

Monterey Peninsula Water Management District Water Supply Planning Efforts

Presentation to State Water Resources
Control Board

April 1, 2008

Monterey, California

Monterey Peninsula Water Management District (MPWMD) Boundary



MPWMD Water Supply Planning Efforts

Projects Underway

- ♦ **MPWMD/California American Water Seaside Basin Aquifer Storage and Recovery Project**
 - Phase 1 ASR Project -Two injection/ recovery wells in former Fort Ord area of Seaside Groundwater Basin
 - Carmel River water diverted through California American Water treatment and distribution system for injection in the two wells
 - Water right Permit 20808A issued November 2007
 - Long-term annual yield of 920 acre-feet per year (AFY)
 - Planning underway for expanded ASR Project
- ♦ **City of Sand City brackish water desalination project** - under construction – 300 AFY yield

MPWMD Water Supply Planning Efforts

Projects in Planning

- ♦ **MPWMD Seawater Desalination Project** – plant site in Sand City; yield up to 8,409 AFY – recently re-titled “95-10 Project” by MPWMD Board in reference to SWRCB Order No. WR 95-10
- ♦ **California American Water’s Coastal Water Project** – 10 million-gallon-per-day (MGD)/ 10,430 AFY seawater desal project in Moss Landing plus 1,300 AFY ASR project in Seaside Groundwater Basin (yield includes MPWMD/ Cal-Am 920 AFY Phase 1 ASR Project)
- ♦ **Regional project** for Monterey Peninsula and northern Monterey County – initiated by CPUC Division of Ratepayer Advocates - yield up to 29,000 AFY

MPWMD Water Supply Planning Efforts

Projects for the Monterey Peninsula Area Proposed by Other Entities

- ♦ **Pajaro/Sunny Mesa Community Services District Monterey Bay Regional Seawater Desalination Project** – plant located in Moss Landing – 20 MGD/ up to 22,400 AFY yield
- ♦ **Water Standard Company's Seawater Desalination Vessel Project** – ship-based project delivering water to California American Water distribution system – 10 to 20 MGD/ 11,200 to 22,400 AFY yield – scalable up to 85,000 AFY

MPWMD Water Supply Planning Efforts

**Integrated Regional Water Management Plan
(IRWMP) for the Monterey Peninsula,
Carmel Bay and South Monterey Bay**

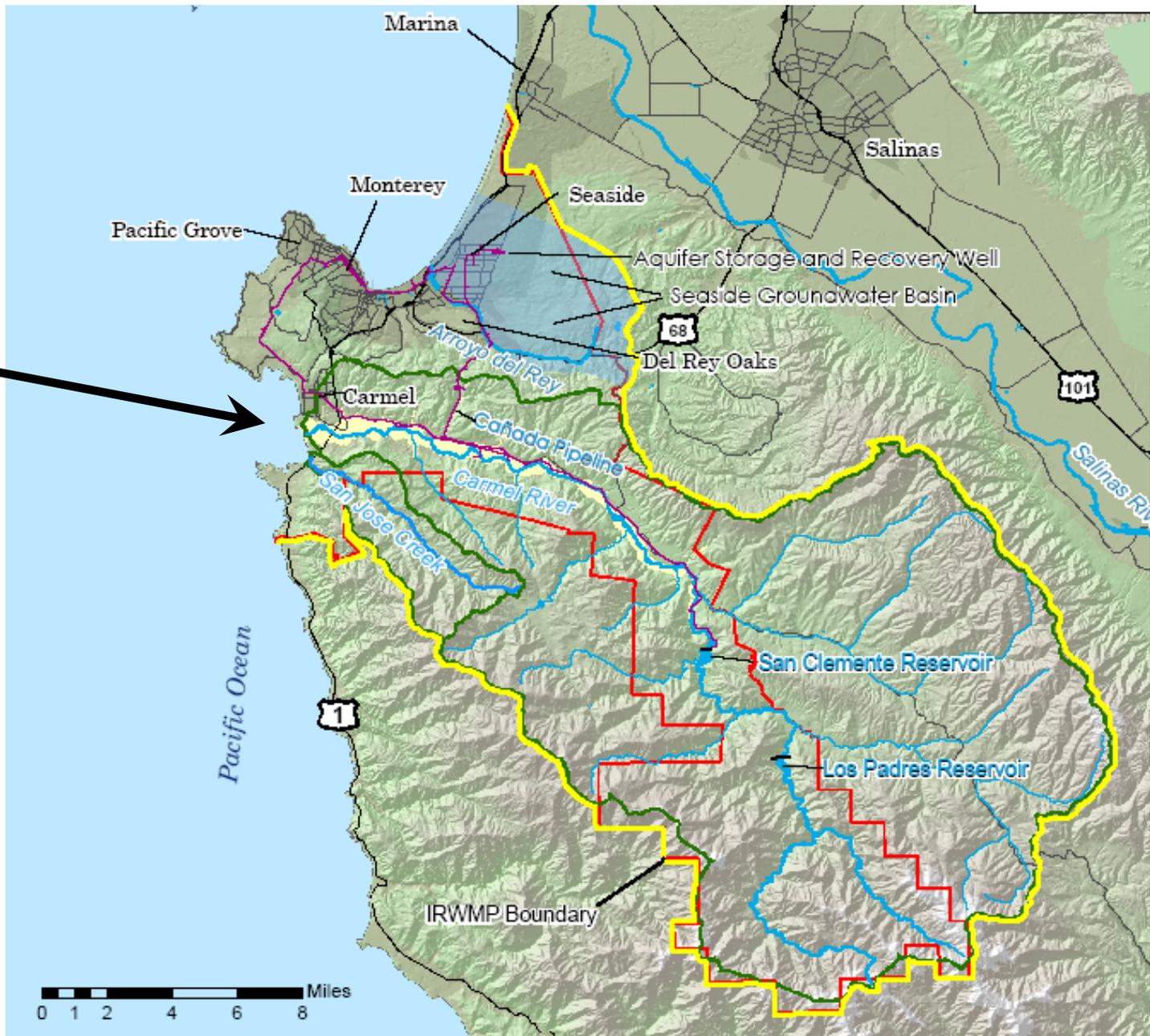
adopted November 2007

Developed by and for Monterey Peninsula area stakeholders, thanks to Proposition 50 grant funds awarded by SWRCB and California Department of Water Resources

Monterey Peninsula, Carmel Bay and South Monterey Bay Integrated Regional Water Management Planning



**Planning Area
(yellow outline)
includes watersheds of the
Monterey Peninsula,
Carmel Bay and South
Monterey Bay**



Region Definition

- ◆ 347 square mile area
- ◆ Coastal watershed areas in Carmel Bay and south Monterey Bay between Carmel Highlands and the southern boundary of the City of Marina
 - The Carmel River is the major stream in the planning area.
- ◆ Includes three Areas of Special Biological Significance (ASBS) at Pt. Lobos, Carmel Bay, and Pacific Grove
- ◆ Cities of:

Carmel-by-the Sea	Monterey
Del Rey Oaks	Sand City
Pacific Grove	Seaside
- ◆ Portions of the unincorporated area of Monterey County in Carmel Highlands, Pebble Beach, Carmel River watershed, Laguna Seca, and former Fort Ord

Regional Priorities

- ◆ **meet current replacement water supply and future demand targets**
- ◆ reduce the potential for flooding in Carmel Valley and at the Carmel River Lagoon
- ◆ mitigate effects of storm water runoff
- ◆ address storm water discharges into Areas of Special Biological Significance
- ◆ promote the steelhead run

MPWMD Water Supply Planning Efforts

IRWMP water supply augmentation goals:

“Meet water supply replacement targets set by MPWMD that satisfy existing water demand..., currently estimated to be approximately 12,500 AFY.”

“Once existing demand is met..., meet water supply targets set by MPWMD to meet estimated long term future demand..., currently estimated to be approximately 4,500 AFY.”

Summary of Project Prioritization

Project	Sponsor	Total	Ranking
Lower Carmel River Restoration and Floodplain Enhancement	MCWRA/BSLT/ MPWMD	12.36	1
Refine ASBS Alternatives	Monterey/PG	12.30	2
Water Conservation Retrofit Program	MPWMD/CAW	7.45	3
CSUMB Stormwater Percolation and Education	CSUMB	7.33	4
Seaside 90" Outfall Infiltration Component	City of Seaside	7.03	5
Seaside Basin Groundwater Replenishment	MRWPCA	6.98	6
Carmel River Watershed Volunteer Monitoring Program	CRWC	6.44	7
Sanitary Sewer System Repair and Replacement	Monterey/PG	5.53	8
Microbial Source Tracking	Monterey/PG	4.03	9
Implementation of Solid Waste Removal Technology	Monterey/PG	3.72	10
Seaside Groundwater Basin Aquifer Storage and Recovery (not rated at this time)	MPWMD/CAW		N/A
Total Points, All Projects		73.2	
Maximum Possible Points for All Projects		100.0	

- Note: many projects remain in the planning phase

Status of IRWM Plan

- ✓ 1. Identify stakeholders
- ✓ 2. Establish Water Management Group
- ✓ 3. Establish Technical Advisory Committee (TAC)
- ✓ 4. Develop regional goals & objectives
- ✓ 5. Develop prioritization protocol and criteria
- ✓ 6. Update project descriptions
- ✓ 7. Prioritize projects, identify synergies
- ✓ 8. Compile results into Final IRWM Plan
- ✓ 9. Adopt Final IRWM Plan (November 2007) ← *current phase*
10. Develop implementation strategies – ongoing
11. Revise IRWM Plan as necessary to meet Prop. 84 guidelines (2008)
12. Seek Local, State and/or Federal Funds (2008)

**FUTURE
REVISION**

Monterey Peninsula Water Quality Objectives for ASBS

- ◆ Define the maximum extent practicable for reducing discharges to Areas of Special Biological Significance (ASBS).
- ◆ Reduce or eliminate to the maximum extent practicable the storm and non-storm water flows to the ASBS.

For Additional Information

- ◆ **MPWMD Website:**

<http://www.mpwmd.dst.ca.us>

- ◆ **MPWMD Contact:**

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