

Otay Water District Board of Directors Meeting

February 4, 2009



Water Supply Assessment and Verification Report for the Otay Ranch Preserve and Resort Community Project

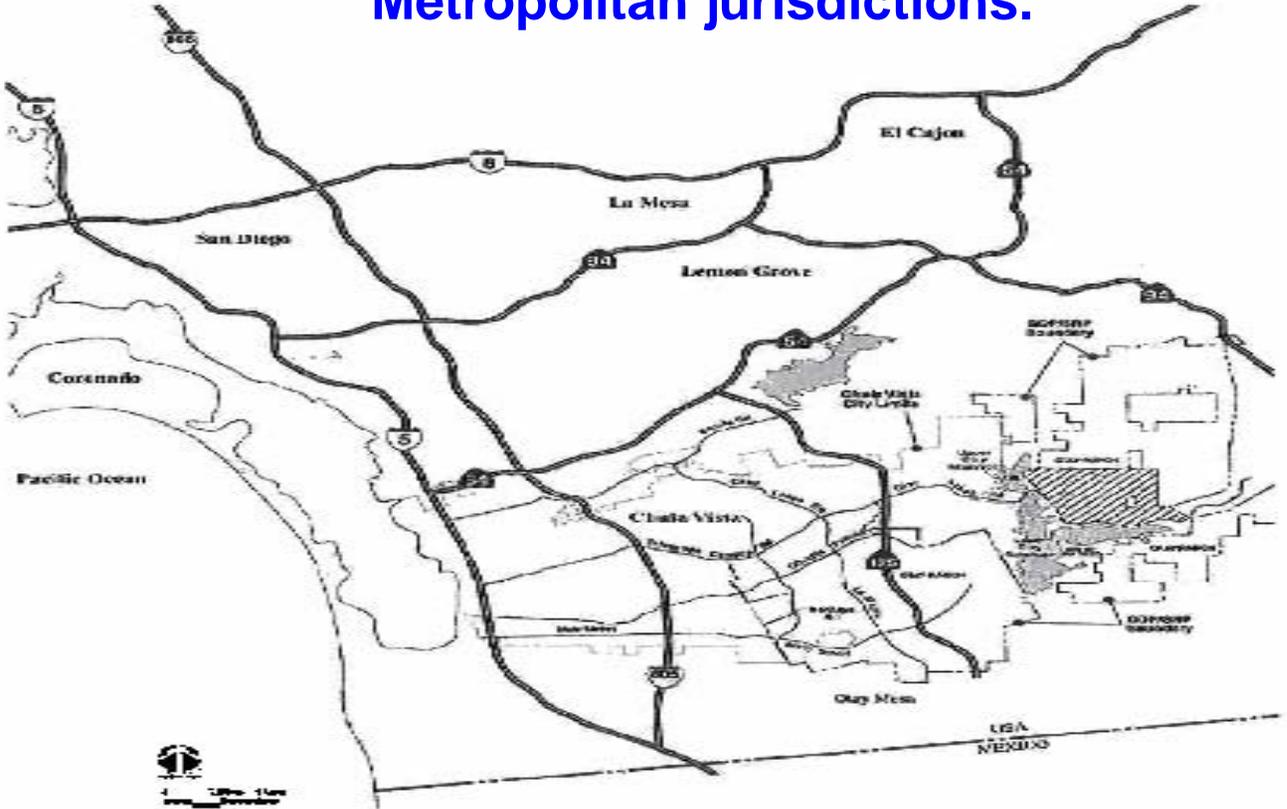
SB 610 and SB 221 Compliance

Jim Peasley, P.E.
Engineering Manager

Background Information

- ❑ 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 (WS2A):
 - ❑ Requires water purveyor to prepare a water supply assessment report for inclusion in land use agency CEQA documentation.
- ❑ SB 221 Water Supply Verification (WSV):
 - ❑ Requires water purveyor to prepare written verification that sufficient water supplies are planned to be available prior to approval of Tentative Map.
- ❑ Otay Ranch Preserve and Resort Community Project (Resort Project) SB 610 and SB 221 Water Supply Assessment and Verification (WSA&V) Report
 - ❑ Board approval required for submittal to the County of San Diego.

The Otay Ranch L.P. Resort Project is outside of the Otay Water District, the Water Authority, and Metropolitan jurisdictions.

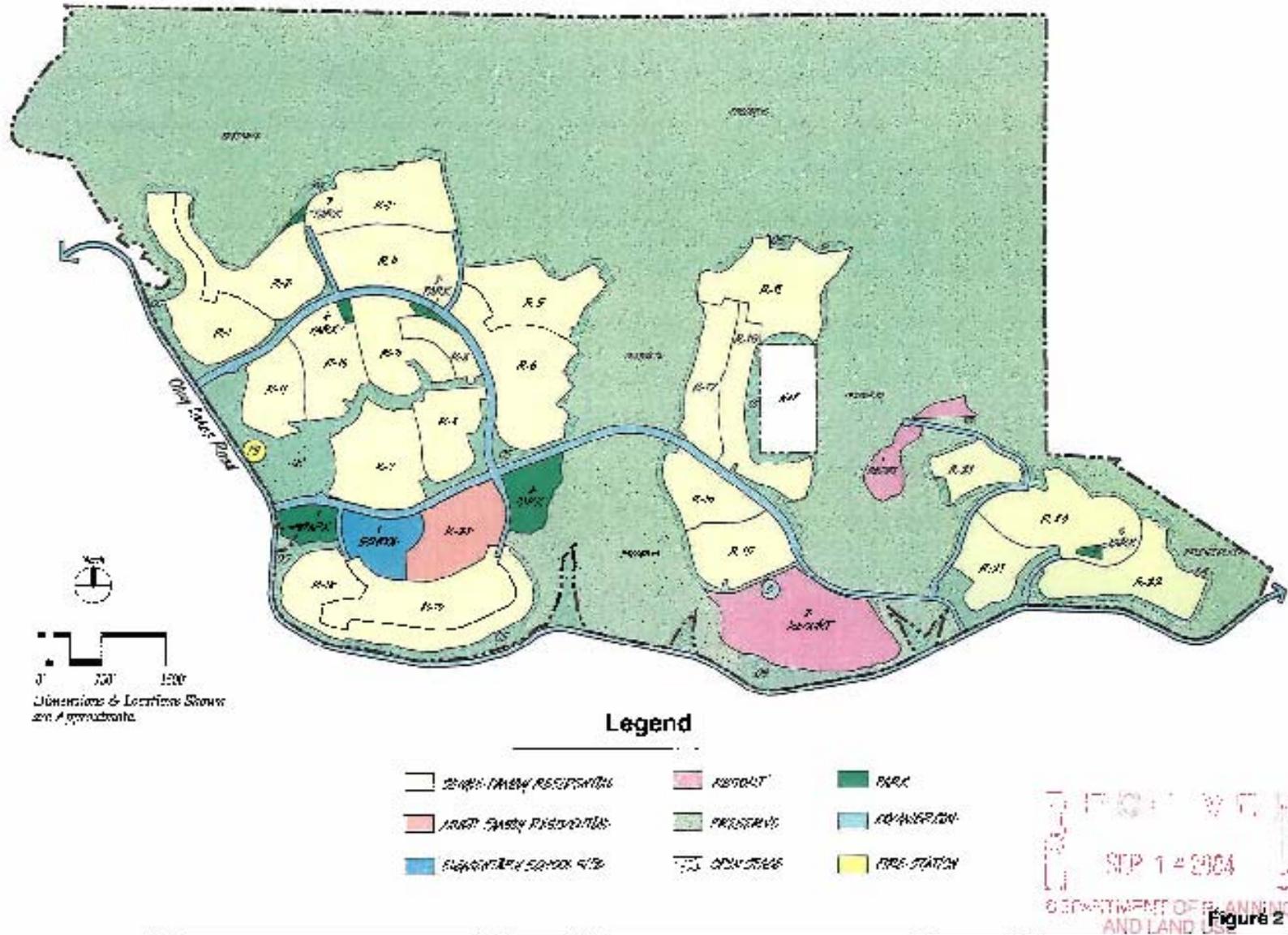


 The Otay Ranch Preserve & Resort Specific Plan Area

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DEPARTMENT OF PLANNING
AND LAND USE

Figure 1

Resort Project Proposed Land Use Plan



SP04-02; TM5361; ER LOG 04-19-005

Proposed Land Use Plan

Resort Project Description

- ❑ Included within the County of San Diego and City of Chula Vista Otay Ranch General Development Plan/Sub Regional Plan adopted October 1993.
- ❑ Annexation into the Otay Water District, Water Authority, and Metropolitan jurisdictions required for imported water service.
- ❑ Project includes a Resort/Hotel and residential development project totaling 1,869 acres.
- ❑ 200 hotel units, 1,738 single family homes, 200 multi-family homes with a school, parks, roadways, open space, preserve, and public safety elements.
- ❑ DEMAND:
 - 1,340 ac-ft/yr (Potable) 76%
 - 417 ac-ft/yr (Recycled) 24% } ± 1,800 ac-ft/yr
- ❑ Otay Water District, Water Authority, and Metropolitan likely to require 100% supply offset for the Resort Project potable water demand as a condition of annexation.
- ❑ Project to be accomplish in several phases over many years.

Resort Project Water Supply Assessment and Verification

- The regional and local water supply agencies acknowledge the challenges of supply acquisition and also the need for adaptable implementation strategy and fully intend to develop sufficient reliable supplies to meet demands.
- Water suppliers recognize additional water supplies are necessary and supply portfolios need to be reassessed and redistributed with the intent to serve existing and future needs.
- Metropolitan is in the process of updating its Integrated Water Resources Plan (IRP) to account for the Delta and other potential supply impact issues.

Resort Project Water Supply Assessment and Verification (cont'd)

- The state of current water supply situation is documented in the Resort Project WSA&V Report with the intent that Otay Water District plans to develop local water supply for the Resort Project.
- Staff believes that the Board has met the intent of the SB 610 and SB 221 statutes in that:
 - 1) Land use agencies and water suppliers have demonstrated strong linkage.
 - 2) The Resort Project WSA&V Report clearly documents the current water supply situation and that sufficient water supplies are planned to meet demand.

Resort Project Water Supply Assessment and Verification (cont'd)

- Based on existing documentation the WSA&V Report demonstrates and documents that sufficient water supplies are planned for and are intended to be acquired.
- The WSA&V Report documents the planned water supply projects and the actions necessary to develop the supplies.
- Water supply for the Resort Project and for existing and future developments within the Otay Water 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.
- See Exhibits A and B of Staff Report for detailed information.

Otay Water District Planned Local Water Supply Projects

- **Planned local water supply projects and approximate annual production.**
 - ✓ Middle Sweetwater River Groundwater Well (~1,500 ac-ft)
 - ✓ Otay River Groundwater Desalination (~4,500 ac-ft)
 - ✓ Rosarito Ocean Desalination Project (~11,200 ac-ft)
 - ✓ North District Recycled Water Project (~1,200 ac-ft)
 - ✓ Rancho del Rey Groundwater Well (~600 ac-ft)
 - ✓ Otay Mesa Lot 7 Groundwater Well (~600 ac-ft)

CONCLUSION

- ❑ Water demand and supply forecasts are included in the planning documents of Metropolitan, Water Authority, and Otay Water District.
- ❑ Actions necessary to develop the identified water supplies are documented.
- ❑ Resort Project SB 610 and SB 221 WSA&V Report demonstrates and documents that sufficient water supplies are planned for and are intended to be available over the next 20 years. 1,340 ac-ft/yr (Potable); 417 ac-ft/yr (Recycled)
- ❑ Metropolitan in the process of updating its IRP considering Delta issues and other potential water supply impacts.
- ❑ All the water for this project will be *offsets*.

STAFF RECOMMENDATION

That the Board of Directors approve the SB 610 and SB 221 Water Supply Assessment and Verification Report dated January 2009 for the Otay Ranch Preserve and Resort Community Project.

EXHIBIT A

Water Authority Planned Water Supply Projects

- **Planned CIP facilities are adequate to acquire and deliver water supplies.**
 - ✓ Emergency Storage Project
 - ✓ 100 MGD Twin Oaks WTP
 - ✓ San Vicente Reservoir Expansion Carryover Storage Project
 - ✓ Pipeline No. 6
 - ✓ All American Canal Lining Project
 - ✓ Coachella Canal Lining Project
 - ✓ IID QSA Water Transfer (Fallow Farmland)

EXHIBIT B

Metropolitan Preferential Rights

- Water Authority's typical preferential right is about 16.5% of Metropolitan's supply.
- Water Authority accounted for approximately 25% of Metropolitan's water sales.
- Water Authority and its member agencies are taking measures to reduce dependence on Metropolitan.
- Metropolitan 2005 RUWMP 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.

Source from the Metropolitan 2005 RUWMP.

EXHIBIT C

Water Authority Drought Water Supply Allocation Plan

- The Water Authority Drought Management Plan is the foundation of their Drought Water Supply Allocation Plan.
- Allocation Plan allows for new demand from growth when land uses are within current water supply planning documents.
- Under the Water Authority Drought Water Supply Allocation Plan the Otay Water District water supply allocation will increase as a result of growth.

EXHIBIT D

Otay Water District Drought Response Conservation Program*

- **Level 1 – Drought Watch**
Voluntary conservation target of up to 10%.
- **Level 2 – Drought Alert**
Mandatory conservation target of up to 20%.
- **Level 3 – Drought Critical**
Mandatory conservation target of up to 40% and no new potable water meters except under limited conditions, such as a new local water supply and/or demand management offset. Suspend annexations into Otay Water District service area.

* Otay Ranch L.P. is aware of the Drought Response Conservation Program.

EXHIBIT E

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

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

Source: From Otay WD 2005 UWMP.

EXHIBIT F

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

Description	FY 2010	FY 2015	FY 2020	FY 2025	FY 2030
Water Authority Supply	49,259	56,341	64,365	71,660	80,876
Recycled Water Supply	4,040	4,684	5,430	6,294	7,297
Groundwater Supply	0	0	0	0	0
Total Required Supply	53,299	61,025	69,795	77,954	88,173
Total Projected Demand	53,299	61,025	69,795	77,954	88,173
Supply 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.

Source: From Otay WD 2005 UWMP.

EXHIBIT G

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

Description	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Water Authority Supply	50,675	52,091	53,509	54,925	56,341
Recycled Water Supply	4,169	4,298	4,426	4,555	4,684
Groundwater Supply	0	0	0	0	0
Total Required Supply	54,844	56,389	57,935	59,480	61,025
Total Projected Demand	54,844	56,389	57,935	59,480	61,025
Supply 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.

Source: From Otay Water District 2005 UWMP.

EXHIBIT H

Projected 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 Updated Urban Water Management Plan. The total projected supply data is balanced with the projected water demand.