AGREEMENT

EA 091821
 SECOND AMENDMENT TO
 UTILITY AGREEMENT NO. 31755
 13-EX-24 (REV 4/2002)
 Page 2 of 2

THE ESTIMATED TOTAL COST TO STATE FOR ITS SHARE OF THE ABOVE DESCRIBED WORK IS \$292,000.00.

CERTIFICATION OF FUNDS				
I hereby certify upon my own personal knowledge that budgeted funds are available for the period and purpose of the expenditure shown here.				
				2/17/11
HQ Accounting Officer				Date
ITEM	CHAP	STAT	FY	AMOUNT
2660-089010042	712	2010	10/11	150,860.00

FUND TYPE	EA	AMOUNT
Design Funds		\$
Construction Funds		\$
RW Funds	091829 1100000070	\$150,860.00

Already encumbered \$141,140.00
 Total \$ 292,000.00

IN WITNESS WHEREOF, the parties hereto have executed this **SECOND AMENDMENT** to Utility Agreement No. 31755 this _____ day of _____, 2011.

STATE: DEPARTMENT OF TRANSPORTATION

OWNER: OTAY WATER DISTRICT

By  2/26/11
 District Division Chief, Right of Way
 Delegated, AMY LAMOTT VARGAS, Chief
 Utility Relocation Branch

By _____ Date _____
 Name/Title _____

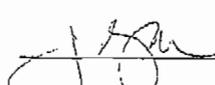
By  1/26/11
 Carol Vu
 Utility Coordinator

By _____ Date _____

DO NOT WRITE BELOW - FOR ACCOUNTING PURPOSES ONLY

PLANNING AND MANAGEMENT TO COMPLETE UNSHADED FIELDS:										UTILITY COMPLETES:			
TR	DOCUMENT CODE	DOCUMENT NUMBER	SUF	DIST	UNIT	CHG DIST	EA	SUB JOB	SPECIAL DESIGNATION	FFY	FA	OBJ CODE	DOLLAR AMOUNT
1	UA	31755		11	2434	11	1100000070	961	9317 SS	11	6	054	150,860.00
	UA											054	

EA FUNDING VERIFIED:

Sign>  2/17/11

Print> Joyce Wiggs
 R/W Planning and Management Date

REVIEW/REQUEST FUNDING:

Sign> 

Print> Carol Vu
 Utility Coordinator Date 1/26/11

Distribution: 4 originals to R/W Accounting
 4 originals returned to R/W Planning and Management

EXHIBIT B-2

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION
AMENDMENT TO UTILITY AGREEMENT

DATE: January 25, 2011
13-EX-24 (REV 4/2002)
Page 1 of 2

<u>Dist</u> 11	<u>Co</u> SD	<u>Rte</u> 905	<u>KP (P.M.)</u> R13.9/R18.6	<u>EA</u> 091821 110000070
Federal Aid No:		A905 (015)E		
Owner's File:				
FEDERAL PARTICIPATION:			On the Project	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
			On the Utilities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

FIRST AMENDMENT TO UTILITY AGREEMENT NO. 31926

WHEREAS, the State of California, acting by and through its Department of Transportation, hereinafter called STATE and OTAY WATER DISTRICT, hereinafter called OWNER, have entered into that certain Utility Agreement No. 31926 dated November 21, 2008 which Agreement sets forth the terms and conditions pursuant to which OWNER has relocated its water facilities in Airway Road, to accommodate STATE's construction on Route 905, Project No. 091821; and,

WHEREAS, in the performance of said work, increased costs over and above those estimated at the time of the execution of said Agreement were incurred primarily due to the increase of additional services required by the design consultant, plan check, construction management, field inspection, and operations services.

WHEREAS, it has been determined that, since final costs have overrun the amount shown in said Agreement by 126% when the increased cost exceeds by 25% the estimated amount set forth in said Agreement, said Agreement shall be amended to show the increased cost of the work to the STATE; and,

WHEREAS, the estimated cost to the STATE of the work to be performed under said Agreement was \$35,000.00, and by reason of the increased costs referred to above, the amended estimated cost to the STATE is \$79,000.00.

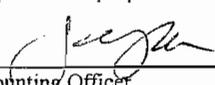
NOW, THEREFORE, it is agreed between the parties as follows:

1. The estimated cost to the STATE of ~~\$35,000.00~~ as set forth in said Agreement is hereby amended to read Phase 9 funds increase to ~~\$79,000.00~~.
2. All other terms and conditions of said Agreement remain unchanged.

AMENDMENT TO UTILITY AGREEMENT

EA 091821
 FIRST AMENDMENT TO
 UTILITY AGREEMENT NO. 31926
 13-EX-24 (REV 4/2002)
 Page 2 of 2

THE ESTIMATED TOTAL COST TO STATE FOR ITS SHARE OF THE ABOVE DESCRIBED WORK IS \$79,000.00.

CERTIFICATION OF FUNDS				
I hereby certify upon my own personal knowledge that budgeted funds are available for the period and purpose of the expenditure shown here.				
 HQ Accounting Officer				Date 2/17/11
ITEM	CHAP	STAT	FY	AMOUNT
2060-0890/6092 20110	712	2010	10/11	44,000.00

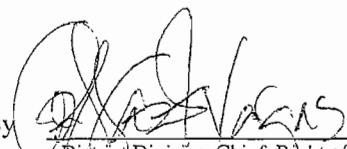
FUND TYPE	EA	AMOUNT
Design Funds		\$
Construction Funds		\$
RW Funds	091829 1100000070	\$44,000.00

Already encumbered \$ 35,000.00
 Total \$ 79,000.00

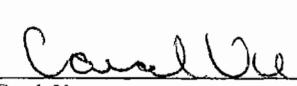
IN WITNESS WHEREOF, the parties hereto have executed this **FIRST AMENDMENT** to Utility Agreement No. 31926 this _____ day of _____, 2011.

STATE: DEPARTMENT OF TRANSPORTATION

OWNER: OTAY WATER DISTRICT

By  _____
 District Division Chief, Right of Way
 Delegated, AMY LAMOTT VARGAS, Chief
 Utility Relocation Branch
 Date 1/26/2011

By _____
 Name/Title _____
 Date _____

By  _____
 Carol Vu
 Utility Coordinator
 Date 1/26/11

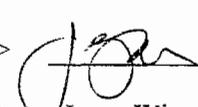
By _____

DO NOT WRITE BELOW - FOR ACCOUNTING PURPOSES ONLY

PLANNING AND MANAGEMENT TO COMPLETE UNSHADED FIELDS:

PLANNING AND MANAGEMENT TO COMPLETE UNSHADED FIELDS:										UTILITY COMPLETES:		
T CODE	DOCUMENT NUMBER	SUF FLX	DIST	UNIT	CHG DIST	EA	SUB JOB	SPECIAL DESIGNATION	FFY	FA	OBJ CODE	DOLLAR AMOUNT
11	UA03192600		11	2839	11	1100000070	9E1	931926	11	6	054	44,000.00
	UA										054	

EA FUNDING VERIFIED:

Sign>  _____
 Date 2/17/11

Print> Joyce Wiggs
 R/W Planning and Management _____
 Date _____

REVIEW/REQUEST FUNDING:

Sign>  _____

Print> Carol Vu
 Utility Coordinator _____
 Date 1/26/11

Distribution: 4 originals to R/W Accounting
 4 originals returned to R/W Planning and Management

Quality Assurance Approval Sheet

Subject: Amendments to Utility Agreements with
Caltrans related to Construction of the SR-905
Utility Relocations

Project No.: P2440-001000
P2440-005000

Document Description: Staff Report for April 6, 2011 Board Meeting

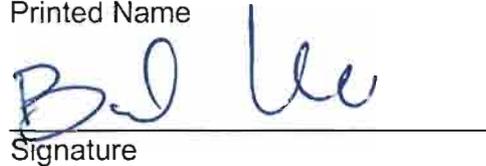
Author:


Signature

3/14/11
Date

Gary Silverman
Printed Name

QA Reviewer:


Signature

3/14/11
Date

Bob Kennedy
Printed Name

Manager:


Signature

3/15/11
Date

Rod Posada
Printed Name

The above signatures attest that the attached document has been reviewed and to the best of their ability the signers verify that it meets the District quality standard by clearly and concisely conveying the intended information; being grammatically correct and free of formatting and typographical errors; accurately presenting calculated values and numerical references; and being internally consistent, legible and uniform in its presentation style.



STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	April 6, 2011		
SUBMITTED BY:	Gary Silverman <i>GS</i> Senior Civil Engineer	PROJECT/ SUBPROJECT:	P2434-001102	DIV. NO.	2
	Ron Ripperger <i>R.R.</i> Engineering Manager				
APPROVED BY: (Chief)	Rod Posada <i>R.P.</i> Chief, Engineering				
APPROVED BY: (Asst. GM):	Manny Magaña <i>M. Magaña</i> Assistant General Manager, Engineering and Operations				
SUBJECT:	Award of a Professional Engineering Services Contract for Phase 2 of the Rancho del Rey Well Project to Tetra Tech, Inc.				

GENERAL MANAGER'S RECOMMENDATION:

That the Otay Water District (District) Board of Directors (Board) awards a professional services contract to Tetra Tech, Inc. (Tetra Tech) and authorizes the General Manager to execute an agreement with Tetra Tech, Inc. for design of Phase 2 of the Rancho del Rey Well Project in an amount not to exceed \$724,493.50 (see Exhibit A for Project location).

COMMITTEE ACTION: _____

Please see Attachment A.

PURPOSE:

To obtain Board authorization for the General Manager to enter into a professional engineering services contract with Tetra Tech for design of Phase 2 of the Rancho del Rey Well Project in an amount not to exceed \$724,493.50.

ANALYSIS:

Phase 2 of the Rancho del Rey Well Project (Project) consists of equipping a well previously drilled and developed in Phase 1, and constructing a wellhead treatment facility to remove salinity and other constituents from the water. The product water from this facility will be pumped into the distribution system, thereby, augmenting the District's potable water supply by approximately 500 acre-feet per year (AFY).

The District requires a consulting firm to provide a range of professional services for the Project, including design engineering, permitting assistance, construction support services, and operations. The operations portion of the Project consists of the consultant providing a part-time certified operator to train District staff and serve as the Chief Operator, as defined by California Department of Public Health Title 22 Regulations. It is initially scoped for this resource to be utilized for 18 months; however, this may be modified when the District's needs can be better quantified.

The District initiated the consultant selection process on January 6, 2011, by placing advertisements in the San Diego Union Tribune and the San Diego Daily Transcript, and posting the Project on the District's website for Professional Engineering Services. The advertisements attracted Letters of Interest and Statements of Qualifications from 20 consulting firms. A Pre-Proposal Meeting was held on January 25, 2011. Twenty-seven (27) people representing 20 consulting firms attended the meeting.

On February 10, 2011, proposals were received from the following seven (7) consulting firms:

1. Black & Veatch
2. CDM
3. Kennedy/Jenks Consultants
4. MWH Americas, Inc.
5. Proteus Consulting
6. Separation Processes, Inc.
7. Tetra Tech, Inc.

After the proposals were evaluated and ranked by a five-member review panel consisting of District Engineering and Operations staff, it was determined that five proposals ranked sufficiently close to warrant being invited to make an oral presentation and respond to questions from the panel. After conducting the interviews on March 1, 2011, the panel completed the consultant ranking process and concluded that Tetra Tech had the best approach to the Project and provided the best

overall value to the District. A summary of the complete evaluation is shown in Exhibit B.

Fee negotiations with Tetra Tech concluded on March 4, 2011, and resulted in a net reduction of \$3,423 to their original proposed fee of \$727,916.50, despite the addition of a new scope item. Their revised proposed fee, with reduction, is \$724,493.50.

FISCAL IMPACT:



The total budget for CIP P2434, as approved in the FY 2011 budget, is \$4,250,000. Total expenditures, plus outstanding commitments and forecast, is \$3,340,010. See Attachment B for budget detail.

Based on a review of the financial budgets, the Project Manager has determined that the budget is sufficient to support the award of this contract, which is the design phase of the Project. However, based on the \$3.5 million Phase 2 capital expenditure estimate in the feasibility study completed in December 2010, the existing CIP budget will be insufficient to support construction. An anticipated supplemental funding of approximately \$2.0 million will be requested as part of the FY 2012 CIP budget to address the remaining work that will be required to complete this Project.

With the shifting of certain CIP's into later years, Finance has determined that 40% of the funding is available from the Expansion Fund and 60% of the funding is available from the Betterment Fund.

STRATEGIC GOAL:

This Project supports the District's Mission statement, "To provide the best quality of water and wastewater services to the customers of Otay Water District, in a professional, effective, and efficient manner." This Project fulfills the District's Strategic Goals No. 1 - Community and Governance, and No. 5 - Potable Water, by maintaining proactive and productive relationships with the Project stakeholders and by guaranteeing that the District will provide for current and future water needs.

LEGAL IMPACT:

None.



General Manager

P:\WORKING\CIP P2434 - RDR Well\Staff Reports\040611 Board\BD-04-06-11, Award Engineering Contract to Tetra Tech.doc

GS/RR:jf

Attachments: Attachment A - Committee Action
 Attachment B - Budget Detail
 Exhibit A - Location Map
 Exhibit B - Evaluation Summary



ATTACHMENT A

SUBJECT/PROJECT: P2434-001102	Award of a Professional Engineering Services Contract for Phase 2 of the Rancho del Rey Well Project to Tetra Tech, Inc.
---	--

COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee reviewed this item at a meeting held on March 23, 2011. The Committee supported Staff's recommendation.

NOTE:

The "Committee Action" is written in anticipation of the Committee moving the item forward for Board approval. This report will be sent to the Board as a Committee approved item, or modified to reflect any discussion or changes as directed from the Committee prior to presentation to the full Board.



ATTACHMENT B

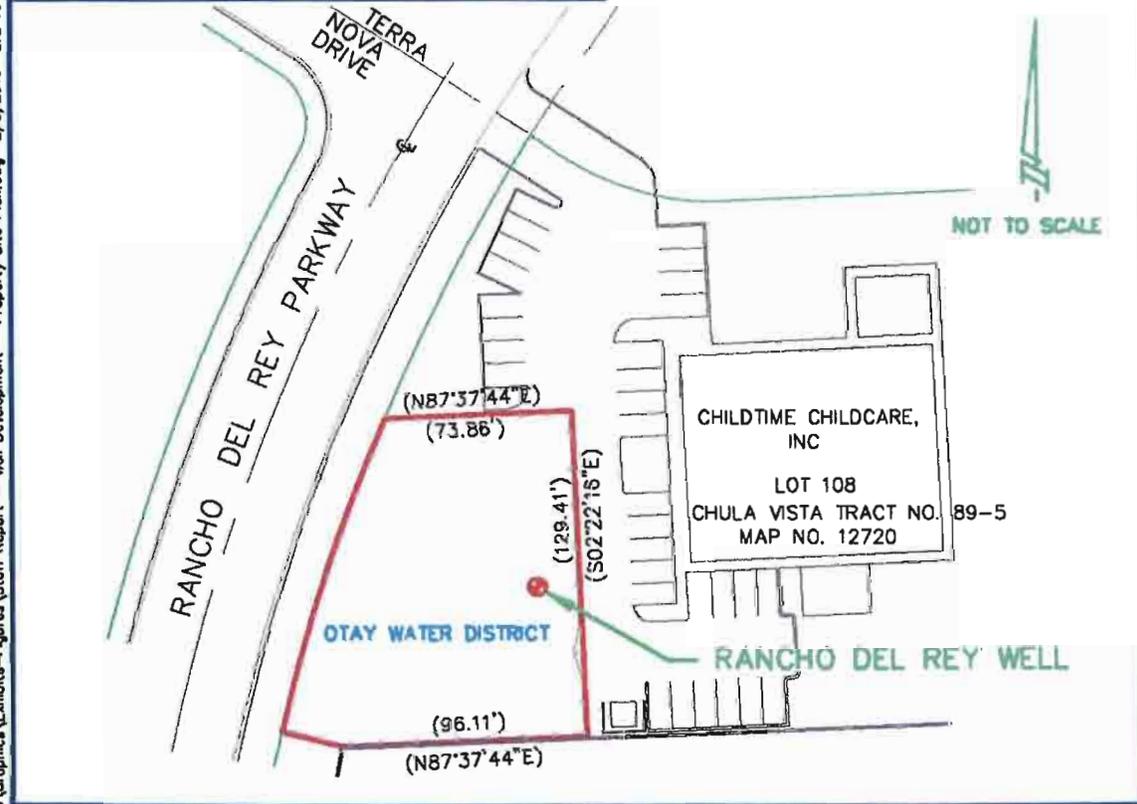
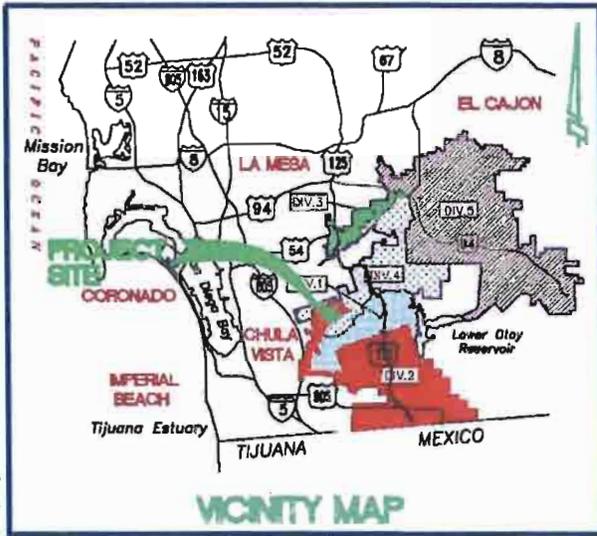
SUBJECT/PROJECT:	Award of a Professional Engineering Services Contract for Phase 2 of the Rancho del Rey Well Project to Tetra Tech, Inc.
P2434-001102	

Otay Water District
P2434 - Rancho Del Rey Well Development

Date Updated: March 01, 2011

Budget	Committed	Expenditures	Outstanding Commitment & Forecast	Projected Final Cost	Vendor/Comments
4,250,000					
Planning					
Labor	335,038	335,038		335,038	
Land	326,092	326,092	-	326,092	
Permits	125	125	-	125	CITY OF CHULA VISTA-DEPT. OF
Materials	1,348	1,348	-	1,348	VARIOUS
Rental	159	159	-	159	PENHALL COMPANY
Construction Costs	26,154	26,154	-	26,154	CHILDTIME CHILDCARE, INC.
Professional Legal Fees	5,619	5,619	-	5,619	GARCIA CALDERON & RUIZ LLP
Consultant Contracts	19,481	19,481	-	19,481	JONES & STOKES ASSOCIATES INC
	10,325	10,325	-	10,325	MWH CONSTRUCTORS INC
	1,100	1,100	-	1,100	SOUTHWESTERN COLLEGE
	3,065	3,065	-	3,065	SOUTHERN CALIFORNIA SOIL
	15,000	14,993	7	15,000	SEPARATION PROCESSES INC
	1,738,430	1,292,225	446,206	1,738,430	AECOM TECHNICAL SERVICES INC
Service Contracts	5,100	5,100	-	5,100	S R BRADLEY & ASSOCIATES INC
	71	71	-	71	SAN DIEGO DAILY TRANSCRIPT
	624	624	-	624	UNION TRIBUNE PUBLISHING CO
	399	399	-	399	REPROHAUS CORP
	6	6	-	6	URBINA'S MASTER SWEEPING INC
	134	134	-	134	COUNTY OF SAN DIEGO
	205	205	-	205	COURIER EXPRESS, INC.
	3,226	3,226	-	3,226	USA SIGN CO.
	7,108	7,108	-	7,108	QUALITY ASSURANCE LABORATORY
	1,955	1,955	-	1,955	MULTI WATER SYSTEMS
	5,665	5,665	-	5,665	BARRETT CONSULTING GROUP
	3,344	3,344	-	3,344	EARTH TECH
	16,714	16,714	-	16,714	CITY OF CHULA VISTA
	112	112	-	112	BOYLE ENGINEERING CORPORATION
	2,500	2,500	-	2,500	MONTGOMERY WATSON LABORATORIES
	2,000	2,000	-	2,000	ANDREW A. SMITH COMPANY
	35,200	35,200	-	35,200	ENARTEC ENGINEERING PLANNING
					ALCEM FENCE COMPANY INC.
Total Planning	2,566,298	2,120,086	446,212	2,566,298	
Design					
Labor	5,991	5,991		5,991	
Consultant Contracts	6,930	6,930	-	6,930	VALLEY CONSTRUCTION MANAGEMENT
	2,829	2,829	-	2,829	PBS&J
	3,500	3,500	-	3,500	MWH CONSTRUCTORS INC
Total Design	19,250	19,250	-	19,250	
Construction					
Labor	14,666	14,666		14,666	
Regulatory Agency Fees	50	50	-	50	PETTY CASH CUSTODIAN
Service Contracts	115	115	-	115	SAN DIEGO DAILY TRANSCRIPT
	440	440	-	440	URBINA'S MASTER SWEEPING INC
Total Construction	15,271	15,271	-	15,271	
Design - RDR Well Treatment					
Labor	14,224	14,224		14,224	
Service Contracts	343	343	-	343	SAN DIEGO UNION-TRIBUNE LLC
	130	130	-	130	SAN DIEGO DAILY TRANSCRIPT
Consultant Contracts	724,494	-	724,494	724,494	TETRA TECH INC
Total Design	739,191	14,697	-	14,697	
Grand Total	3,340,010	2,169,304	1,170,706	3,340,010	

P:\WORKING\CP P2434\Graphics\Exhibits\Staff Report - Well Development - Property Site Plan.dwg 2/3/2010 2:27:54 PM PST



OTAY WATER DISTRICT
 RANCHO DEL WAY PARKWAY, CHULA VISTA, CA.
 RANCHO DEL REY GROUND WATER DEVELOPMENT

CIP P2434-

EXHIBIT A

EXHIBIT B SUMMARY OF PROPOSAL RANKINGS

P2434 Rancho Del Rey Well, Phase 2

	WRITTEN								ORAL						TOTAL SCORE	REFERENCES	
	Qualifications of Team	Responsiveness, Project Understanding	Technical and Management Approach	INDIVIDUAL SUBTOTAL - WRITTEN	AVERAGE SUBTOTAL - WRITTEN	Proposed Fee*	Consultant's Commitment to DBE	AVERAGE TOTAL WRITTEN	Additional Creativity and Insight	Strength of Project Manager	Presentation, Communication Skills	Quality of Response to Questions	INDIVIDUAL TOTAL - ORAL	AVERAGE TOTAL ORAL			
MAXIMUM POINTS	30	25	30	85	85	15	Y/N	100	15	15	10	10	50	50	150	Poor/Good/Excellent	
Black & Veatch	Bob Kennedy	27	21	26	74	64	14	Y	78							78	
	Ron Ripberger	20	19	19	58												
	Rod Posada	22	20	25	67												
	David Charles	22	19	21	62												
	Gary Stalker	18	18	23	59												
CDM	Bob Kennedy	29	23	28	80	76	12	Y	88	12	12	7	8	39	38	126	
	Ron Ripberger	23	20	24	67					12	11	7	7	37			
	Rod Posada	29	24	30	83					12	12	9	9	42			
	David Charles	28	23	28	79					12	10	7	8	37			
	Gary Stalker	25	22	25	72					12	12	6	7	37			
Kennedy/Jenks	Bob Kennedy	27	22	26	75	68	12	Y	80	13	13	8	8	42	40	120	
	Ron Ripberger	23	19	21	63					11	12	7	7	37			
	Rod Posada	25	22	25	72					12	13	8	8	41			
	David Charles	23	20	22	65					12	12	7	7	38			
	Gary Stalker	24	20	23	67					13	12	9	9	43			
MWH	Bob Kennedy	28	22	27	77	67	1	Y	68							68	
	Ron Ripberger	23	20	23	66												
	Rod Posada	25	21	25	71												
	David Charles	23	19	21	63												
	Gary Stalker	20	20	18	58												
Proteus	Bob Kennedy	26	20	25	71	66	15	Y	81	11	12	6	7	36	38	119	
	Ron Ripberger	21	19	20	60					12	11	7	8	38			
	Rod Posada	22	20	24	66					13	11	8	8	40			
	David Charles	25	20	25	70					12	10	7	8	37			
	Gary Stalker	19	20	22	61					12	11	8	8	39			
SPI	Bob Kennedy	25	20	25	70	69	14	Y	83	12	13	7	7	39	38	121	
	Ron Ripberger	22	20	22	64					11	11	6	7	35			
	Rod Posada	26	22	26	74					13	13	7	7	40			
	David Charles	26	21	28	75					11	11	7	7	36			
	Gary Stalker	21	22	20	63					10	13	9	7	39			
Tetra Tech	Bob Kennedy	30	24	29	83	74	13	N	87	14	14	9	9	46	42	129	Good
	Ron Ripberger	21	20	22	63					13	12	7	8	40			
	Rod Posada	30	24	25	79					13	13	9	9	44			
	David Charles	29	22	26	77					13	13	7	8	41			
	Gary Stalker	25	22	19	66					12	13	8	8	41			

Review Panel does not see or consider fee when scoring other categories. Fee is scored by the PM, who is not on Review Panel.

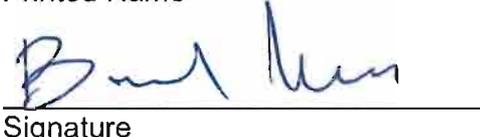
FEE SCORING CHART			
Consultant	Proposed Fee	Position	Score
Proteus	\$473,641	lowest	15
Black & Veatch	\$509,200		14
SPI	\$543,741		14
TT	\$572,557		13
KJ	\$619,619		12
CDM	\$628,622		12
MWH	\$1,170,691	highest	1

Quality Assurance Approval Sheet

Subject: Award of a Professional Engineering Services
Contract for Phase 2 of the Rancho del Rey
Well Project to Tetra Tech, Inc.

Project No.: P2434-001102

Document Description: Staff Report for April 6, 2011 Board Meeting

Author:	 Signature	<u>3/15/11</u> Date
	<u>Gary Silverman</u> Printed Name	
QA Reviewer:	 Signature	<u>3/15/11</u> Date
	<u>Bob Kennedy</u> Printed Name	
Manager:	 Signature	<u>3/15/11</u> Date
	<u>Rod Posada</u> Printed Name	

The above signatures attest that the attached document has been reviewed and to the best of their ability the signers verify that it meets the District quality standard by clearly and concisely conveying the intended information; being grammatically correct and free of formatting and typographical errors; accurately presenting calculated values and numerical references; and being internally consistent, legible and uniform in its presentation style.



STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	April 6, 2011	
SUBMITTED BY:	Kevin Cameron <i>KC</i> Assistant Civil Engineer I	PROJECT/ SUBPROJECT:	P2473-001103	DIV. NO. 1
	Ron Ripperger <i>u</i> Engineering Manager			
APPROVED BY: (Chief)	Rod Posada <i>Rod Posada</i> Chief, Engineering			
APPROVED BY: (Asst. GM):	Manny Magaña <i>M. Magaña</i> Assistant General Manager, Engineering and Operations			
SUBJECT:	Procurement of Pumps and Motors for the 711-1 Pump Station			

GENERAL MANAGER'S RECOMMENDATION:

That the Otay Water District (District) Board of Directors (Board) authorizes the General Manager to execute a purchase order with Sloan Electromechanical Service & Sales (Sloan) for the procurement of five (5) pumps, motors, and discharge heads for the 711-1 Pump Station Improvements Project in an amount not to exceed \$204,934.45 (see Exhibit A for Project location).

COMMITTEE ACTION:

Please see Attachment A.

PURPOSE:

To obtain Board authorization for the General Manager to execute a purchase order with Sloan for the procurement of five (5) pumps, motors, and discharge heads for the 711-1 Pump Station Improvements Project in an amount not to exceed \$204,934.45.

ANALYSIS:

The 711-1 Pump Station (PS), located in Chula Vista, takes suction primarily from the 624-3 Reservoir and discharges to the 711-1, 711-2, and 711-3 Reservoirs, which serves the 711 pressure zone.

From the Project's beginning in 1989, the 711-1 Pump Station was designed to run at 16,000 gpm @ 161' Total Dynamic Head (TDH) (i.e., four pumps operating, each at 4,000 gpm @ 161' TDH) in order to meet the existing and projected demands. Over time, the Pump Station has experienced vibration, noise, and cavitation problems due to running constantly at the higher capacity. In the 1990's and early 2000's, the 711-1 Pump Station served as the key component for the Central Area and needed to remain in service. Therefore, as individual pumps failed due to cavitation, they were quickly rebuilt, or in some cases, replaced with varying brands and sizes in an attempt to solve the problems. In 2007, the 980-2 Pump Station (22,800 gpm) was put into service. This relieved the 711-1 Pump Station, and has allowed staff to redesign the pumps and motors based on a lower overall pump station projected capacity.

Staff reviewed the 711-1 Pump Station's existing conditions. Currently, there are three different types of pumps installed in the Pump Station:

- two (2) Fairbanks-Morse 14" 3-stage/200 hp each, 4,200 gpm @ 110' TDH
- two (2) Peerless 16" 2-stage/200 hp each, 4,000 gpm @ 161' TDH
- one (1) Peerless 18" 2-stage/250 hp, 4,500 gpm @ 163' TDH

At the present time, one of the 16" Peerless pumps is inoperable and in need of replacement. During the request for proposal period on this Project, another Peerless pump has experienced problems and will be out of commission for a short period of time. This will be remedied with a new mechanical seal, but will only temporarily fix the problems.

Operations staff currently operates a minimum of two (2) pumps at the 711-1 Pump Station, which is the ideal operational mode for the future. Field tests on the Pump Station revealed the lower discharge head (110' TDH vs. 161' TDH) on Pump No. 1 (14" 3-stage) and Pump No. 4 (14" 3-stage) are the "best" operating pumps at the Pump Station.

Staff has determined that the combination of slower than expected growth, coupled with an increased conservation effort, has reduced the demand in the 711 zone, which is not expected to exceed 10,000 gpm until 2020. With this data, along with field tests that were performed on the Pump Station in May of 2010, Staff concluded that the best way to resolve the 711-1 Pump Station cavitation problems was to replace the existing pumps with smaller pumps and motors, and run the Pump Station at 10,000 gpm @ 120' TDH. This would lower the inlet suction velocities to approximately 3.0 feet per second (fps)

during the two pump operation scenario. The station currently runs in excess of 4.9 fps, but the Hydraulic Institute's standard recommends less than 4.0 fps.

In summary, based on the compiled field data and the Hydraulic Institute Standards it has been determined that the best way to resolve the 711-1 Pump Station cavitation problems is to replace the existing pumps with smaller pumps and motors, and run the Pump Station at 10,000 gpm @ 120' TDH. This will meet the standard requirements, and still have the ability to meet the demands of the system. The pumps have a useful life of seven to ten years. As the pumps approach the end of their useful life, the Pump Station could be re-evaluated to examine whether the demands have surpassed the Pump Stations capabilities. By reducing the capacity of the 1989 design from 16,000 gpm to 10,000 gpm, the Pump Station will run in a two pump operational mode of 5,900 gpm @ 100' TDH (3.0 ft/s on suction side), and therefore, eliminate the cavitation problems.

Bids were solicited on February 23, 2011 from four (4) vendors to provide five (5) complete pumps with motors and deliver them to the site based on the design package prepared by Staff. It is the intent that District staff will install the equipment with their own labor. A pre-bid meeting was held on March 1, 2011 at the 711-1 Pump Station site for the vendors to ask any questions, and become familiar with the existing site conditions.

The procedure for material purchases outlined in the District's Purchasing Manual states that a minimum three (3) bids must be obtained. Should three quotations not be obtainable, documentation in the form of a "notation of memorandum" must be provided and attached to the purchase requisition. On March 8, 2011, Staff received two (2) bids. The results are below.

	<u>CONTRACTOR</u>	<u>TOTAL AMOUNT</u>	<u>CORRECTED AMOUNT</u>
1	Sloan Electromechanical Service & Sales	\$204,934.45	-
2	Fairbanks Morse	\$264,165.00	-

Days after the pre-proposal meeting, Electronic Motor Specialists (EMS) sent an e-mail stating they would not be bidding on the Project. Propulsion Controls Engineering (PCE) also did not submit a bid.

It is recommended that the bid be awarded to Sloan by virtue of their lower price and their demonstrated ability to provide the equipment that meets District requirements.

FISCAL IMPACT: _____



Funding for the overall Project comes from CIP P2473, the 711-1 Pump Station Improvements Project.

The total budget for CIP P2473, as approved in the FY 2011 budget, is \$500,000. Total expenditures, plus outstanding commitments and forecast, is \$325,451. See Attachment B for budget detail.

Based on a review of the financial budgets, the Project Manager has determined that the budget is sufficient to support the Project.

Finance has determined that 100% of the funding is available from the Replacement Fund for CIP P2473.

STRATEGIC GOAL:

This Project supports the Operations Department Mission statement, "To provide prompt, professional response to all matters related to the distribution of water to our clients."

LEGAL IMPACT: _____

None.



General Manager

P:\WORKING\CIP P2473 - 711-1 Pump Station Improvement\Staff Reports\BD 04-06-11, Staff Report, 711-1 Pump Station Improvements-v2, (KC-RR).doc

KC/RR/RP:jf

- Attachments: Attachment A - Committee Action
- Attachment B - Budget Detail
- Exhibit A - Location Map



ATTACHMENT A

SUBJECT/PROJECT: P2473-001103	Procurement of Pumps and Motors for the 711-1 Pump Station
---	--

COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee reviewed this item at a meeting held on March 23, 2011. The Committee supported Staff's recommendation.

NOTE:

The "Committee Action" is written in anticipation of the Committee moving the item forward for Board approval. This report will be sent to the Board as a Committee approved item, or modified to reflect any discussion or changes as directed from the Committee prior to presentation to the full Board.



ATTACHMENT B

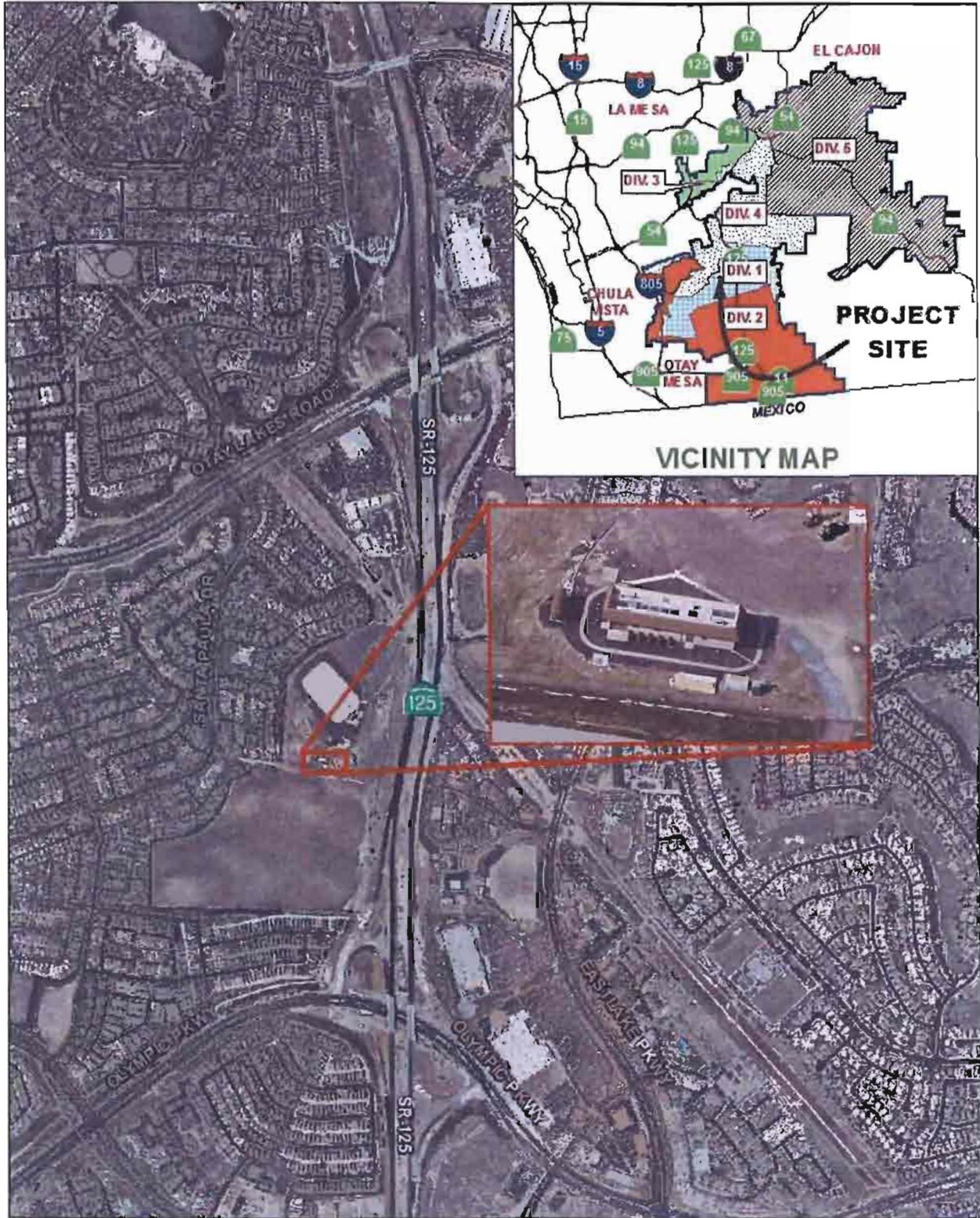
SUBJECT/PROJECT: P2473-001103	Procurement of Pumps and Motors for the 711-1 Pump Station
---	--

Otay Water District
P2473 - PS-711-1 Pump Station Improvement

Date Updated: February 25, 2011

<i>Budget</i>	<i>Committed</i>	<i>Expenditures</i>	<i>Outstanding Commitment & Forecast</i>	<i>Projected Final Cost</i>	<i>Vendor/Comments</i>
500,000					
Planning					
Labor	7,632	7,632		7,632	
Consultant Contracts	390	390	-	390	JC HEDEN AND ASSOCIATES INC
Total Planning	8,022	8,022	-	8,022	
Design					
Labor	13,020	13,020		13,020	
Consultant Contracts	29,750	29,750	-	29,750	MWH CONSTRUCTORS INC
Total Design	42,770	42,770	-	42,770	
Construction					
Labor	16,492	16,492	45,000	61,492	
Infrastructure Equipment & Mate	204,935	-	204,935	204,935	Sloan Electromechanical Service & Sales
	1,799	1,799	-	1,799	US BANK CORPORATE PAYMENT
	265	265	-	265	PENHALL COMPANY
	5,672	5,672	-	5,672	MESA LABORATORIES INC
	496	496	-	496	Use Tax
Total Construction	229,659	24,724	249,935	274,659	
Grand Total	280,451	75,516	249,935	325,451	

EXHIBIT A



OTAY WATER DISTRICT 711-1 PUMP STATION SITE

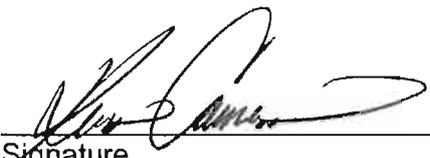


Quality Assurance Approval Sheet

Subject: Procurement of Pumps and Motors for the 711-1
Pump Station

Project No.: P2473-001103

Document Description: Staff Report for the April 6, 2011 Board Meeting

Author:  3/11/11
Signature Date

Kevin Cameron
Printed Name

QA Reviewer:  3/11/11
Signature Date

Gary Silverman
Printed Name

Manager:  3/11/11
Signature Date

Ron Ripperger
Printed Name

The above signatures attest that the attached document has been reviewed and to the best of their ability the signers verify that it meets the District quality standard by clearly and concisely conveying the intended information; being grammatically correct and free of formatting and typographical errors; accurately presenting calculated values and numerical references; and being internally consistent, legible and uniform in its presentation style.



STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	March 28, 2011
SUBMITTED BY:	Geoffrey Stevens, Chief Information Technology and Strategic Planning	W.O./G.F. NO:	DIV. NO.
APPROVED BY: (Chief)	German Alvarez <i>[Signature]</i> Assistant General Manager, Administration and Finance		
APPROVED BY: (Asst. GM):			
SUBJECT:	FY 2011 Strategic Plan and Performance Measures Report		

GENERAL MANAGER'S RECOMMENDATION:

No recommendation. This is an informational item only.

COMMITTEE ACTION: _____

See Attachment A.

PURPOSE:

To provide a fiscal mid-year report on the District's Strategic Performance Plan.

ANALYSIS:

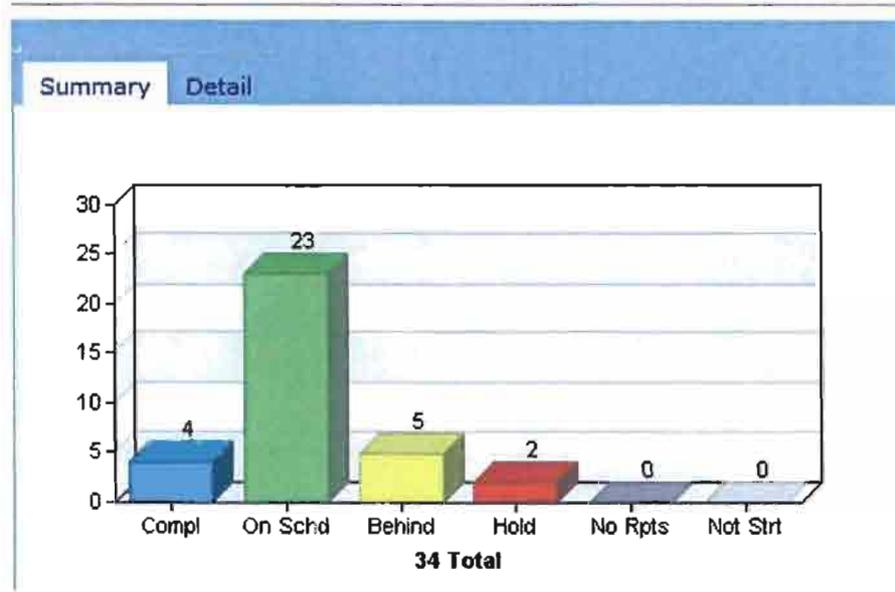
The District has completed the first half of the Strategic Plan for FY 2011. Overall, results for performance measures continue to be positive with the District exceeding its target (at least 75% on target). Results for objectives were just under target (at least 90% complete or on track), but are expected to recover by next quarter. Detailed information on each objective and measure is also available electronically on the Board Extranet. Looking at these results in more detail:

Strategic Plan Objectives - 84%

Strategic plan objectives are designed to ensure we are making the appropriate high-level changes necessary to move the agency in the planned direction to meet new challenges and opportunities. Objective results were just under target with 27 of 32 (84%) complete, ahead or on schedule. 2 items are on hold and are thus excluded from the calculation. Five items are behind schedule. Of these five items, three have been corrected as of March 1st.

FY 11 Objectives

Objectives: All Scorecard Areas



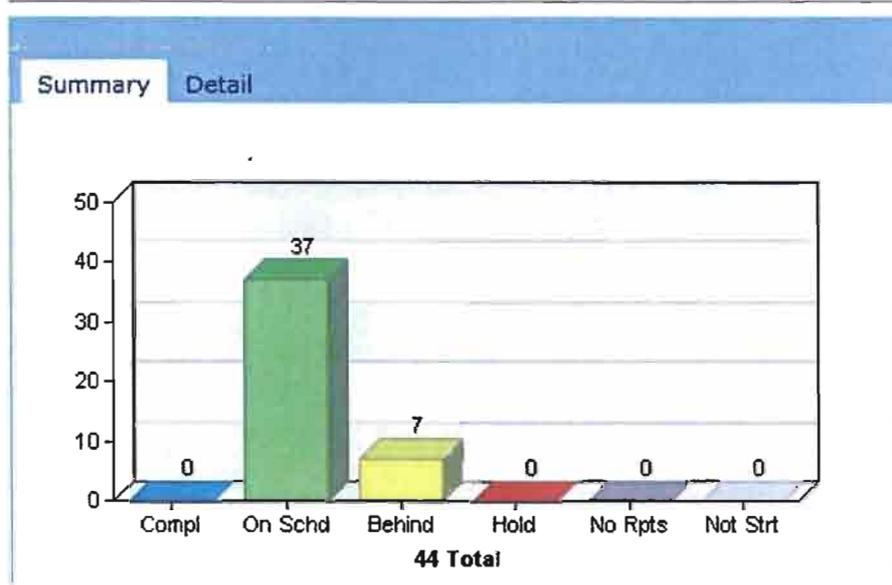
27/32 Objectives on or ahead of schedule (84%).
Target is 90%.

Performance Measures - 84% (6 Points Below Goal)

Performance measures are designed to track the day-to-day performance of the District. Sometimes referred to as a "dash board", these items attempt to measure the effectiveness and efficiency of daily operations. The overall goal is that at least 75% of these measures be rated "on target". District results in this area are positive with 37 of 44 (84%) items achieving the desired level or better.

FY 11 Performance Measures

Measures: All Scorecard Areas



37/44 Measures on or ahead of schedule (84%).
Target is 75%.

Balanced Scorecard - External View

The Balanced Scorecard methodology is designed to ensure that a company is performing consistently on a wide range of measures necessary to ensure both short-term and long-term improvements. Many of the areas do not meet the target due to a lower ratio of open items. For example 4 out of 5 Learning & Growth objectives are completed or on schedule, but 4/5 is still only 80%, just missing the 90% target. For a more detailed explanation, quarter reports for these measures are available on the Board Extranet.

Balanced Scorecard Perspective

FY 2011 • Qtr 2 • All Departments



Green = meets or exceeds/ Red = does not meet

Departmental Perspective - Internal View of Performance

The departmental perspective breaks down performance objectives and measures by the responsible internal departments. The results here are similar to the balanced scorecard scenario where a lower ratio in open items resulted in a lower on target percentage.

FY 2011 • Qtr 2 • All Scorecard Areas

Departments	Objectives	Measures
1-Administrative Services	■ Objectives	■ Measures
2-Engineering	■ Objectives	■ Measures
3-Finance	■ Objectives	■ Measures
4-Information Technology	■ Objectives	■ Measures
5-Operations	■ Objectives	■ Measures

Green = meets or exceeds/ Red = does not meet

Significant Achievements

Some significant mid-year achievements include 46 objectives complete to-date and 37 of 44 measures with results on target.

FISCAL IMPACT:



Informational item only, no fiscal impact.

STRATEGIC GOAL:

Strategic Plan and Performance Measure reporting is a critical element in providing performance reporting to the Board and staff.

LEGAL IMPACT:

None



General Manager



ATTACHMENT A

SUBJECT/PROJECT:	FY 2011 Strategic Plan and Performance Measures Report
-------------------------	--

COMMITTEE ACTION:

The Administration and Finance Committee and the Engineering and Operations Committee met in March and reviewed this item. Based upon this discussion the Committees recommend that the Board receive that attached information.

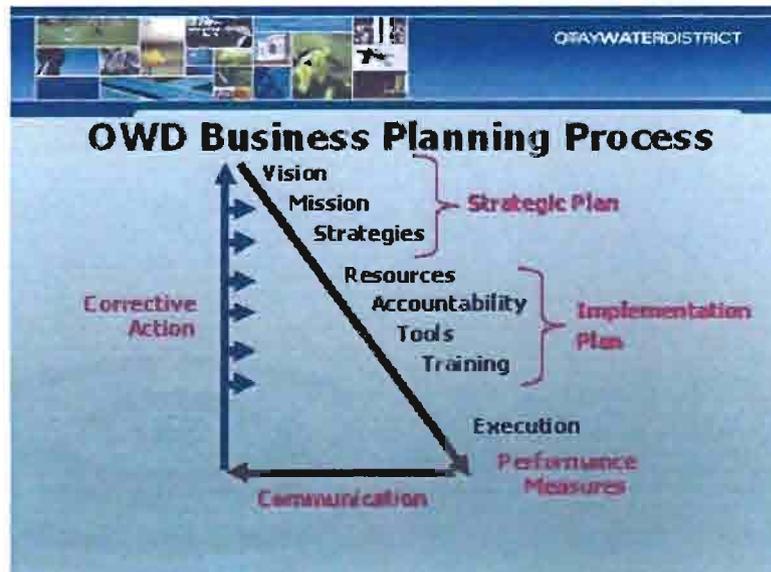
NOTE:

The "Committee Action" is written in anticipation of the Committee moving the item forward for board approval. This report will be sent to the Board as a committee approved item, or modified to reflect any discussion or changes as directed from the committee prior to presentation to the full board.

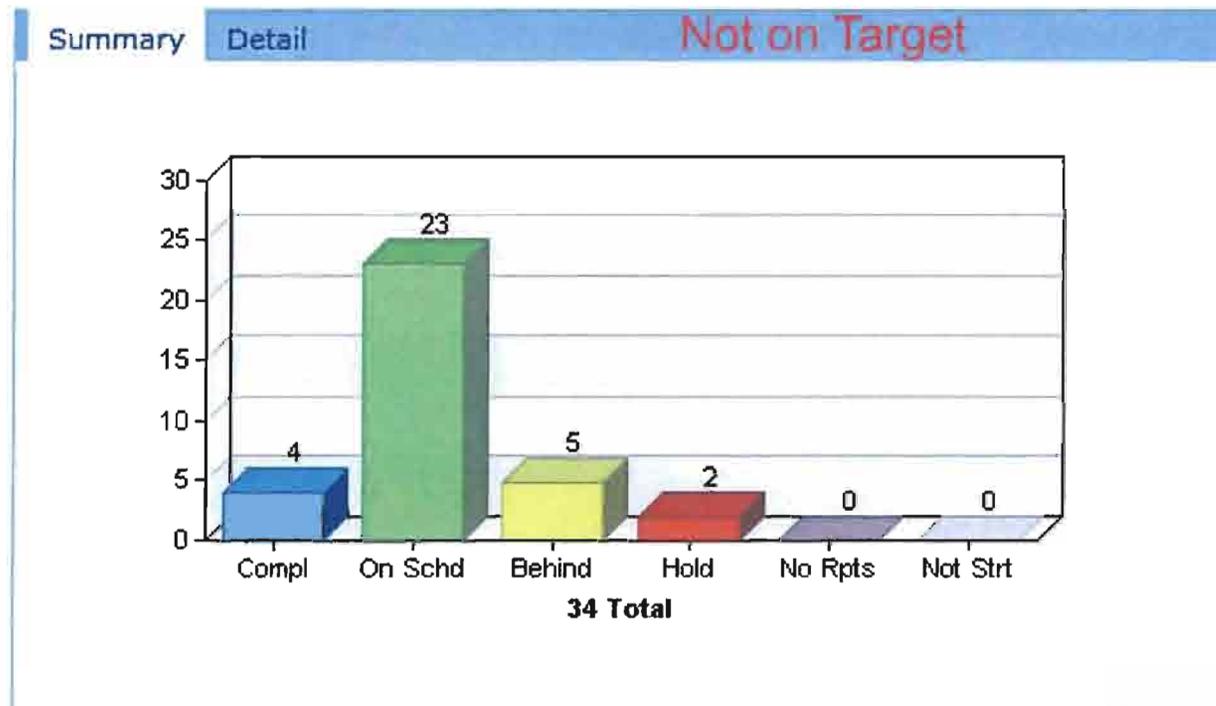
Strategic Plan

FY 2011

Mid-Year Report



Objectives: All Scorecard Areas



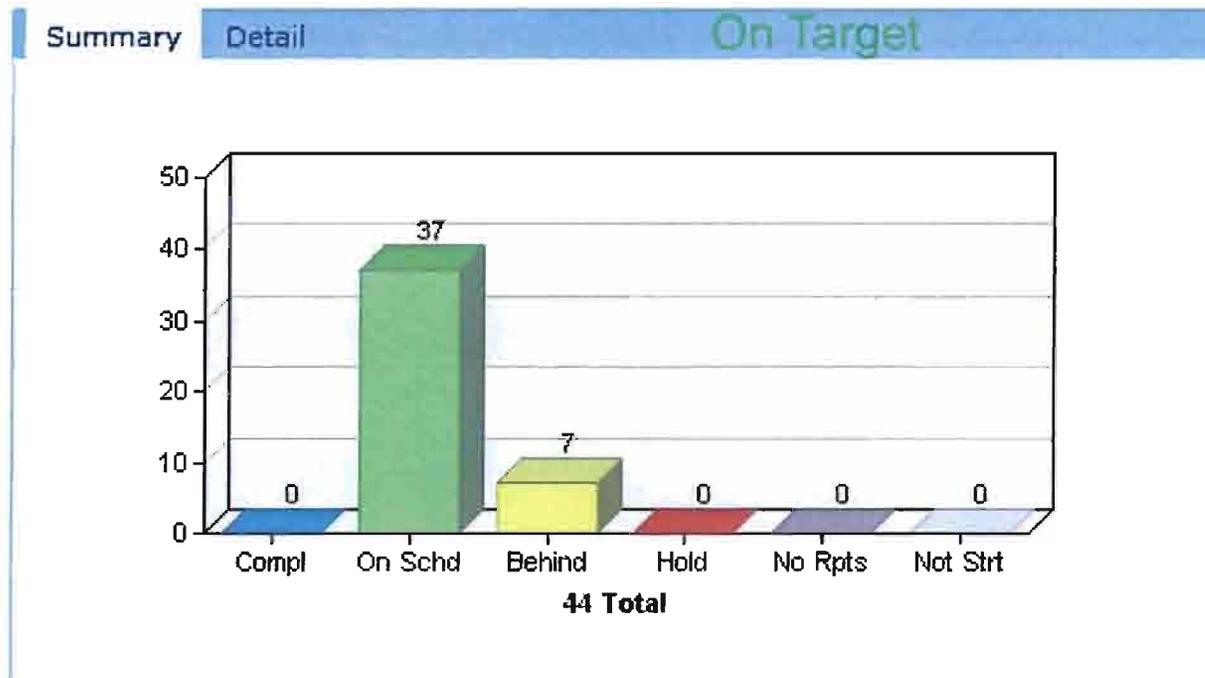
FY2010 Objectives

27 of 32 objectives complete, ahead or on target **(84%)**

Target is 90%



Measures: All Scorecard Areas



FY2010 Performance Measures

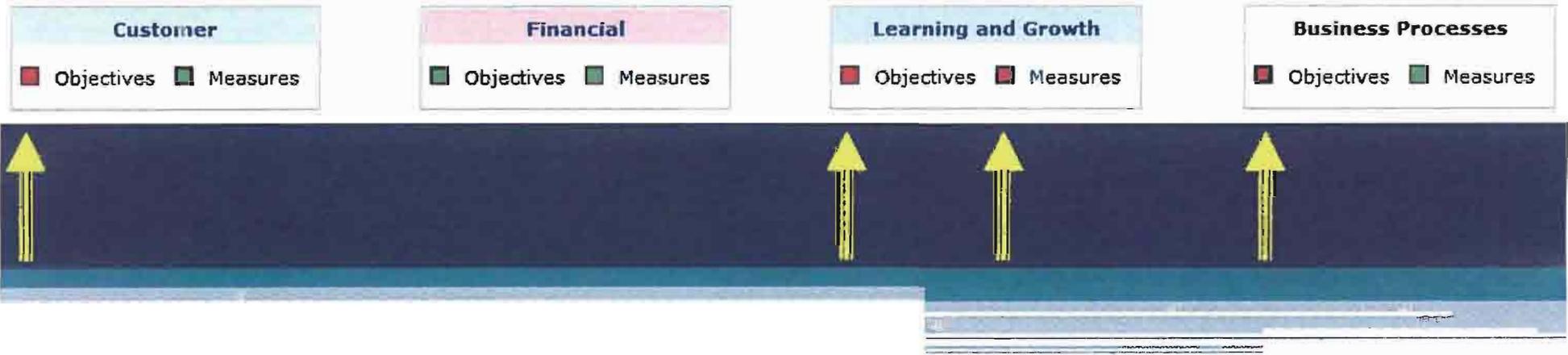
37 of 44 performance measures complete, ahead or on target **(84%)**

Target is 75%



Balanced Scorecard

FY 2011 • Qtr 2 • All Departments



Balanced Scorecard

Green = meets or exceeds/ Red = does not meet

Department View

FY 2011 • Qtr 2 • All Scorecard Areas

Departments		Objectives	Measures
1-Administrative Services			
2-Engineering			
3-Finance			
4-Information Technology			
5-Operations			

Department View

Green = meets or exceeds/ Red = does not meet

What's New / Next

- Additional Fields for Strat Plan Application
- FY 2012-2014 Strategic Plan
- FY 2009-2011 Strat Plan Completion Report