

Filling the Gap: New Water Supply for the Monterey Peninsula

October 26, 2011

Revisiting Our Predicament

- State Cease and Desist Order (CDO) mandates forced reductions of Carmel River diversions
- Seaside Basin Adjudication mandates forced reductions of groundwater pumped from the basin
- Customer demand for water will exceed available "legal" supplies
- New supply is needed just to keep up with existing demand without consideration to future needs for lots of record or new construction
- The Regional Desalination Project is in limbo

The Supply Gap



Factors Affecting the Supply Gap

- Weather: Wet year reduces demand
- Economy: Good economy increases demand
- Reliability needs (e.g. "Peak Month")
- Critically dry year will reduce efficacy of ASR
- Sand City desalination allocates only 94 AF to unlawful diversions; Remainder can be "reclaimed" for growth
- Future conservation and reduction of system losses
- Replacement of accumulated deficit in Seaside Basin

Supply Gap = 6,500 to 8,000 AF

MPWMD Supply Portfolio

Project Description	Expected Average Yield	Potential Expanded Project Yield
Water Project 1 – Phase 1 Aquifer Storage and Recovery	1,000 AF	complete
Water Project 2 – Phase 2 Aquifer Storage and Recovery	1,000 AF	4,000 AF?
Water Project 3 – Local Desalination Plant	2,000 AF	3,500 AF?
Water Project 4 – Support Groundwater Replenishment	2,700 AF	2,700 AF
Water Project 5 – Expand Los Padres Reservoir Capacity	850 AF	1,500 AF?
Total Future Projects (excludes Phase 1 ASR already completed)	6,550 AF	11,700 AF

MPWMD Projects in Cal-Am Analysis

Project Description	Expected Average Yield	Potential Expanded Project Yield
Water Project 1 – Phase 1 Aquifer Storage and Recovery	1,000 AF	complete
Water Project 2 – Phase 2 Aquifer Storage and Recovery	1,000 AF	4,000 AF?
Water Project 3 – Local Desalination Plant	2,000 AF	3,500 AF?
Water Project 4 – Support Groundwater Replenishment	2,700 AF	2,700 AF
Water Project 5 – Expand Los Padres Reservoir Capacity	850 AF	1,500 AF?
Total Future Projects (excludes Phase 1 ASR already completed)	6,550 AF	11,700 AF

Project Timelines

PRELIMINARY

Project Description	Est. Completion
Water Project 1 – Phase 1 Aquifer Storage and Recovery	complete
Water Project 2 – Phase 2 Aquifer Storage and Recovery	Q3 / 2013
Water Project 3 – Local Desalination Plant	Q4 / 2018
Water Project 4 – Support Groundwater Replenishment	See Keith
Water Project 5 – Expand Los Padres Reservoir Capacity	Q3 / 2017

Project Costs

VERY PRELIMINARY

Project Description	Cost
Water Project 1 – Phase 1 Aquifer Storage and Recovery	\$6,480,000*
Water Project 2 – Phase 2 Aquifer Storage and Recovery	\$6.5 million
Water Project 3 – Local Desalination Plant	\$68.3 million
Water Project 4 – Support Groundwater Replenishment	See Keith
Water Project 5 – Expand Los Padres Reservoir Capacity	\$78.2 million

*: Denotes Cal-Am Costs Not Included

Cost per Acre Foot

VERY, VERY PRELIMINARY

Project Description	Est. Completion
Water Project 1 – Phase 1 Aquifer Storage and Recovery	\$743* / \$1,143
Water Project 2 – Phase 2 Aquifer Storage and Recovery	\$1,143
Water Project 3 – Local Desalination Plant	\$3,534
Water Project 4 – Support Groundwater Replenishment	See Keith
Water Project 5 – Expand Los Padres Reservoir Capacity (Rubber Dam Only Alternative)	\$4,294 (\$3,130)

*: Denotes Cal-Am Costs Not Included; Assume \$400 /AF additional Cal-Am costs



MPWMD Stands Ready to

- Work in partnership with Cal-Am or other public agencies
- Bring expertise, low-cost public financing, governance, experience, and accountability to Peninsula constituents.