

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

TUESDAY
January 18, 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 THE WATER SUPPLY ASSESSMENT REPORT, AS REQUIRED BY SENATE BILL 610, FOR THE SAN DIEGO-TIJUANA CROSS BORDER FACILITY PROJECT (KENNEDY) [5 minutes]
4. APPROVE THE REIMBURSEMENT AGREEMENT BETWEEN THE DISTRICT AND THE COUNTY OF SAN DIEGO FOR THE RELOCATION OF AN 8-INCH SEWER MAIN (KAY) [5 minutes]
5. FISCAL YEAR 2011 FIRST QUARTER CAPITAL IMPROVEMENT PROJECT UPDATE REPORT (KAY) [10 minutes]
6. INFORMATIONAL REPORT REGARDING THE ACTION PLAN FOR COMMUNITY OUTREACH AND SITE IMPROVEMENTS AT THE 657-1 AND 657-2 RESERVOIR SITE (RIPPERGER) [5 minutes]
7. DISCUSS COMMITTEE MEETING DATES
8. SAN DIEGO COUNTY WATER AUTHORITY UPDATE (WATTON) [10 minutes]
9. 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 January 14, 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 January 14, 2011.



Susan Cruz, District Secretary



STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	February 2, 2011
SUBMITTED BY:	Bob Kennedy <i>BK</i> Associate Civil Engineer	W.O./G.F. No.:	D0738- DIV. NO. 2 090062
	Ron Ripperger <i>RR</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:	Approval of Water Supply Assessment Report (December 2010) for the San Diego-Tijuana Cross Border Facility		

GENERAL MANAGER'S RECOMMENDATION:

That the Otay Water District (District) Board of Directors (Board) approve the Water Supply Assessment Report (WSA Report) dated December 2010 for the San Diego-Tijuana Cross Border Facility (Cross Border 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 December 2010 WSA Report for the Cross Border 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 City of San Diego (City) 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 Cross Border Project. Prior to transmittal to the City, 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 Cross Border Project WSA Report is attached as Exhibit C.

For the Cross Border Project, the City is the responsible land use agency that requested the SB 610 water supply assessment from the District, as the water purveyor for the proposed Cross Border Project. The request for the WSA Report, in compliance with SB 610 requirements, was made by the City because the Cross Border 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 Cross Border Project is a 63.8 acre development and is planned to include approximately 78,500 square feet of retail space, two 150-room hotels, a cargo facility, a parking garage, industrial lots, and a cross border terminal facility providing secure air-passenger access to the passenger terminals of the General Abelardo L. Rodriguez International Airport.

The District, as the proposed water purveyor for the Cross Border 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 PBS&J 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 normal supply conditions and in single and multiple dry years to meet the projected demand of the Cross Border Project and other planned development projects within the District.

The expected demand for the Cross Border Project is 95 acre-feet per year. As originally included in the District's Water Resources Master Plan, dated October 2008, and approved by the District on February 3, 2010, the projected demand for this property was 60 acre-feet per year. Therefore, there is an increase of 35 acre-feet per year due to a proposed increase in development intensity and the future International Business and Trade (IBT) land use proposed for the remaining undeveloped lots. The City is proposing the IBT land use zone for this portion of Otay Mesa in the Otay Mesa Community Plan Update. The projected recycled water demand for the proposed Cross Border Project is 11 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 (City) within 90 days. The City's WSA request letter dated December 10, 2010 was received by the District December 14, 2010.

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 City's request letter dated December 10, 2010 was received by the District December 14, 2010 so the 90 day deadline for the District to provide the WSA Report to the City is March 13, 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 Cross Border Project.

With the initiation of the South Bay Water Reclamation Plant (SBWRP) recycled water supply on May 18, 2007 the District has reduced the annual take of potable water from the Water Authority, once used to supplement the recycled water supply shortfall, in excess of 3,200 acre-feet per year. The Cross Border Project estimate of an additional 35 acre-feet per year potable water demand is about 1 percent of the potable water saved with the SBWRP supply start up.

FISCAL IMPACT:

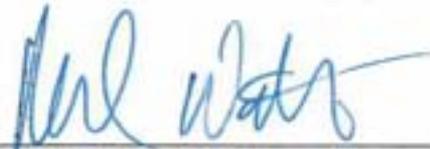
The District has been reimbursed \$15,900 for all costs associated with the preparation of the Cross Border Project WSA Report. The reimbursement was accomplished via a \$18,800 deposit the Project proponents placed with the District.

STRATEGIC GOAL:

The preparation and approval of the Cross Border 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 Cross Border 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

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BK/RR:jf

Attachments: Attachment A - Committee Actions
Exhibit A - Project Location Map
Exhibit B - Explanation of the Intent of SB 610
Exhibit C - Cross Border Project WSA Report



ATTACHMENT A

SUBJECT/PROJECT:

D0738-090062

Approval of Water Supply Assessment Report (December 2010)
for the San Diego-Tijuana Cross Border Facility

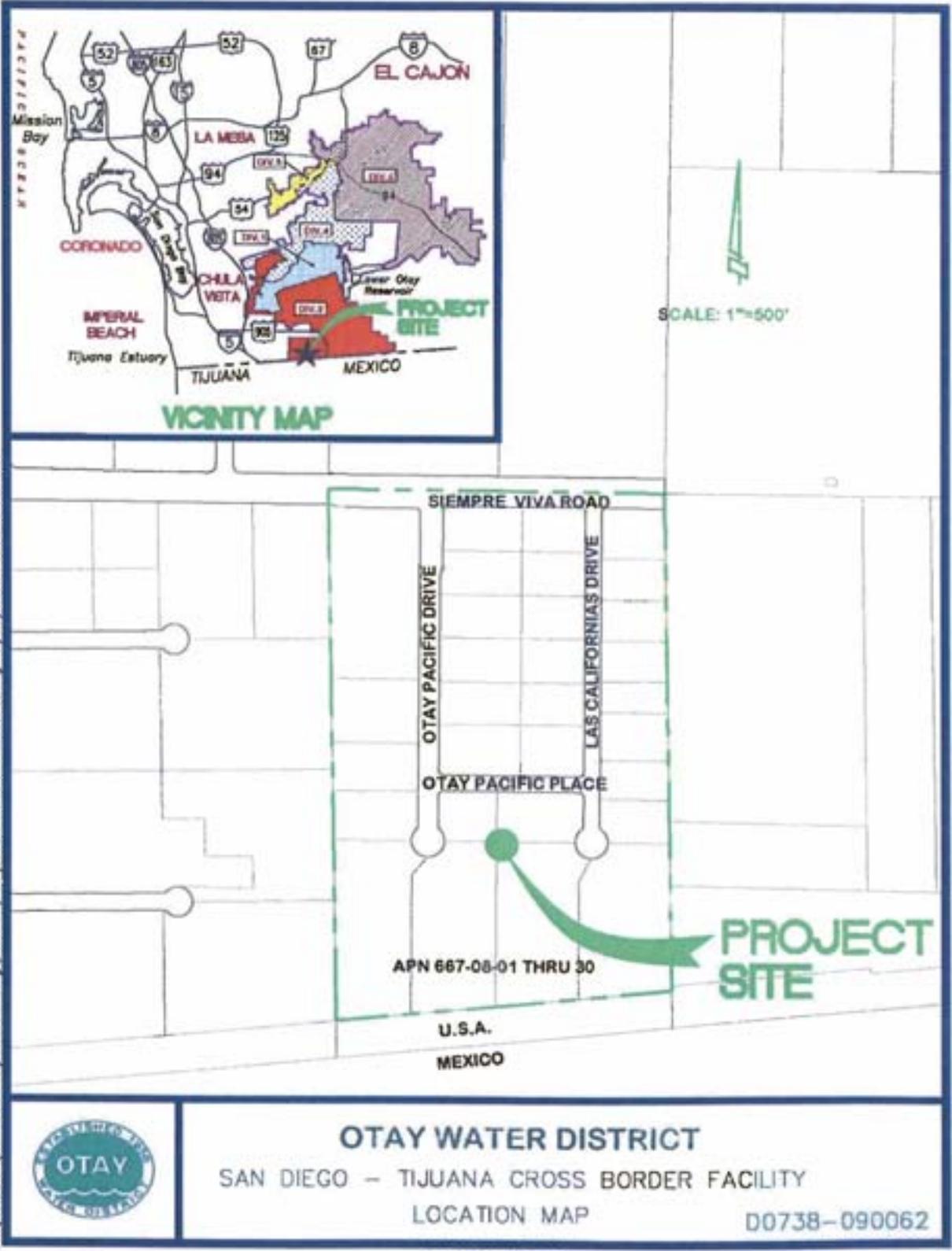
COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee reviewed this item at a meeting held on January 18, 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.

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OTAY WATER DISTRICT
 SAN DIEGO - TIJUANA CROSS BORDER FACILITY
 LOCATION MAP

D0738-090062

EXHIBIT A

EXHIBIT B

Background Information

The Otay Water District (District) prepared the December 2010 Water Supply Assessment Report (WSA Report) for the San Diego-Tijuana Cross Border Facility (Cross Border Project) development proposal at the request of the City of San Diego (City). The City's WSA request letter dated December 10, 2010 was received by the District on December 14, 2010 so the 90 day deadline for the District to provide the Board approved WSA Report to the City ends March 13, 2011. The Otay-Tijuana Ventures, LLC submitted an entitlement application to the City for the development of the Cross Border Project.

The Cross Border 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 Cross Border Project entitlement approval is independent of the City's eventual adoption of land use Scenario 3B to their planned update to the Otay Mesa Community Plan (OMCP). The OMCP Update as planned will introduce a new land use designation known as International Business and Trade (IBT). The IBT land use designation combines the current Business Park and Light Industrial land use designations and allows for single and multiple tenant office, research and development, light manufacturing, and storage and distribution uses. The City is proposing to apply the IBT designation to portions of land adjacent to the border, other ports of entry, and lands in transition to higher intensity industries. Due to delays in the OMCP Update preparation and hearing schedule, Otay - Tijuana Ventures, LLC entitlement application includes a separate Community Plan Amendment (CPA) and a Planned Development Permit (PDP) to allow for the development of the Cross Border Project hotels, retail centers, cargo facility, parking garage, cross border terminal facility, and the industrial lots prior to adoption of the OMCP Update. The IBT land use will be applied to the industrial lots with this entitlement application.

The WSA Report for the Cross Border Project has been prepared by the District in consultation with PBS&J, the Water Authority, and the City 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 December 2010 WSA Report for the Cross Border Project.

The Otay - Tijuana Ventures, LLC proposed development concept for the approximately 63.8 acre Cross Border Project consists of a combination of land uses including retail space, industrial lots, two 150-room hotels, a cargo facility, a parking garage, and a cross-border terminal facility providing secure air-passenger access to the passenger terminals of the General Abelardo L. Rodriguez International Airport.

This entitlement demand for the Cross Border Project with the IBT land use will increase the expected demand to approximately 84,800 gpd or about 95 acre feet per year (ac-ft/yr). This is 31,100 gpd or 35 ac-ft/yr higher than the demand estimate in the District's 2009 WRMP.

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 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:

- A Federal Court ruling that sets operational limits on Sacramento-San Joaquin Delta pumping from December to June to protect the Delta smelt. 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.

For Fiscal Year 2006 the Water Authority's preferential right was 16.56% of Metropolitan's supply. So Metropolitan could theoretically take an 8.5% 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. This reduction would more than compensate for the Metropolitan predicted 22% reduction in water supply available from the State Water Project, which could be an overall 2% cutback in Metropolitan total supplies in 2025.

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 Cross Border 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 Cross Border Project WSA Report does not in any way guarantee water supply to the Cross Border 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 Cross Border 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 Cross Border 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. Staff is also working with the City of San Diego on a WSA for Scenario 3B Otay Mesa Community Plan Update. 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 Cross Border 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 Cross Border 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 Cross Border Project and the existing and other planned development projects within the District.

Accordingly, after approval of a WSA Report for the Cross Border 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 Cross Border Project as a water supply assessment report consistent with the requirements of the legislation enacted by SB 610. The City, as lead agency under the CEQA for the Cross Border 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 Cross Border Project.

EXHIBIT C



OTAY WATER DISTRICT

WATER SUPPLY ASSESSMENT REPORT
for the
San Diego - Tijuana Cross Border Facility

Prepared by:

Bob Kennedy, P.E.
Associate Civil Engineer
Otay Water District
in consultation with
PBS&J
and
San Diego County Water Authority

December 2010

**Otay Water District
Water Supply Assessment Report
December 2010**

San Diego - Tijuana Cross Border Facility

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Appendices

Appendix A: San Diego – Tijuana Cross Border Facility Vicinity Map

Appendix B: San Diego – Tijuana Cross Border Facility Development Plan

Otay Water District Water Supply Assessment Report December 2010

San Diego – Tijuana Cross Border Facility

Executive Summary

The Otay Water District (WD) prepared this Water Supply Assessment Report (WSA Report) at the request of the City of San Diego (City) for the San Diego - Tijuana Cross Border Facility (Cross Border) Project. Otay - Tijuana Ventures, LLC submitted an entitlement application to the City for the development of the Cross Border Project.

The Cross Border 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 Otay - Tijuana Ventures, LLC proposed development concept for the approximately 63.8 acre Cross Border Project consists of a combination of land uses including retail space, industrial lots, two 150-room hotels, a cargo facility, a parking garage, and a cross-border terminal facility providing secure air-passenger access to the passenger terminals of the Tijuana Rodriguez International Airport.

The Cross Border Project entitlement approval is independent of the City's eventual adoption of land use Scenario 3B to their planned update to the Otay Mesa Community Plan (OMCP). The OMCP Update as planned will introduce a new land use designation known as International Business and Trade (IBT). The IBT land use designation combines the current Business Park and Light Industrial land use designations and allows for single and multiple tenant office, research and development, light manufacturing, and storage and distribution uses. The City is proposing to apply the IBT designation to portions of land adjacent to the border, other ports of entry, and lands in transition to higher intensity industries. Due to delays in the OMCP Update preparation and hearing schedule, Otay - Tijuana Ventures, LLC entitlement application includes a separate Community Plan Amendment (CPA) and a Planned Development Permit (PDP) to allow for the development of the Cross Border Project hotels, retail centers, cargo facility, parking garage, cross border terminal facility, and the industrial lots prior to adoption of the OMCP Update. This will include the new IBT land use designation on the industrial lots.

The expected demands for the Cross Border Project is 84,800 gallons per day (gpd) or about 95 acre feet per year (ac-ft/yr). This is 31,100 gpd or 35 ac-ft/yr higher than the demand estimate in the District's 2009 Water Resource Master Plan (WRMP). Otay - Tijuana Venture retained PBS&J to update the 2009 WRMP to include the entitlement densities and intensities of development proposed with the Otay Mesa Community Plan Update. The District's 2009 WRMP updated November, 2010 now includes the 95 ac-ft/yr demand estimate in the District's demand projections that was forwarded to the Water Authority for inclusion in their UWMP update. The projected recycled water demand for the proposed Cross Border Project is approximately 9,900 gpd or 11 ac-ft/yr, representing about 11% of the total Cross Border Project water demand.

The Cross Border 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 11 ac-ft/yr. The Otay WD 2009 WRMP and 2005 Urban Water Management Plan (UWMP) anticipated that the Cross Border 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. As a wholesale supplier, the Water Authority did not receive the extension and is currently required to submit its UWMP to DWR by December 31, 2010. However, Senate Bill 1478 corrected language in SBX 7-7 to grant wholesale suppliers the same 6-month extension on their UWMPs.

The District's 2009 WRMP updated November, 2010 now includes the 95 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. SANDAG and the City of San Diego have also confirmed the land use Scenario 3B of the Otay Mesa Community Plan Update that forms the basis for the Cross Border Project entitlement was included in the Series 12 update that has been forwarded to both Metropolitan and the Water Authority for their future UWMP updates. The Series 12 update was also made available to Metropolitan for their use to develop demand projections in to 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 unanticipated demands such as those related to the densification of the Cross Border 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 Cross Border 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 Cross Border 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 Cross Border Project has been prepared by the Otay WD in consultation with PBS&J, the Water Authority, and the City 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 City 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 Cross Border Project development concept exceeds the thresholds contained in the legislation enacted by SB 610 and therefore requires preparation of a WSA report. The Cross Border 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 Cross Border 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 Cross Border 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 Cross Border 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 Cross Border 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 Cross Border 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 Cross Border 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 Cross Border Project WSA Report may be incorporated into the California Environmental Quality Act (CEQA) compliance process for the Cross Border Project as a water supply assessment report consistent with the requirements of the legislation enacted by SB 610. The City, as lead agency under CEQA for the Cross Border 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 Cross Border Project.

Section 1 - Purpose

Otay - Tijuana Ventures, LLC submitted an entitlement application to the City of San Diego (City) for the development of the San Diego - Tijuana Cross Border Facility (Cross Border) Project. The City requested that the Otay Water District (WD) prepare a Water Supply Assessment (WSA) Report for the Cross Border Project. The Cross Border Project description is provided in Section 3 of this WSA Report.

This WSA Report for the Cross Border Project has been prepared by the Otay WD in consultation with PBS&J, the San Diego County Water Authority (Water Authority), and the City 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 Cross Border Project development concept exceeds the thresholds contained in the legislation enacted by SB 610 and therefore requires preparation of a WSA report. The Cross Border 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 Cross Border 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 City in its evaluation of the Cross Border Project under the CEQA approval process procedures.

Section 2 - Findings

The Otay WD prepared this WSA Report at the request of the City for the Cross Border Project. Otay - Tijuana Ventures, LLC submitted an entitlement application to the City for the development of the Cross Border Project.

The Cross Border 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 Cross Border Project entitlement approval is independent of the City's eventual adoption of land use Scenario 3B to their planned update to the Otay Mesa Community Plan (OMCP). The OMCP Update as planned will introduce a new land use designation known as International Business and Trade (IBT). The IBT land use designation combines the current Business Park and Light Industrial land use designations and allows for single and multiple tenant office, research and development, light manufacturing, and storage and distribution uses. The City is proposing to apply the IBT designation to portions of land adjacent to the border, other ports of entry, and lands in transition to higher intensity industries. Due to delays in the OMCP Update preparation and hearing schedule, Otay - Tijuana Ventures, LLC entitlement application includes a separate Community Plan Amendment (CPA) and a Planned Development Permit (PDP) to allow for the development of the Cross Border Project hotels, retail centers, cargo facility, parking garage, cross border terminal facility, and the industrial lots prior to adoption of the OMCP Update. This will include the new IBT land use designation on the industrial lots.

Upon approval of the project, the IBT land use will increase the expected demand to approximately 84,800 gpd or about 95 acre feet per year (ac-ft/yr). This is 31,100 gpd or 35 ac-ft/yr higher than the demand estimate in the District's 2009 WRMP. Otay - Tijuana Venture retained PBS&J to update the 2009 WRMP to include the entitlement densities and intensities of development proposed with the Otay Mesa Community Plan Update. The District's 2009 WRMP updated November, 2010 now includes the 95 ac-ft/yr demand estimate in the District's demand projections that was forwarded to the Water Authority for inclusion in their UWMP update. The projected recycled water demand for the proposed Cross Border Project is approximately 9,900 gpd or 11 ac-ft/yr, representing about 11% of the total Cross Border Project water demand.

The Cross Border 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 11 ac-ft/yr. The Otay WD 2009 WRMP updated November, 2010 and 2005 Urban Water Management Plan (UWMP) anticipated that the land area to be utilized for the Cross Border Project would use both potable and recycled water.

In evaluating the availability of sufficient water supply, the Cross Border 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 Cross Border 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 Cross Border 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 Cross Border 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 Cross Border Project is located within the Otay Mesa Community Plan (OMCP) area in the City of San Diego. Refer to Appendix A for a vicinity map of the proposed Cross Border Project. The Cross Border Project is bounded by Siempre Viva Road to the north and the U.S./Mexico international border to the south. The Cross Border 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 located within the municipal boundaries of the City and subject to the City's land use jurisdiction, the Otay WD is the potable and recycled water purveyor.

The Cross Border Project entitlement approval is independent of the City’s eventual adoption of land use Scenario 3B to their planned update to the Otay Mesa Community Plan (OMCP). The OMCP Update as planned will introduce a new land use designation known as International Business and Trade (IBT). The IBT land use designation combines the current Business Park and Light Industrial land use designations and allows for single and multiple tenant office, research and development, light manufacturing, and storage and distribution uses. The City is proposing to apply the IBT designation to portions of land adjacent to the border, other ports of entry, and lands in transition to higher intensity industries. Due to delays in the OMCP Update preparation and hearing schedule, Otay - Tijuana Ventures, LLC entitlement application includes a separate Community Plan Amendment (CPA) and a Planned Development Permit (PDP) to allow for the development of the Cross Border Project hotels, retail centers, cargo facility, parking garage, cross border terminal facility, and the industrial lots prior to adoption of the OMCP Update. This will include the new IBT land use designation on the industrial lots.

The City’s OMCP Update is currently in the development planning process phase and is scheduled for adoption in 2011. The OMCP area is a dynamic and rapidly developing area of the City. The OMCP Update will establish goals and objectives for future development that will implement the vision and policies while enhancing the image of the Otay Mesa.

The proposed development concept for the approximately 63.8 acre Cross Border Project is planned as a combination of land uses as shown in Table 1.

Table 1
Cross Border Project Proposed Land Uses

Project Element	Land Use	Gross Area	Dwelling Units
Cross Border Facility (73,500 sq. ft.)	Industrial/Commercial	9.1 acres	0
Parking Garage	Industrial/Commercial	9.0 acres	0
Cargo	Industrial/Commercial	5.0 acres	0
International Business & Trade	Industrial	17.1 acres	0
Retail Shops (78,500 sq. ft.)	Commercial	5.2 acres	0
Hotels (2)	Commercial	10.1 acres	300 Rooms
Streets/Detention Basin	Public Facility	8.3 acres	0
	Totals	63.8 acres	300 Rooms

Source: Latitude 33, San Diego - Tijuana Cross Border Facility Lot Area Exhibit, September 24, 2009 (Appendix B)

The Cross Border Project is on approximately 63.8 acres and is planned to include retail space, industrial lots, two 150-room hotels, a cargo facility, a parking garage, and a cross-

border terminal facility providing secure air-passenger access to the passenger terminals of the Tijuana Rodriguez International Airport. The terminal facility does not plan to utilize cooling towers for air conditioning purposes. Additionally, the site proposed to develop two 150-room hotels and approximately 78,500 square feet of retail space that will serve the crossing facility customer needs. The remaining industrial lots do not include any specific development plans. As each of these lots develops in the future, it would be subject to the project approval and permitting processes of the City and Otay WD. Refer to Appendix B for the proposed development plan of the Cross Border Project.

The City has discretionary authority on land use decisions for the Cross Border Project and can establish actions and/or permit approval requirements. The projected potable and recycled water demands associated with the Cross Border Project have considered the anticipated City discretionary actions and/or permit approvals and are incorporated into and used in this WSA Report. The water demands for the proposed Cross Border 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 the vast majority 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 Water Resources Master Plan (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 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 land use Scenario 3B of the Otay Mesa Community Plan Update 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 Cross Border Project as it is an industrial subdivision.

In evaluating the availability of sufficient water supply, the Cross Border 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 future underlying land use designation for the Cross Border Project industrial lots will be the IBT land use designation, which combines uses permitted in both the Business Park and light industrial designations. The designation allows for single- and multi-tenant office, research and development, light manufacturing, and storage and distribution uses. Because there is no water demand rate established for IBT in the Series 11 employment data, City staff established an employee density of 30 employees per acre and a water demand factor of 60 gpd per employee for a demand of 1,800 gpd per acre. The IBT Rate assumes a mixture of 1/3 heavy industrial, 1/3 light industrial, and 1/3 industrial parks.

Given the unusual nature of the terminal building, the development of reasonable and supportable estimates of water demand in this instance merits a customized approach. After carefully considering the proposed design and function of the facility, including its passenger counts and employee counts, water use for the terminal building is evaluated on a per passenger and per employee based projection of water demands.

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.

Cross Border 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 Cross Border Project are shown in Table 4 and Table 5 respectively. The projected potable water demand is 84,800 gpd, or about 95 ac-ft/yr. The projected recycled water demand is 9,900 gpd, or about 11 ac-ft/yr, representing about 11% of the total Cross Border Project demand.

**Table 4
 Cross Border Facility Project Projected Potable
 Water Annual Average Demands**

Location (Land Use)	Gross Acreage	Potable Water Factor	Net Potable Acreage/Units	Unit Rate	Average Demand
Cross Border Facility (73,500 sq. ft. of Industrial/Commercial) ¹	9.1	--			
Passengers			6,500 persons	2.1 gpd/person	13,700 gpd
Employees			69 persons	23 gpd/person	1,600 gpd
Parking Garage (Industrial/Commercial) ²	9.0	100%	9.0 ac	45 gpd/ac	400 gpd
Cargo (Industrial/Commercial)	5.0	95%	4.8 ac	893 gpd/ac	4,300 gpd
Industrial Lots ³	17.1	95%	16.8 ac	1,800 gpd/ac	30,300 gpd
Retail Shops (78,500 sq. ft. of Commercial) ⁴	5.2	80%	4.2 ac	1,785 gpd/ac	7,500 gpd
Hotels (Commercial) ⁵	10.1	--	300 rooms	90 gpd/room	27,000 gpd
Streets/Detention Basin (Public Facility)	8.3	--	--	--	--
Totals	63.8 acres				84,800 gpd

¹ The employee unit use factor based on scheduled air transportation employee water use from the “Commercial and Industrial End Uses of Water” report by the American Wastewater Association Research Foundation.

² Parking garage demands assumed to be equivalent to 5% of industrial land use unit demands.

³ Industrial demands use IBT unit use factors.

⁴ Commercial demands are per criteria from the 2009 WRMP.

⁵ Hotel indoor water use based on industry references from the American Wastewater Association Research Foundation “Commercial and Industrial End Uses of Water”, 2000.

The Cross Border 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 11 ac-ft/yr. The 2009 WRMP and 2005 UWMP anticipated that the Cross Border Project site would use both potable and recycled water.

Table 5
Cross Border Project Projected Recycled
Water Average Demands

Location (Land Use)	Gross Acreage	Recycled Water Factor	Net Recycled Acreage	Unit Rate	Average Demand
Cross Border Facility	9.1 acres	5%	0.46 acres	2,155 gpd/acre	1,000 gpd
Parking Garage	9.0 acres	0%	0.00 acres	2,155 gpd/acre	0 gpd
Cargo	5.0 acres	5%	0.25 acres	2,155 gpd/acre	500 gpd
Industrial Lots	17.1 acres	5%	0.85 acres	2,155 gpd/acre	1,800 gpd
Retail Shops	5.2 acres	20%	1.04 acres	2,155 gpd/acre	2,200 gpd
Hotels	10.1 acres	20%	2.02 acres	2,155 gpd/acre	4,400 gpd
Streets/Detention Basin	8.3 acres	--	--	--	--
Totals	63.8 acres				9,900 gpd

The Otay WD 2009 WRMP projected a potable water demand for the project site based on land uses prior to the IBT designation. Using the Otay WD unit demand factors, the projected potable water demand is approximately 53,700 gpd, or approximately 60 ac-ft/yr. Assuming that all supply for the Cross Border Project would be from imported water resources, the projected potable water demand of the Cross Border Project exceeds the imported water planned supply to the site by approximately 31,100 gpd, or approximately 35 ac-ft/yr as summarized in Table 6. The projected recycled water demand for the proposed Cross Border Project is approximately 9,900 gpd or 11 ac-ft/yr, representing about 10% of the total Cross Border Project water demand.

Table 6
Cross Border Facility Project Projected Potable
Water Demand/Supply Comparison

Demand/Supply Projection	Water Demand/Supply	
	Gallons per day	Acre feet per year
Cross Border Project Projection	90,400	95
Otay WD 2009 WRMP Projection	53,700	60
Difference	36,700	35

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 Supervisor 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 Cross Border Project will implement the CUWCC Best Management Practices for water conservation such as installation of ultra low flow toilets, development of a water conservation plan, and potential beneficial use of recycled water, all of which are typical requirements of development projects within the City 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 the majority 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 2010. 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 increase in 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. The SOS determines if Metropolitan's current system is capable of delivering the supplies to meet the demands shown in its 2004 IRP Update.

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. Based on a nine-year lead time requested by Metropolitan, a decision to proceed with Pipeline 6 would need to be communicated to Metropolitan by 2009. 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 FY 2006 preferential right is 16.46% of Metropolitan's supply, while the Water Authority accounted for approximately 25% of Metropolitan's water sales. 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 is \$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 neatly complete on the AAC lining project with construction to be 100 percent complete in 2010. 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(b1). 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 Urban Water Management Plan updated November, 2010 and the revised 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 essentially 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 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 acquired all the permits for the construction of 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 Agreement through the typical planning, environmental approval, design, and construction processes.

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 then 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 Rey 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 2008 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. The steps necessary to put such a well into production are as follows:

- Review the results of available data, tests, reports, etc.
- Reevaluate the cost effectiveness of a production well system.
- Proceed with the planning, environmental compliance, permitting, design, and construction of a groundwater well production system.

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 an 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 Cross Border 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 Cross Border 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 Cross Border 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 Cross Border 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 Cross Border 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 Cross Border 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.

Table 10 presents the forecasted balance of water demands and supplies for the Otay WD service area under single dry year conditions. 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. Multiple dry year conditions for periods ending 2020, 2025, and 2030 are provided in the Otay WD revised 2005 UWMP. The projected potable

demand and supply requirements shown the Tables 9, 10, and 11 are from the Otay WD revised 2005 UWMP adjusted to reflect the additional 35 ac-ft/yr for the Cross Border Project and groundwater supply development of 600 ac-ft/yr by the Otay WD. 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
Cross Border Demand Increase	0	35	35	35	35
Total Demand	49,812	57,068	65,264	72,889	82,440
Supplies					
Water Authority Supply	45,772	51,784	59,234	65,995	74,543
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	57,068	65,264	72,889	82,440
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 as from the Otay WD revised 2005 UWMP adjusted to reflect the additional 38 ac-ft/yr for the Cross Border Facility Project and groundwater supply development of 600 ac-ft/yr by the Otay WD.

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
Cross Border Demand Increase	0	38	38	38	38
Total Demand	53,299	61,063	69,833	77,992	88,211
Supplies					
Water Authority Supply	49,253	55,779	63,803	71,098	80,314
Recycled Water Supply	4,040	4,684	5,430	6,294	7,297
Otay WD Groundwater Supply	0	600	600	600	600
Total Supply	53,299	61,063	69,832	77,992	88,211
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 the additional 38 ac-ft/yr for the Cross Border Project and 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
Cross Border Demand Increase	0	38	38	38	38
Total Demand	54,844	56,427	57,973	59,518	61,063
Supplies					
Water Authority Supply	50,8048	51,143	51,943	52,624	53,168
Recycled Water Supply	4,040	4,684	5,430	6,294	7,297
Otay WD Groundwater Supply	0	600	600	600	600
Total Supply	54,844	56,427	57,973	59,518	61,063
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 Cross Border 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 Cross Border 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 Cross Border 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

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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.

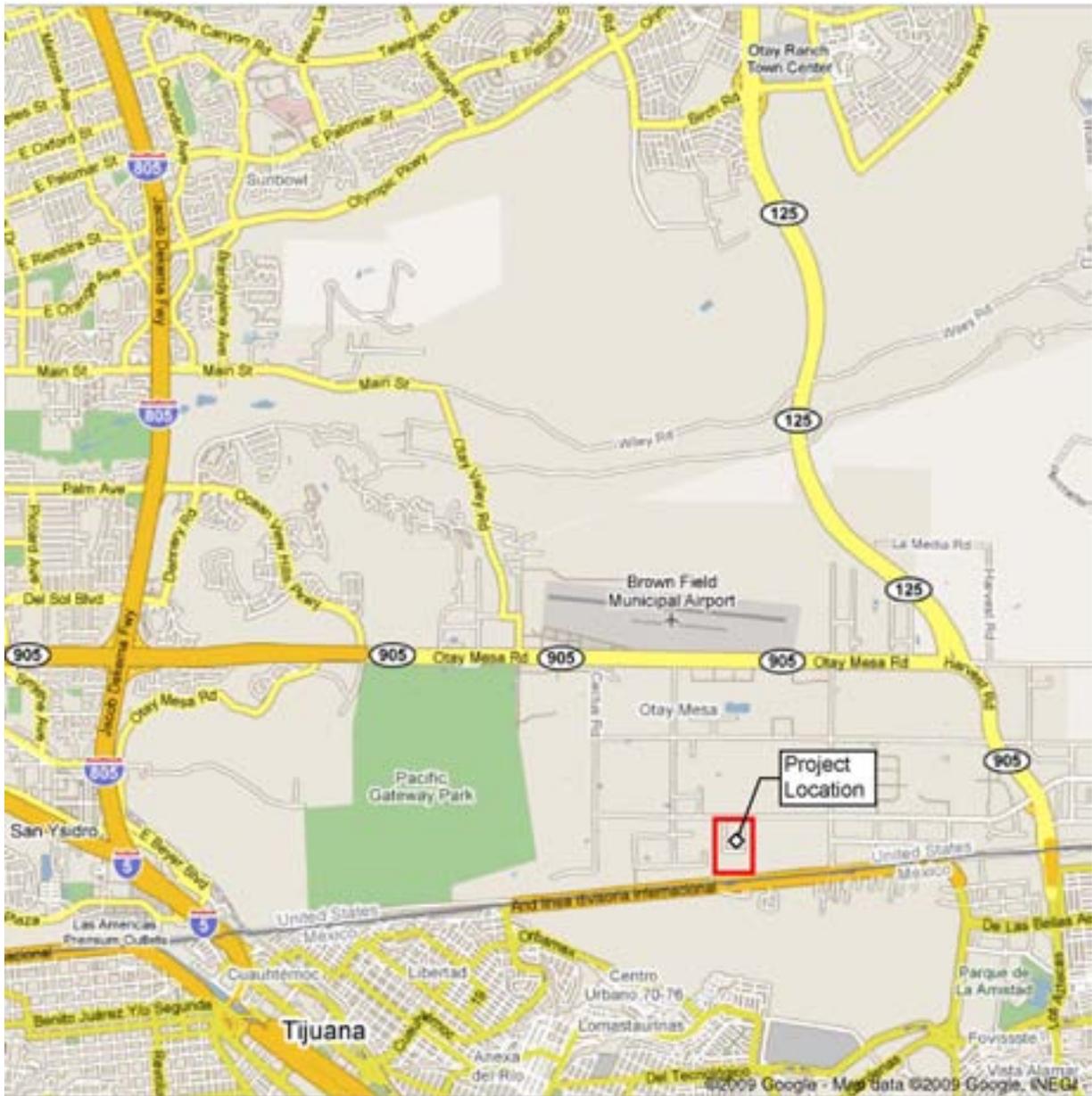
Agreement between the San Diego County Water Authority and Otay Water District regarding Implementation of the East County Regional Treated Water Improvement Program.

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.

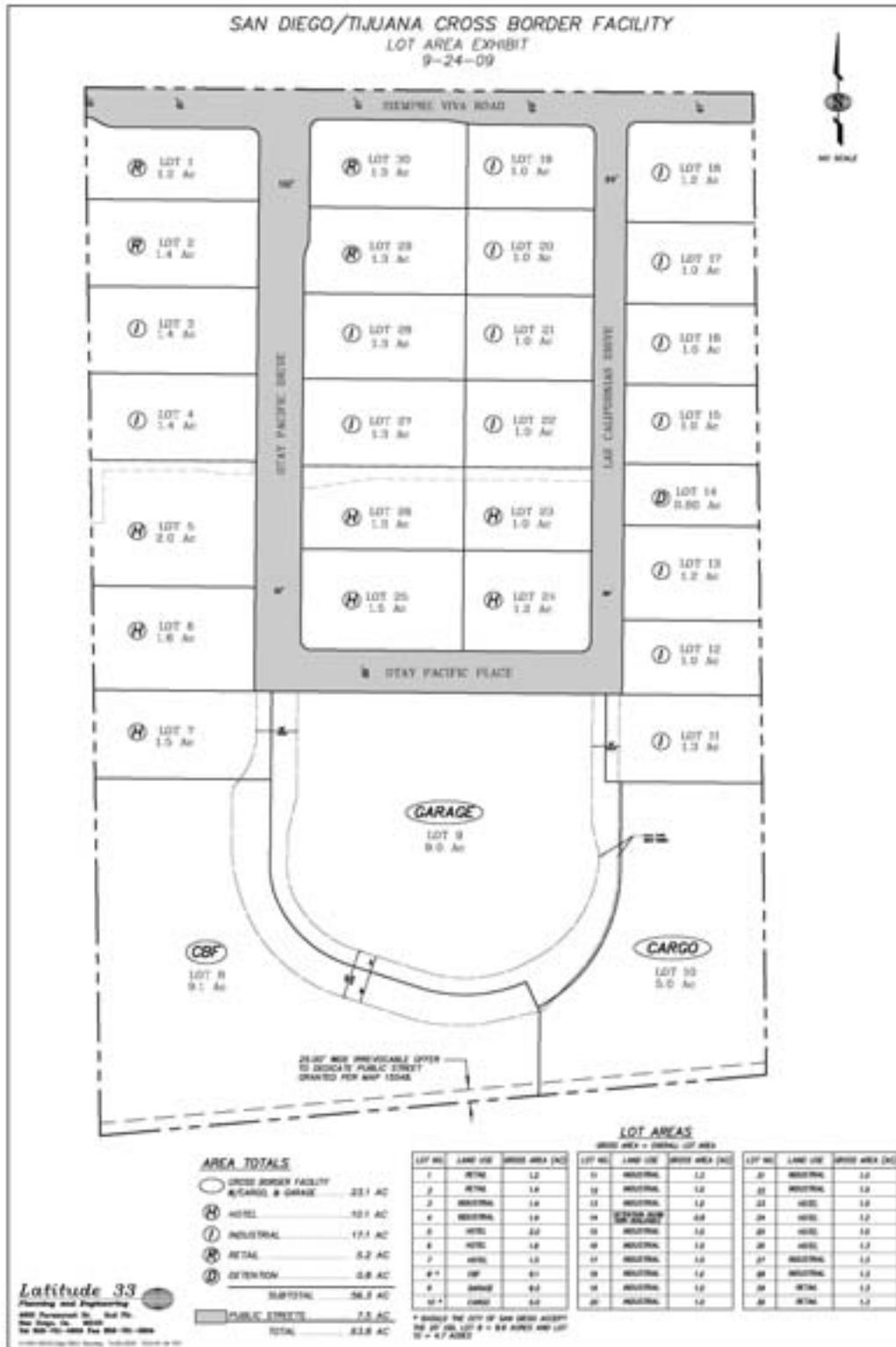
Agreement between the Otay Water District and the City of San Diego for Purchase of Reclaimed Water from the South Bay Water Reclamation Plant.

Appendix A

San Diego – Tijuana Cross Border Facility Vicinity Map

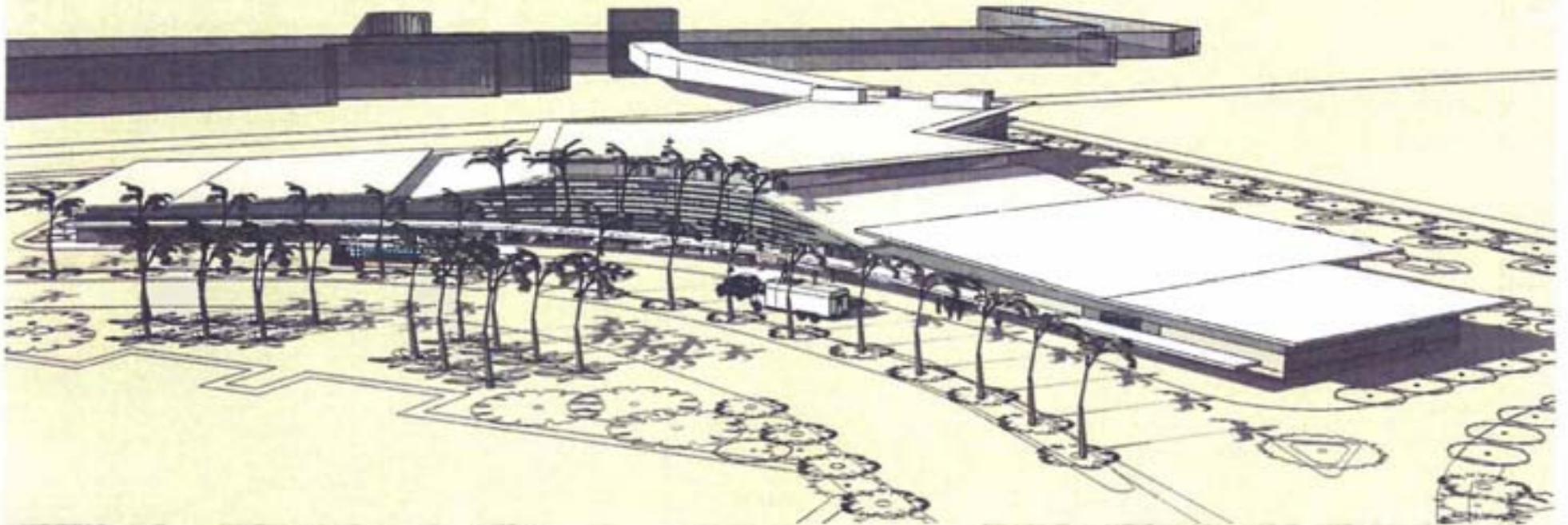


Appendix B San Diego – Tijuana Cross Border Facility Development Plan



Otay Water District Board of Directors Meeting

February 2, 2011



Water Supply Assessment Report for the San Diego-Tijuana Cross Border Facility SB 610 Compliance



© 2010 Geog
© 2010 HEC

Integrated Facilities Center

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 Cross Border project for it is an industrial subdivision.

Cross Border project Water Supply Assessment Report

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

Cross Border Project Description

- **New International Business and Trade land use.**
- **Approximately 63.8 acres.**



Cross Border Project Description

Land Use:

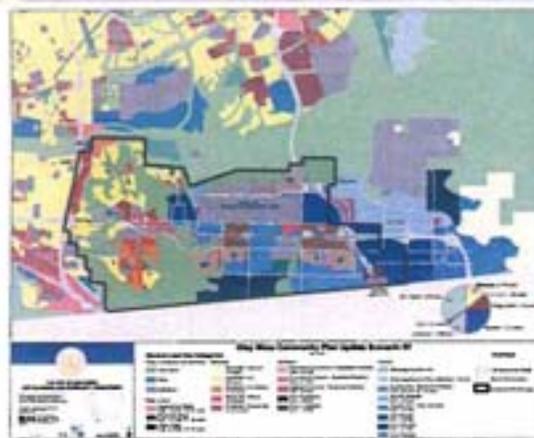
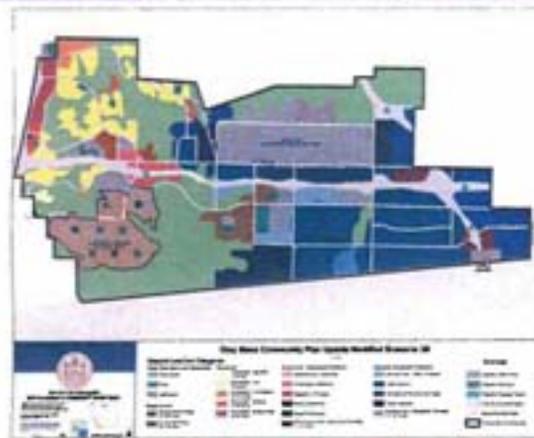
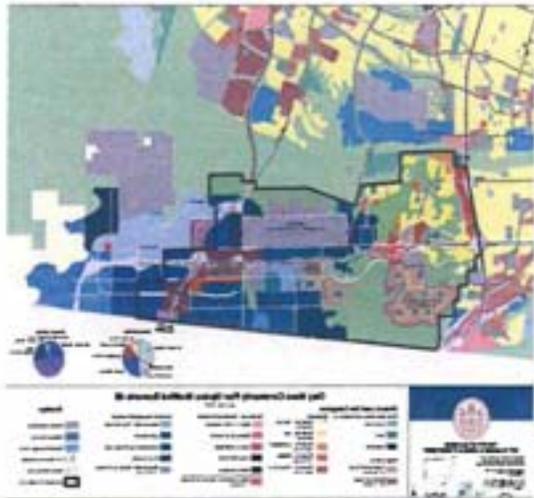
- Two 150 Room Hotels
- 78,500 Sq. Ft. Retail
- Parking Garage
- Cargo Facility and Cross Border Terminal Facility (4.5 Million People per Year)

Demand:

- 95 AFY Potable
- 11 AFY Recycled (11 % of demand)
- Increase in Potable Demand: 35 AFY above current approved land use



Image U.S. Geological Survey



SANDAG
BOARD OF DIRECTORS
FEBRUARY 16, 2010

AGENDA ITEM NO. 16
2010 REGIONAL URBAN WATER MANAGEMENT PLAN

2010 REGIONAL URBAN WATER MANAGEMENT PLAN (The Number 17000)

Introduction:
The Regional Planning Commission (RPC) has reviewed the 2010 Regional Urban Water Management Plan (UWMP) and has approved it for the Board of Directors. The RPC is pleased to see the progress that has been made in the development of the 2010 UWMP and the progress that has been made in the implementation of the plan. The RPC is pleased to see the progress that has been made in the implementation of the plan. The RPC is pleased to see the progress that has been made in the implementation of the plan.

Background:
The 2010 Regional Urban Water Management Plan is one of the first steps in the development of the 2010 Regional Urban Water Management Plan (UWMP) and is a key component of the 2010 UWMP. The 2010 UWMP is a key component of the 2010 UWMP and is a key component of the 2010 UWMP. The 2010 UWMP is a key component of the 2010 UWMP and is a key component of the 2010 UWMP.

SANDAG

Otay Water District
Water Resources Master Plan Update

APRIL 2010

OTAY

Approved by Otay Water District
on February 3, 2010

INTEGRATED WATER RESOURCES PLAN
Report No. 1234
Final Draft

2010
UPDATE

DRAFT

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

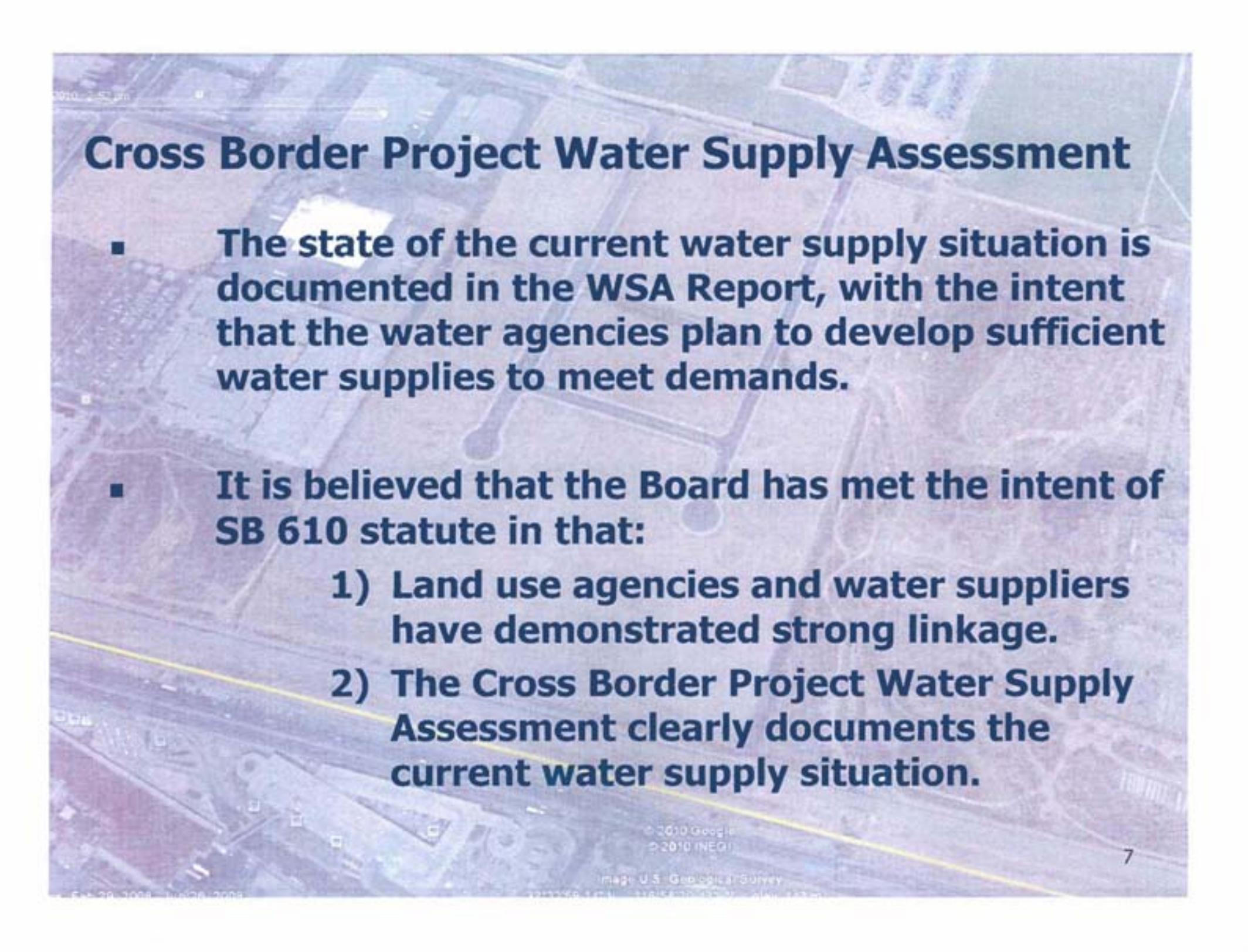
2010 REGIONAL URBAN WATER MANAGEMENT PLAN

2005

San Diego County Water Authority

Cross Border 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.**

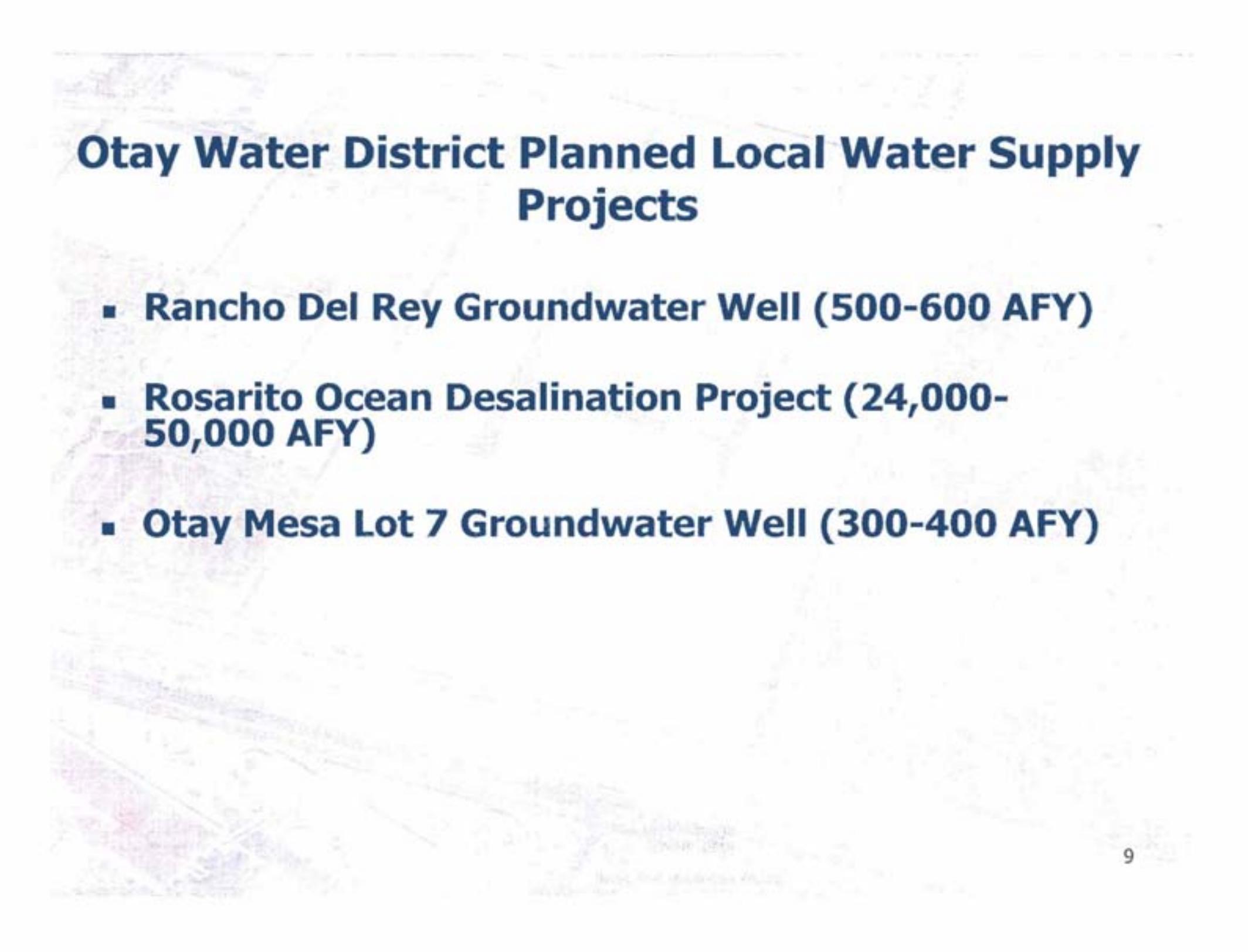


Cross Border Project Water Supply Assessment

- **The state of the current water supply situation is documented in the WSA Report, with the intent that the water agencies plan to develop sufficient water supplies to meet demands.**
- **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 Cross Border Project Water Supply Assessment clearly documents the current water supply situation.**

Cross Border Project Water Supply Assessment

- **Based on existing documentation, the WSA Report demonstrates and documents that sufficient water supplies are planned for and are intended to be acquired.**
- **The WSA Report documents the planned water supply projects and the actions necessary to develop the supplies.**
- **Water supply for the Cross Border 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.**



Otay Water District Planned Local Water Supply Projects

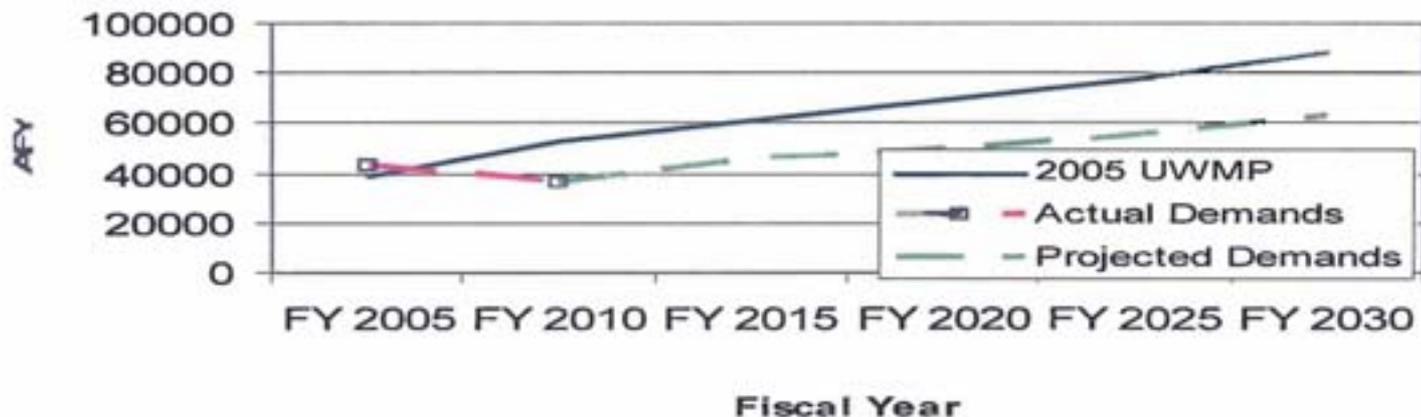
- **Rancho Del Rey Groundwater Well (500-600 AFY)**
- **Rosarito Ocean Desalination Project (24,000-50,000 AFY)**
- **Otay Mesa Lot 7 Groundwater Well (300-400 AFY)**

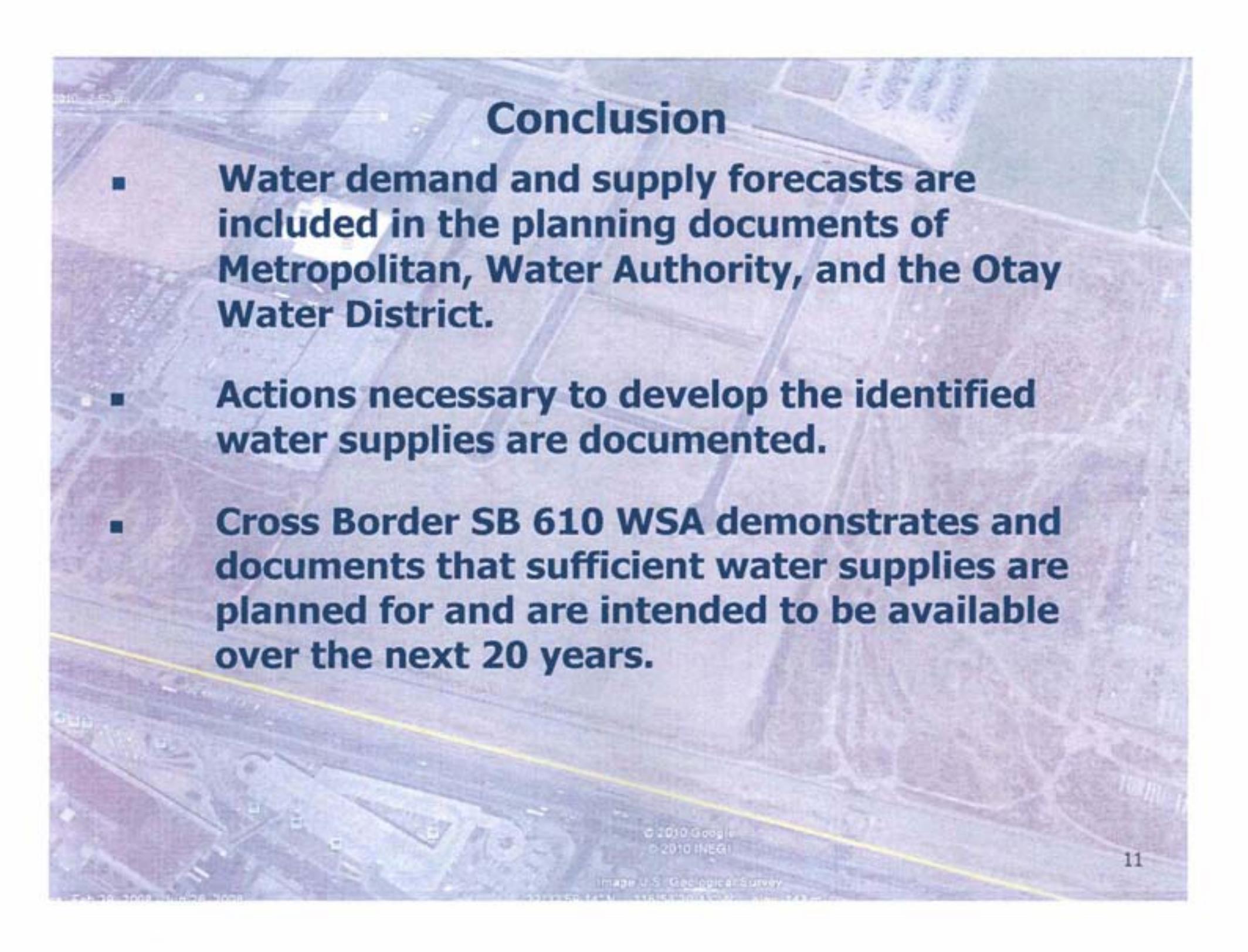
Projected Balance of Potable Water Supplies and Demands Normal Year Conditions (AFY)

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
Cross Border Demand Increase	0	35	35	35	35
Total Demand	49,812	57,068	65,264	72,889	82,440
Supplies					
Water Authority Supply	45,772	51,784	59,234	65,995	74,543
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	57,068	65,264	72,889	82,440

Source: Table 9 Cross Border Facility WSA Report (From Otay WD 2005 UWMP Update).

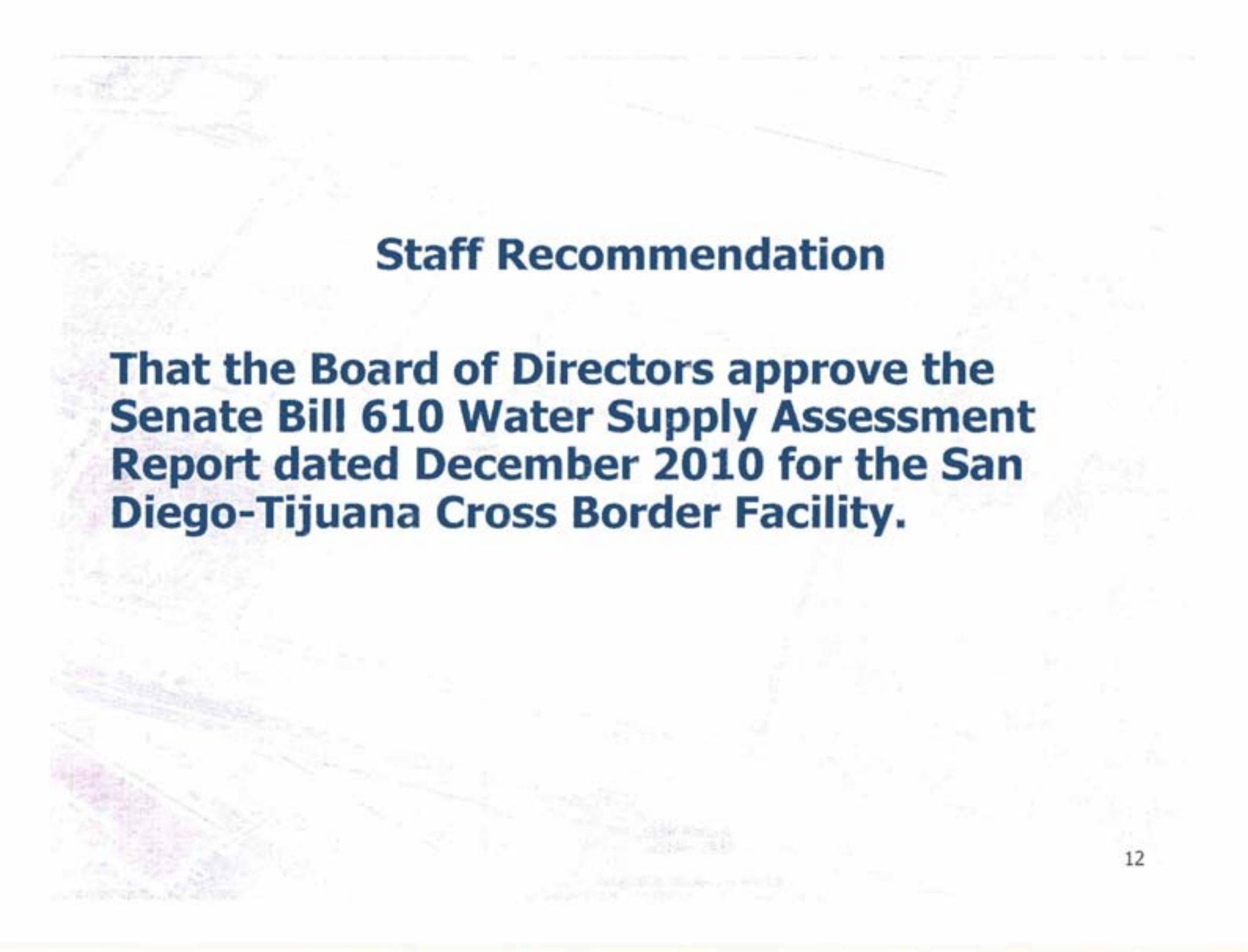
Actual Demand vs. 2005 UWMP



An aerial satellite image of a landscape, likely a water project area, with a prominent yellow line crossing the scene diagonally from the bottom left to the top right. The terrain is a mix of brownish and greenish hues, suggesting agricultural or undeveloped land. There are some structures and roads visible in the upper left and lower left corners.

Conclusion

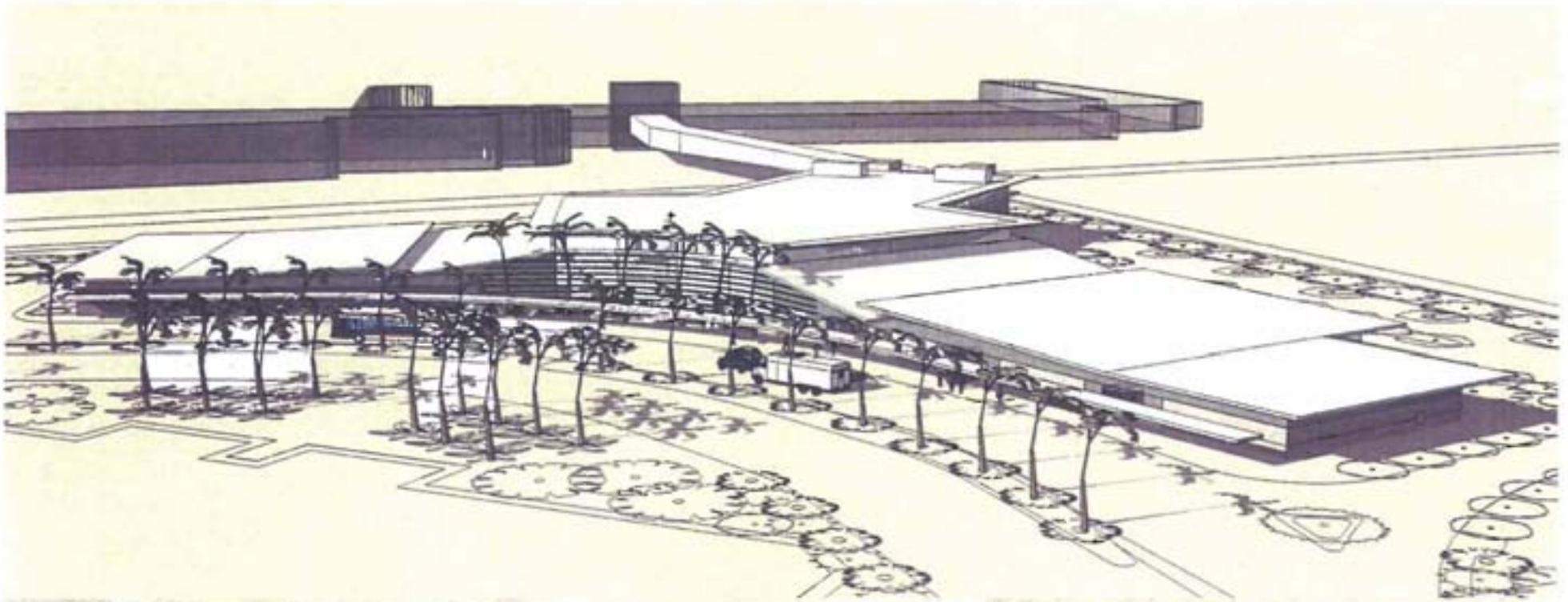
- **Water demand and supply forecasts are included in the planning documents of Metropolitan, Water Authority, and the Otay Water District.**
- **Actions necessary to develop the identified water supplies are documented.**
- **Cross Border SB 610 WSA demonstrates and documents that sufficient water supplies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

A faint, light-colored map of California is visible in the background of the slide. The map shows the state's outline and some internal regional boundaries. The text is overlaid on this map.

Staff Recommendation

That the Board of Directors approve the Senate Bill 610 Water Supply Assessment Report dated December 2010 for the San Diego-Tijuana Cross Border Facility.

Questions?



Water Supply Assessment Report for the San Diego-Tijuana Cross Border Facility SB 610 Compliance



Quality Assurance Approval Sheet

Subject: Approval of Water Supply Assessment Report
(December 2010) for the San Diego-Tijuana Cross
Border Facility

Project No.: D0738-090062

Document Description: Staff Report for February 2, 2011 Board Meeting

Author:	 Signature	<u>1/11/11</u> Date
	<u>Bob Kennedy</u> Printed Name	
QA Reviewer:	 Signature	<u>1/11/11</u> Date
	<u>Gary Silverman</u> Printed Name	
Manager:	 Signature	<u>1/11/11</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:	February 2, 2011
SUBMITTED BY:	Daniel Kay <i>DK</i> Associate Civil Engineer	PROJECT/ SUBPROJECT:	S2023-001103 DIV. 5 NO.
	Ron Ripperger <i>✓</i> Engineering Manager		
APPROVED BY: (Chief)	Rod Posada <i>[Signature]</i> Chief, Engineering		
APPROVED BY: (Asst. GM):	Manny Magaña <i>[Signature]</i> Assistant General Manager, Engineering and Operations		
SUBJECT:	Approval of a Reimbursement Agreement Between Otay Water District and the County of San Diego for the Relocation of an 8-Inch Sewer Main		

GENERAL MANAGER'S RECOMMENDATION:

That the Otay Water District (District) Board of Directors (Board) authorizes the General Manager to execute a Reimbursement Agreement between the District and the County of San Diego (County) for the relocation of an 8-inch sewer main (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 Reimbursement Agreement (see Exhibit B) with the County to relocate an existing 8-inch sewer main due to the construction of a new drainage culvert in Calavo Drive, Spring Valley.

ANALYSIS:

The County has identified an undersized culvert for storm water drainage in Calavo Drive and has developed plans to construct a new larger culvert to increase the capacity. The District currently owns an 8-inch sewer main that crosses the drainage culvert perpendicularly and is within the County's Right-of-Way (ROW). The County owns prior and superior rights as their ROW was established before the District's sewer main was installed. Therefore, the District must reimburse the County for the work required to relocate the existing sewer main.

The nature of the work is to relocate 160 linear feet of 8-inch sewer to cross above the new storm drain culvert and install two new manholes. The County plans to bid the work in May, begin construction in June, and complete the Project by October 2011. The County estimates the relocation construction will cost approximately \$40,000.

FISCAL IMPACT:



Funding for the Project comes from CIP project, S2023, "Calavo Drive Sewer Main Utility Relocation."

The total budget for CIP S2023, as approved in the FY 2011 budget, is \$65,000. Total expenditures, plus outstanding commitment and forecast to date, are \$64,185. 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 funding will be available for CIP S2023. Funding will be 100% from the Replacement Fund.

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 to, "Design and construct new infrastructure - satisfy current and future water needs for Potable, Recycled, and Wastewater Services."

LEGAL IMPACT:

The Districts' previous legal counsel and the current legal counsel have reviewed the Reimbursement Agreement.



General Manager

P:\WORKING\CIP S2023 Calavo Dr. Sewer Main Utility Relocation\Staff Reports\BD-02-11, Staff Report, Calavo Dr. Sewer Agreement, (DK-RR).doc

DK/RR:jf

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



ATTACHMENT A

SUBJECT/PROJECT: S2023-001103	Approval of a Reimbursement Agreement Between Otay Water District and the County of San Diego for the Relocation of an 8-Inch Sewer Main
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COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee reviewed this item at a meeting held on January 18, 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.



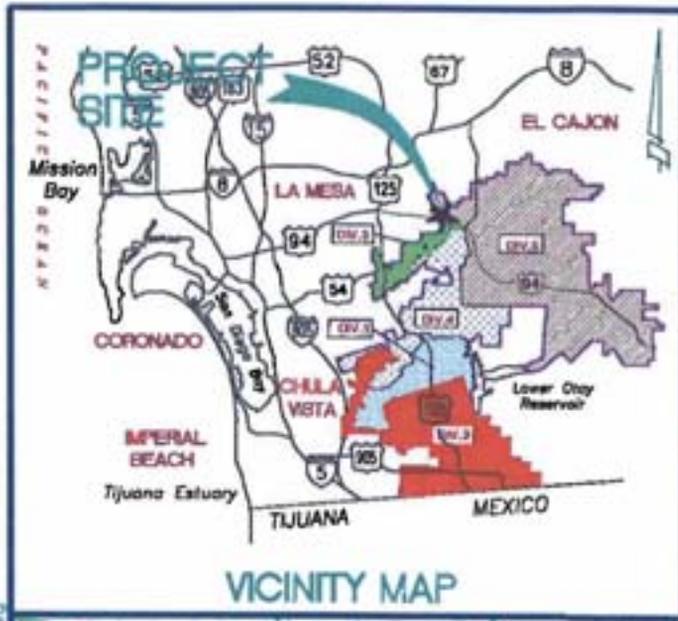
ATTACHMENT B

SUBJECT/PROJECT: S2023-001103	Approval of a Reimbursement Agreement Between Otay Water District and the County of San Diego for the Relocation of an 8-Inch Sewer Main
---	--

Otay Water District
S2023 - Calavo Drive Sewer Main Utility Relocation

Date Updated: January 04, 2011

<i>Budget</i>	<i>Committed</i>	<i>Expenditures</i>	<i>Outstanding Commitment & Forecast</i>	<i>Projected Final Cost</i>	<i>Vendor/Comments</i>
65,000					
Planning					
Labor	1,480	1,480	-	1,480	STAFF
Professional Legal Fees	520	520	-	520	GARCIA CALDERON & RUIZ LLP
Consultant Contracts	2,185	2,185	-	2,185	LEE & RO INC
Total Planning	4,185	4,185	-	4,185	
Design					
Labor	10,000	6,325	3,675	10,000	STAFF
Total Design	10,000	6,325	3,675	10,000	
Construction					
Labor	10,000	-	10,000	10,000	STAFF
Construction	40,000	-	40,000	40,000	COUNTY OF SAN DIEGO - DPW
Total Construction	50,000	-	50,000	50,000	
Grand Total	64,185	10,510	53,675	64,185	



LEGEND

- EXISTING SEWER MANHOLE
- EXISTING SEWER MAIN



OTAY WATER DISTRICT

CALAVO DRIVE SEWER MAIN
UTILITY RELOCATION
LOCATION MAP

CIP S2023

EXHIBIT A

P:\WORKING\CIP_S2023_Calavo Dr. Sewer Main Utility Relocation\Graphics\Exhibits-Figures\Exhibit A.dwg

EXHIBIT B

REIMBURSEMENT AGREEMENT BETWEEN THE COUNTY OF SAN DIEGO AND OTAY WATER DISTRICT FOR RELOCATION OF UTILITIES IN CONNECTION WITH THE CALAVO DRIVE IMPROVEMENT PROJECT

THIS AGREEMENT executed this _____ day of _____, 20____, by and between the County of San Diego, a political subdivision of the State of California, hereinafter referred to as "COUNTY", and the Otay Water District, a municipal water district having its office and principal place of business at 2554 Sweetwater Springs Blvd, Spring Valley, California, hereinafter referred to as "DISTRICT."

WHEREAS, the County of San Diego, Board of Supervisors, authorized the design and construction of drainage structure improvements within Calavo Drive, south of the intersection of Louisa Drive and Calavo Drive in the vicinity of Valle De Oro (hereinafter referred to as "Project"); and

WHEREAS, COUNTY has informed DISTRICT that certain existing sewer facilities of DISTRICT located within Calavo Drive conflict with the Project and that, since the COUNTY has prior rights in the area covered by the Project, DISTRICT must relocate or be responsible for the costs of relocation of said facilities to accommodate the Project improvements; and

WHEREAS, DISTRICT has requested that COUNTY include within the construction contract for the Project, bid items related to the relocation and installation of the sewer facilities at issue, which relocation will generally include new sewer pipe, manholes, private service laterals with right-of-way cleanouts and related appurtenances all as more particularly detailed in the Plans for Construction of Calavo Drive, RS 2249 dated _____, as revised and finally approved by District on _____ and provided to County on _____.(hereinafter "District Sewer Facilities"); and

WHEREAS, the COUNTY has included or is prepared to include the relocation of the District Sewer Facilities in the plans and specifications for the Project and has agreed to include these facilities as part of the contract to be awarded and managed by the COUNTY for the Project, provided that DISTRICT reimburses COUNTY for the cost to relocate the District Sewer Facilities and assumes ownerships and responsibility for the facilities once they are constructed.

AGREEMENT

NOW THEREFORE, for mutual and valuable consideration and in consideration of the covenants and agreements contained herein, it is agreed between the Parties hereto as follows:

1. COUNTY Responsibilities. COUNTY shall competitively bid, award, and administer a contract (hereinafter the "Contract") to construct the Project. The bid documents for the Contract shall include the District Sewer Facilities as a separate bid line item.

2. DISTRICT Responsibilities. DISTRICT will furnish engineering, plans, specifications, an engineer's estimate, administration, and other support and documentation as is reasonably required by COUNTY to coordinate the design and construction of the District Sewer Facilities into the COUNTY's bid documents for the Project. Following award of the Contract, DISTRICT shall provide timely inspection, engineering support, and other documents and services reasonably requested by COUNTY to avoid any delay or increased cost in the completion of the Project as a result of the inclusion of the District Sewer Facilities in the Project.

3. Communications with Project Contractor. All communications between the Project contractor and DISTRICT will be coordinated through the County Resident Engineer.

4. Change Orders. DISTRICT shall approve all change orders necessary to relocate and construct the District Sewer Facilities. DISTRICT shall not unreasonably condition, delay or deny the approval of any change orders. Change orders for the District Sewer Facilities may be initiated by the DISTRICT or the COUNTY, but shall not be issued to the contractor unless approved by DISTRICT. DISTRICT shall participate with COUNTY in the negotiation (unless prohibited from doing so by the Project contract) of the price of any change orders with the Project contractor.

(a) COUNTY Initiated Change Orders: In those instances where the COUNTY requests a change order, the COUNTY shall submit a written request for changes to the DISTRICT for the DISTRICT'S written approval. Such changes, once approved by DISTRICT, shall be paid for by DISTRICT and made at no cost to the COUNTY. Nothing herein shall be construed as granting a right to the Project contractor to demand acceptance of such changes.

(b) DISTRICT Initiated Change Orders: DISTRICT may seek a change in the plans, specifications, character of work, or quantity of work for the District Sewer Facilities by change order provided the proposed change order is consistent with any limits on change orders imposed by State law, County ordinances or County policy. Proposed change orders shall be in writing and state the dollar value of the change, any adjustment in contract time, and shall provide for the DISTRICT's, COUNTY's, and Project contractor's signatures indicating acceptance. DISTRICT shall be solely responsible for the cost of all DISTRICT-initiated change orders, including but not limited to any increased costs to COUNTY resulting from the implementation of the change order. DISTRICT shall provide all DISTRICT initiated change orders to the County Resident Engineer to thereafter be forwarded by County to the Project contractor. COUNTY may decline to forward a DISTRICT-initiated change order to the Project contractor if COUNTY determines that inclusion of the change order could increase the COUNTY's Project costs.

5. Extra Work: In the event DISTRICT should request that extra work be performed in connection with the District Sewer Facilities, DISTRICT shall forward the request for extra work to the County Resident Engineer. The COUNTY shall determine if the extra work can be added to the scope of work for the Project. COUNTY shall not unreasonably delay, condition or deny the inclusion of extra work into the scope of work for the Project. COUNTY shall forward the request for extra work

to the Project contractor for consideration and possible acceptance. DISTRICT shall participate with COUNTY in the negotiation of the price of any extra work with the Project contractor. DISTRICT shall be solely responsible for the cost of the extra work and for any increased Project costs attributable to the extra work.

6. Notice of Differing Site Conditions: The COUNTY shall promptly notify the DISTRICT of the following work site conditions upon their discovery by COUNTY and the COUNTY's determination that the conditions may adversely impact the completion of the District Sewer Facilities (hereinafter called "changed conditions").

- (a) Subsurface or latent physical conditions differing materially from those represented in the contract.
- (b) Unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in work of the character being performed; and
- (c) Material differing from that represented in the Project contract which the COUNTY believes maybe hazardous waste, as defined in Section 25117 of the Health and Safety Code that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.

7. DISTRICT Responsibility for Cost of Changed Conditions: The DISTRICT shall promptly investigate the conditions which appear to be changed conditions. DISTRICT shall promptly initiate any change orders or extra work necessary to address the changed conditions. DISTRICT shall be solely responsible for all increased costs to complete the District Sewer Facilities and any costs incurred by COUNTY in connection with addressing the changed conditions.

8. Project Completion, Inspection and Ownership. DISTRICT and COUNTY anticipate that the Project will be completed on or about January 2012. The Project, however, will not be deemed completed or accepted until both COUNTY and DISTRICT have accepted their respective facilities or improvements.

- (a) Inspection by DISTRICT. Upon receipt of notice of completion of the District Sewer Facilities, DISTRICT shall promptly inspect the facilities and shall not unreasonably condition, delay or refuse acceptance of the facilities as built. Whether DISTRICT accepts the District Sewer Facilities or not, COUNTY assumes no responsibility for the ownership or maintenance of the facilities. The facilities shall at all times be deemed to be owned and operated by DISTRICT.
- (b) Compliance with Specifications. COUNTY will include provisions in the Project contract that require all District Sewer Facilities furnished, constructed, and installed by COUNTY's contractor to be in strict compliance with the DISTRICT approved plans and specifications, that all materials furnished by the contractor must conform to DISTRICT's approved material list, and that any and all deviations from said plans and

specifications must be approved by DISTRICT, in writing, prior to being incorporated into the Project.

9. Right to Enforce. DISTRICT shall be considered a third-party beneficiary of the County's construction contract with regard to the District Sewer Facilities only and shall have any rights available to a third-party beneficiary under California law to enforce the contract against the County's contractor. COUNTY shall have no obligation to enforce the contract against its contractor with regard to the District Sewer Facilities.

10. Warranty. The COUNTY's contractor shall warrant all work, including without limitation the District Sewer Facilities, for a period of no less than one year from the date of acceptance, which shall be deemed to be the later of the dates COUNTY or DISTRICT accept their respective facilities. Acceptance will be evidenced by the filing of a Notice of Completion, signed by the applicable party, with the County of San Diego Recorder.

11. Payment. COUNTY shall notify DISTRICT of the award of the Project contract. Upon receipt of notice of the award, DISTRICT shall pay to County the full amount of all items as bid, without any setoff or deduction, for the District Sewer Facilities. DISTRICT shall promptly pay the full amount of any change order or extra work for the District Sewer Facilities. Any additional sums needed to fully compensate COUNTY for the cost to relocate and construct the District Sewer Facilities shall be paid by DISTRICT. DISTRICT shall pay the full invoiced amount without any setoff or deduction within thirty (30) days of the receipt of an invoice. COUNTY will refund to DISTRICT any excess payments made by DISTRICT, together with any interest earned on DISTRICT's payment, while on deposit with the COUNTY upon the completion of the District Sewer Facilities and expiration of any warranty period for which withholdings have been made.

- (a) Invoices. As the Project progresses, COUNTY shall invoice the DISTRICT for costs related to the District Sewer Facilities following the receipt of an invoice from its contractor on which such costs appear. The County invoice shall include the following: (i) a copy of the contractor's invoice; (ii) identification of those costs attributable to the District Sewer Facilities; (iii) net total charge against DISTRICT Project deposits; and iv) requests for additional funds to complete the relocation and construction of the District Sewer Facilities.
- (b) For purposes of invoicing, costs not apportioned by the contractor on its billings between the District Sewer Facilities and other work may be apportioned in the following manner:
 - (i) If a percentage of work attributable to the District Sewer Facilities based on the total amount billed can be reasonably determined, the costs shall be apportioned based on the percentage (e.g. If contractor states that 75% of the work billed was for the District Sewer Facilities and this appears reasonable based on work included in the contractor's invoice, DISTRICT shall pay 75% of the amount billed).

- (ii) If a percentage cannot easily be determined or the parties can't agree on a percentage of allocation, but the work billed is equally beneficial to both, the cost shall be divided equally (e.g., the contractor digs a single trench to place both a DISTRICT sewer pipe and a COUNTY culvert and the pipes have identical trenching requirements).
 - (iii) If no other method applies, the costs may be divided in accordance with any other method agreed to by the COUNTY and the DISTRICT.
- (c) DISTRICT Approval. DISTRICT shall review and approve the COUNTY invoice within (30) calendar days of its receipt. If DISTRICT determines that all relevant documents have not been submitted, DISTRICT shall inform the COUNTY of the need for additional information and specify the needed documents/information. If DISTRICT fails to approve the County invoice or request additional information within the 30-day review period, the charges on the COUNTY invoice shall be deemed approved. DISTRICT disapproval shall not alleviate DISTRICT from the obligation to promptly pay all costs incurred by COUNTY for the District Sewer Facilities. DISTRICT may pay under protest.
- (d) Withholding/Retention: From each payment to the Project contractor, COUNTY shall withhold a minimum of ten (10) percent of the amount of the contractor's invoice. Payment thereof shall not be made until final approval and acceptance of the facilities by both the DISTRICT and the COUNTY has been received by COUNTY.

12. Termination: Before the issuance of the Notice of Intent to Award (NOI) by COUNTY for the Project contract, DISTRICT may terminate this Agreement and exclude from the Project contract the District Sewer Facilities if the bid for construction of the facilities exceeds by five percent (5%) or more the engineer's estimate prepared by District for the facilities. DISTRICT shall provide COUNTY with a "Final Engineer's Estimate" at the time it supplies to COUNTY plans and specification for the District Sewer Facilities for inclusion in the bid package for the Project. The Final Engineer's Estimate shall be the only engineer's estimate used by DISTRICT in determining if this Agreement may be terminated. COUNTY shall send a copy of the NOI to DISTRICT at the same time that is sent to the Project contractor.

13. Records Retention. Detailed records, which form the basis of the COUNTY invoice(s), shall be retained by the County for a period of four (4) years from the date of the final statement and shall be available for verification by DISTRICT auditors. Notwithstanding the foregoing, COUNTY shall have no liability to DISTRICT for failing to maintain such records.

14. DISTRICT Indemnification. DISTRICT agrees to indemnify, defend and save COUNTY harmless from and against all demands, claims, suits, cost of defense, attorney's fees, witness fees, liabilities, or other expenses of any kind resulting from COUNTY's inclusion of the District Sewer Facilities in the Project, including but not limited to any claim for damage or damages to property or for injury or injuries to, or death of any person, or persons, including but not limited to any

employee, statutory employee, agent or servant of COUNTY, except liability arising from sole negligence, willful act or breach of this Agreement by COUNTY, or the agents employees or independent contractors of COUNTY.

15. COUNTY Indemnification. COUNTY agrees to indemnify, defend and save DISTRICT harmless from and against all demands, claims, suits, cost of defense, attorney's fees, witness fees, liabilities, or other expenses of any kind, including but not limited to any claim for damage or damages to property of for injury or injuries to, or death of any person, or persons, including but not limited to any employee, statutory employee, agent or servant of the DISTRICT in any way arising from the Project, except to the extent relating to the District Sewer Facilities or arising from the sole negligence, willful act or breach of this Agreement by DISTRICT, or the agents, employees or independent contractors of DISTRICT.

16. Entire Agreement. This Agreement contains the entire understanding of the parties. No party is relying on any other representation or promises not contained in this Agreement. This Agreement may be changed only by a written amendment signed by both parties.

17. Notices. All notices to be given pursuant to this Agreement shall be in writing and either: i) sent by certified mail, return receipt requested, in which case notice shall be deemed delivered three (3) business days after deposit, postage prepaid in the United States mail, (ii) sent by a nationally recognized overnight courier, in which case notice shall be deemed delivered one (1) business day after deposit with this courier, or (iii) by facsimile (fax) or similar means, if a copy of the notice is also sent by United States Certified mail, in which case notice shall be deemed delivered on transmittal by facsimile (fax) or other similar means provided that a transmission report is generated reflecting the accurate transmissions of the notices, as follows:

OTAY WATER DISTRICT

2554 Sweetwater Springs Blvd
Spring Valley, CA 91978
Attn: Mark Watton
General Manager

Telephone: (619) 670-2222

Fax: (619) 670-8920

COUNTY OF SAN DIEGO

5555 Overland Avenue, Ste 6101
San Diego, California 92123
Attn: Lawrence Hirsch
Utilities Coordinator

Telephone: (858) 694-2215

Fax: (858) 694-2499

These addresses and telephone numbers may be changed by written notice to the other Party. Copies of notices are for informational purposes only, and a failure to give or receive copies of any notice shall not be deemed a failure to give notice.

18. Partial Invalidity. If for any reason it should be determined by a court of competent jurisdiction that part of this Agreement is invalid or unenforceable, all other provisions shall remain valid and enforceable.

19. No Construction against Drafter. If for any reason a dispute should arise between the parties relative to the enforcement of this Agreement, no ambiguities in the Agreement shall be resolved in favor of one party and against another by reason of the fact that one party drafted the Agreement, supplied a copy of the Agreement to the other, or had the assistance of legal counsel in preparing or reviewing it.

20. Authority to Execute and Further Assurances. The parties hereby acknowledge that the party executing the Agreement on its behalf has the authority to sign the Agreement on its behalf and that by virtue of said signature the entity is bound by the terms of this Agreement. The parties further agree to work together in a cooperative manner to further the purpose of this Agreement.

21. Primary Intent. This Agreement is intended to help facilitate the DISTRICT's relocation of the District Sewer Facilities at the DISTRICT's expense and is in no way intended to shift responsibility for the cost of this work from DISTRICT to COUNTY. This Agreement shall be interpreted and applied in strict conformance with this understanding.

IN WITNESS WHEREOF, the Parties hereto have read and understand this Agreement and have caused this Agreement to be executed on the date first written above.

OTAY WATER DISTRICT

By _____

Date _____

Mark Watton, General Manager

Approved As To Form:
District Counsel

By _____

Date _____

COUNTY OF SAN DIEGO

By _____

Date _____

Clerk of the Board of Supervisors

Quality Assurance Approval Sheet

Subject: Approval of a Reimbursement Agreement Between
Otay Water District and the County of San Diego for
the Relocation of an 8-Inch Sewer Main

Project No.: S2023-001103

Document Description: Staff Report for the February 2, 2011 Board Meeting

Author:


Signature

1/6/11
Date

Daniel Kay
Printed Name

QA Reviewer:


Signature

1/6/11
Date

Gary Silverman
Printed Name

Manager:


Signature

1/7/11
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:	February 2, 2011
SUBMITTED BY:	Daniel Kay <i>DK</i> Associate Civil Engineer	PROJECT:	Various DIV. NO. ALL
	Ron Ripperger <i>RR</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:	Informational Item - First Quarter Fiscal Year 2011 Capital Improvement Program Report		

GENERAL MANAGER'S RECOMMENDATION:

That the Otay Water District (District) Board of Directors (Board) accepts the First Quarter Fiscal Year 2011 Capital Improvement Program (CIP) Report for review and receives a summary via PowerPoint presentation.

COMMITTEE ACTION:

Please see Attachment A.

PURPOSE:

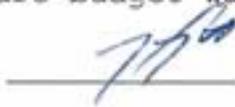
To update the Board about the status of all CIP project expenditures and to highlight significant issues, progress, and milestones on major projects.

ANALYSIS:

To keep up with growth and to meet our ratepayers' expectations to adequately deliver safe, reliable, cost-effective, and quality water, each year the District Staff prepares a six-year CIP Plan that identifies the District infrastructure needs. The CIP is comprised of four categories consisting of backbone capital facilities, replacement/renewal projects, developer's reimbursement projects, and capital purchases.

The First Quarter Fiscal Year 2011 update is intended to provide a detailed analysis of progress in completing these projects within the allotted time and budget. Expenditures through the First Quarter totaled approximately \$4.4 million. Approximately 16% of the Fiscal Year 2011 expenditure budget was spent.

FISCAL IMPACT:



None.

STRATEGIC GOAL:

The CIP 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

F:\CIP\CIP Quarterly Reports\2011\Q1\Staff Report\00 01-02-11, Staff Report, First Quarter FY 2011 CIP Report, (RR-RP).doc

RR/RP:jf

Attachments: Attachment A - Committee Action
Presentation



ATTACHMENT A

SUBJECT/PROJECT: Various	Informational Item - First Quarter Fiscal Year 2011 Capital Improvement Program Report
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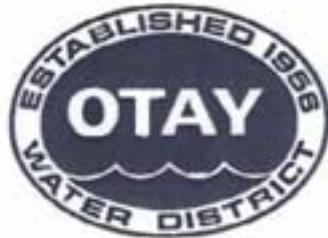
COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee reviewed this item at a meeting held on January 18, 2011. The Committee supported Staff's recommendation.

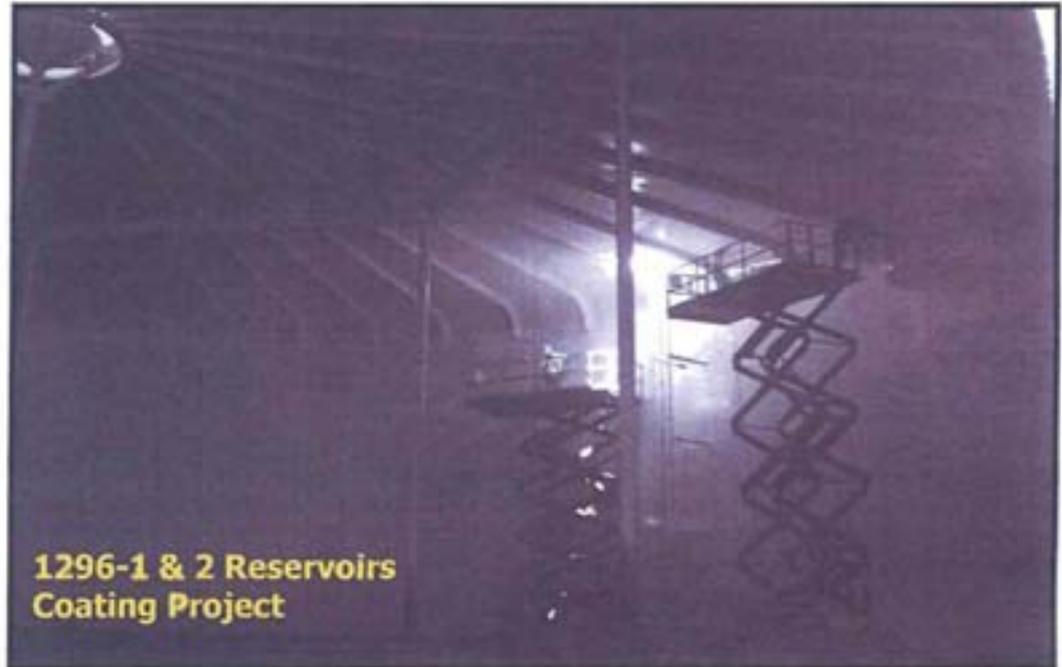
NOTE:

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.

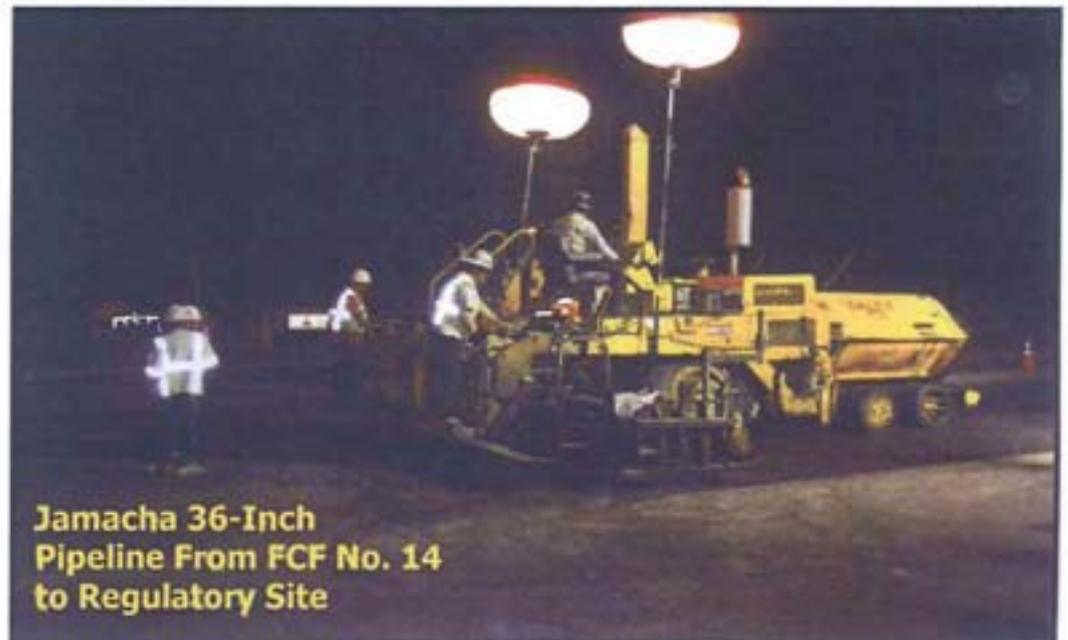
CAPITAL IMPROVEMENT PROGRAM



First Quarter
Fiscal Year 2011
(through September 30, 2010)



**1296-1 & 2 Reservoirs
Coating Project**



**Jamacha 36-Inch
Pipeline From FCF No. 14
to Regulatory Site**

Background

The approved CIP budget for Fiscal Year 2011 consists of 82 projects that total \$28.5 million. These projects are broken down into four categories:

- | | |
|-----------------------------|-----------------|
| 1. Capital Facilities: | \$ 16.2 million |
| 2. Replacement/Renewal: | \$ 10.0 million |
| 3. Capital Purchases: | \$ 2.3 million |
| 4. Developer Reimbursement: | \$ 0.0 million |

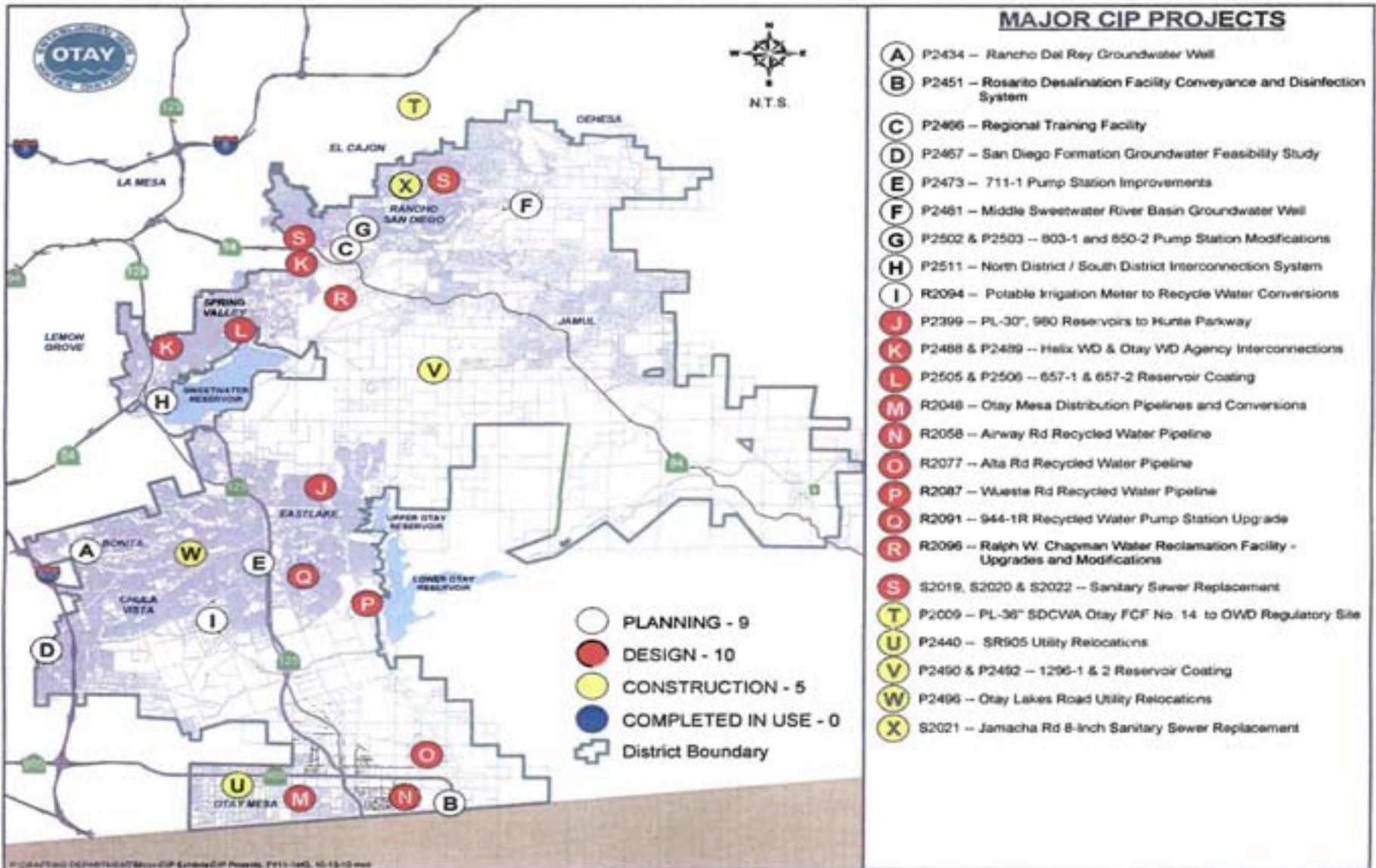
Overall expenditures through the First Quarter Fiscal Year 2011 totaled \$4.4 million which is 16% of the Fiscal Year 2011 budget.

Fiscal Year 2011 Report

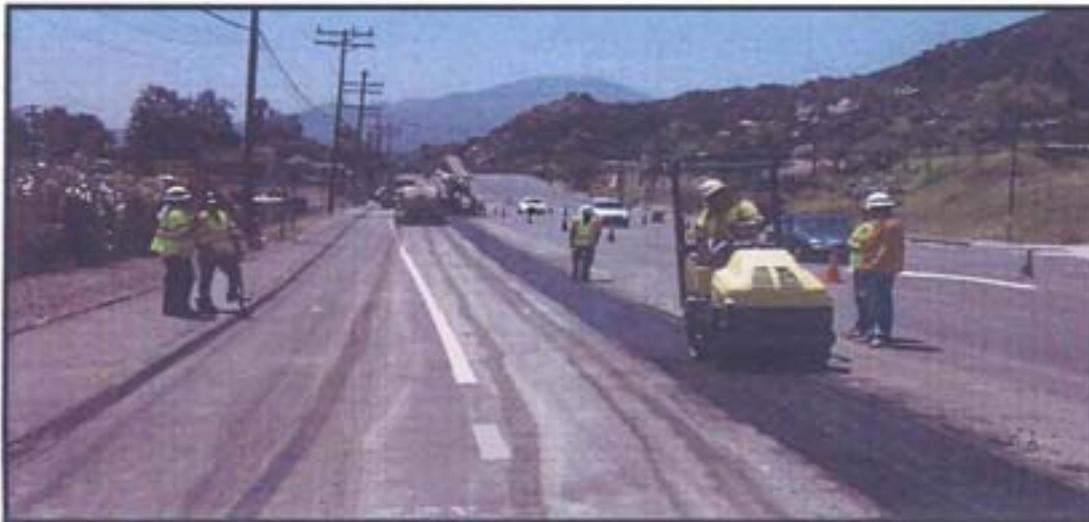
(through September 30, 2010)

CIP CAT	Description	FY 2011 Budget	FY 2011 Expenditures	% FY 2011 Budget Spent	Total Life-to- Date Budget	Total Life-to-Date Expenditures	% Life-to- Date Budget Spent
1	Capital Facilities	\$16,181,000	\$3,038,000	19%	\$180,949,000	\$43,220,000	24%
2	Replacement/ Renewal	\$10,006,000	\$1,119,000	11%	\$44,053,000	\$15,574,000	35%
3	Capital Purchases	\$2,249,000	\$267,000	12%	\$13,450,000	\$6,023,000	45%
4	Developer Reimbursement	\$12,000	\$0	0%	\$7,882,000	\$1,000	0%
	Total:	\$28,448,000	\$4,424,000	16%	\$246,334,000	\$64,818,000	26%

Major CIP Projects



CIP Projects in Construction



36-Inch Pipeline from FCF No. 14 to Regulatory Site (P2009)

This project was awarded to CCL Contracting in June 2009.
This project consists of construction of approximately 27,300 feet of 36-inch pipeline to upgrade FCF No. 14 to a capacity of 16 million gallons per day.

CIP Projects in Construction

□ 36-Inch Pipeline From FCF No. 14 to Regulatory Site Project:

Key Component: **Approximately 5 miles of 36-inch pipeline for potable water from Otay's FCF No. 14 to the Regulatory Site.**

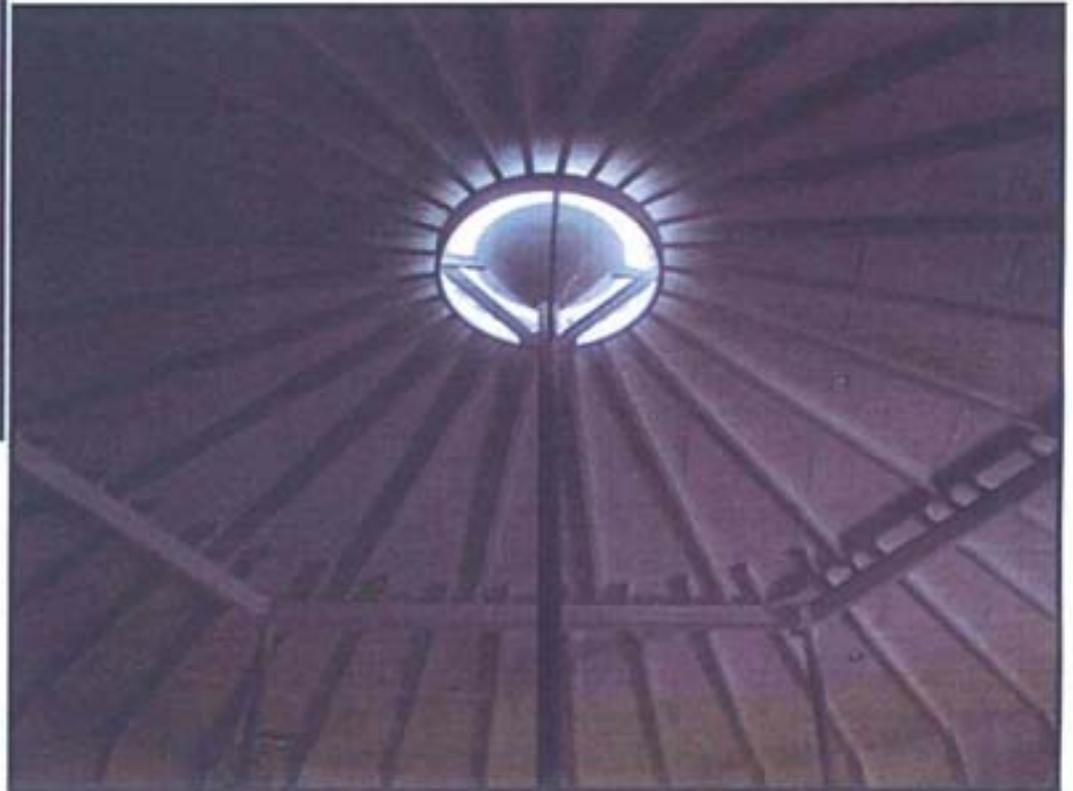
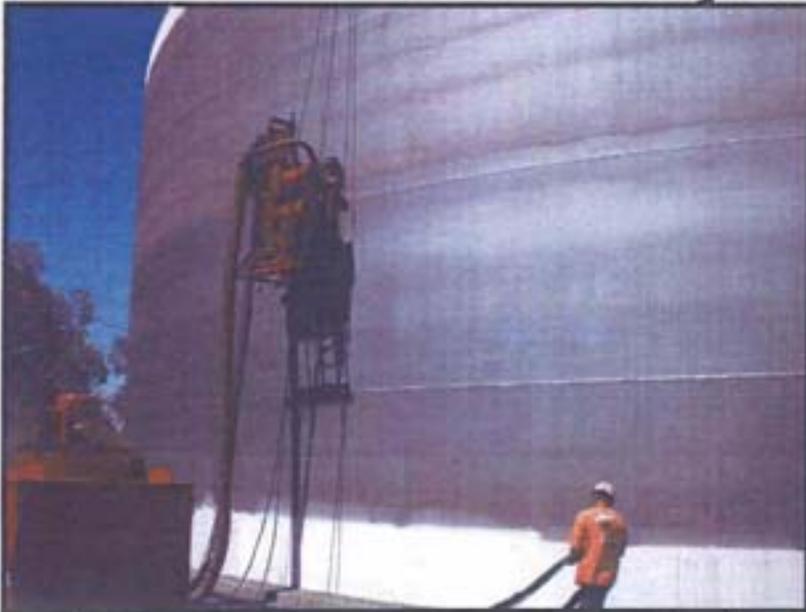
Schedule: **A construction contract was awarded to CCL Contracting (CCL) on June 3, 2009. Project is complete.**

Cost: **The FY 2011 project budget is \$2.2 million, of which \$2.1 million, or 94% has been spent. The life-to-date project budget is \$21 million, of which \$19 million, or 91%, has been spent.**

Significant Issues: **None.**

Highlights: **Installation of the 36-inch pipe is complete with only pipeline bacteria testing and minor pavement remaining. The pavement and striping are complete.**

CIP Projects in Construction



1296-1 & 2 Reservoirs Coating (P2490 & P2492)

This project was awarded to West Coast Industrial Coating, Inc. in February 2010. This project includes an assessment of the facilities to assure compliance to all applicable codes and OSHA standards as well as for the interior and exterior coatings of the 1296-1 & 2 Reservoirs.

CIP Projects in Construction

□ 1296-1&2 Reservoirs Coating Projects

Key

Component: Interior and exterior coatings on the 1296-1 & 2 Reservoirs.

Schedule: A construction contract was awarded to West Coast Industrial Coating, Inc., on February 3, 2010. Project is approximately 55% complete. Project completion is anticipated for February 2011.

Cost: The combined FY 2011 project budgets for CIPs P2490 and P2492 are \$680,000, of which \$206,000, or 30.3% was spent. The life-to-date project budgets are \$900,000, of which \$418,000, or 46%, have been spent.

Significant

Issues: None.

Highlights: None.

CIP Projects in Construction



Otay Lakes Road 12-Inch Recycled Water Pipeline and Potable Utility Relocation Project (R2094 & P2496)

This project consists of installing a 12-inch recycled pipeline along Otay Lakes Rd., from Telegraph Canyon Rd. to Bonita Vista High School on 'H' Street. This will provide recycled water to Southwestern College, a condo complex, and Bonita Vista High School. This project also includes relocating a few District facilities for the City of Chula Vista's road improvement project.

CIP Projects in Construction

□ Potable Irrigation Meters to Recycled Water Conversions

Key

Component: Installation of a 12-inch recycled pipeline along Otay Lakes Rd. and converting existing potable water irrigation systems to use recycled water.

Schedule: Construction started in May 2010. Southland Paving completed the 12-inch recycled water main in front of Bonita Vista High School, along with the roadway improvements along Otay Lakes Rd. (approx. 750 LF of the proposed 4,200 LF). They are currently working on the potable Pressure Reducing Station and will continue with the recycled pipeline installation. Project completion is anticipated for February 2011.

Cost: A Reimbursement Agreement, executed between the City of Chula Vista (City) and the District dated March 2, 2010, required the District to submit a deposit to the City for the estimated construction costs of \$1,100,000 (which includes a 10% contingency).

The combined FY 2011 project budgets for CIPs R2094 and P2496 are \$695,000, of which \$79,000, or 11.4% was spent. The life-to-date project budgets are \$3,350,000, of which \$1,397,000, or 42%, have been spent.

Significant

Issues: None.

Highlights: None.

Consultant Contract Status

(through September 30, 2010)

Consultant	CIP No.	Project Title	Original Contract Amount	Total Change Orders	Revised Contract Amount	Approved Payment To Date	% Change Orders	% Project Complete	Date of Signed Contract	End Date of Contract
PLANNING										
AECOM	P2434	RANCHO DEL REY GROUNDWATER WELL DEVELOPMENT	\$ 1,561,625.00	\$ -	\$ 1,561,625.00	\$ 623,268.90	0.0%	39.9%	1/20/2010	12/31/2010
MWH AMERICAS INC.	P2010	NORTH-SOUTH SERVICES AREA INTERTIE STUDY	\$ 119,505.00	\$ 11,500.00	\$ 131,005.00	\$ 118,314.41	9.6%	90.3%	10/22/2009	6/30/2011
SALVADOR LOPEZ-CORDOVA	P2451	DESALINATION PROJECT	\$ 45,000.00	\$ -	\$ 45,000.00	\$ -	0.0%	0.0%	9/15/2010	8/14/2011
TRAN CONSULTING ENGINEERS	S1201	SANITARY SEWER CCTV INSPECTION AND CONDITION ASSESSMENT	\$ 560,025.00	\$ -	\$ 560,025.00	\$ 238,146.92	0.0%	42.5%	1/20/2010	6/30/2013
DESIGN										
CALIFORNIA CENTER FOR SUSTAINABLE ENERGY	Varies	SOLAR POWER FEASIBILITY STUDY	\$ 34,400.00	\$ -	\$ 34,400.00	\$ 2,700.00	0.0%	7.8%	5/18/2010	6/30/2011
CPM PARTNERS	Varies	AS-NEEDED SCHEDULING SERVICES	\$ 175,000.00	\$ -	\$ 175,000.00	\$ 53,255.00	0.0%	30.4%	5/18/2010	6/30/2012
DARNELL & ASSOCIATES	Varies	AS-NEEDED TRAFFIC ENGINEERING SERVICES FOR FY2010 AND FY2011	\$ 175,000.00	\$ -	\$ 175,000.00	\$ 128,517.50	0.0%	73.4%	1/20/2010	6/30/2011
ENGINEERING PARTNERS INC. THE	Varies	ELECTRICAL SERVICES	\$ 100,000.00	\$ -	\$ 100,000.00	\$ 85,930.00	0.0%	85.9%	3/19/2007	6/30/2011
ENGINEERING PARTNERS INC. THE	Varies	AS-NEEDED ELECTRICAL DESIGN SERVICES	\$ 100,000.00	\$ -	\$ 100,000.00	\$ 22,765.00	0.0%	22.8%	10/7/2009	6/30/2011
HDR	Varies	TEMPORARY LABOR SERVICES	\$ 150,000.00	\$ 35,000.00	\$ 185,000.00	\$ 156,275.00	23.3%	84.5%	6/30/2010	6/30/2011
HVAC ENGINEERING INC	P2002, P2503	HVAC SERVICES FOR 850-2 PS & 803-1 PS	\$ 19,421.00	\$ -	\$ 19,421.00	\$ -	0.0%	0.0%	9/17/2010	12/31/2011
LEE & RO INC	P2009	DESIGN OF 36-INCH PIPELINE	\$ 580,183.00	\$ 61,629.00	\$ 641,812.00	\$ 624,320.35	10.6%	97.3%	9/11/2008	12/31/2010
LEE & RO INC	Varies	AS-NEEDED ENGINEERING DESIGN SERVICES	\$ 175,000.00	\$ -	\$ 175,000.00	\$ -	0.0%	0.0%	6/30/2010	6/30/2012
MTGL INC.	Varies	AS-NEEDED GEOTECHNICAL CONSULTING SERVICES	\$ 175,000.00	\$ -	\$ 175,000.00	\$ 6,030.00	0.0%	3.4%	6/23/2010	6/30/2012
MWH AMERICAS INC.	R2096, R2096, S2018	RWCWRF UPGRADE PROJECT	\$ 458,813.00	\$ -	\$ 458,813.00	\$ 116,473.07	0.0%	25.4%	10/14/2009	6/30/2011
PBS&J	Varies	HYDRAULIC MODELING SERVICES	\$ 45,000.00	\$ -	\$ 45,000.00	\$ 19,560.55	0.0%	43.5%	11/20/2009	6/30/2011
PHOTO GEODETIC CORPORATION	P2399	SURVEYING SERVICES	\$ 3,425.63	\$ -	\$ 3,425.63	\$ 3,150.00	0.0%	92.0%	8/24/2010	COMPLETE
REPROHAUS	Varies	AS-NEEDED REPROGRAPHIC SERVICES	\$ 20,000.00	\$ -	\$ 20,000.00	\$ 7,056.15	0.0%	35.3%	2/16/2010	12/31/2011
SCHIFF & ASSOCIATES	Varies	PROFESSIONAL CORROSION SERVICES	\$ 250,000.00	\$ -	\$ 250,000.00	\$ 134,169.62	0.0%	53.7%	11/20/2009	6/30/2011
SOUTHERN CALIFORNIA SOIL	Varies	AS-NEEDED GEOTECHNICAL SERVICES	\$ 175,000.00	\$ 11,761.37	\$ 186,761.37	\$ 145,643.50	6.7%	78.0%	10/7/2009	6/30/2011
SUPERIOR TANK SOLUTIONS	P2491	803-2 Reservoir Visual Inspection	\$ 250.00	\$ -	\$ 250.00	\$ 250.00	0.0%	100.0%	7/15/2010	COMPLETE

Consultant Contract Status (continued)

Consultant	CIP No.	Project Title	Original Contract Amount	Total Change Orders	Revised Contract Amount	Approved Payment To Date	% Change Orders	% Project Complete	Date of Signed Contract	End Date of Contract
CONSTRUCTION SERVICES										
BRADLEY CONSULTING GROUP	P2172	1485-1 PUMP STATION - TREE CONSULTING SERVICE	\$ 500.00	\$ -	\$ 500.00	\$ 500.00	0.0%	100.0%	9/7/2010	9/8/2010 COMPLETE
MWH CONSTRUCTORS INC	Varies	TEMPORARY LABOR SERVICES	\$ 150,000.00	\$ 130,000.00	\$ 280,000.00	\$ 260,925.00	88.7%	93.2%	1/5/2009	12/31/2010
PROWEST APPRAISALS	P2172	APPRAISAL SERVICES	\$ 2,827.50	\$ -	\$ 2,827.50	\$ 2,600.00	0.0%	92.0%	8/12/2010	8/25/2010 COMPLETE
RBF CONSULTING	P2009	36-INCH PIPELINE	\$ 1,088,785.00	\$ 46,995.00	\$ 1,135,780.00	\$ 1,129,658.75	4.3%	99.5%	1/28/2008	3/1/2011
RBF CONSULTING	R2058, R2077, R2087	CONSTRUCTION MANAGEMENT SERVICES FOR THE OTAY MESA RECYCLED WATER SUPPLY LINK	\$ 708,560.00		\$ 708,560.00	\$ 12,730.00	0.0%	1.8%	3/24/2010	12/31/2011
RBF CONSULTING	S2019, S2021	CONSTRUCTION MANGAGEMENT	\$ 5,000.00	\$ -	\$ 5,000.00	\$ 4,640.00	0.0%	92.8%	8/5/2010	10/6/2010
VALLEY CONSTRUCTION MANAGEMENT	Varies	AS-NEEDED CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES	\$ 175,000.00		\$ 175,000.00	\$ 65,040.00	0.0%	37.2%	3/17/2010	6/30/2012
ENVIRONMENTAL										
A.D. HINSHAW	Varies	CONSULTING SERVICES FOR JWA's CEQA	\$ 34,625.25	\$ -	\$ 34,625.25	\$ 5,084.50	0.0%	14.7%	3/25/2010	6/30/2012
BRG CONSULTING INC	P2143	1296-3 RESERVOIR ENV SVCS	\$ 125,000.00	\$ -	\$ 125,000.00	\$ 112,602.54	0.0%	90.0%	4/11/2006	12/31/2010
FORENSIC ENTOMOLOGY SERVICES	P2494	SCIENCE ADVISOR REVIEW	\$ 4,000.00	\$ -	\$ 4,000.00	\$ -	0.0%	0.0%	9/30/2010	6/30/2011
ICF INTERNATIONAL (aka JONES & STOKES ASSOCIATES)	P1253	SAN MIGUEL HABITAT MANAGEMENT AREA	\$ 987,807.00	\$ -	\$ 987,807.00	\$ 520,342.45	0.0%	52.7%	2/3/2009	12/31/2011
ICF INTERNATIONAL (aka JONES & STOKES ASSOCIATES)	R2058/ R2077/ R2087	OTAY MESA RECYCLED WATER SUPPLY LINK PIPELINES	\$ 213,087.00	\$ 9,115.00	\$ 222,202.00	\$ 213,077.42	4.3%	95.9%	5/1/2009	6/30/2011
ICF INTERNATIONAL	Varies	AS-NEEDED ENVIRONMENTAL CONSULTING SERVICES	\$ 375,000.00	\$ -	\$ 375,000.00	\$ 5,343.52	0.0%	1.4%	9/9/2010	6/30/2013
DR. MARY ANNE HAWKE	P2494	SCIENCE ADVISOR REVIEW	\$ 4,350.00	\$ -	\$ 4,350.00	\$ -	0.0%	0.0%	9/9/2010	6/30/2011
PHOTO GEODETTIC CORPORATION	R2096	AERIAL MAPPING	\$ 2,400.00	\$ -	\$ 2,400.00	\$ 2,400.00	0.0%	100.0%	9/15/2010	10/12/2010 COMPLETE
RAHN CONSERVATION CONSULTING	P2494	SCIENCE ADVISOR REVIEW	\$ 4,000.00	\$ -	\$ 4,000.00	\$ -	0.0%	0.0%	9/15/2010	6/30/2011
RECON	P1253	PREPARATION OF THE SUBAREA PLAN	\$ 270,853.00	\$ -	\$ 270,853.00	\$ 115,296.53	0.0%	42.6%	3/28/2008	3/28/2011
TECHNOLOGY ASSOCIATES	Varies	CONSULTING SERVICES FOR JWA's NCCP	\$ 34,625.25	\$ -	\$ 34,625.25	\$ 18,892.13	0.0%	54.6%	4/5/2010	6/30/2012
WATER RESOURCES										
AECOM	P2481	MIDDLE SWEETWATER RIVER BASIN GROUNDWATER WELL PILOT PROJECT	\$ 1,065,037.00	\$ -	\$ 1,065,037.00	\$ 251,013.17	0.0%	23.6%	5/21/2009	5/31/2011
CAMP DRESSER & McKEE INC	P2451	BI-NATIONAL DESALINATION FEASIBILITY STUDY	\$ 94,552.00	\$ 18,005.00	\$ 112,557.00	\$ 98,209.84	19.0%	87.3%	3/19/2008	6/30/2011
CITY OF CHULA VISTA	R2093	WASTEWATER RECLAMATION FACILITY STUDY	\$ 150,000.00	\$ -	\$ 150,000.00	\$ -	0.0%	0.0%	9/24/2009	2/28/2011
MICHAEL R. WELCH	P2481	ENGINEERING PLANNING SVCS.	\$ 40,000.00	\$ -	\$ 40,000.00	\$ 15,660.00	0.0%	39.2%	3/25/2009	6/30/2011
PUBLIC SERVICES										
AEGIS ENGINEERING MANAGEMENT	Varies	RECYCLED WATER PLAN CHECKING, RETROFIT, AND INSPECTION SERVICES FOR DEVELOPER PROJECTS	\$ 300,000.00	\$ -	\$ 300,000.00	\$ 105,990.00	0.0%	35.3%	1/20/2010	6/30/2012
TOTALS:			\$ 10,758,656.63	\$ 324,005.37	\$ 11,082,662.00	\$ 5,425,731.88	3.0%			

Construction Contract Status

(through September 30, 2010)

CIP NO.	PROJECT TITLE	CONTRACTOR	ORIGINAL CONTRACT AMOUNT	TOTAL CHANGE ORDERS	REVISED CONTRACT AMOUNT	TOTAL EARNED TO DATE	% OF CHANGE ORDERS *	% PROJECT COMPLETE	EST. COMP. DATE
P2009/ P2038	Jamacha Rd. 36-Inch Pipeline & 12-Inch Pipeline Replacement	CCL Contracting	\$16,189,243	(\$307,266)	\$15,881,977	\$14,282,403	-1.90%	90%	Complete
P2490 & P2492	1296-1 & 1296-2 Reservoir Coating & Upgrades	West Coast Industrial	\$690,000	\$0	\$690,000	\$376,731	0.00%	55%	February 2011
S2021	Jamacha Rd. 8-Inch Sewer Replacement	A.B. Hashmi	\$91,320	(\$2,226)	\$89,094	\$89,094	-2.44%	100%	Complete
	TOTALS:		\$16,970,563	(\$309,492)	\$16,661,071	\$14,748,228	-1.82%		

Expenditures

(through September 30, 2010)

(\$000)

CIP No.	Description	Project Manager	FISCAL YEAR-TO-DATE, 09/30/10				LIFE-TO-DATE		Comments
			FY 2011 Budget	Expenses	Balance	Expense to Budget %	Budget	Balance	
CAPITAL FACILITY PROJECTS									
P2009	PL - 36-inch, SDCWA Otay FCF No. 14 to Regulatory Site	Ripperger	\$ 2,200	\$ 2,075	\$ 125	94%	\$ 21,000	\$ 1,984	Project in construction.
P2033	PL - 16-inch, 1296 Zone, Melody Road - Campo Presilla	Ripperger	-	-	-	0%	1,826	1,821	Developer driven.
P2038	PL - 12-inch, 978 Zone, Hidden Mesa Road	Kay	130	30	100	23%	2,378	196	Construction complete (Part of P2009).
P2063	PS - 870-2 Pump Station Replacement (28,000 GPM)	Ripperger	90	-	90	0%	12,561	12,021	Moved to Phase III.
P2143	Res - 1296-3 Reservoir 2 MG	Kay	5	41	(36)	820%	3,540	125	Construction complete.
P2172	PS - 1485-1 Pump Station Replacement	Ripperger	5	10	(5)	200%	2,473	6	Project accepted; finalizing last easement.
P2191	Res - 850-4 Reservoir 2.2 MG	Kay	5	7	(2)	140%	3,410	11	Project complete.
P2267	36-inch Main Pumpouts and Air/Vacuum Ventilation Installations	Vasquez	-	-	-	0%	425	201	Nothing to update.
P2318	PL - 20-inch, 657 Zone, Summit Cross-Tie and 36-inch Main Connections	Cameron	100	2	98	2%	600	528	Project in preliminary design.
P2357	PS - 657-1/850-1 Pump Station Demolition	Silverman	50	3	47	6%	300	297	In design; to be combined with P2471.
P2370	Res - Dorchester Reservoir and Pump Station Demolition	Silverman	67	-	67	0%	150	137	In design; to be combined with P2471.
P2391	PS - Perdue WTP Pump Station (10,000 GPM)	Silverman	5	14	(9)	280%	11,900	11,861	Rosario Desal project precludes the need for this project hence no expenditures are planned for FY-11.
P2399	PL - 30-inch, 980 Zone, 980 Reservoirs to Hurte Parkway	Silverman	200	25	175	13%	3,600	839	In design.
P2431	Res - 980-4 Reservoir 5 MG	Ripperger	5	-	5	0%	5,900	5,900	Moved to Phase III.
P2434	Rancho Del Rey Groundwater Well Development	Silverman	1,000	114	886	11%	4,250	2,870	The Board authorized execution of a professional services agreement for engineering and development of the Rancho del Rey Groundwater monitoring and production well. Well drilling activities have been completed. Working with AECOM to address extra costs due to Otay reducing or limiting the work hours and days responding to concerns about vibration and noise from homeowners in the area.
P2451	Rosario Desalination Facility Conveyance and Disinfection System	Kennedy	1,000	88	912	9%	30,000	29,437	FY-11 budget revised. Project on hold until third quarter FY-11.
P2466	Regional Training Facility	Coburn-Boyd	24	10	14	42%	252	6	This project budget has been expended, may be increased to cover some minor future expenses.
P2467	San Diego Formation Groundwater Feasibility Study	Peasley	600	-	600	0%	1,800	1,041	This project is jointly funded by SWA and Otay. The SDCWA awarded a LISA grant to SWA to fund up to 50% of the cost of the effort. Monitoring wells in the Otay River have been completed by USGS. Data gathering on well information within the San Diego Formation continues. Otay River participation agreement between SWA and Otay has been approved.
P2471	850/857 PRS at La Pasa Pump Station	Silverman	240	4	236	2%	310	259	In design.
P2472	Water Supply Feasibility Studies	Peasley	30	-	30	0%	175	149	This project is for water supply feasibility study efforts. MWH completed the preparation a brief study including cost estimates for supply from the SWA Perdue WTP and the North District to South District interconnection.
P2473	PS - 711-1 Pump Station Improvement	Cameron	200	13	187	7%	500	441	PDR complete.
P2474	Fuel Storage Covers and Containment	Cameron	50	8	42	16%	120	91	FDR complete.
P2475	Pump Station Fire Hydrant Installations	Cameron	45	10	35	22%	65	2	Project complete.

Expenditures (Continued)

CIP No.	Description	Project Manager	FISCAL YEAR-TO-DATE, 09/30/10				LIFE-TO-DATE		Comments
			FY 2011 Budget	Expenses	Balance	Expense to Budget %	Budget	Balance	
CAPITAL FACILITY PROJECTS									
P2481	Middle Sweetwater River Basin Groundwater Well Feasibility	Peasley	50	10	40	20%	1,820	1,437	Groundwater development planning efforts continue on the Middle Sweetwater River Basin Groundwater Well Pilot Project including preparation of a draft community outreach plan and analysis of imported supplied into the basin. Meetings with SWA have occurred with staff agreement on the quantity of imported water contributed to the groundwater supply. The Rosarito Desal project precludes the need for this project hence little expenditures are planned for in the remaining FY-11.
P2488	Del Rio Road Helix and Otay Agency Interconnection	Key	120	10	110	8%	150	79	Design complete; project out to bid.
P2489	Gilispie Drive Helix and Otay Agency Interconnection	Key	135	11	124	8%	150	110	Design complete; project out to bid.
P2497	Solar Power Feasibility Study	Kennedy	150	6	144	4%	250	215	On schedule. In process of selecting candidate site for construction.
P2502	803-1 Pump Station Modifications	Silverman	50	13	37	26%	200	187	PDR updated; HVAC design in process.
P2503	850-2 Pump Station Modifications	Silverman	150	18	132	12%	650	632	PDR updated; HVAC design in process.
P2510	Operations Yard Improvements	Key	25	-	25	0%	370	370	PDR complete.
P2511	North District - South District Interconnection System	Silverman	800	66	734	8%	37,300	37,234	Project in preliminary design.
R2034	RecRes - 860-1 Reservoir 4 MG	Key	200	-	200	0%	3,800	3,776	Project on hold.
R2048	RecPL - Otay Mesa Distribution Pipelines and Conversions	Ripperger	250	61	189	24%	2,200	2,066	In design.
R2058	RecPL - 16-inch, 860 Zone, Airway Road - Otay Mesa/Alta	Kennedy	1,000	77	923	8%	3,500	2,482	Reimbursement Agreement will consume most of this budget.
R2077	RecPL - 24-inch, 860 Zone, Alta Road - Alta Gate/Airway	Kennedy	1,750	57	1,693	3%	4,500	3,734	Reimbursement Agreement will consume most of this budget.
R2087	RecPL - 24-inch, 927 Zone, Waste Road - Olympic/Otay WTP	Kennedy	3,378	71	3,307	2%	7,000	6,212	Easement acquisition budget for the City of Chula Vista and the City of San Diego.
R2088	RecPL - 30-inch, 860 Zone, County Jail - Roll Reservoir/860-1 Reservoir	Kennedy	240	4	236	2%	3,500	3,438	Revise Budget to \$20K for FY-11.
R2091	RecPS - 927-1 Pump Station Upgrade (10,000 GPM) and System Enhancements	Ripperger	1,250	48	1,202	4%	3,950	3,653	90% design complete.
R2092	Dis - 450-1 Reservoir Disinfection Facility	Ripperger	2	(16)	18	-800%	742	3	In warranty.
R2093	MBR City of Chula Vista Feasibility Study	Peasley	120	75	45	63%	210	90	The City of Chula Vista City Council and Otay Board of Directors have approved the MBR participation agreement to focus on the treatment facility and related requirements. The City of Chula Vista awarded a consulting contract to RMC to accomplish the scope of work it was underway. A draft report has been prepared for review and comment.
R2094	Potable Irrigation Meters to Recycled Water Conversions	Charles	500	73	427	15%	3,100	1,808	On budget.
Total Capital Facility Projects			16,181	3,038	13,143	19%	180,949	137,729	
REPLACEMENT/RENEWAL PROJECTS									
P2386	APCD Engine Replacements and Retrofits	Rahders	442	-	442	0%	3,213	1,453	Currently \$136K on the January Board report; awaiting approval.
P2387	Safety and Security Improvements	Munoz	102	72	30	71%	1,835	250	Plan to spend the full amount.
P2416	SR-125 Utility Relocations	Kennedy	50	-	50	0%	963	49	GCR collecting from SBX.
P2440	SR-905 Utility Relocations	Silverman	100	31	69	31%	1,600	47	90% construction complete.
P2453	SR-11 Utility Relocations	Key	50	1	49	2%	155	151	CalTrans driven.
P2456	Air and Vacuum Valve Upgrades	Acuna	450	165	285	41%	2,722	485	On track.
P2458	AMR Manual Meter Replacement	Keeran	1,500	215	1,285	14%	10,448	6,217	On track.
P2477	Res - 624-1 Reservoir Cover Replacement	Kennedy	5	1	4	20%	450	422	On budget and on schedule.
P2484	Large Water Meter Replacement Program	Keeran	100	12	88	12%	535	402	On track.

Expenditures (Continued)

CIP No.	Description	Project Manager	FISCAL YEAR-TO-DATE, 09/30/10				LIFE-TO-DATE		Comments
			FY 2011 Budget	Expenses	Balance	Expense to Budget %	Budget	Balance	
REPLACEMENT/RENEWAL PROJECTS									
P2485	SCADA Communication System and Software Replacement	Staker	350	28	324	7%	1,325	1,018	Plan to spend the full amount.
P2486	Asset Management Plan Condition Assessment and Data Acquisition	Stevens	600	49	551	8%	1,150	866	Plan to spend the full amount.
P2490	1296-1 Reservoir Interior/Exterior Coating	Kay	240	10	230	4%	350	280	Project under construction.
P2491	850-3 Reservoir Exterior Coating	Kay	10	1	9	10%	300	298	Project to be done in FY-12.
P2492	1296-2 Reservoir Interior/Exterior Coating	Kay	440	196	244	45%	550	202	Project in construction.
P2493	624-2 Reservoir Interior Coating	Kay	5	-	5	0%	350	349	Project to be done in FY-12.
P2494	Multiple Species Conservation Plan	Coburn-Boyd	170	41	129	24%	830	248	This budget will be spent this fiscal year.
P2495	San Miguel Habitat Management/Mitigation Area	Coburn-Boyd	280	35	245	14%	1,220	1,413	This budget will be spent this fiscal year.
P2496	Otay Lakes Road Utility Relocations	Kay	195	6	189	3%	250	145	Project under construction.
P2504	Regulatory Site Access Road and Pipeline Relocation	Ripperger	200	-	200	0%	600	600	Developer driven.
P2505	657-1 Reservoir Interior/Exterior Coating	Cameron	325	4	321	1%	375	371	Design complete; project out to bid.
P2506	657-2 Reservoir Interior/Exterior Coating	Cameron	325	3	322	1%	375	372	Design complete; project out to bid.
P2507	East Palomar Street Utility Relocation	Cameron	20	2	18	10%	500	498	CalTrans driven.
P2508	Pipeline Cathodic Protection Replacement Program	Kennedy	50	-	50	0%	150	150	Selection for cathodic as needed required to start.
P2509	R.J. Donovan Prison Water Meter Upgrade	Ripperger	-	-	-	0%	60	60	In the process of replacing the meter.
R2096	RWCWRF - Upgrades and Modifications	Coburn-Boyd	1,200	54	1,146	5%	2,500	2,206	The project schedule has changed so that not all of the projected budget will be spent this fiscal year.
S2012	SVSD Outfall and RSD Replacement and OM Reimbursement	Peasley	642	1	641	0%	4,392	3,798	The expenditures are typically billed by SVSD and paid within the fourth quarter of the fiscal year.
S2019	Avocado Boulevard 8-inch Sewer Main Improvement	Cameron	1,515	53	1,462	3%	1,730	1,532	Design 90% complete.
S2020	Calavo Drive 8-inch Sewer Main Replacement	Cameron	360	4	356	1%	420	381	Design 90% complete.
S2021	Jamacha Road 8-inch Sewer Main Replacement	Kay	60	105	(65)	263%	160	8	Project complete.
S2022	Hidden Mesa Drive 8-inch Sewer Main Rehabilitation	Cameron	120	4	116	3%	150	134	Design 90% complete.
S2023	Calavo Drive Sewer Main Utility Relocation	Cameron	50	1	49	2%	65	50	County of San Diego driven.
S2024	Campo Road Sewer Main Replacement	Cameron	75	2	73	3%	3,250	3,248	To be assessed in the Sewer Master Plan.
S2025	Wiegand Way Sewer Main Replacement	Cameron	25	5	20	20%	175	170	County Project.
Total Replacement/Renewal Projects			10,006	1,119	8,887	11%	44,053	26,479	
CAPITAL PURCHASE PROJECTS									
P2282	Vehicle Capital Purchases	Rahders	540	59	481	11%	4,945	2,882	\$25K encumbered, awaiting vehicle delivery; \$100K on the January Board report; awaiting approval.
P2285	Office Equipment and Furniture Capital Purchases	Dobrowski	-	-	-	0%	481	42	Nothing to update.
P2286	Field Equipment Capital Purchases	Rahders	201	25	176	12%	1,527	764	Plan to spend the full amount by year end.
P2443	Information Technology Mobile Services	Jenkins	250	19	231	8%	1,552	685	Plan to spend the full amount by year end.
P2461	Records Management System Upgrade	Stevens	150	-	150	0%	408	201	Plan to spend the full amount by year end.
P2469	Information Technology Network and Hardware	Jenkins	300	69	231	23%	1,921	1,116	Plan to spend the full amount by year end.
P2470	Application Systems Development and Integration	Stevens	408	95	313	23%	2,218	1,337	Plan to spend the full amount by year end.
P2501	Telecommunications Equipment Upgrade	Jenkins	400	-	400	0%	400	400	Plan to spend the full amount by year end.
Total Capital Purchase Projects			2,249	267	1,982	12%	13,490	7,477	

Expenditures (Continued)

CIP No.	Description	Project Manager	FISCAL YEAR-TO-DATE, 09/30/10				LIFE-TO-DATE		Comments
			FY 2011 Budget	Expenses	Balance	Expense to Budget %	Budget	Balance	
DEVELOPER REIMBURSEMENT PROJECTS									
P2104	PL - 12-inch, 711 Zone, La Media Road - Birch/Rock Mountain	Charles	-	-	-	0%	833	833	Nothing to update.
P2107	PL - 12-inch, 711 Zone, Rock Mountain Road - La Media/SR 125	Charles	-	-	-	0%	722	722	Nothing to update.
P2325	PL - 10' to 12" Oversize, 1296 Zone, PB Road - Rolling Hills Hydro PS/PB Bndy	Charles	1	-	1	0%	50	50	Awaiting Developer's request for reimbursement.
P2402	PL - 12-inch, 624 Zone, La Media Road - Village 7/Otay Valley	Charles	-	-	-	0%	444	444	Nothing to update.
P2403	PL - 12-inch, 624 Zone, Heritage Road - Olympic/Otay Valley	Charles	-	-	-	0%	925	925	Nothing to update.
R2028	RecPL - 8-inch, 680 Zone, Heritage Road - Santa Victoria/Otay Valley	Charles	-	-	-	0%	600	600	Nothing to update.
R2042	RecPL - 8-inch, 927 Zone, Rock Mountain Road - SR-125/EastLake	Charles	-	-	-	0%	140	140	Nothing to update.
R2047	RecPL - 12-inch, 680 Zone, La Media Road - Birch/Rock Mountain	Charles	-	-	-	0%	450	450	Nothing to update.
R2082	RecPL - 24-inch, 680 Zone, Olympic Parkway - Village 2/Heritage	Charles	5	-	5	0%	1,747	1,747	Awaiting Developer's request for reimbursement.
R2083	RecPL - 20-inch, 680 Zone, Heritage Road - Village 2/Olympic	Charles	5	-	5	0%	400	400	Awaiting Developer's request for reimbursement.
R2084	RecPL - 20-inch, 680 Zone, Village 2 - Heritage/La Media	Charles	1	-	1	0%	971	970	Awaiting Developer's request for reimbursement.
R2085	RecPL - 20-inch, 680 Zone, La Media - State/Olympic	Charles	-	-	-	0%	600	600	Nothing to update.
Total Developer Reimbursement Projects		Total	12	-	12	0%	7,662	7,661	
GRAND TOTAL			\$ 28,448	\$ 4,424	\$ 24,024	16%	\$ 246,334	\$ 181,516	

Quality Assurance Approval Sheet

Subject: Informational Item – First Quarter Fiscal Year
2011 Capital Improvement Program Report

Project No.: Various

Document Description: Staff Report for February 2, 2011 Board Meeting

Author:	 Signature	<u>1/10/11</u> Date
	Daniel Kay Printed Name	
QA Reviewer:	 Signature	<u>1/10/11</u> Date
	Gary Silverman Printed Name	
Manager:	 Signature	<u>1/10/11</u> 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:	Engineering, Operations, and Water Resources Committee	MEETING DATE:	January 18, 2011	
SUBMITTED BY:	Kevin Cameron <i>KC</i> Assistant Civil Engineer I	PROJECT/ SUBPROJECT:	P2505-001103 P2506-001103	DIV. NO. 3
	Ron Ripperger <i>RR</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:	Informational Item - Action Plan for Community Outreach and Site Improvements at the 657-1 and 657-2 Reservoir Site			

GENERAL MANAGER'S RECOMMENDATION:

This is an informational item regarding Staff's action plan for community outreach and site improvements at the 657-1 & 657-2 Reservoir site in association with the Exterior/Interior Coating and Upgrades Project (see Exhibit A for Project location).

PURPOSE:

To update the Engineering, Operations, and Water Resources Committee (Committee) on an action plan for community outreach and site improvements at the 657-1 & 657-2 Reservoir site in association with the Exterior/Interior Coating and Upgrades Project.

ANALYSIS:

On January 5, 2011, the Board awarded a construction contract to recoat the interior and exterior of the 657-1 and 657-2 reservoirs. When the Project was previously presented to the Engineering, Operations, and Water Resources Committee Meeting on December 7, 2010, the Committee inquired about the community relations and landscaping work that was planned in association with this Project.

Staff acknowledged to the Committee that these were important elements of the Project and agreed to provide additional details about the planned activities. The following is an action plan for these activities.

Community Outreach - The 657-1 and 657-2 reservoirs are located in a residential neighborhood, so it is important to communicate effectively, in advance of and during construction, so affected customers understand what to expect. To the extent possible, the construction operations will be conducted to minimize impact to the neighborhood with respect to traffic, noise, debris, and other elements.

A presentation to the Spring Valley Community Group is scheduled for January 25, 2011, to give the community pertinent information about the Project and to hear their concerns, if any.

Also, prior to the contractor mobilizing to the site, specific customers, within a radius of the site deemed to be most impacted, will be provided with a "door hanger" which will contain information about the dates of construction, hours of operation, nature of the work, and contact information to register comments or questions. Exhibit B attached shows the residents that are anticipated to be notified.

Based on the feedback from the community, concerns will be addressed on a case by case basis, and if warranted, a special community meeting may be scheduled during construction to provide additional information about construction progress.

Site Improvements - A possible site improvement that may have a positive visual impact on the community is an enhancement to the existing landscaping. As shown in the attached Exhibit C, which is a series of site photographs from various perspectives, opportunities for landscaping are limited. However, Staff will evaluate and, under a separate contract, implement additional landscaping, if needed.

FISCAL IMPACT:



The reservoir coating work is expected to fully utilize the available budgets. Therefore, any site improvements that are considered and intended would require additional funds to be added to the existing CIP budgets. Any recommended additional improvements will be brought to the Board for approval along with a request to increase the CIP budgets. See Attachments B-1 and B-2 for budget detail.

STRATEGIC GOAL:

This Project supports the Operations Department Mission statement, "To provide all operations and maintenance services in the highest possible professional, efficient, safe, and cost effective manner to all internal and external customers, and to strive to continually improve the level of service this department provides."

LEGAL IMPACT: _____

None.



General Manager

P:\WORKING\CIP P2505 & 2506 657-1&2 Reservoir Coating\Staff Reports\BD 02-02-11, Staff Report, Informational Item - Action Plan, (KC-RR).doc

KC/RR/RP:jf

Attachments: Attachment A - Committee Action
Attachment B-1 - Budget Detail for CIP P2505
Attachment B-2 - Budget Detail for CIP P2506
Exhibit A - Location Map
Exhibit B - Outreach Contact Map
Exhibit C - Site Photographs



ATTACHMENT A

SUBJECT/PROJECT: P2505-001103 P2506-001103	Informational Item - Action Plan for Community Outreach and Site Improvements at the 657-1 and 657-2 Reservoir Site
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COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee reviewed this item at a meeting held on January 18, 2011. The Committee supported Staff's recommendation.



ATTACHMENT B-1

SUBJECT/PROJECT: P2505-001103 P2506-001103	Informational Item - Action Plan for Community Outreach and Site Improvements at the 657-1 and 657-2 Reservoir Site
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Otay Water District
 P2505 - 657-1 Reservoir Interior/Exterior Coating

Date Updated: November 30, 2010

<i>Budget</i>	<i>Committed</i>	<i>Expenditures</i>	<i>Outstanding Commitment & Forecast</i>	<i>Projected Final Cost</i>	<i>Vendor/Comments</i>
375,000					
Planning					
Labor	822	822	-	822	
Total Planning	822	822	-	822	
Design					
Labor	13,507	13,507		13,507	
Service Contracts	143	143	-	143	SAN DIEGO UNION-TRIBUNE LLC
	38	38	-	38	SAN DIEGO DAILY TRANSCRIPT
Total Design	13,688	13,688	-	13,688	
Construction					
Labor	20,000	519	19,481	20,000	
Construction Contract	320,500	-	320,500	320,500	Blastco, Inc.
CM Contract	14,990	-	14,990	14,990	As-Needed CM
Project Closeout	5,000	-	5,000	5,000	
Total Construction	360,490	519	359,971	360,490	
Grand Total	375,000	15,029	359,971	375,000	



ATTACHMENT B-2

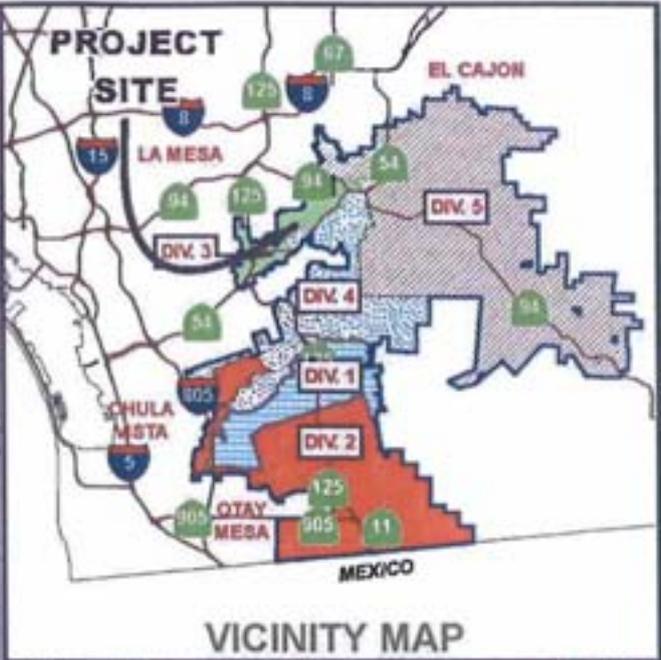
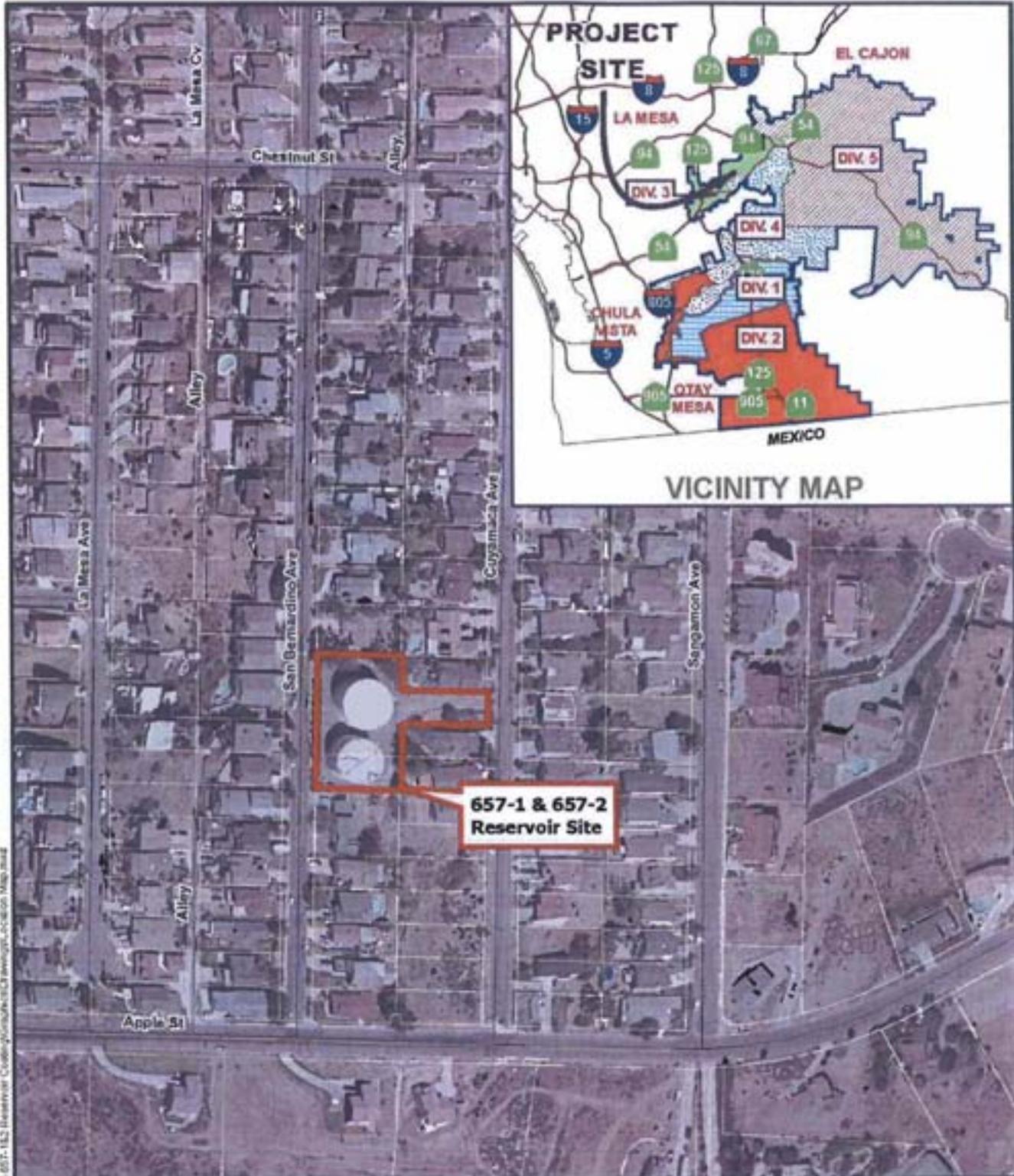
SUBJECT/PROJECT:	Informational Item - Action Plan for Community Outreach and Site Improvements at the 657-1 and 657-2 Reservoir Site
P2505-001103	
P2506-001103	

Otay Water District
P2506 - 657-2 Reservoir Interior/Exterior Coating

Date Updated: November 30, 2010

<i>Budget</i>	<i>Committed</i>	<i>Expenditures</i>	<i>Outstanding Commitment & Forecast</i>	<i>Projected Final Cost</i>	<i>Vendor/Comments</i>
375,000					
Planning					
Labor	569	569	-	569	
Total Planning	569	569	-	569	
Design					
Labor	12,933	12,933		12,933	
Service Contracts	143	143	-	143	SAN DIEGO UNION-TRIBUNE LLC
	38	38	-	38	SAN DIEGO DAILY TRANSCRIPT
Total Design	13,114	13,114	-	13,114	
Construction					
Labor	25,000	614	24,386	25,000	
Construction Contract	312,000	-	312,000	312,000	Blastco, Inc.
CM Contract	19,317	-	19,317	19,317	As-Needed CM
Project Closeout	5,000	-	5,000	5,000	
Total Construction	361,317	614	360,703	361,317	
Grand Total	375,000	14,297	360,703	375,000	

P:\WORK\810\CI\ P2505 & 2506 657-1&2 Reservoir Coating\Graphics\Drawings\Location Map.mxd



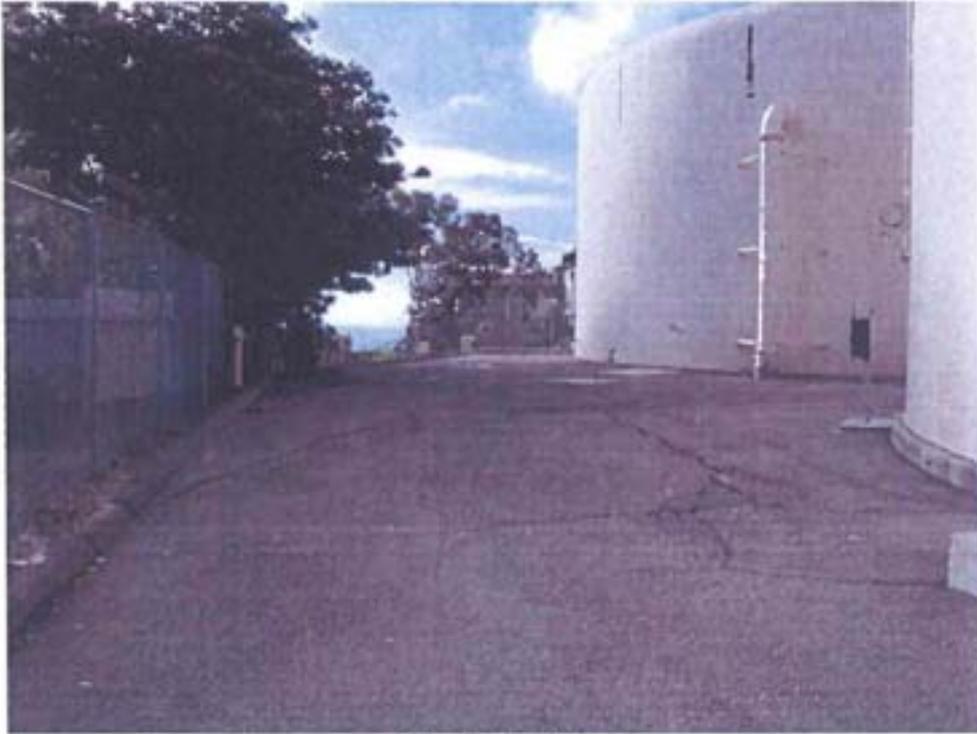
OTAY WATER DISTRICT
 657-1 (1.0 MG) & 657-2 (0.87 MG) RESERVOIRS
 EXTERIOR/INTERIOR COATINGS & UPGRADES
 SPRING VALLEY, CA



CIP # P2505 & P2506

EXHIBIT A

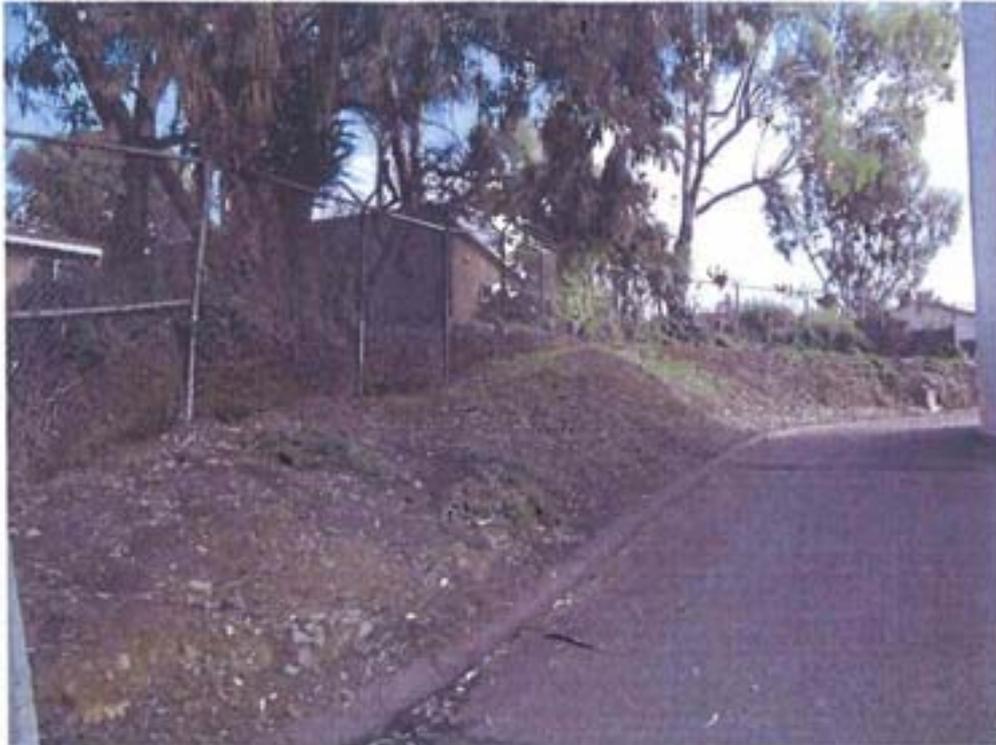
EXHIBIT C



C1 – East Side



C2 – West Side



C3 – North Side



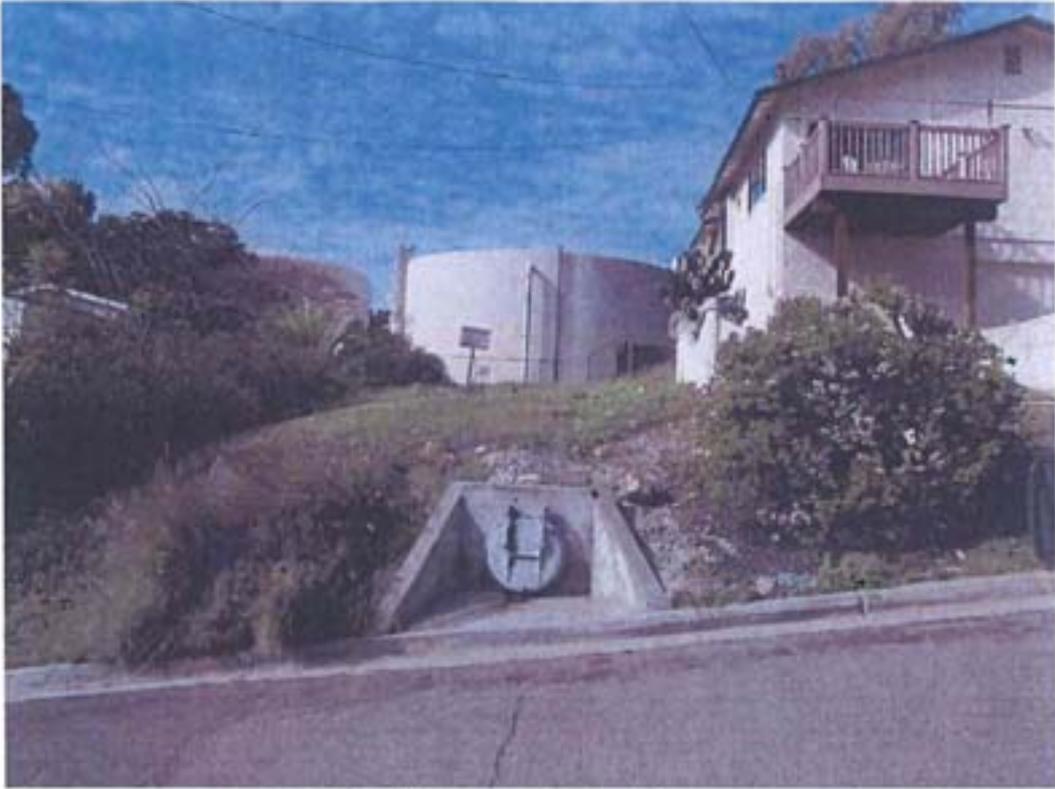
C4 – South Side



C5 – Access Gate



C6 – Street Frontage



C7 – Cuyamaca Avenue Access



C8 – Vegetation



C9 – Aerial View of Site

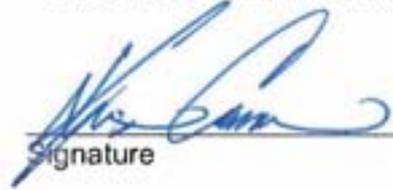
Quality Assurance Approval Sheet

Subject: Informational Item - Action Plan for Community
Outreach and Site Improvements at the 657-1 and
657-2 Reservoir Site

Project No.: P2505-001103
P2506-001103

Document Description: Staff Report for January 18, 2011 Engineering, Operations, and Water
Resources Committee Meeting

Author:


Signature

1/13/11
Date

Kevin Cameron
Printed Name

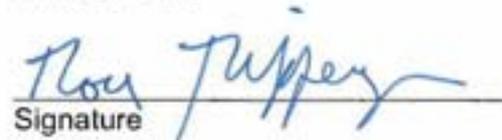
QA Reviewer:


Signature

1/13/11
Date

Gary Silverman
Printed Name

Manager:


Signature

1/13/11
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.