

**REPOG Meeting Status Update of the Regional Project Technical Work Group**  
**Stephanie Hughes, RMC Water and Environment, April 30, 2008**

**Projected Regional Water Gaps**

Description	Water Gap (AFY)	Source
<i>Regulatory Replacement Demands</i>		
1 Carmel River Replacement	8,498	<i>MPWMD Technical Memorandum 2006-02, October 2006: The average annual production (WY 1996-2006) by CAW from the Carmel River (11,015afy) was weather adjusted by 7.8% to reflect a weather adjusted average of 11,874 AFY, minus CAW's recognized legal rights of 3,376 AFY.</i>
2 Seaside Aquifer Replacement	2,489	<i>MPWMD Technical Memorandum 2006-02, October 2006: The average annual production (WY 1996-2006) by CAW from the Seaside Basin coastal subareas (3,695 AFY) was weather adjusted by 7.8% to reflect a weather adjusted average of 3,983 AFY, minus CAW's eventual allocation of 1,494 AFY.</i>
	466	<i>MPWMD Technical Memorandum 2006-02, October 2006: The average annual production (WY 1996-2006) by CAW from the Seaside Basin Laguna Seca subarea (432afy) was weather adjusted by 7.8% to reflect a weather adjusted average of 466 AFY.</i>
	762	<i>MPWMD Technical Memorandum 2006-02, October 2006: Loss of storage capacity in Los Padres that inhibits ability to divert legal Carmel River supply.</i>
	272	<i>MPWMD Technical Memorandum 2006-02, October 2006: Non-CAW Seaside Basin Coastal and Laguna Seca Subareas replacement needs.</i>
<b>Subtotal 1 and 2</b>	12,500	
<i>Future Additional Build-Out Demand within CAW Service Area</i>		
<b>3 MPWMD</b>		
City of Monterey	705	<i>MPWMD Board Workshop presentation, May 18, 2006: Water demand as provided by the jurisdictions to MPWMD using build-out projections from General Plans and average water use factors.</i>

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		(Note: the updated future estimates include a 20% contingency to account for potential future changes in usage rates (rebound). With this contingency (734 AF) future demands are estimated at 3,803 AFY.)
	City of Seaside	582
	City of Carmel-by-the-Sea	288
	City of Sand City	386
	City of Pacific Grove	1,264
	City of Del Rey Oaks	48
	Monterey County (unincorporated)	1,135
	Monterey Peninsula Airport District	138
	<b>Subtotal 3</b>	4,500
	<b>Subtotal 1, 2, and 3</b>	17,000
	<i>Future Demand Outside of CAW Service Area</i>	
		<i>MCWD UWMP, December 2005: 2,400 AFY is the Fort Ord demand under current development restrictions per the Base Reuse Plan. That calculation assumed the MCWD 300 AFY desal facility was in operation. This is not the case, so 300 AFY was added to the UWMP estimate. If restrictions are lifted, 5,250 AFY would be required by 2025.</i>
4	Marina Coast Water District / Ord Community	2,700
5	North County	
		<i>Communication with Curtis Weeks of MCWRA: To prevent double-counting and overlaps, North County should include Moss Landing and PSMCSD. The water gap stated in the May 5, 1998 MCWRA Memorandum to Files, 2030 Land Use and Water Needs Conditions for North county is 3,039 AFY. In addition, 70 AFY for Moss Landing and 1,800 AFY for PSMCSD.</i>
	Unincorporated North County	4,900
		<i>Communication with Eric Tynan: Replacement water for current groundwater pumping (in the event that 400-ft aquifer incurs seawater intrusion).</i>
	Castroville Water District	1,000
	<b>Subtotal 4 and 5</b>	8,600
	<b>Total Identified Incremental Regional Water Gap<sup>1</sup></b>	25,600

<sup>1</sup> This quantity is an increase from the 20,272 AFY identified in the PEA.

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**Criteria for Component and Programmatic Evaluations**

Criteria	Criteria Considerations	Individual Water Supply Components	Overall Program Level
Schedule	Will projects be implemented in time to supply amount required?	✓	✓
Legal	Is the project consistent with governing laws and regulations?	✓	✓
Reliability	Do projects depend on precipitation?	✓	✓
Permitting	Have permits already been acquired? If not, are there foreseen permitting issues?	✓	✓
Public Acceptance	Are parties strongly for or against the projects?	✓	✓
Environmental	High energy consumption? Adverse impacts to fish & habitats?	✓	✓
Regulatory	Adequate to meet 95-10? Responds to Seaside Adjudication?		✓
Additional Supply	Amount in AFY	✓	✓
Cost	Only to be included at the programmatic level, rather than to each component		✓
Sustainability	Maximize use of fresh water sources, reduce use of desalination		✓

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**Program Alternatives to Supply Identified Regional Water Gap**

Component	Supply (AFY)		Description
	Regulatory Replacement	Regional	
<b>Conservation</b>	Potential for demand offset	Potential demand offset	Water conservation efforts represent a potential demand reduction on the Monterey Peninsula. While it does not produce additional supply or yield, it is an important component of the analysis and was supported by public stakeholders.
<b>Stormwater</b>	TBD	TBD	This project is currently being evaluated for the City of Pacific Grove. The feasibility and amount of water available for treatment for potable use has yet to be quantified.
<b>Seaside ASR / In-lieu Recharge (ILR)</b>	1,300	1,300	Consists of injecting water from the Carmel River into the Seaside Groundwater Basin. A 920 AFY project is anticipated to begin implementation in 2008 and is a project of the MPWMD. The PEA incorporates an ASR project of 1,300 AFY.
<b>Opportunities for Recycled Water Use <sup>2</sup></b>			
Regional Urban Water Augmentation Project (RUWAP)	Up to 300	Up to 3,000	Recycled water will be produced at the MRWPCA Salinas Valley Reclamation Plant. There is potential for an extension to Monterey, as well as potential for joint use with Seaside Groundwater Replenishment Project. Interagency agreements are vital to this component.
Seaside Groundwater Replenishment	0	Up to 2,800	Replenish the Seaside Groundwater Basin with recycled water from MRWPCA Salinas Valley Reclamation Plant.
Salinas Basin Seawater Intrusion Project	0	TBD	Create a seawater intrusion barrier for the Salinas Basin with recycled water from MRWPCA Salinas Valley Reclamation Plant.
<b>Sand City Desalination</b>	300	300	This project is moving forward and construction was initiated in 2008.
<b>Salinas Basin Groundwater</b>	0	> 5,900	Total yield is a function of delivery of new supply to offset existing agricultural groundwater pumping and modification of existing limitations in use of groundwater within existing basin.
<b>Salinas River Diversions - Urban</b>	0	Up to 5,000	Maximum available in a single year.
<b>Regional Desalination Facility</b>	Up to 10,900	Up to 13,100	Source water anticipated to be a blend of ocean water and brackish water from vertical wells.
<b>TOTAL INCREMENTAL URBAN SUPPLY</b>	12,500	Up to 25,600	A combination of the water supply components above would be utilized to meet previously quantified regional water demands in wet, dry, and average water years.
<b>Agricultural Supplies</b>			
Recycled Water	7,000	7,000	This is integral to the overall project as it ensures that the Salinas Basin remains balanced. Recycled water would be stored during winter months for recovery and delivery during summer irrigation season. Recycled water would be blended with increased diversions from Salinas River and delivered to an expanded CSIP distribution system, consistent with SVWP Phase 2 project description in the SVWP EIR/EIS. Some portion of reduced agricultural groundwater pumping could be utilized to meet domestic water needs.
Salinas River Diversions	5,000	5,000 (average annual)	

<sup>2</sup> Recycled water projects may be mutually exclusive, depending on final agricultural irrigation component and overall limit of available recycled water.