

# San Jacinto Watershed Council

## GROUNDWATER MANAGEMENT ACTIVITIES AT EMWD

June 2, 2005

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## GROUNDWATER MANAGEMENT ACTIVITIES

- 1. Why Groundwater Management?**
- 2. West San Jacinto Groundwater Management Plan**
  - ✓ Overview
  - ✓ Projects
- 3. Hemet/San Jacinto Management Plan**
  - ✓ Overview
  - ✓ Projects

## CAPITAL IMPROVEMENT PROGRAM

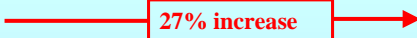
	<u>5-year Total</u>	<u>Planning &amp; Design</u>	<u>Under Construction</u>
Water	\$ 335.5	\$ 269.7	\$ 65.8
Sewer	\$ 359.3	\$ 313.3	\$ 46.0
Recycled	\$ 16.0	\$ 12.6	\$ 3.4
General	<u>\$ 1.8</u>	<u>\$ 1.8</u>	<u>\$ 0.0</u>
<b>TOTAL</b>	<b>\$712.6</b>	<b>\$ 597.4</b>	<b>\$ 115.2</b>

All values are in million dollars

## EMWD WATER SUPPLY PLAN

### Water Demand

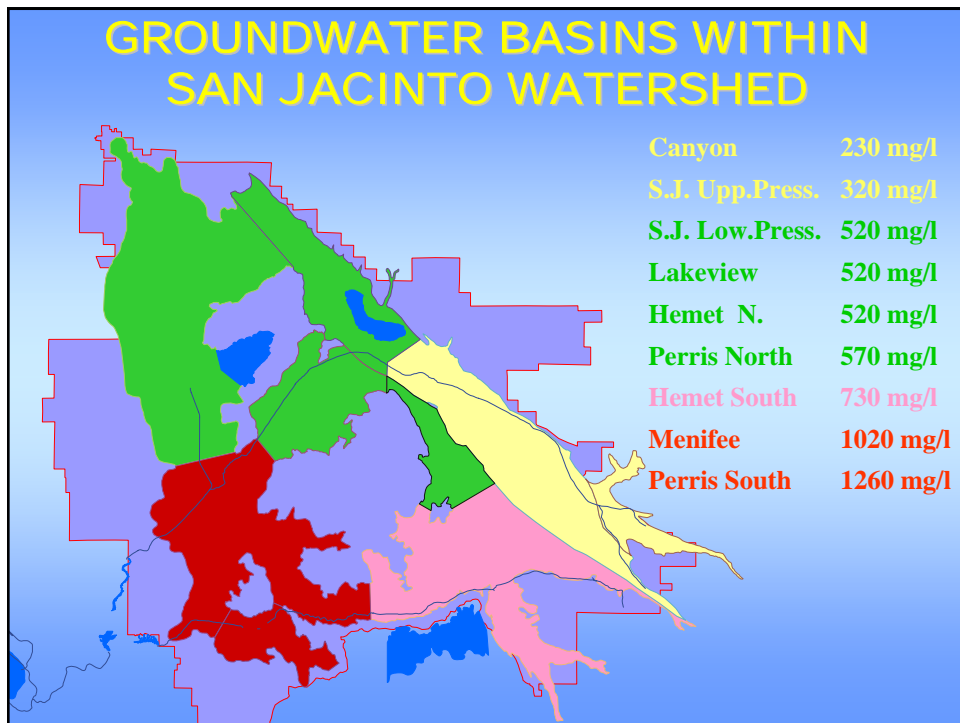
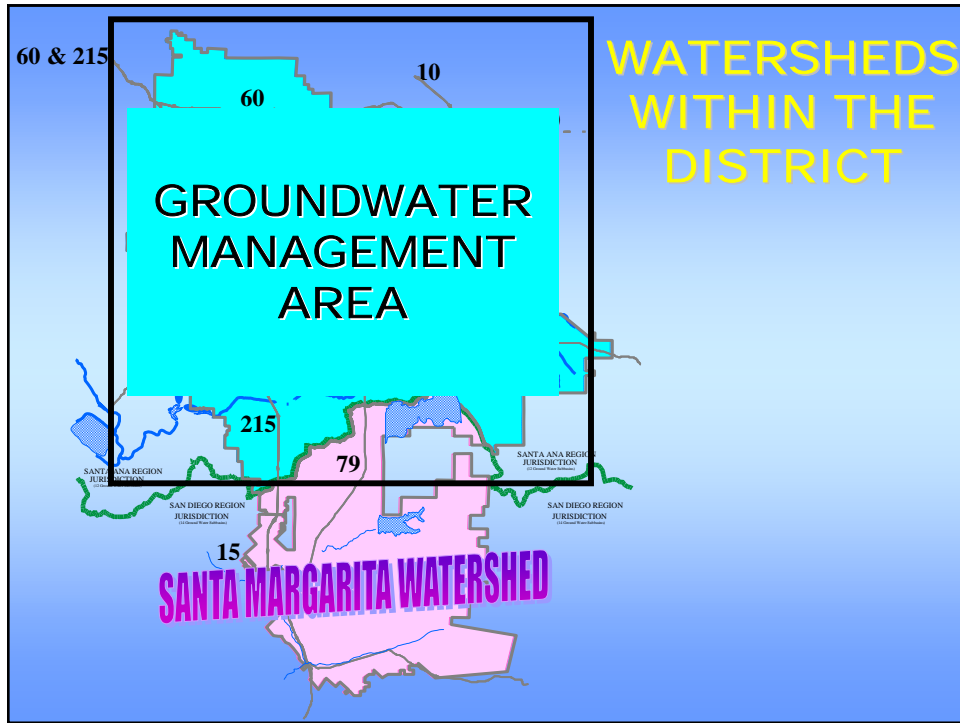
	<u>2005</u>	<u>2010</u>	<u>2015</u>
Potable Water Demand	109,000	119,000	133,000
Non Potable Water Demand	25,000	32,000	37,000
<b>Total Water Demand</b>	<b>134,000</b>	<b>151,000</b>	<b>170,000</b>



### Water Supply

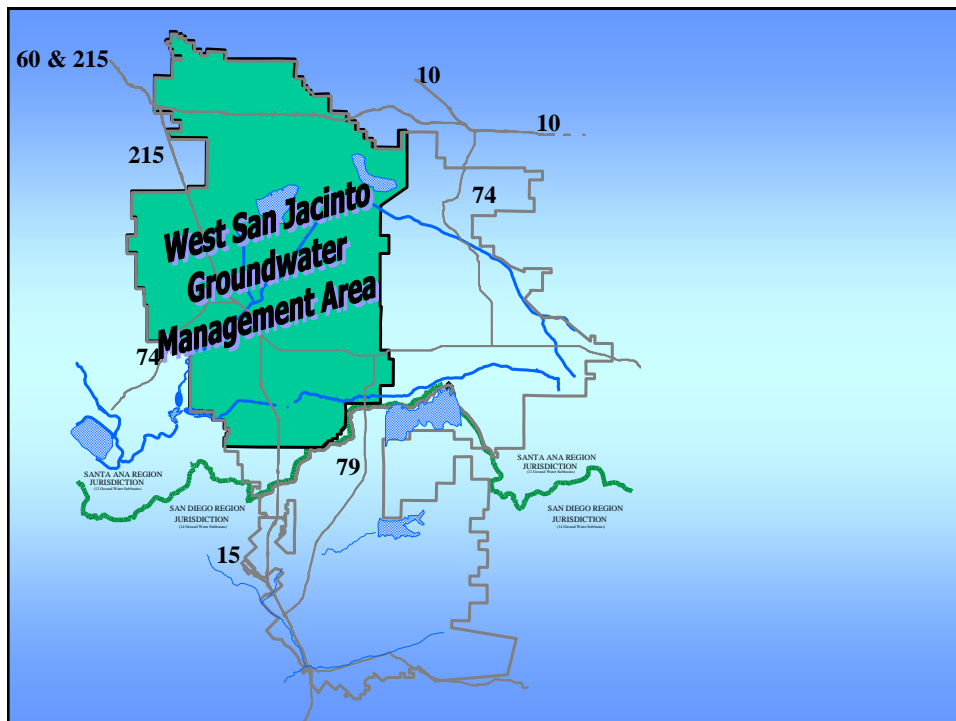
Imported Water	85,000	81,500	91,000
Recharge & Recovery	2,000	7,500	15,000
Groundwater	22,000	30,000	27,000
Recycled Water	25,000	32,000	37,000
<b>Total Water Supply</b>	<b>134,000</b>	<b>151,000</b>	<b>170,000</b>





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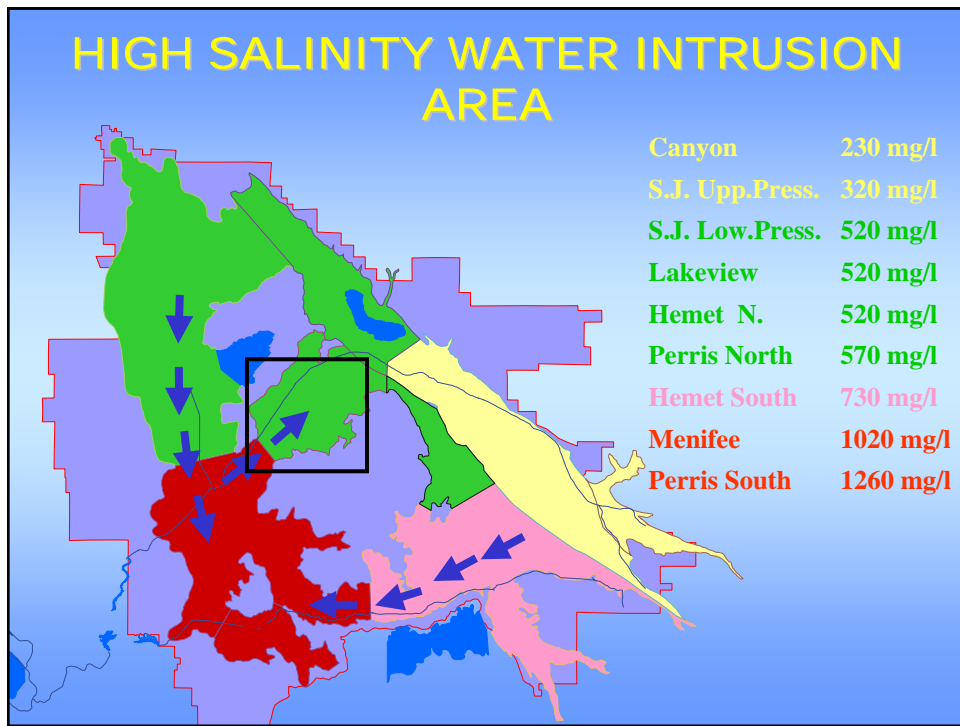


## WEST SAN JACINTO GROUNDWATER MANAGEMENT PLAN

- **Advisory Committee:**
  - **Cities of Perris, and Moreno Valley**
  - **Nuevo Water Company and EMWD**
  - **Local Groundwater Producers**
- **Groundwater monitoring programs:**
  - **Water quality, levels, and extraction**
  - **Well capping/sealing**
- **An annual report to evaluate groundwater conditions in the West San Jacinto Management area**

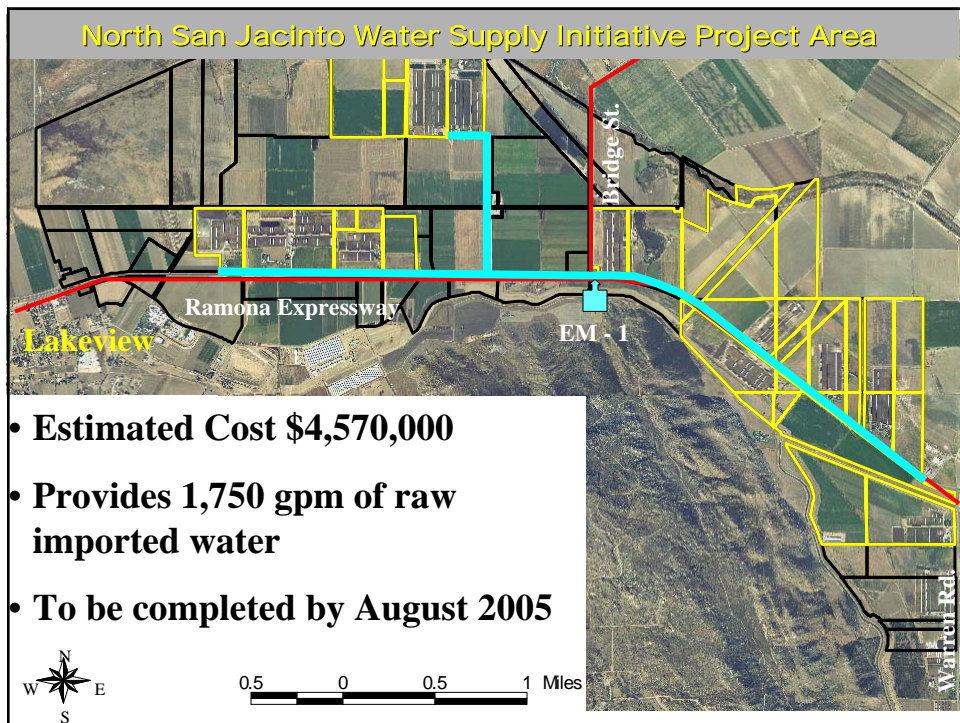
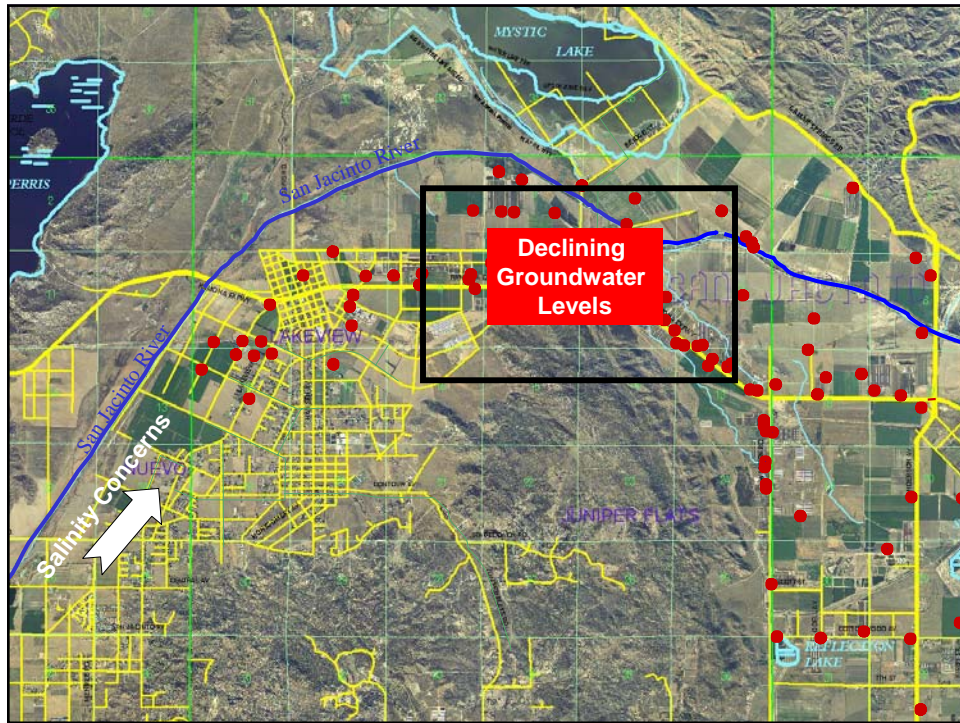
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  - ✓ **Projects**
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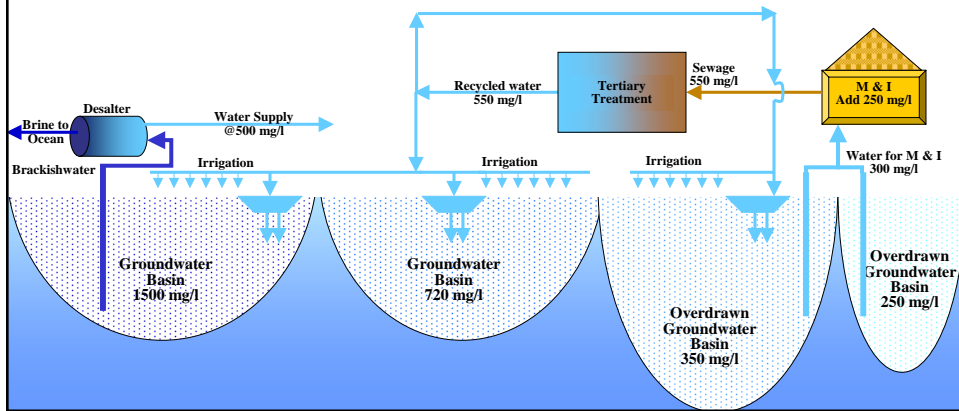
## PROGRAMS TARGETED TO IMPROVE LAKEVIEW SUBBASIN SITUATION

- **Reduce Groundwater Production in the Lakeview Area**
- **Increase Groundwater Production in the Perris Area (Desalination Program)**

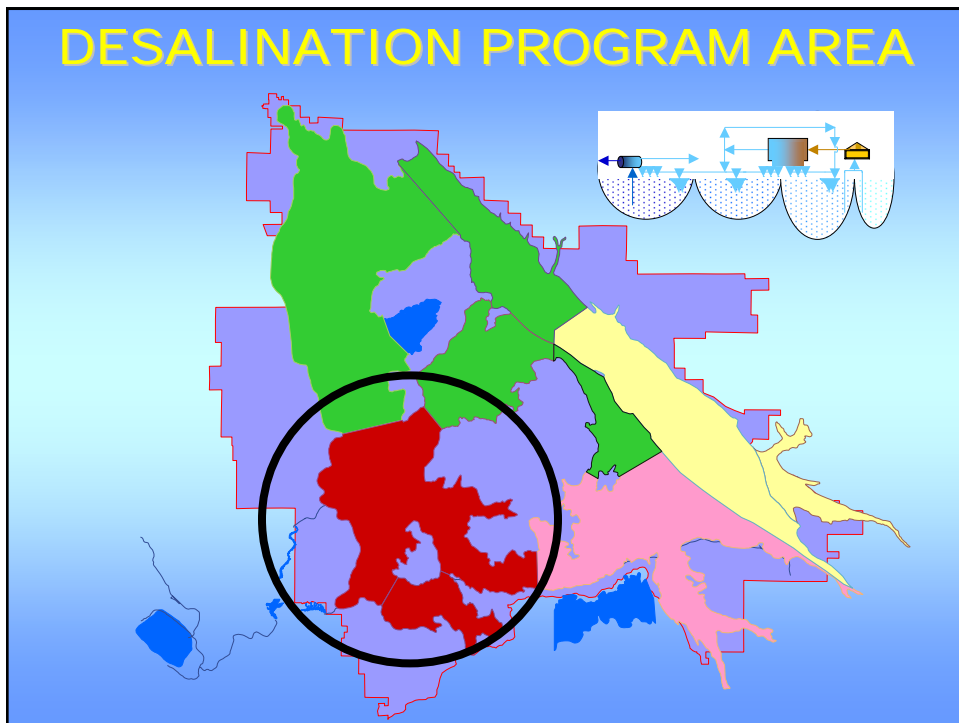


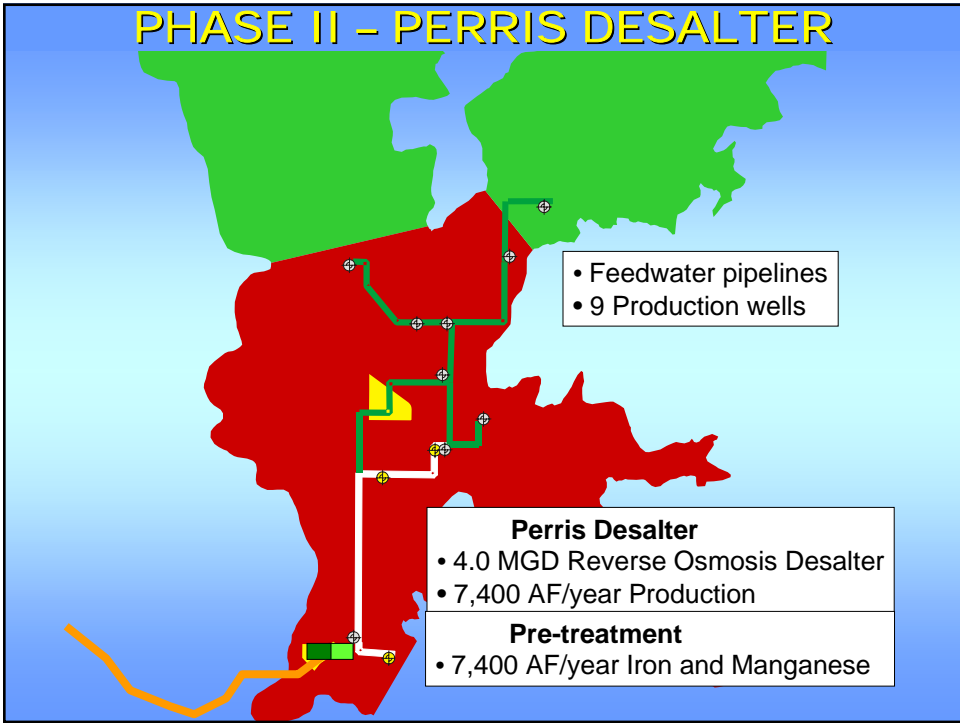
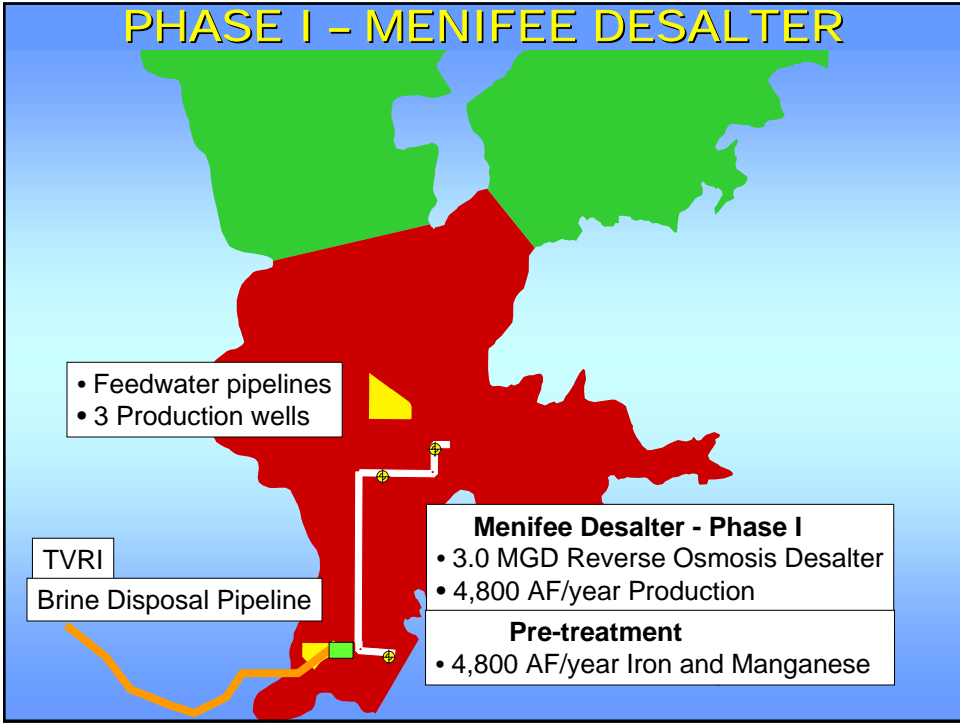
# EMWD DESALINATION PROGRAM

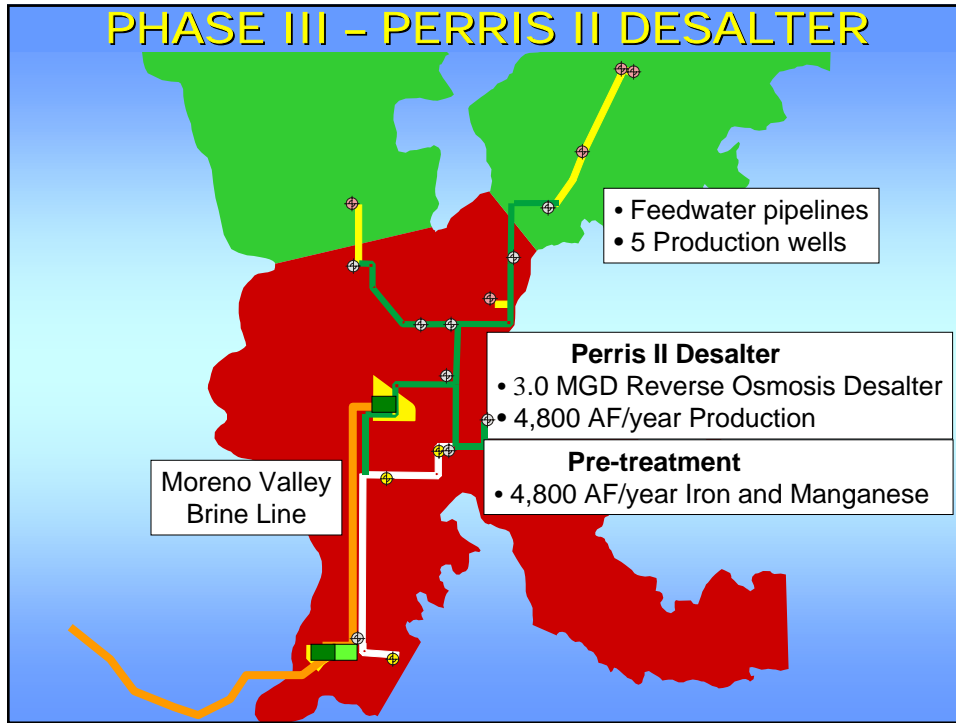
- Phase I – Menifee Desalter
- Phase II – Perris Desalter
- Phase III – Perris II Desalter



# DESALINATION PROGRAM AREA





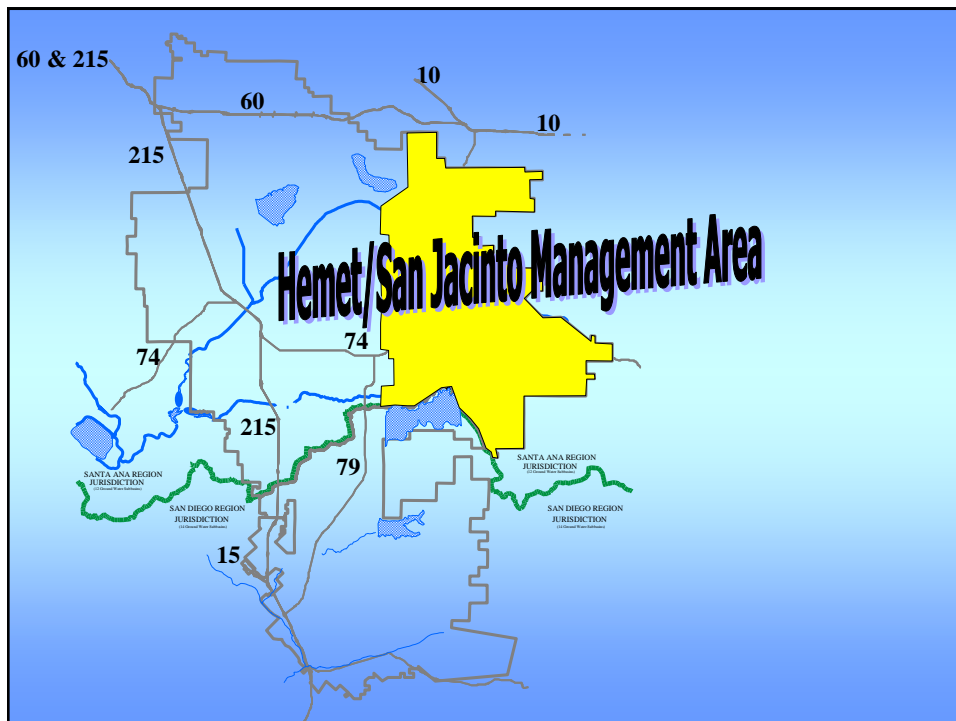


### EMWD DESALINATION PROGRAM Infrastructure Costs

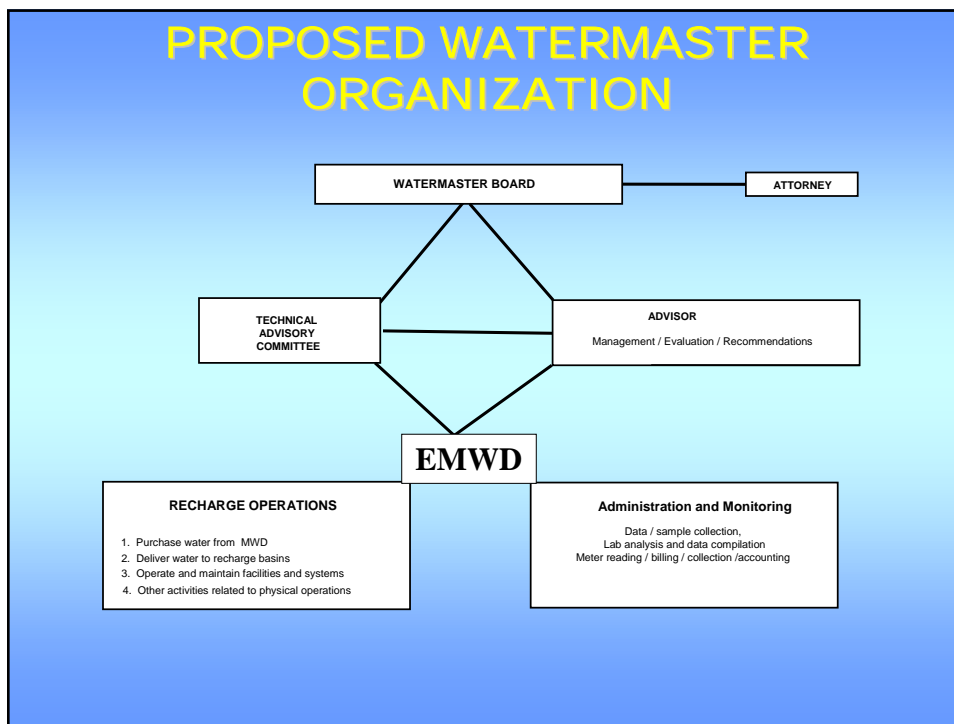
• Meniffee Desalter	\$ 11,200,000
• Perris I Desalter	\$ 26,200,000
• Perris II Desalter	\$ 29,500,000
• SARI, Treatment & Disposal	\$ 28,800,000
• Desalter Wells (Shared)	\$ 19,200,000
• Transmission Pipelines (Shared)	\$ 18,400,000
• Reach 4 Brine Line	\$ 7,800,000
• Moreno Valley Brine Line	\$ 2,300,000
<b>Total Program Costs</b>	<b>\$143,400,000</b>

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## PROPOSED WATERMASTER ORGANIZATION



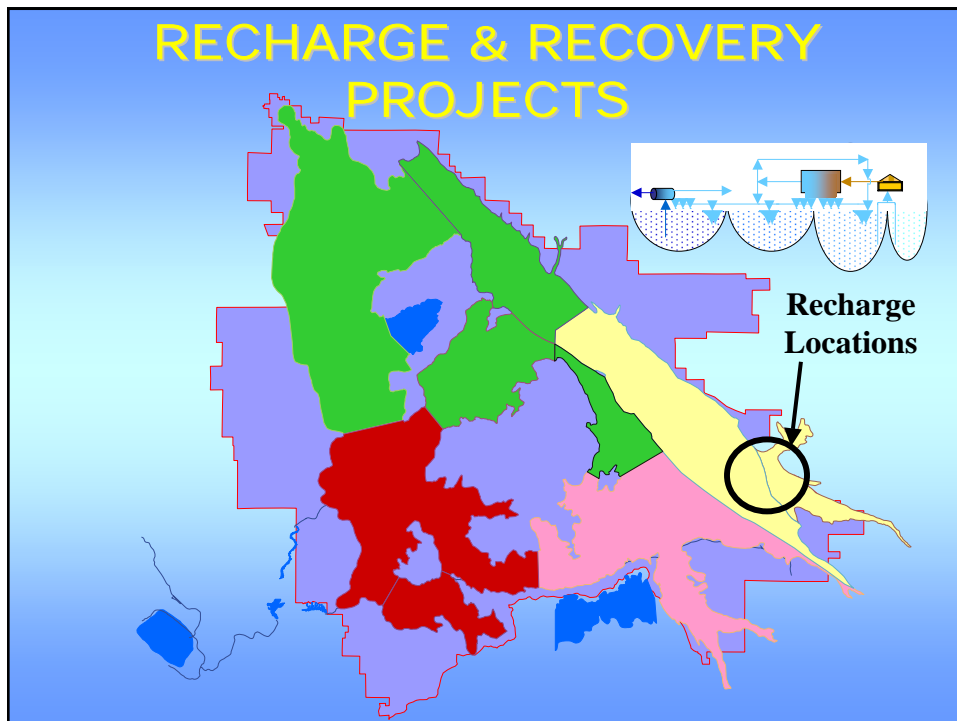
## GROUNDWATER MANAGEMENT ACTIVITIES

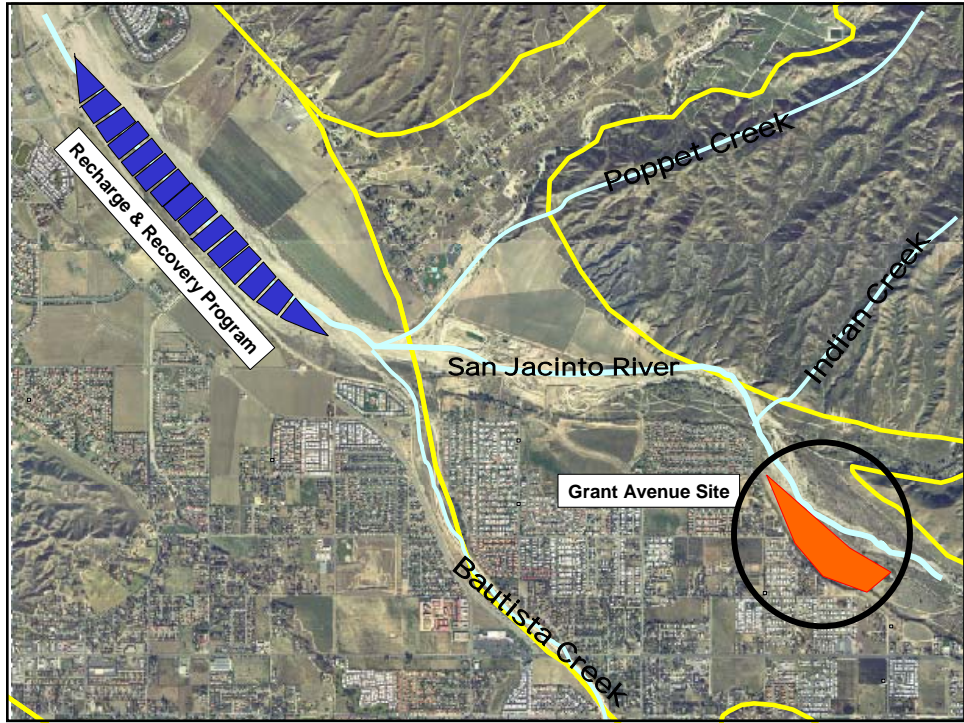
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## RECHARGE & RECOVERY PROGRAM OBJECTIVES

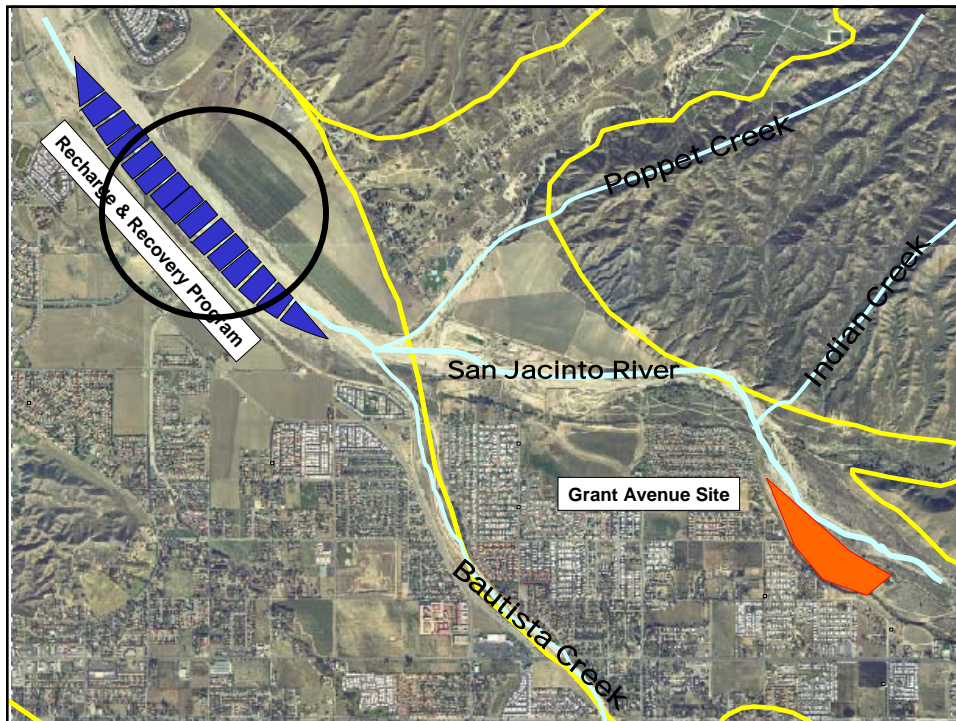
- **Tribal Settlement Water (up to 7,500 AFY)**
- **Elimination of Existing Overdraft (10,000 AFY)**
- **Additional Long Term Supply (15,000 AFY)**
- **Drought Management Storage (45,000 AF)**

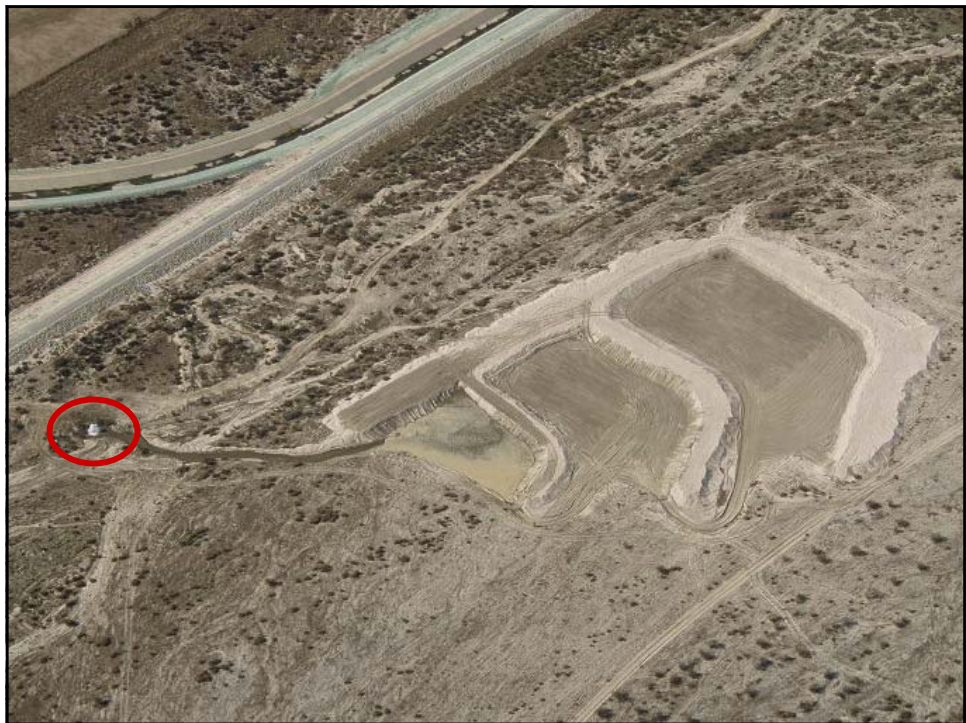
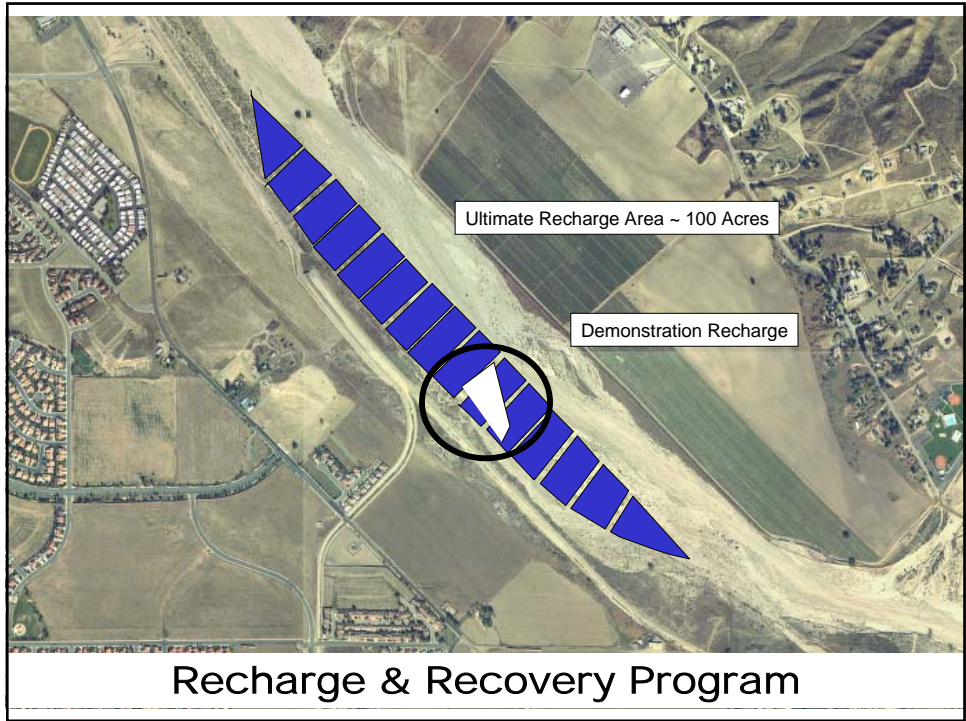
## RECHARGE & RECOVERY PROJECTS





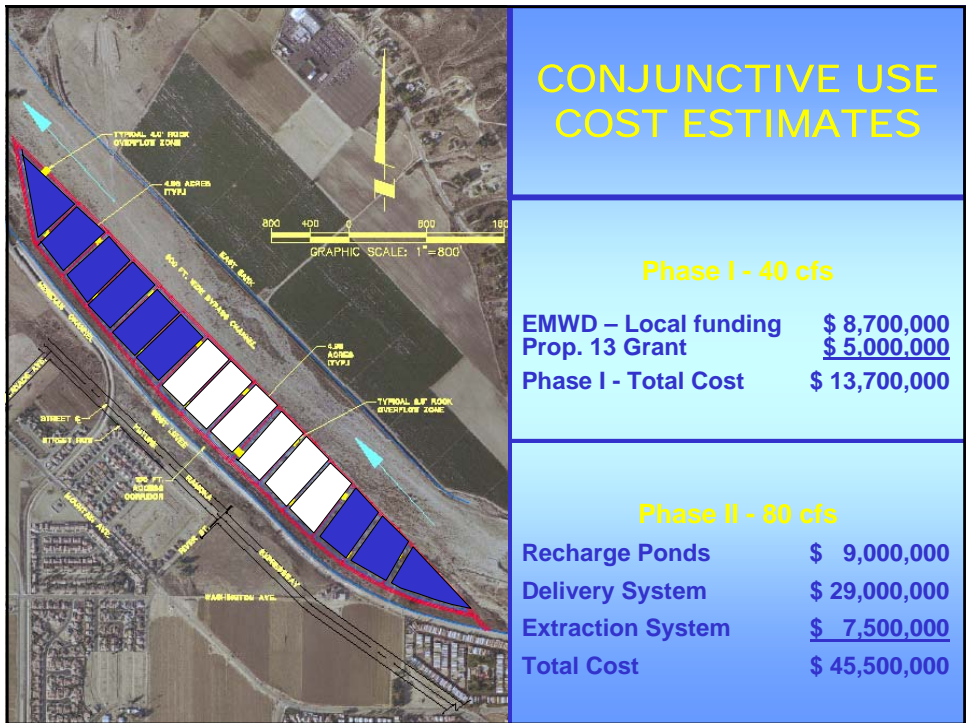
# GRANT STREET RECHARGE SITE







**Recharge and Recovery Project**



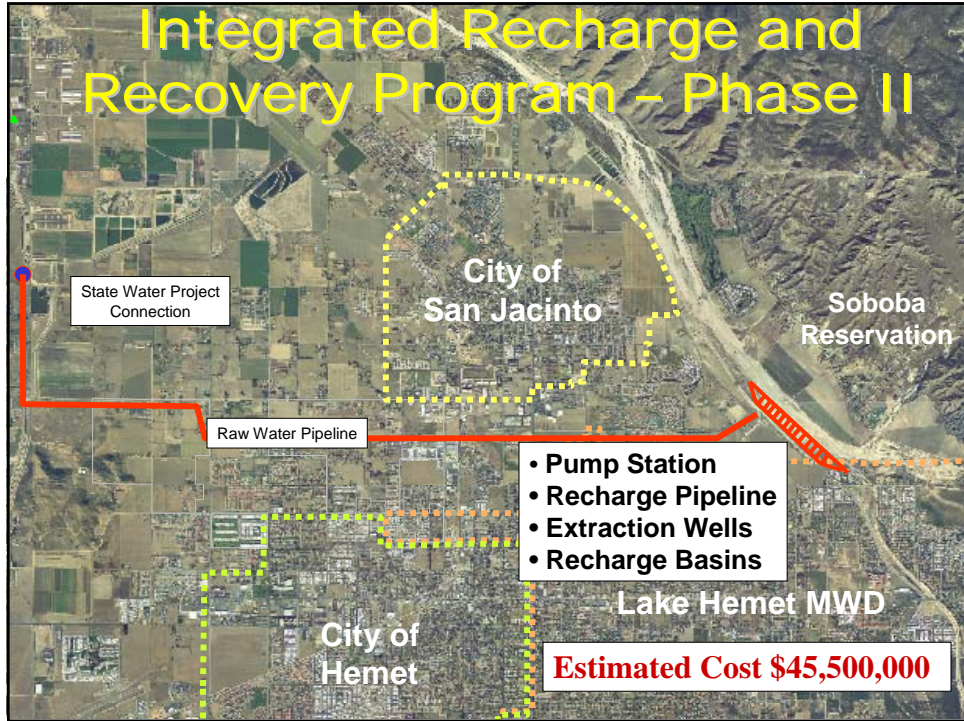
**CONJUNCTIVE USE COST ESTIMATES**

**Phase I - 40 cfs**

EMWD – Local funding	\$ 8,700,000
Prop. 13 Grant	\$ 5,000,000
<b>Phase I - Total Cost</b>	<b>\$ 13,700,000</b>

**Phase II - 80 cfs**

Recharge Ponds	\$ 9,000,000
Delivery System	\$ 29,000,000
Extraction System	\$ 7,500,000
<b>Total Cost</b>	<b>\$ 45,500,000</b>



# QUESTIONS?