

Draft

Monterey Regional Water Supply Reliability Collaboration

Non-Potable Water and Distribution System Work Group

from

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to

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Supplemental Projects Listing and Summary Discussion

Preamble: The following summarizes the supplemental water supply projects considered at the April 5, 2007 meeting of the Non-Potable Water Distribution System Work Group, as part of a status report to be submitted to the Regional Plenary Oversight Group (REPOG) at their next meeting on April 25, 2007.

Problem Statement: Cal-Am Service Area existing water supply replacement needs identified as 12,500 acre-feet per year (AFY).

Phased Supplemental Projects Concept: The concept entails assembling supplemental non-potable water projects that would be available to help offset the existing water supply needs in a phased manner, with the “First Tier” projects list being those that are closest to implementation and likely to be in service by 2011 (i.e., the “low-hanging fruit” projects). Along with this, a medium sized desal plant ($\pm 3,000$ AFY) would also be provided. This would be followed by the “Second Tier” projects, consisting of projects that are in the pre-planning, planning, or feasibility stage at present, but could come online by about 2015 to further offset the existing water supply needs on an incremental basis. As a part of this second phase, an additional component of desal (up to 5,500 AFY) would be added.

This phased (or tiered) approach has the advantage of reducing the required initial capacity of a new desalination plant envisioned with the California American Water Coastal Water Project, commensurate with the available capacity of these supplemental projects. In other words, a new desalination project would *not* need to be sized to initially meet the maximum anticipated existing water supply needs, but rather its capacity could be expanded incrementally and only as needed to meet the difference

between the developed supplemental project supplies and the identified existing water supply needs.

Supplemental Projects Listing: The Supplemental Projects Listing developed by this Work Group is provided as **Attachment A** herein. This listing shows potential supplemental projects grouped by First Tier and Second Tier, based on the level of project development and implementation status, as shown. The overall phased concept is summarized in **Attachment B**.

The attached project list shows that the First Tier Projects, i.e., those believed that could be in operation by 2011, can deliver up to 4,000 AFY of water. This total estimated delivery is about 32% of the total identified need of 12,500 AFY. Second Tier Projects are not as developed as the First Tier Projects, but could provide up to 5,300 AFY of water by 2015, which when combined with the First Tier Projects could deliver up to 9,300 AFY, or satisfy about 74% of the demand.

The Working Group acknowledges the uncertainty in some of these projects and, therefore, recommends the construction of a 3,000 AFY desalination plan concurrent with the First Tier Projects. In so doing, by 2011, there could be approximately 7,000 AFY of water available or about 56% of the projected need. From 2007 to about 2011, Second Tier Projects will be further developed and deemed feasible or not, and others may also be identified which will help solve the balance of the problem more cost effectively. These projects could be developed as appropriate at that time. If no Second Tier Projects come on line an expanded desalination project could always be constructed for the remainder of about 5,500 AFY of needed supply.

ATTACHMENT A

Problem: Develop 12,500 AFY (+/-) of New Water Supply

4/20/07

FIRST TIER PROJECTS (By 2011)					
	Description	Size	Status	Date Operational	
1.	Cal Am Unaccounted line loss (p)	300 AFY	On-going	On-going/incremental	
2.	ASR – Carmel River (p)	920 AFY	Construction	August 2008	
3.	Sand City Desal (p)	150 AFY	EIR (done)/ design/build	August 2008	
4.	RUWAP – Monterey	300 AFY	EIR (done)/ construction/ administration	2008 – 2010	
5.	MRWPCA Replenishment	2,400 AFY	Planning	2009 – 2011	
	Total	4,070 AFY			
SECOND TIER PROJECTS (By 2015)					
	Description	Size	Status	Date Operational	
1.	RUWAP – Phase II + York School, etc. . . .	300 +/-AFY	Planning	2010 – 2014	
2.	PG Recycled Water Irrigation	100 + AFY	Feasibility	2011 – 2013	
3.	Expanded ASR – Carmel River (p)	1,380 + AFY	Planning	2013 - 2016	
3.	Expanded R/W Aquifer Recharge (Salinas Aquifer)	1,500 +/- AFY	Pre-planning	2015+	
4.	Treatment of Salinas Industrial Ponds	2,000 AFY	Feasibility	2012 – 2015	
	Total	5,280 AFY			

P = potable water source

4/18/2007

ATTACHMENT B

PHASED WATER SUPPLY CONCEPT

TEIR/TIMING	CONTRIBUTION BY NON- POTABLE PROJECTS	DESAL SIZING	TOTAL
I (by 2011)	4,000 AFY	±3,000 AFY	7,000 AFY
II (by 2015)	Up to 5,300 AFY	Up to 5,500 AFY	5,500 AFY
	UP TO 9,300 AFY	Up to 8,500 AFY	
TOTAL			12,500 AFY