

EXHIBIT 19-A

Final

**Report from the Community Advisory Committee to the
Monterey Peninsula Water Management District
Board of Directors**

September 11, 2007

FINAL
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Monterey Peninsula Water Management District Board of Directors
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EXECUTIVE SUMMARY

Summary of Comments Received by the Community Advisory Committee
February 2007 through June 2007
September 11, 2007

Aquifer Storage & Recovery in the Seaside Basin Monterey Peninsula Water Management District

The MPWMD Aquifer Storage and Recovery (ASR) Project diverts “excess” flow from the Carmel River in wet periods, as defined by state and federal resource agencies, which would then be treated and transmitted via the Cal-Am distribution system to special injection/recovery wells in the Seaside Groundwater Basin on the former Fort Ord. Available storage capacity in the Seaside Basin Coastal Subareas serves as an underground reservoir for the diverted water for use during dry periods. ASR can help improve environmental conditions in the Carmel River and Seaside Basins by reducing Carmel River diversions in dry periods, when the river environment is most vulnerable, and helping to replenish the Seaside Basin in wet periods. MPWMD already owns and operates one set of successful two wells which, along with additional transmission pipeline and other minor structures, is known as the Phase 1 ASR Project. The Phase 1 project allows a maximum annual Carmel River diversion and injection of up to 2,420 acre-feet per year (AFY) into the Seaside Basin. The maximum extraction from the Seaside Basin would be 1,500 AFY. Average values would be lower and depend on long-term weather conditions. The long-term project yield is estimated to be about 920 AFY with operations that maximize use of Seaside Basin water to offset Carmel River pumping in dry periods. Additional project facilities, some being considered in conjunction with California American Water’s (CAW) Coastal Water Project, could significantly expand the project yield.

Merits	Drawbacks
<ul style="list-style-type: none">• Useful in increasing area water supply, some help with Order 95-10 and Seaside aquifer, recharge of aquifers is good.• Common sense solution; technically feasible; expandable.• Flexible; can use sources of water in addition to Carmel River.• Water “savings account”; any water stored is beneficial.• Secondary benefits to Seaside Basin, e.g. helps prevent saltwater intrusion.• No water for new construction or remodels, (not growth inducing).• Protects ecosystem of Carmel River.• Captures excess flow without negative environmental impacts of other alternatives.• Cost effective; second most economical project.• Uses some existing CAW infrastructure.• Eligible for grant funding.• More energy efficient than other alternatives.	<ul style="list-style-type: none">• Does not meet replacement and future water needs of the Peninsula.• NOAA Fisheries guidelines are flawed, i.e. non-revocable requirement needed to cut diversion of surface flow in Spring, Summer and Fall to protect aquatic creatures.• Expensive.• Needs new infrastructure, i.e., pipeline and surface storage.• Needs legal management (enforceability) to prevent California American Water (CAW) from drawing against Carmel River.• Additional use of excess ASR water by cities could negate primary environmental benefit to Carmel River.• Cost estimate is preliminary and may be incomplete

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| <ul style="list-style-type: none">• Wells can have dual use, i.e. emergency production well.• Existing pipeline along General Jim Moore Blvd. will be buried; aesthetics. | |
|--|--|

Regional Urban Water Augmentation Project
Marina Coast Water District and Monterey Regional Water Pollution Control Agency

The Regional Urban Water Augmentation Project (RUWAP) involves two major water augmentation supply projects: seawater desalination and recycled water. Only 300 acre-feet per year (AFY) is designated for use by California American Water (CAW) customers for non-potable uses such as golf courses, cemeteries, parks and other landscape open space.

The RUWAP project goal is to provide 2,400 AFY of water to the former Fort Ord area to meet redevelopment requirements described in the Fort Ord Reuse Plan. In addition, 300 AFY is being considered to replace potable uses on the Monterey Peninsula (defined as Cal-Am's Monterey District service area). The EIR for the project was certified in October 2004; the "Hybrid Alternative" was endorsed by the Marina Coast Water District (MCWD) and Fort Ord Reuse Authority (FORA) boards of directors in 2005. The EIR evaluated several alternatives, including:

- "Seawater Desalination Alternative" -- a new 3,000 AFY desalination facility in the area currently occupied by the MCWD's existing desalination plant. The proposed replacement desalination project meets the project objective of 2,400 AFY, replaces the District's existing 300 AFY desalination plant, and also provides 300 AFY for use within or outside of the District service areas, e.g., on the Monterey Peninsula.
- "Recycled Water Alternative" -- provides 3,000 AFY of recycled water, which meets the project objective of 2,400 AFY, but would also provide 300 AFY of recycled water to the Monterey Peninsula and an additional 300 AFY for use within or outside District service areas.
- "Hybrid Alternative" -- includes a water supply of up to 1,500 AFY from an expansion of MCWD's seawater desalination plant (including replacement of the existing 300 AFY capacity plant) and the production and distribution of up to 1,500 AFY of recycled water for landscape irrigation. The EIR concluded that depending upon the recycled water needs at the former Fort Ord, the remainder would be used for MCWD's other service areas and potentially, the Monterey Peninsula, via a new recycled water distribution system.

The project yield for the desalination component is 1,500 AFY, with 1,200 AFY of this amount to be available for the Ord Community and 300 AFY to replace MCWD's existing desalination plant. The reclaimed water project yields in 2005 were stated to be 1,700 AFY in Phase 1 and 3,100 AFY in Phase 2. The 2006 information provided by MCWD states the yields to be 1,500 AFY in Phase 1 and 3,300 in Phase 2.

Merits	Drawbacks
<ul style="list-style-type: none"> • Useful in increasing area water supply, some help with Order 95-10 and Seaside aquifer, recharge of aquifers is good. • Good use of technology and conservation, technically feasible, permits obtainable. • Helps increase water supply projects portfolio. • Compatible with Groundwater Replenishment Project (GRP) – projects work well together. • Could be part of regional solution, provide redundancy. • Project underway, will be built without approval of MPWMD. • State Proposition 84 bond funds available to RUWAP. 	<ul style="list-style-type: none"> • Limited usefulness to MPWMD area. • Cost is high, especially when combined with other proposed projects – regional, more cost-effective approach, including infrastructure sharing, needed. • Desalination component may have California Coastal Commission permitting issue; Monterey County Environmental Health advocates for one large desalination plant. • Cost estimate is preliminary and may be incomplete.

Groundwater Replenishment Project
Monterey Regional Water Pollution Control Agency

The Groundwater Replenishment Project (GRP) is currently being evaluated by Monterey Regional Water Pollution Control Agency (MRWPCA). The concept envisions treatment of recycled water to near-potable condition for groundwater percolation or injection into the Seaside Basin. Similar to the ASR project described above, the purified, recycled water source would be available in winter, when it is not used by food crops such as artichokes, and could be put to a beneficial use rather than be discharged into the ocean. After meeting State Department of Health Services treatment and migration standards, this supplemental source of water could be made available for recovery and potable reuse. The initial project is anticipated to produce 2,400 AFY.

Merits	Drawbacks
<ul style="list-style-type: none"> • Useful in increasing area water supply, some help with Order 95-10 and Seaside aquifer, recharge of aquifers is good. • Good use of technology and conservation, technically feasible, permits obtainable. • Planned infrastructure could be part of regional solution. • Provides redundancy. • Saves fresh water, expands groundwater storage, could provide surface water habitat. • Relatively energy efficient. • State Proposition 84 bond funds available to GRP. 	<ul style="list-style-type: none"> • Limited usefulness to MPWMD area. • Cost is high, especially when combined with other proposed projects – regional, more cost-effective approach, including infrastructure sharing, needed. • Should include using stormwater and excess Salinas River flows. • Cannot stand alone as project, must be combined with RUWAP or other regional project(s). • Cost estimate is preliminary and may be incomplete.

Long-Term Water Supply Project/Desalination in Sand City
Monterey Peninsula Water Management District

The MPWMD Sand City Desalination Project (MPWMD SCDP) is comprised of a 7.5 million gallons per day (MGD) seawater desalination plant in the Sand City area with new seawater intake/brine discharge facilities at Seaside State Beach, Sand City and/or former Fort Ord. The project design initially envisioned horizontal directionally-drilled (HDD) wells for intake/discharge, but the geology of the former Fort Ord coastal area requires use of the existing MRWPCA outfall for large volumes of brine discharge. The basic yield goal set in 2003 is 8,400 AFY, intended to legalize existing community demand. Specifically, the project goal is to meet local, near-term needs, including compliance with Order 95-10, assuming CAW diversions from the Carmel River do not exceed 11,285 AFY. An additional amount of 500 AFY would offset a portion of the overdraft of the Seaside Groundwater Basin. Production up to 11,000 AFY may be possible, depending on the outcome of hydrogeologic and engineering investigations that must first be performed.

Merits	Drawbacks
<ul style="list-style-type: none"> • HDD wells environmentally beneficial. • Sites available. • Could be public/private partnership between District and CAW providing for local control of project design. • Could require voter approval. • No water for new construction or remodels, not growth inducing. • Drought proof, flexible and expandable. • Desalination plant technically feasible. • Distribution costs appear lower than for North Coast desalination projects. • Would result in compliance with Order 95-10 when combined with ASR and RUWAP. • Project located within MPWMD boundaries. 	<ul style="list-style-type: none"> • HDD well technology is questionable. • Plant sites are theoretical. • Potential permitting problems for well sites belonging to California Department of Parks and Recreation. • Potential long-term erosion issue for facilities west of Highway 1. • Not enough water for growth; politicizes ballot issue between growth and no-growth advocates. • Costs extremely high for amount of water produced. • High energy demand. • Brine disposal by wells could be less favorable than by outfall. • California Coastal Commission favors a regional facility rather than a series of small plants. • Storage capacity not adequate to meet peak demand or during periods of low rainfall. • Cost estimate is preliminary and may be incomplete.

Coastal Water Project/Desalination
California American Water Company

The major components of the proposed Coastal Water Project (CWP) are a seawater desalination plant in Moss Landing at the “Duke East” site on Dolan Road about one-half mile east of Highway 1; use of the intake and outfall for LS Power Group’s Moss Landing Power Plant (MLPP), formerly owned by Duke Energy.; a desalinated water conveyance system to the Monterey Peninsula, including a transmission pipeline, terminal reservoir and pumping stations; and an aquifer storage and recovery (ASR) project in the Seaside Groundwater Basin. California American Water (CAW) plans to use a site on the MLPP property for a one-year pilot project, but does not yet have a long-term lease agreement for the proposed CWP facilities. The yield goal for the “basic project” is defined as 11,730 acre-feet per year (AFY): 10,730 AFY to replace CAW’s Carmel River withdrawals to comply with SWRCB Order WR 95-10, and 1,000 AFY to help alleviate over-pumping in the Seaside Groundwater Basin. The seawater desalination plant would have a production capacity of 10 million gallons per day (10 MGD) and would produce on average 10,430 AFY. The ASR portion of the project would provide a long-term yield of 1,300 AFY.

Merits	Drawbacks
<ul style="list-style-type: none"> • Technically feasible; not dependent on weather conditions; drought proof; scaleable, 11,738 AFY for small project to 20,272 AFY for regional project. • Would result in compliance with Order 95-10 ruling to replace 10,730 AFY for Carmel River overdraw. • Progress already made on Proponents Environmental Assessment (PEA) and EIR. • Extensive public outreach in planning (Plan B community process). • No public vote unless public funding. • CAW understands the present water system problems. • California Public Utilities Commission (CPUC) is the lead agency and will control rates. • Moss Landing Power Plant is largest electrical producer in California; not likely to close. • Mitigates seawater intrusion; alternatives for brine disposal allow for least environmental impacts; partial restoration of Carmel River summer flow. • Marina location alternative available for desalination plant. • CAW stated the possibility of joining with a public partner. 	<ul style="list-style-type: none"> • No present prototype. Closest comparison is expensive Florida desalination plant; questionable, unproven technical feasibility. • Not enough production planned to meet general plan needs. • Development and construction time frame too long. • CAW public outreach meaningless; there is a disconnect between public sentiment and project design. • 20,000 AF regional project is a target for the no-growth interests; too large; not right-sized. • CPUC is wrong agency to lead project. • Power-plant dependent; Moss Landing Power Plant requires fossil fuels; additional impact from greenhouse gases. • Dependent on Moss Landing Power Plant cooling water discharge. • Brine discharge alternatives all have great potential for negative environmental impact. • High cost for water. • High energy demand. • Alleged not to conform to Chapter 10.72 of the Monterey County Code • Cost estimate is preliminary and may be incomplete.

North Monterey County Desalination Project
Pajaro/Sunny Mesa Community Services District

The North Monterey County Desalination Project (NMCDP) is comprised of a seawater desalination plant in Moss Landing, transmission pipeline to the Monterey Peninsula, and a potential 30-acre solar energy power production facility to reduce energy costs. The proposed site is the former National Refractories and Mineral Corporation's Moss Landing facility. Project proponents plan to use existing intake/outfall pipelines, with the possible use the Moss Landing Power Plant cooling water intake and outfall, as an alternative. A lease agreement with the property owner has been in effect since March 2004. The yield goal is 20,000 to 23,000 AFY or more, depending on purveyor demand. A 20 MGD project, capable of producing up to 22,400 AFY, was used for cost estimates provided in 2006. Total demands of 20,930 AFY are identified in Pajaro/Sunny Mesa Community Services District (P/SM) materials provided to MPWMD. The project is intended as a regional project, including meeting the needs of the expanding P/SM service area in northern Monterey County. P/SM has entered into a management agreement with Poseidon Resources, a private corporation experienced in desalination technology.

Merits	Drawbacks
<ul style="list-style-type: none"> • Project proponent is a public agency. • Proponent is willing to enter into long-term agreement for guaranteed price. • Includes multi-day storage capacity. • Regional approach addresses multiple water problems by providing 20,000 to 22,000 AF of water. • Could be supplemented by ASR. • Drought proof, flexible and expandable. • Would result in compliance with Order 95-10. • Incorporates solar power. • Has confirmed site. 	<ul style="list-style-type: none"> • Ownership question due to participation of private organization in plant construction and operation. • Long term reliability related to partnership with private organization and governance by an agency with no track record for implementing large water project. • High O&M costs; transport of water to Monterey Peninsula not included in cost estimates. • Obtaining agreement on regional approach would be difficult, i.e. there is no agreement between CAW and PSM for regional coordination. • No planned ASR component. • Permitting and environmental review process is stalled; longer with regional approach. • Environmental impacts greater than other desalination projects with direct intake and discharge. • Technical feasibility uncertain with no similar large facilities operating without major problems in United States. • High energy demand. • Cost estimate is preliminary and may be incomplete.

Seawater Conversion Vessels/Desalination
Water Standard Company

The seawater conversion vessel project, proposed by Standard Water Company, is based upon an offshore “mother ship” containing a seawater desalination plant using reverse osmosis technology and one or more gas turbine engines to provide energy for the desalination process and associated shipboard facilities. Treated water would be delivered to an onshore water distribution system such as Cal-Am’s using either a pipeline placed on the seabed or a “shuttle ship” tanker to deliver water to a shoreside facility for unloading. Information on the project provided to the District is based on a 20 MGD desalination plant capable of producing up to 22,400 AFY of treated water, but a much larger plant could be installed on the ship.

Merits	Drawbacks
<ul style="list-style-type: none"> • Project is unique and innovative. • Environmental impacts on ocean resources less than other desalination. • Water Standard Company capitalize and operate the project. • Technology is proven although not in this configuration. • Project is drought proof and scaleable. • Water Standard Company has a good organizational structure and has partnered with companies in an innovative manner. • Facility can be relocated. • Would result in compliance with Order 95-10 ruling to replace 10,730 AFY for Carmel River overdraw. 	<ul style="list-style-type: none"> • Lead agency needs to be identified. • Extensive coordination required among various entities to get water to customers. • Timeframe for permitting process is unknown. • No proven track record for Water Standard Company. • Lack of a comparable-sized prototype. • Anchoring of a ship in the ocean to meet all weather challenges may be difficult. • Potential unacceptable visual and air quality impacts. • Installation, operation and maintenance of five-mile underwater pipeline. • Feasibility of water storage. • Concerns regarding financing from a small ratepayer base over a 30-year time period. • Cost estimate is preliminary and may be incomplete.

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INTRODUCTION AND PURPOSE

❖ Introduction

On December 11, 2006, the Monterey Peninsula Water Management District (MPWMD, or District) Board of Directors voted unanimously to form an Ad Hoc Community Advisory Committee (CAC, or Committee) with a charge to review the seven water supply projects listed on the Matrix of Water Supply Alternatives, and to submit a report to the Board documenting comments expressed by committee members on those projects. The CAC was chaired by the District General Manager (non-voting capacity), with technical and administrative support provided by the District's Engineer and Executive Assistant. The charge requires the CAC to refrain from recommending a position of support or disapproval for any project or any aspect of a project. The seven projects are as follows:

- Aquifer Storage and Recovery in the Seaside Basin (Sponsor: MPWMD)
- Regional Urban Water Augmentation Project (Co-Sponsors: Marina Coast Water District and Monterey Regional Water Pollution Control Agency)
- Groundwater Replenishment Project (Sponsor: Monterey Regional Water Pollution Control Agency)
- Long-Term Water Supply Project/Desalination in Sand City (Sponsor: MPWMD)
- Coastal Water Project (Sponsor: California American Water)
- Monterey Bay Regional Desalination Project (Sponsor: Pajaro/Sunny Mesa Community Services District)
- Seawater Conversion Vessels (Sponsor: Water Standard Company)

Each Director selected two persons to serve on the Committee. One of those two persons represents a community group. The Directors and their appointees are as follows:

Appointing Director	Appointee #1	Appointee #2
Alvin Edwards	Janet Brennan <i>League of Women Voters</i>	Manuel G. Fierro
Larry Foy	Paul Bruno <i>Water for Us</i>	Dewey Baird
Michelle Knight	Bob McKenzie <i>Monterey County Hospitality Assoc.</i>	Sheryl McKenzie
Judi Lehman	Greg Pickens <i>Monterey Alliance of Neighborhoods</i>	Bruce Crist
Kristi Markey	David Dilworth <i>Helping Our Peninsula's Environment</i>	Robert Greenwood
David Pendergrass	Tom Rowley <i>Monterey Peninsula Taxpayers Assoc.</i>	Ron Chesshire
David Potter	Roy Thomas <i>Carmel River Steelhead Assoc.</i>	Peter Dausen

The Committee met monthly between February and August 2007. The final report of the committee will be submitted to the Board for review at its September 17, 2006 meeting.

❖ Purpose

The Community Advisory Committee (CAC) is an Ad Hoc committee formed for the sole purpose of providing a forum for public discussion in order to increase the Board of Directors' awareness of public sentiment regarding the seven water supply projects that are described on the Comparative Matrix of Water Supply Alternatives, Parts I and II, that was received by the Board on October 16, 2006. Utilizing the Matrix as a resource, the CAC met and reviewed each project listed on the Matrix and prepared a report that summarizes individual comments expressed by committee members on those projects, including the relative advantages and disadvantages of each project in addressing the Monterey Peninsula's water supply need. The Board does not seek consensus from the CAC, but rather input on the merits or drawbacks of projects listed on the Matrix. The CAC does not recommend a position of support or disapproval for any project listed on the Matrix.

❖ Procedure for Committee Review of Each Project Listed on the Matrix

The Community Advisory Committee (CAC, or Committee) met once a month for seven months, beginning in February 2007. At each monthly meeting, the CAC received a report on one or two of the seven water supply projects listed on the Matrix by proponents of the respective projects. An outline of each report can be viewed on the District's website at <http://www.mpwmd.dst.ca.us/asd/board/committees/cac/2007/2007.htm>. In advance of the meeting, the Committee members could provide questions or issues for the presenters to address during their presentations. Following the presentation and question-and-answer period, the Committee members discussed the project and each provided his or her views on the merits and drawbacks of the project. Committee members could also provide additional input to staff following the meetings. At each meeting, the public was provided an opportunity for comment on each project presented, as well as non-agenda items.

Following the presentations on the seven projects, Janet Brennan, Ron Chesshire, Peter Dausen, Manuel Fierro, and Bob McKenzie volunteered to serve on a subcommittee that would assemble and summarize the merits and drawbacks of the projects. The subcommittee met on July 26 and August 14, 2007 to reach consensus on how best to summarize the merits and drawbacks of each project. Their consensus summary is included in this Report as the Executive Summary and was sent to the full Committee for review prior to the cancelled August 27, 2007 meeting and again in advance of the September 11, 2007 final review. The Final Report will be presented to the Board of Directors for consideration at their September 17, 2007 meeting.

The CAC meets the definition of a "legislative body" as defined by the Brown Act; therefore, all meetings were noticed and open to the public in compliance with the Brown Act.

❖ **Explanation of MPWMD Comparative Matrix of Water Supply Alternatives**

The Comparative Matrix (refer to Appendix C) is a compilation of information on major water supply projects that could serve the Monterey Peninsula area. The first version of the Matrix was compiled and presented to the Board in September 2004, in fulfillment of the following stated purposes:

- To summarize and consolidate information provided by proponents of current water supply project proposals in a single format to facilitate comparison; and
- To facilitate Board discussion of next steps regarding water project implementation as it relates to use of MPWMD resources (staff, consultants, budget) in coming years.

The first version contained information on five projects. The Matrix was updated and presented to the Board in September 2005. This second version added the Groundwater Replenishment Project proposed by the Monterey Regional Water Pollution Control Agency. The Matrix was again updated and presented to the Board in October 2006. To this third version was added a seventh project, seawater conversion vessels, at the direction of the Board, following a presentation of the concept by representatives of the Water Standard Company, the project proponents, at an August 31, 2006 Board workshop.

As with all versions of the Matrix, the 2006 matrix is divided into two parts. Part I summarizes four relatively large desalination projects that would, at a minimum, comply with State Water Resources Control Board (SWRCB) Order 95-10 with existing water demand on the Monterey Peninsula; two of the projects could also potentially meet future needs of the Peninsula and other coastal areas in northern Monterey County. Part II summarizes three projects that feature aquifer storage and recovery (ASR) and reclaimed water technology. These projects alone could not fully comply with SWRCB Order 95-10, but could be combined with each other or with any of the desalination projects to meet community water supply goals, serve as back-up supply, or help reduce costs.

The most recent version of the Matrix (October 2006) may be found at the following website:

<http://www.mpwmd.dst.ca.us/asd/board/boardpacket/2006/20061016/13/item13.htm>

The September 2004 and September 2005 versions may be found at the following website:

<http://www.mpwmd.dst.ca.us/pae/matrix/matrix.htm>

ADMINISTRATIVE HISTORY

Meeting Date	Action or Topic Discussed
Summary of Board Action	
June 26, 2006	Board directed staff to contact community groups and solicit their interest in participating on a committee that could provide input on water use and consumption policies.
June 22, 2006	Board reviews list of community groups that were contacted inquiring as to their interest in participation on a new committee. (Refer to Appendix E)
December 11, 2006	Board of Directors approved formation of the Community Advisory Committee (CAC) and adopted a charge for the CAC that requested review of projects listed in the MPWMD Matrix of Water Supply Alternatives. The Board reviewed a list of community groups that indicated an interest in participating on the committee. (Refer to Appendix E)
January 26, 2007	Board approves list of appointees to the CAC. (Refer to Introduction and Purpose)
Summary of Committee Deliberations <i>Minutes of the committee meetings are provided as Appendix D. Audio tapes and CD recordings of the committee meetings were also made available to the committee members and can be obtained by contacting the District office. An outline of each report presented by the project sponsors can be viewed on the District's website at http://www.mpwmd.dst.ca.us/asd/board/committees/cac/2007/2007.htm.</i>	
February 6, 2007	Organizational meeting. CAC reviewed committee charge, meeting procedures and format for final report to the Board.
February 26, 2007	Aquifer Storage and Recovery in Seaside Basin presented by the Monterey Peninsula Water Management District
March 26, 2007	Regional Urban Water Augmentation Project presented by the Marina Coast Water District and the Monterey Regional Water Pollution Control Agency Groundwater Replenishment Project presented by the Monterey Regional Water Pollution Control Agency
April 23, 2007	Long-Term Water Supply Project/Desalination in Sand City presented by the Monterey Peninsula Water Management District
May 29, 2007	Coastal Water Project/Desalination presented by California American Water Company
June 25, 2007	Monterey Bay Regional Desalination Project presented by Pajaro/Sunny Mesa Community Services District
July 25, 2007	Seawater Conversion Vessels/Desalination presented by Water Standard Company
July 26, 2007	CAC Subcommittee met to begin preparation of the final report of the committee's deliberations to the MPWMD Board of Directors. Discussed preparation of an Executive Summary and made assignments to subcommittee members for preparation of the summary.
August 14, 2007	CAC Subcommittee met to continue preparation of the final report to the MPWMD Board of Directors. Developed the draft Executive Summary.
August 27, 2007	Cancelled due to lack of a quorum.
September 11, 2007	Met to provide an opportunity for committee members to submit new information on any of the 7 projects listed on the MPWMD Comparative Matrix. Reviewed and commented on Final Draft CAC report to the Board of Directors. Referred Report to Board of Directors for receipt on September 17, 2007.

Appendix A

CHARGE TO THE MPWMD AD HOC COMMUNITY ADVISORY COMMITTEE

Adopted by MPWMD Board 12/11/06

1. Primary Function

The Community Advisory Committee (CAC) is an ad hoc committee formed for the sole purpose of providing a forum for public discussion in order to increase the Board of Directors' awareness of public sentiment regarding the seven water supply projects that are described on the Comparative Matrix of Water Supply Alternatives, Parts I and II. Utilizing the Matrix as a resource, the CAC is directed to meet and review each project listed on the Matrix and prepare a report that summarizes individual comments expressed by committee members on those projects, including relative advantages and disadvantages of each project in addressing the Monterey Peninsula's water supply need. The Board does not seek consensus from the CAC, but rather input on the merits or drawbacks of projects listed on the Matrix. The CAC shall not recommend a position of support or disapproval for any project listed on the Matrix. The CAC shall complete its review process and submit a report for consideration by the Board of Directors at its September 17, 2007 meeting.

2. Process

The CAC will meet once a month for seven months, beginning in February 2007. At each monthly meeting, the CAC will receive a report from District staff on one of the seven water supply projects listed on the Matrix. The CAC will discuss the project and record comments expressed by its members. The final meeting should occur in August 2007, when the CAC will approve its report for referral to the Board of Directors. The CAC meets the definition of a "legislative body" as defined by the Brown Act; therefore, all meetings shall be noticed and open to the public in compliance with the Brown Act.

3. Composition and Structure

a) The CAC is comprised of 14 members who shall reside within the boundaries of the Monterey Peninsula Water Management District. Seven of the members shall each represent a different community group.

b) Each Director appoints 2 members to the CAC.

- Appointee No. 1 – Must reside within the District boundaries and represent a community group. The District maintains a list of groups that have expressed an interest in participating on the committee. This list is available as a resource to the appointing Director; however, it is not required that representatives be chosen from the list.
- Appointee No. 2 – Must reside within the District boundaries. The appointee may be associated with a community group, but will not be officially representing any community group.

- c) A quorum of eight (8) CAC members shall be required for an official meeting to be conducted. Action may be taken by majority vote of those CAC members present.
- d) The General Manager will serve as Chair to the CAC, for purposes of facilitating meetings. District staff will provide support to the committee as appropriate.

4. Responsibilities of the Committee

Meet monthly between February and August 2007 and review each of the seven water supply projects listed on the Comparative Matrix, and submit a written report to the Board of Directors for consideration at its September 17, 2007 meeting that includes comments expressed by CAC members on those projects.

Appendix B

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

CITIZENS ADVISORY COMMITTEE

MEETING PROCEDURES AND DECORUM RULES

Approved February 6, 2007

1. All CAC members are to ask the Chair to be recognized before speaking. In addition to facilitating an orderly meeting, this procedure will enable the Chair to state the member's name before h/she speaks. The latter will ensure CAC members and others listening to meeting recordings to identify each speaker's comments.
2. Ordinarily, the Chair will set no time limit on CAC members when making their comments. Members are asked to be concise and avoid redundant comments, especially if the only purpose is to attempt to convince others to accept her/his perspective.
3. Citizen comments will only be taken when shown on the agenda, and normally limited in time as indicated thereon.
4. All CAC members and public speakers are expected to be respectful of others' expressed opinions, and refrain from personal attack. Remember to criticize the issue or point, not the person.
5. The Chair will caution any public speaker who fails to confine her/his comment to the subject or time limit indicated on the agenda, and will be asked to stop or quickly conclude her/his remarks. The Chair reserves the right to declare any person out of order, if h/she deliberately refuses to abide by such caution or becomes disorderly.
6. Audible expression from any person the Chair has not recognized to speak is not acceptable.
7. The Chair retains the exclusive right to facilitate each meeting in accordance with State law, the CAC charge, and these meeting procedures, and to make other decisions necessary to ensure the efficient and orderly conduct of each meeting, including voting procedures, if needed; unless overruled by a majority of CAC members present.

Appendix C

MPWMD Comparative Matrix of Water Supply Alternatives

Parts 1-A, 1-B and II

(Attached to October 16, 2007 Report to the MPWMD Board describing the Matrix, that was distributed to the Community Advisory Committee on February 6, 2007)

ITEM: ACTION ITEMS

13. RECEIVE WATER SUPPLY ALTERNATIVES COMPARATIVE MATRIX UPDATE FOR 2006

Meeting Date:	October 16, 2006	Budgeted:	N/A
From:	David A. Berger, General Manager	Program/ Line Item No.:	N/A
Prepared By:	Henrietta Stern, Andrew Bell	Cost Estimate:	N/A

General Counsel Approval: N/A
Committee Recommendation: N/A
CEQA Compliance: N/A

SUMMARY: The Monterey Peninsula Water Management District (MPWMD) Board will receive a staff presentation on an updated matrix (**Exhibits 13-A, 13-B, and 13-C**) that compares information provided by the sponsors of six water supply projects. The matrix purpose is to:

- summarize and consolidate 2006 information provided by proponents about current water supply project proposals in a single format; and
- facilitate Board discussion of next steps regarding water project implementation as it relates to use of MPWMD resources (staff, consultants, budget) in the coming year.

The seven projects in the 2006 matrix include:

1. Coastal Water Project (CWP) sponsored by California American Water (Cal-Am).
2. North Monterey County Desalination Project (NMCDP) sponsored by the Pajaro/Sunny Mesa Community Services District (P/SM).
3. Long-Term Water Supply Project/Desalination (WSP) sponsored by MPWMD.
4. Seawater conversion vessels, proposed by Water Standard Company
5. Aquifer Storage and Recovery in Seaside Basin (ASR) sponsored by MPWMD.
6. Regional Urban Water Augmentation Project (RUWAP) sponsored by Marina Coast Water District (MCWD) and Monterey Regional Water Pollution Control Agency (MRWPCA).
7. Groundwater Replenishment Project (GRP) sponsored by MRWPCA.

The fourth project in the list, seawater conversion vessels, was added to the matrix at the direction of the Board, following a presentation of the concept by the project proponents at an August 31, 2006 Board workshop.

As with the 2005 matrix, the 2006 matrix is divided into two parts. Part I (**Exhibits 13-A and 13-B**) summarizes four relatively large desalination projects that would, at a minimum, comply with State Water Resources Control Board (SWRCB) Order 95-10 with existing water demand on the Monterey Peninsula; two of the projects could also potentially meet future needs of the

Peninsula and other coastal areas in northern Monterey County. Part II (**Exhibit 13-C**) summarizes three projects that feature aquifer storage and recovery (ASR) and reclaimed water technology. These projects alone could not fully comply with SWRCB Order 95-10, but could be combined with each other or with any of the desalination projects to meet community water supply goals, serve as back-up supply, or help reduce costs.

Please refer to the "Discussion" section below for an overview of each project, with an emphasis on new or updated information. It is notable that all projects would require upgrades to the existing Cal-Am distribution system in order to receive the water.

RECOMMENDATION: The Board should receive the updated 2006 matrix information, ask questions, indicate whether follow-up work is needed by staff, and indicate whether a specific agenda item should be prepared for future consideration. The Board may wish to defer this discussion to the Strategic Plan Workshop scheduled for September 25, 2006, which will include water augmentation issues.

BACKGROUND: At its July 19 and 29, 2004 meetings, the Board heard presentations by and posed questions to project proponents, with emphasis on water production capacity, cost, timeline and opportunities for MPWMD participation. The Board directed staff to prepare a matrix summarizing information provided by project proponents related to these questions, and obtain and summarize regulatory process information for discussion on September 29, 2004. The matrix was first presented on September 29, 2004 at the MPWMD Strategic Planning Session. Refer to the following web address for the 2004 matrix and supporting information:
<http://www.mpwmd.dst.ca.us/asd/board/boardpacket/2004/20040929/07/item07.htm>

On March 21, 2005, project update presentations were made by Cal-Am, Monterey County Water Resources Agency (MCWRA), MPWMD, MRWPCA and P/SM. At a special meeting on June 16, 2005, the Board determined that it would host an August 25, 2005 Town Hall Meeting with emphasis on public education about different water supply options. The well-attended August 25, 2005 event featured four displays staffed by project sponsors, eight presentations to an audience of over 100 people, and a lively question/answer session. Sponsor presentation materials may be found on the District website at:
www.mpwmd.dst.ca.us/asd/board/boardpacket/2005/20050825/0825ag_notice.htm.

The 2005 update to the matrix was presented at the September 8, 2005 Strategic Planning Session. Refer to the following web address for the 2005 matrix and supporting information:
<http://www.mpwmd.dst.ca.us/asd/board/boardpacket/2005/20050908/04/item4.htm>

In previous years, all matrix information was submitted by the project sponsors with no independent analysis by MPWMD to assess the completeness or accuracy of the information. Earlier in 2006, the District Board commissioned an independent review of the three desalination projects (Projects 1, 2 and 3 listed above). At the June 29, 2006 Board Special Workshop, Bookman-Edmonston/GEI Consultants (B-E/GEI) presented their June 26, 2006 report titled "*Seawater Desalination Projects Evaluation*." Copies of the full report are available at the District office, and presentation materials are provided at the following website location:
<http://www.mpwmd.dst.ca.us/asd/board/boardpacket/2006/20060629/0629agenda.htm>.

During the workshop, B-E/GEI representatives responded to a number of questions and comments by the Board and public. At the end of the workshop, the Board asked for the cost for additional work by B-E/GEI to revise the final report by including responses to comments and questions during the workshop. At its July 17, 2006 meeting, the Board determined that additional funds should not be expended to revise the report at this time. Staff was directed to solicit written comments from Cal-Am and Pajaro/Sunny Mesa Community Services representatives and to prepare a summary of oral and written comments. A summary of comments by the Board, the public, and project proponents, including copies of written comments received, included in this packet under Item 14, **Exhibit 14-B**.

The City of Sand City is pursuing a 300 acre-foot per year (AFY) desalination project designed solely to meet the City needs. In 2006, an Environmental Impact Report (EIR) was certified and California Coastal Commission approval was obtained. The project could not be expanded to meet broader community water needs without jeopardizing the "benign by design" criteria; a larger project would result in brine salinity levels above ambient seawater levels. Thus, the Sand City project was not included in the 2005 and 2006 matrices.

The District Board held a special workshop on August 31, 2006 to hear a presentation on seawater conversion vessels (SCV) to provide an ocean-based (rather than land-based) source of desalinated water. The presentation was made by representatives of PBS&J Inc., one of the country's largest engineering design firms, Water Standard Company, and GE Energy, part of a team assembled to market this concept internationally. MPWMD has neither analyzed nor endorsed the SCV project concept. Pursuant to Board direction at the September 18, 2006, information on this project was solicited from the project proponents, and the information provided to staff is included in the 2006 matrix as **Exhibit 13-B**.

The Monterey County Water Resources Agency, as directed by the Monterey County Board of Supervisors, has led an interagency effort involving city managers and general managers of water and wastewater agencies, including MPWMD. This effort has resulted in concept proposals for forming an inter-agency governance structure to evaluate water supply alternatives and create an integrated strategy for implementing a publicly-owned water supply project (or projects) that could serve regional needs on the Monterey Peninsula and the rest of northern Monterey County. This entity is presently called the Monterey Bay Regional Water Authority (MBRWA). A specific project has not been defined, and is thus not included in the matrix. The interagency governance structure could potentially apply to any water project on the matrix.

DISCUSSION: The October 16, 2006 updated matrix serves as a "snapshot in time" to help track progress on the six water supply projects. The discussion below: (1) describes the matrix organization; (2) highlights each project with emphasis on what is new or different in 2006 as compared to 2005; and (3) describes next steps.

As part of the process of updating the matrix, District staff contacted proponents of each of the projects listed in **Exhibits 13-A, 13-B, and 13-C** and requested that updated information be provided not later than August 30, 2006. Updated information in the form of e-mails and mark-ups of the 2005 matrix were received from MCWD and its consultant and MRWPCA. Skip

Griffin of PBS&J provided the matrix information shown in **Exhibit 13-B** and the PowerPoint presentation contained in **Exhibit 13-D**. No response to staff's request was received from Cal-Am or from Pajaro/Sunny Mesa. As a result, staff used information previously obtained from Cal-Am and Pajaro/Sunny Mesa to update those portions of the matrix. Those sources include information obtained by Bookman-Edmonston/GEI Consultants for preparation of their June 26, 2006 report titled "Seawater Desalination Projects Evaluation," and information available to the District through its participation in the process for Cal-Am's application to the CPUC for the Coastal Water Project.

MATRIX ORGANIZATION

Throughout the matrix, numbered rows provide the information requested for the matrix. The following lettered columns are used in 2006:

Part I-A Desalination Projects (Exhibit 13-A)

Column A - Decision Element (topic)

Column B - Coastal Water Project (Cal-Am)

Column C - North Monterey County Desalination Project (P/SM)

Column D - Long-Term Water Supply Project/Desalination at Sand City (MPWMD)

Part I-B Desalination Projects (Exhibit 13-B)

Column A - Decision Element (topic)

Column B - Seawater Conversion Vessel (Water Standard Company)

Part II Projects Other Than Desalination (Exhibit 13-C)

Column A - Decision Element (topic)

Column B - Aquifer Storage and Recovery in Seaside Basin (MPWMD)

Column C - Regional Urban Water Augmentation Project (MCWD and MRWPCA)

Column D - Groundwater Replenishment Project (MRWPCA)

As noted in the "Background" section above, proponent information provided for three of the four desalination projects was subject to independent review by Bookman-Edmonston/GEI Consultants (B-E/GEI) and its subconsultants as presented in their June 26, 2006 report titled "*Seawater Desalination Projects Evaluation*." Thus, numerical cost data and certain other technical information submitted by the project proponents may differ from results of the evaluation by the consultant. In cells of Part I of the matrix where information differs, the proponent's information is shown in regular font and the conclusion by the B-E/GEI team is shown in ***bold italics***.

The primary matrix topics ("Decision Elements") remain:

- Project description,
- Water yield, including recipients and phasing,
- Project cost to customers, including detailed cost breakout,
- Financing and assumptions,
- Timeline and key milestones,

- Permits needed and regulatory agencies involved,
- Site control,
- Project operations and proponent capabilities,
- Project participants including MPWMD opportunities,
- Public involvement,
- List of acronyms found in the matrix.

Numbered line items refer to specific subtopics. By necessity, the information presented in the matrix is in abbreviated form.

SEAWATER DESALINATION PROJECTS

Coastal Water Project (Sponsor: Cal-Am – Exhibit 13-A, Column B)

The major components of the proposed Coastal Water Project (CWP) are a seawater desalination plant in Moss Landing at the “Duke East” site on Dolan Road about one-half mile east of Highway 1; use of the intake and outfall for LS Power Group’s Moss Landing Power Plant (MLPP), formerly owned by Duke Energy.; a desalinated water conveyance system to the Monterey Peninsula, including a transmission pipeline, terminal reservoir and pumping stations; and an ASR project in the Seaside Groundwater Basin. Cal-Am plans to use a site on the MLPP property for a one-year pilot project, but does not yet have a long-term lease agreement for the proposed CWP facilities. The yield goal for the “basic project” is defined as 11,730 AFY to: (a) provide 10,730 AFY to replace Cal-Am’s Carmel River withdrawals to comply with SWRCB Order WR 95-10, and (b) 1,000 AFY to help alleviate over-pumping in the Seaside Groundwater Basin.

New and Changed Information in 2006: On July 14, 2005, Cal-Am announced completion of the 1,700-page Proponent’s Environmental Assessment (PEA), a comprehensive environmental review document required by the California Public Utilities Commission (CPUC) before the CPUC will consider Cal-Am’s application for a Certificate of Public Convenience and Necessity (CPCN) to allow rate increases to fund the CWP. The September 2004 CPCN application was also amended in July 2005 to reflect information provided in the PEA for the 11,730 AFY Proposed Project.

The PEA also analyzed five alternatives in detail, four of which could potentially be approved by the CPUC as a new water project. The five alternatives are listed below. More complete descriptions are provided in the 2005 matrix materials:

- Alternative 1 (Regional Alternative) -- would provide 20,272 AFY of water for both Cal-Am and the neighboring communities.
- Alternative 2 (Over-sized Pipeline Alternative) – would include the same features as the proposed CWP, except that all pipelines would be larger to facilitate increased production to meet future needs.
- Alternative 3 (MLPP HDD Intake Alternative) -- would utilize Horizontal Directional Drilling (HDD) intake wells as feedwater supply.

- Alternative 4 (North Marina Site Alternative) – would locate the seawater desalination facility in the City of Marina Sphere of Influence at Armstrong Ranch. The project could be sized to meet either the CWP or Regional Alternative water demands.
- Alternative 5 (No Project Alternative) – would entail existing programs to conserve and recycle water.

Cal-Am consultants performed extensive engineering analyses to prepare cost estimates in 2005 for the proposed CWP. The June 2006 report by MPWMD consultants evaluated project facilities and estimated costs for the desalination portion of the CWP only and did not review or evaluate the ASR component.

With the submittal of the PEA, the CPUC staff began its formal environmental review as lead agency under the California Environmental Quality Act (CEQA). In 2006, the CPUC retained the firm of ESA Water to prepare the Draft EIR for the CWP. The ESA Water consulting team and CPUC staff met with MWMD staff on two occasions (June 28 and August 3, 2006) to better understand the water supply setting and to ask questions about potential CPUC-developed alternatives that may be included in the EIR. The current schedule calls for the Draft EIR to be prepared in Spring 2007 and the Final EIR to be completed in Summer 2007. This is roughly one year later than projected in September 2005.

The California Department of Health Services (CDHS) requires a pilot project for a desalination facility to demonstrate reliable water quality and quantity. In early 2005, Cal-Am submitted an application to the California Coastal Commission (CCC) for a waiver of a Coastal Development Permit to construct a 200,000 gallon-per-day (gpd) pilot project at the MLPP. In 2005, Cal-Am anticipated that permits for the pilot project would be issued in September 2005 by the CCC, Regional Water Quality Control Board (RWQCB) and Monterey County. At the time the 2005 matrix was prepared, Cal-Am anticipated pilot project installation in late 2005, with a one-year test period beginning January 2006. The actual timeline appears to be running about one year later. The County of Monterey approved the Cal-Am pilot project in August 2006, and the RWQCB approved the pilot project at its September 7, 2006 meeting. CCC consideration is anticipated later this year. Various components of the pilot project have been delivered and are being assembled, but operation of the pilot project is not anticipated to begin until June 2007 at the earliest.

Other Related Events in 2006:

- Cal-Am and MPWMD entered into a Management and Operations Agreement as of April 1, 2006 for Phase 1 of MPWMD's Aquifer Storage and Recovery Project. In accordance with this agreement, Cal-Am and MPWMD representatives have coordinated planning, permitting, and construction of facilities that will comprise the Phase 1 ASR Project.
- The Decision on the Seaside Groundwater Basin Adjudication (California American Water v. City of Seaside, et al.) was issued on March 27, 2006. This decision may affect planning for the CWP.
- The Moss Landing Power Plant, previously owned by Duke Energy, was purchased by LS Power Systems in 2006.

- In May 2006, Cal-Am and its parent entities filed application with the CPUC for authority to sell up to 100% of the stock of American Water Works Company, Cal-Am's parent company, through public stock offerings. CPUC Public Participation Hearings are scheduled in September 2006. It is not known if this potential change will affect the CWP.

North Monterey County Desalination Project (Sponsor: P/SM – Exhibit 13-A, Column C)

Information about the North Monterey County Desalination Project (NMCDP) is very similar to that provided in 2005. Project components include a seawater desalination plant in Moss Landing, transmission pipeline to the Monterey Peninsula, and a potential 30-acre solar energy power production facility to reduce energy costs. The proposed site is the former National Refractories and Mineral Corporation's Moss Landing facility, with planned use of existing intake/outfall pipelines, with possible use of LS Power Group intake and outfall, if needed. A lease agreement with the property owner has been in effect since March 2004. The yield goal is 20,000 to 23,000 AFY or more, depending on purveyor demand. A 20 MGD project, capable of producing up to 22,400 AFY, was used for cost estimates provided in 2006. Total demands of 20,930 AFY are identified in P/SM materials provided to MPWMD. The project is intended as a regional project, including meeting the needs of the expanding P/SM service area in northern Monterey County. P/SM has entered into a management agreement with Poseidon Resources, a private corporation experienced in desalination technology.

New and Changed Information in 2006: Pajaro/Sunny Mesa partner Peter MacLaggan of Poseidon Resources provided refined project description, cost and timeline information to MPWMD consultants for the 2006 evaluation of desalination projects, but no updated information was provided in response to MPWMD staff's request to update information presented in the 2005 matrix. The total estimated capital cost provided by Poseidon was reduced from \$175,831,000 in the 2005 matrix to \$132,000,000. The total estimated O&M cost provided by Poseidon was increased from \$13,360,000 in the 2005 matrix to \$16,900,000 per year. Although the total estimated costs were disclosed by Poseidon, the breakdown of capital and O&M costs were provided to MPWMD's consultants on a confidential basis. Therefore the costs by category (e.g., desalination plant, intake and outfall, transmission pipelines, etc. for capital costs, and energy and facilities costs for O&M costs) are not available to be presented in the matrix.

The County of Monterey approved the P/SM pilot project in March 2006, but the County's approval was appealed to the California Coastal Commission (CCC). The RWQCB approved the pilot project at its September 7, 2006 meeting. An application to the CCC for a Coastal Development Permit for the pilot plant was submitted in March 2006. CCC consideration of that application and the appeal of the County of Monterey approval is anticipated later this year.

P/SM intends to be the lead agency for CEQA review of its desalination project. The target completion date for environmental review and permitting is June 2008, as compared with a date of December 2006 for certifying the Final EIR in the 2005 matrix. The target completion date for beginning water delivery is July 2010, as compared with a date of 2009 in the 2005 matrix.

Long-Term Water Supply Project/Desalination in Sand City (Sponsor: MPWMD – Exhibit 13-A, Column D)

The MPWMD Water Supply Project (WSP) is comprised of a seawater desalination plant in the Sand City area with new seawater intake/brine discharge facilities at Seaside State Beach, Sand City and/or former Fort Ord. The project design envisioned HDD wells for intake/discharge, but the geology of the former Fort Ord coastal area requires use of the existing MRWPCA outfall for large volumes of brine discharge. The basic yield goal set in 2003 is 8,400 AFY to legalize existing community demand. Specifically, the project goal is to meet local, near-term needs, including compliance with Order 95-10, assuming Cal-Am diversions from the Carmel River do not exceed 11,285 AFY and total Cal-Am production remains under 15,285 AFY. Production up to 11,000 AFY may be possible, depending on the outcome of hydrogeologic and engineering investigations that must first be performed.

An administrative “Board Review Draft EIR” for the MPWMD Water Supply Project was received at the December 15, 2003 meeting. To date, it has not been authorized to be refined to a formal Draft EIR to be circulated to the public pursuant to CEQA. The MPWMD Board continues to place this project “on hold” pending evaluation of regional projects.

New and Changed Information in 2006: There has been no Board action to pursue the WSP since it was tabled in October 2004. District efforts have focused on ASR and participation in interagency discussions about governance structure for regional water supply projects. However, the WSP was one of the three desalination projects subject to independent consultant review in June 2006. The MPWMD consultants determined that the estimated capital costs, including the 25% contingency amount, are reasonable. The MPWMD consultants determined that the estimated energy use should be reduced by 33% due to the higher energy efficiency of currently-available reverse osmosis equipment. This would reduce annual O&M costs by about \$2 million per year.

Seawater Conversion Vessel (Proponent: Standard Water Company – Exhibit 13-B, Column B)

New and Changed Information in 2006: This project was not included in prior years’ matrices. Representatives of three firms participating in the project, Standard Water Company, PBS&J, and GE Energy, presented the concept to the Board at a workshop on August 31, 2006. The seawater conversion vessel project, proposed by Standard Water Company, is based upon an offshore “mother ship” containing a seawater desalination plant using reverse osmosis technology and one or more gas turbine engines to provide energy for the desalination process and associated shipboard facilities. Treated water would be delivered to an onshore water distribution system such as Cal-Am’s using either a pipeline placed on the seabed or a “shuttle ship” tanker to deliver water to a shoreside facility for unloading. At the September 18, 2006 regular Board meeting, the Board directed that the project be added to the matrix. The information shown in Exhibit 14-B, Column B, was provided by Skip Griffin of PBS&J. Mr. Griffin also provided a PowerPoint presentation on the project that is a revised version of the presentation made at the August 31, 2006 Board workshop. This document, titled “The Benefits of a Seawater Conversion Vessel” and dated September 27, 2006, is attached as **Exhibit 13-D**.

PROJECTS OTHER THAN SEAWATER DESALINATION

Aquifer Storage and Recovery in Seaside Basin (Sponsor: MPWMD – Exhibit 13-C, Column B)

The MPWMD Aquifer Storage and Recovery Project would divert “excess” flow from the Carmel River in wet periods, as defined by state and federal resource agencies, which would then be treated and transmitted via the Cal-Am distribution system to special injection/recovery wells in the Seaside Groundwater Basin on the former Fort Ord. Available storage capacity in the Seaside Basin Coastal Subareas serves as an underground reservoir for the diverted water for use during dry periods. ASR can help improve environmental conditions in the Carmel River and Seaside Basins by reducing Carmel River diversions in dry periods, when the river environment is most vulnerable, and helping to replenish the Seaside Basin in wet periods. MPWMD already owns and operates one successful full-scale test well at the proposed site. The proposed Phase 1 ASR Project would add a second well immediately adjacent to the current site, along with some additional transmission pipeline and other minor structures. The Phase 1 project envisions a maximum annual Carmel River diversion and injection of up to 2,420 AFY into the Seaside Basin. The maximum extraction from the Seaside Basin would be 1,500 AFY. Average values would be lower and depend on long-term weather conditions. Revised computer modeling performed in mid-2006 indicates that the average project yield would be about 920 AFY with operations that maximize use of Seaside Basin water to offset Carmel River pumping in dry periods. The MPWMD ASR project could relatively easily combine with any other project described above.

The Phase 1 ASR Project assumes use of a primarily above-ground, near-term Cal-Am pipeline to more efficiently deliver water to the Santa Margarita injection well site than the existing temporary pipeline. The pipeline was approved by the City of Seaside in June 2005, and is anticipated to be constructed by Cal-Am in late 2006 pending U.S. Army approval expected in September 2006. Once the final location of the new General Jim Moore Boulevard road alignment is approved and funded, a realistic plan for a permanent below-ground pipeline to the injection well can be formulated.

The MPWMD Phase 1 ASR is similar to, but not the same ASR project described for Cal-Am’s CWP proposal. The District and Cal-Am signed a Management and Operations Agreement (M&OA) regarding near-term and long-term ASR projects. Cal-Am and MPWMD technical staff continue to coordinate on means to engineer the Cal-Am’s system to facilitate ASR.

New and Changed Information in 2006: On August 21, 2006, the MPWMD Board certified the EIR/EA for the MPWMD Phase 1 ASR Project. This completion date matched the completion estimate provided in the September 2005 matrix. Permits from the U.S. Army and City of Seaside for the ASR well are expected in September 2006. SWRCB water rights approval is expected in Fall 2006 as protest dismissal agreements are being finalized in September 2006. Design and construction of the Phase 1 ASR Project is anticipated through December 2006. Financing for the Phase 1 ASR Project was approved by the MPWMD Board in August 2005 and entails a 1.2% user fee on water bills of Cal-Am customers. This user fee will provide approximately \$300,000 per year to fund the Phase 1 ASR Project. These dates are consistent with the schedule estimated in the September 2005 matrix.

The importance of ASR in the management and stewardship of the Seaside Basin gained importance as it is a key component of the “physical solution” described by the Monterey County Superior Court’s March 2006 Final Decision on the Seaside Basin water rights adjudication. Notably, the Phase 1 ASR Project purpose is solely geared toward improved environmental protection of the Carmel River, with secondary benefits to the Seaside Basin. There is no water supply increment for new construction or remodels identified as part of this project, and it is not geared toward resolving Seaside Basin problems. However, future EIRs will address yet-to-be proposed ASR Phases, once more information is known about regional land use plans and infrastructure. These future ASR phases are likely to include improvement to the Seaside Basin as a primary project purpose.

Regional Urban Water Augmentation Project (Sponsors: MCWD and MRWPCA – Exhibit 13-C, Column C)

The Regional Urban Water Augmentation Project (RUWAP) involves two major water augmentation supply projects: seawater desalination and recycled water. In the 2004 matrix, a previous variation was referred to as the Regional Urban Recycled Water Project, and focused solely on the use of reclaimed water. Only 300 AFY is designated for use by Cal-Am customers for non-potable uses such as golf courses, cemeteries, parks and other landscape open space. The RUWAP could be combined with ASR or the other desalination projects described in the matrix.

New and Changed Information in 2006: The RUWAP project goal is to provide 2,400 AFY of water to the former Fort Ord area to meet redevelopment requirements described in the Fort Ord Reuse Plan. In addition, 300 AFY is being considered to replace potable uses on the Monterey Peninsula (defined as Cal-Am’s Monterey District service area). The EIR for the project was certified in October 2004; the “Hybrid Alternative” was endorsed by the MCWD and FORA boards of directors in 2005. The EIR identified evaluated several alternatives, including:

- “Seawater Desalination Alternative” -- a new 3,000 AFY desalination facility in the area currently occupied by the MCWD’s existing desalination plant. The proposed replacement desalination project meets the project objective of 2,400 AFY, replaces the District’s existing 300 AFY desalination plant, and also provides 300 AFY for use within or outside of the District service areas, e.g., on the Monterey Peninsula.
- “Recycled Water Alternative” -- provides 3,000 AFY of recycled water, which meets the project objective of 2,400 AFY, but would also provide 300 AFY of recycled water to the Monterey Peninsula and an additional 300 AFY for use within or outside District service areas.
- “Hybrid Alternative” -- includes a water supply of up to 1,500 AFY from an expansion of MCWD’s seawater desalination plant (including replacement of the existing 300 AFY capacity plant) and the production and distribution of up to 1,500 AFY of recycled water for landscape irrigation. The EIR concluded that depending upon the recycled water needs at the former Fort Ord, the remainder would be used for MCWD’s other service

areas and potentially, the Monterey Peninsula, via a new recycled water distribution system.

In the 2005 matrix, the project yield for the desalination component was listed as “amount to be determined.” In information provided by MCWD in 2006, the yield of the desalination component is stated to be 1,500 AFY, with 1,200 AFY of this amount to be available for the Ord Community and 300 AFY to replace MCWD’s existing desalination plant. The reclaimed water project yields in 2005 were stated to be 1,700 AFY in Phase 1 and 3,100 AFY in Phase 2. The 2006 information provided by MCWD states the yields to be 1,500 AFY in Phase 1 and 3,300 in Phase 2.

New cost information provided by MCWD’s consultant RMC Water and Environment indicates that the capital cost of the Phase 1 reclaimed water project is estimated to be \$54 million, up from \$19 million in the 2005 matrix. No new capital cost information was provided for the Phase 2 reclaimed water project or the desalination project, and no updated annual operation and maintenance cost estimates for either project were provided.

Groundwater Replenishment Project (Sponsor: MRWPCA – Exhibit 13-C, Column D)

A second, related concept known as the Groundwater Replenishment Project (GRP) is currently being evaluated by MRWPCA. The GRP concept was not included in the 2004 matrix because little information was available, and MRWPCA was determining if the concept has merit to warrant further study. The concept envisions treatment of recycled water to near-potable condition for groundwater percolation or injection into the Seaside Basin. Similar to the ASR project described above, the purified, recycled water source would be available in winter, when it is not used by food crops such as artichokes, and could be put to a beneficial use rather than be discharged into the ocean. After meeting State DHS treatment and migration standards, this supplemental source of water could be made available for recovery and potable reuse. Similar technology has been very successful in Orange County in Southern California for many years by operation of the Water Factory 21 plant, which creates recycled water for injection into its groundwater basin as a seawater intrusion barrier. Expanding on that success, the Orange County Water District is implementing an 80 million-gallon-per-day purified, recycled water project that will substantially augment their long-term potable water supply.

New and Changed Information in 2006: In 2005 MRWPCA retained an expert consultant from the Water Factory 21 facility to help the agency assess and pursue the GRP locally. In the 2005 matrix, the GRP was stated to initially produce 2,800 AFY, with possible expansion in the future, and that a pilot project was anticipated in 2006. New information provided by MRWPCA in August 2006 states that the initial project would produce 2,400 AFY, and that a pilot project is anticipated in 2007. In the 2005 matrix the estimated capital cost is stated to be \$26.9 million, and no annual operation and maintenance cost estimate was provided. New information provided by MRWPCA indicates an estimated capital cost of \$37.9 million, and annual operation and maintenance costs are estimated to total \$1,325,000 per year (August 2006 dollars). The new information states that the goal for the unit cost of water remains at \$1,200 per acre-foot, the same as stated in 2005. The agency states that it is continuing to pursuing Proposition 50 and other funding sources. The agency has coordinated with MPWMD, DHS and other regulatory agencies regarding hydrogeology, health issues and engineering.

YEAR 2006 COMPARISON OF PROJECTS

Because three of the four desalination projects were compared in detail by Bookman-Edmonston/GEI Consultants in June 2006, this 2006 matrix update will not repeat that work. Information on the fourth seawater desalination project, seawater conversion vessels, is new this year, provided to the District by project proponents in August and September 2006. The other projects lend themselves to combining with or augmenting a larger, primary project and could potentially proceed on an independent path from the desalination projects. As noted in 2004 and 2005, varying levels of effort have been expended by proponents to estimate the respective project capital and operating costs. Though the Cal-Am project has the most extensive cost documentation as of September 2006, District staff and consultants believe that cost estimates for all projects in the matrix are not fully developed and are potentially inaccurate. A contingency factor of 25% to 30% has been suggested by District consultants for the three desalination projects, and similar factors are likely applicable to the non-ASR other projects in Part II.

Next Steps and Concepts for Future Action

The 2006 comparative matrix continues to refine water supply project information, but many information gaps still exist. Except for the MPWMD Phase 1 ASR Project and MCWD's RUWAP, major environmental review must be completed for each of the water supply proposals. Also, the county-initiated Monterey Bay Regional Water Authority governance structure is still evolving and consensus has not yet been obtained on its specific function and authority.

The MPWMD Board should consider various options of how the 2006 matrix should be used. These options may include, but are not limited to:

- Use the matrix solely as an informational snapshot in time. Update the matrix in six or 12 months, when more information is available.
- Use the September 2006 matrix to make a policy decision on what project(s) to support now.
- Defer a policy decision on water project alternatives described in the matrix (other than ASR Phase 1), and the role the District should assume in pursuing supply solutions, until more definitive information is available.
- Consider other policy choices that may be identified by the Board during the September 25, 2006 Strategic Planning Workshop.
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EXHIBITS

13-A MPWMD Comparative Matrix, Part I-A, Desalination Projects

13-B MPWMD Comparative Matrix, Part I-B, Desalination Projects

13-C MPWMD Comparative Matrix, Part II, Projects Other than Desalination

13-D ~~September 27, 2006 PowerPoint presentation by PBS&J for Water Standard Company, "The Benefits of a Seawater Conversion Vessel"~~

Note: Exhibit 13-D is not included in the Final Draft Report to the Community Advisory Committee.

EXHIBIT 13-A
MPWMD Comparative Matrix, Part I-A, Desalination Projects

A		B		C		D
FINAL for 10/16/06 Meeting		MPWMD Comparative Matrix -- Part I-A, Desalination Projects		LONG-TERM WATER SUPPLY PROJECT (Sand City Desal)		MPWMD
1	DECISION ELEMENT	COASTAL WATER PROJECT	NORTH MONTEREY COUNTY DESALINATION PROJECT	LONG-TERM WATER SUPPLY PROJECT (Sand City Desal)	MPWMD	
2	PROJECT DESCRIPTION	California American Water Moss Landing desal plant assumes use of Duke Energy site and intake/outfall. Includes desal conveyance system comprised of transmission main, terminal reservoir, and pump stations; and ASR facilities to store CR (or desalinated) water in Seaside Basin. PEA analyzes Proposed Project and five alternatives (see Line 60). Proposed Project yield is 11,730 AFY. Approvals expected by end of 2006; install early 2007; operate for one year via agreement with LS Power.	Pajaro/Sunny Mesa CSD Desal plant at National Refractories site; prefer use of Duke Energy wastewater as source (existing intake as backup) with existing outfall. Includes energy recovery; possible 30-ac solar energy. Current focus on regional plant, including P/SM service area; willing to expand to serve other areas. No ASR is planned, but could be combined with MPWMD ASR project. Approvals expected by end of 2006 based on approved Encina plant design; plan to operate 4 yrs.; managed by Kennedy/Jenks expert	Desal plant at Sand City with potential intake and outfall locations from Seaside State Beach to coastal Fort Ord. HDD well technology needed to achieve 8,409 AF yield goal; brine disposal via MRWPCA outfall likely needed. Could be combined with MPWMD ASR project.		
3	Pilot Project	Approvals expected by end of 2006; install early 2007; operate for one year via agreement with LS Power.	Approvals expected by end of 2006 based on approved Encina plant design; plan to operate 4 yrs.; managed by Kennedy/Jenks expert	None planned currently, but will be required by DHS		
4	PROJECT YIELD	Actual yield based on commitments of purveyor customers	Actual yield based on commitments of purveyor customers	8,409 AFY yield goal; possibly 11,000 AFY (uncertain)		
5	Comply with Order 95-10? Water for Seaside Basin?	Yes, 10,730 AFY assumed for Project and alternatives. 1,000 AFY slated to replace Cal-Am use in Seaside Basin.	Yes, 10,730 AFY assumed. Up to 2,700 AF to address gap between current production and sustainable yield estimate in Seaside Basin.	Yield falls short of 10,730 AFY unless expanded or combined with another project. No yield to address Seaside Basin.		
6	Future Mont. Penin. Needs?	Regional Alt includes 3,572 AFY for jurisdictions within CAW service area as previously identified by MPWMD and jurisdictions.	Water for growth not currently contemplated.	Current project goal is legalizing existing use (11,285 AFY from CR and 3,500 AFY from Seaside assumed). Water for growth not contemplated.		
7	Future Non-MP Needs	Regional Alternative lists 4,970 AFY for MCWD/NorCo as amended by participants. North Marina Alt could also be sized to meet regional needs.	Up to 11,230 AF to address known overdraft in areas now within P/SM service area	None		
8	TOTAL YIELD	11,730 AFY for Proposed Project; 20,272 AFY for Regional Alternative (or North Marina Alt).	20,000-22,400 AFY (20 MGD project, capable of producing up to 22,400 AFY - 20,930 AFY demand identified)	8,409 AFY. Project could potentially be expanded to 11,000 AFY - permitting and feasibility are uncertain.		
9	Yield Phasing to Mont Penin	11,730 AFY is Proposed Project amount. Oversized Pipeline Alt or Regional Alt could facilitate incremental future supply above 11,730 AFY.	Phasing based on demand; assume 10,730 AF plus amount needed for Seaside first	No phasing		
10	PROJECT COST	2005 Costs for Proposed Project (11,730 AFY) Indexed to 2004 through 2008	Costs in 2005 dollars for 20 MGD project provided to B-E/GEI Consultants by Poseidon Resources	Varies with site; see Dec 2003 Board Review Draft EIR		
11	Capital - see lines 77-106	\$191,090,000 for proposed project (11,730 AFY) Based on 10% contingencies - B-E/GEI Consultants recommend 25% contingencies. B-E/GEI evaluated only the desalination component of the project, and not the ASR component.	\$132,000,000 for 20 MGD project \$169,030,000 (B-E/GEI Consultants, based on increasing contingencies by 10-15% to 25%)	\$176,200,000 - \$193,000,000		
12	Amortized Cap. Cost (\$/yr)	\$15,000,000/yr	Information not provided	\$14,200,000 - \$15,600,000/yr		
13	O&M - see lines 108-112	\$6,372,000 (net amount; see basis of cost info) B-E/GEI evaluated only the desalination component of the project, and not the ASR component.	\$16,900,000/yr	\$8,740,000 - \$9,090,000/yr \$6,740,000 - \$7,090,000/yr (B-E/GEI Consultants)		
14	Assumed energy cost (\$/kwh)	\$0.07/kwh	Information not provided	\$0.12/kwh		
15	Total Annual Cost	\$21,372,000/yr	Information not provided	\$22,990,000 - \$24,690,000/yr \$20,990,000 - \$22,690,000/yr (B-E/GEI Consultants)		
16	Time frame for estimates	Capital cost escalated through end of construction in 2008 with 4% inflation	2005	December 2002		

EXHIBIT 13-A
MPWMD Comparative Matrix, Part I-A, Desalination Projects

	A	B	C	D
			NORTH MONTEREY COUNTY DESALINATION PROJECT	LONG-TERM WATER SUPPLY PROJECT (Sand City Desal)
4	DECISION ELEMENT	COASTAL WATER PROJECT		
22	Share of total project cost	100% of Proposed Project costs are for CAW Peninsula customers; Regional Alt would rely on prorata share of participation.	Cost of water based on contract volume (capacity+annual usage charges); separate charge for pipelines and pumping facilities.	Entire cost to be paid by Peninsula consumers.
23	How share determined	See line 23	See line 23	N/A
24	Cost sharing of existing vs. future Cal-Am ratepayers	See CPCN application; David Stephenson testimony	Future capacity cost based on construction and transmission	New users pay connection fee similar to current system
25	Cost of Water (\$/AF)	Proposed Project is \$1,725/AF delivered to Peninsula customers (\$1,000/AF for desal plant, pumps, pipes and storage; \$150/AF for ASR; \$550/AF for O&M). Includes lease of desal site. Regional Alternative would be \$1,600/AF for CAW customers. Based on 10% contingencies - B-E/GEI Consultants recommend 25% contingencies. B-E/GEI evaluated only the desalination component of the project, and not the ASR component.	Information not provided by project proponent \$1,434/AF (B-E/GEI Consultants)	\$2,737 - \$2,939/AF based on 7.5 MGD (\$,409 AFY) project. Includes site acquisition and other RJW costs. \$2,491-\$2,693/AF if energy costs reduced by 33% as recommended by B-E/GEI Consultants. Need to add conveyance and related costs to obtain cost of delivered water.
26	Impact to Cal-Am Bill	Increase of \$2.20/ccf in 2007 to \$5.73/ccf in 2011	No information provided	No information provided
28	FINANCING ASSUMPTIONS	See CPCN application amended 7/14/05	Revenue bonds or COPs; possible Poseidon funding	pursuant to District Law
30	Interest rate (%)	7%	Information not provided	7%
31	Term (yrs)	30	Information not provided	30 years
32	Public vote required?	No public vote required; possible if public financing. CPUC makes CPCN decision.	Not required of P/SM unless Prop 218	Depends on type of funding or if part of JPA etc.
33	Grants (describe)	None anticipated at this time.	On DWR eligible list, but no grant to date. Will pursue funds for pilot and envtl studies with MLML.	None currently
34				
35	TIMELINE	See CWP charts		
	Draft EIR (and/or EIS)	PEA submitted 7/14/05 forms basis of DEIR, anticipated to be published by CPUC Spring 2007. NEPA requirement uncertain.	See Line 37	N/A -- Board tabled action in Oct 04 unknown; minimum 7 mos to evaluate onshore HDD, and DEIR; assume NEPA tiers on EIR.
36	Certify FEIR (EIS ROD)	FEIR anticipated Summer 2007; NEPA depends on timing of ARMY/FORA land transfer	June 2008 ("Environmental Review and Permitting")	unknown; assume 6 mos to FEIR
37	Obtain key permits	Pilot plant permits: Monterey County - Aug 2006, but appealed to CCC; RWQCB - Sep 2006; CCC - to be considered late 2006. Full-Scale Project: CPUC issuance of CPCN - Sep 2007; CCC Coastal Development Permit anticipated March 2008	Pilot plant permits: Monterey County - Mar 2006, but appealed to CCC; RWQCB - Sep 2006; CCC - anticipated to be considered late 2006. See Line 37 for full-scale project permits	Assume 6-12 mos from FEIR
38	Secure financing	Upon CPUC approval of CPCN (Sep 2007)	Information not provided	Assume 6 months after approval/vote
39	Secure ROW/property access	After FEIR certified by CPUC	Information not provided	Assume 3-6 months after financing
40	Start construction	Winter/Spring 2008 to 2010	Information not provided	Assume 3-6 mo after ROW/access
42	Commence water delivery	2010	July 2010	assume 24-month construction
43	Total time to water delivery	3 1/2 - 4 years from Sep 06	4 years from Sep 06	unknown; 4-5 years from Day 1

EXHIBIT 13-A
MPWMD Comparative Matrix, Part I-A, Desalination Projects

A		B	C	D
DECISION ELEMENT		COASTAL WATER PROJECT	NORTH MONTEREY COUNTY DESALINATION PROJECT	LONG-TERM WATER SUPPLY PROJECT (Sand City Desal)
44	PERMITS/REGS Federal Agencies	USEPA, MBNMS, USFWS, NOAA Fisheries, USACOE, USCG	Same as CWP except no ASR permits needed; fewer stream crossings/avoidance lessen federal permits	Similar to CWP; no pipeline under sloughs and streams lessens some federal permits
46	EIS needed?	NEPA review required; EIS possible based on pipeline alignment through federal lands if not already transferred to local jurisdictions	NEPA review may be needed by Army for pipes; EIS unlikely if demonstrate avoidance, reduced impact	NEPA review assumed; EIS is possible
47	Fed lead agency?	Army Corps likely	to be determined, if needed	TBD (US Army?)
48	Sanctuary approval?	Permit to construct; review NPDES application	Yes, related to NPDES/outfall; need to confirm outfall capacity	Yes, related to intake and discharge
49	State Agencies	CPUC, SWRCB, RWQCB, SLC, CDFG, CCC, CEC, CDPR, CDHS, SHPO (CDTS?)	Same as CWP, except no CPUC or CEC; no SWRCB for ASR	Same as CWP except no CPUC, CEC
50	CPUC approval?	Needed for Cal-Am rates; CPCN submitted for CWP Sept 20, 2004 and amended July 14, 2005.	N/A	N/A
51	EIR lead agency	CPUC	Pajaro/Sunny Mesa CSD	MPWMD
52	SWRCB/Water Rights	Needed for ASR or any other new Carmel River diversions	N/A, no ASR planned	N/A
53	Regional Agencies	MBUAPCD, MPWMD, TAMC, FORA	Same as CWP	Same as CWP
54	Monterey County	MCWRA, MCPBI, MCEH, MCPW	MCEH, construction and use permits	MCEH, MCPBI (?)
55	Local Agencies	All affected cities and jurisdictions for encroachment and construction permits; includes MLHD	Similar to CWP; jurisdictions may vary; MLHD (?)	Construction and use permits within affected jurisdictions
56				
57				
58	SITE CONTROL Confirmed site?	Moss Landing Power Plant planned for pilot plant. "Duke East" site evaluated in PEA as preferred site.	Confirmed site for pilot project. Lease agreement signed with owner of Natl Refractory site. Potential use of LS Power discharge rather than own intake; will use own outfall.	Sites and alternatives identified; agreements with owners are needed, including MRWPCA for use of regional outfall.
59	Alternative sites and projects?	Moss Landing scenario in PEA evaluates Granite Rock and Natl Refractories sites. Five project alternatives in PEA include: (1) Regional Alt with 20,272 AFY yield; (2) Over-sized Pipeline Alt with larger source and transmission pipelines to enable future supply increases; (3) HDD intake Alt using HDD intake wells near MLPP as feedwater supply rather than Duke intake; (4) North Marina Alt, which locates plant in Armstrong Ranch area with HDD intake and MLPP outfall for brine; and (5) No Project Alt, comprised of existing conservation efforts.	No alternative to National Refractories site needed. EIR will identify project alternatives.	Several locations for desalination plant, seawater collectors and brine disposal via HDD and MRWPCA outfall evaluated in BRDEIR, along with other project alternatives.
60				

EXHIBIT 13-A
MPWMD Comparative Matrix, Part I-A, Desalination Projects

	A	B	C	D
4	DECISION ELEMENT	COASTAL WATER PROJECT	NORTH MONTEREY COUNTY DESALINATION PROJECT	LONG-TERM WATER SUPPLY PROJECT (Sand City Desal)
61	OPERATIONS/OTHER			
62	Technical, Managerial and Financial Capabilities (TMF) to meet DHS standards	Cal-Am has extensive TMF capabilities and current certifications to own/operate water systems. Over 39,000 customers in Monterey County	P/SM has current TMF certification by DHS. Planned enhancement for desal project includes expanded board and staff; plan to outsource engineering (K/U), legal, development, contract, admin, construction, management; Poseidon is "Exclusive Management Agent" in current agreement.	Assume certified entity would operate plant in coordination with Cal-Am system, with MPWMD oversight.
63	Back-up; water production interruptions (e.g., power or intake water)	CWP design is consistent w/ Duke operations; forebay, storage tanks and ASR as backup; also other Cal-Am sources in Seaside and CR.	Own intake is backup supply if MLPP discharge water not available; refurbishing seawater tanks with 11-day supply; generators and onsite solar, if feasible. Notes County Ordinance requires back-up supply.	Redundant plant design; back-up generators; ASR source
64				
65	PROJECT PARTICIPANTS			
66	Overview	CAW willing to participate in public/private partnerships and regional governance formation. Proposed project is geared toward existing CAW customers. Regional Alternative includes cities and areas within MPWMD, MoCo, MCWWD, Castroville WD and Moss Landing; pending further study and action by entities.	Focus on regional plant, including P/SM needs; willing to expand plant to meet needs of others such as FORA, MCWWD and Monterey Peninsula.	Funded by MPWMD via methods allowed by MPWMD Law; possible public-private partnership or JPA.
67	MPWMD participation	MPWMD and CAW executed April 2006 Management and Operations Agreement regarding ASR component. No approvals to date.	P/SM Board authorized JPA with MPWMD in 2004; MPWMD declined offer at that time.	MPWMD currently envisioned as sole sponsor.
68	Other entities participation	Other water purveyors are wholesale water customers.	Ongoing discussions with FORA and MCWWD. Met met with Cal-Am in Nov 2004; sent letter in Feb 05.	None specified; partnerships possible.
69				
70	PUBLIC INVOLVEMENT			
71	Outreach programs	Formal outreach program with 52 town hall meetings; presentations to jurisdictions. Website. Direct mail communication to CAW customers and stakeholders. CPUC staff to facilitate DEIR public involvement.	Presentations to MPWMD, City of Monterey, MCWWD, FORA, DHS, Monterey County, MoCo Planning; Castroville WD as requested	Monthly written updates and quarterly public workshops 2002-early 2004.
72				
73	INFORMATION SOURCES	Year 2005 and 2006: PEA and Amended Application to CPUC on CWP dated July 14, 2005, including technical memoranda on engineering and cost estimates; amended CPCN application for CWP July 2005. Handout materials from CAW consultant (RBF); matrix input data from RBF July-August 2005, including detailed basis of cost documents. August 25, 2005 Town Hall Meeting presentation by Steve Leonard of CAW and responses to questions. Seawater Desalination Projects Evaluation, B-E/GEI Consultants, June 26, 2006	Year 2006: Application by P/SM to California Department of Water Resources for Proposition 50 Grant for Pilot Demonstration Project, March 24, 2006. Monterey Bay Regional Desalination Project Conceptual Design Report, P/SM in cooperation with Poseidon Resources Corp., April 2006. Information provided in 2006 by Poseidon Resources to B-E/GEI Consultants for preparation of desalination projects evaluation. Seawater Desalination Projects Evaluation, B-E/GEI Consultants, June 26, 2006	Board Review Draft EIR, MPWMD Water Supply Project, December 2003. Regulatory agency worksheets prepared by Jones & Stokes Sept 2004. See line 115 for technical reports with cost information. MPWMD consultant estimates (CDM), Seawater Desalination Projects Evaluation, B-E/GEI Consultants, June 26, 2006
74				
75				

EXHIBIT 13-A
MPWMD Comparative Matrix, Part I-A, Desalination Projects

A		B		C		D	
DECISION ELEMENT		COASTAL WATER PROJECT		NORTH MONTEREY COUNTY DESALINATION PROJECT		LONG-TERM WATER SUPPLY PROJECT (Sand City Desal)	
4	CAPITAL COST DETAIL	Year 2005 costs indexed to 2004 through 2008	Year 2005 costs	Year 2004 information - December 2002 costs			
76	DESALINATION						
77	Intake	included in plant cost	Information not provided				\$21,600,000
78	Pre-treatment	included in plant cost	Information not provided				included in plant cost
79	Desal Plant	\$93,531,000	Information not provided				\$28,250,000
80	Post-treatment	included in plant cost	Information not provided				included in plant cost
81	Brine discharge	included in intake cost	Information not provided				\$18,560,000 - \$27,130,000
82	Storage	\$5,981,000 includes term reser, pump station	Information not provided				included in transmission pipeline
83	Transmission Pipelines	\$25,024,000	Information not provided				\$12,692,000
84	Pump stations	included in storage costs	Information not provided				included in transmission pipeline
85	Energy facilities	none identified	Information not provided				\$1,000,000
86	DESAL SUBTOTAL	\$124,536,000	Information not provided				\$82,100,000 - \$90,670,000
87	ASR COSTS	\$15,578,000	N/A				N/A
88	RECYCLED WATER COSTS	N/A	N/A				N/A
89	OTHER WATER SOURCES	N/A	N/A				N/A
90	ADDL CAPITAL COSTS						
91	Pilot Plant	\$2,585,000	\$2,970,000				none identified
92	Distribution system	included in desal and ASR costs	none identified				none identified
93	Improvements						
94	Right-of-way	\$2,000,000 (desal plant site to be leased)	none identified (desal plant site to be leased)				\$5,900,000 - \$9,100,000 (includes site acquisition)
95	Envrl review, permits, etc.	\$30,456,000	Information not provided				\$61,700,000 - \$67,850,000
96	Engineering	included in envrl/permits	Information not provided				included in envrl/permits
97	Construction Management	included in envrl/permits	Information not provided				included in envrl/permits
98	Admin/legal	included in envrl/permits	Information not provided				included in envrl/permits
99	Mitigation measures	to be determined	None identified				to be determined
100	Contingencies	\$15,935,000	Information not provided				\$25,800,000
101	SUBTOTAL	\$50,976,000	Information not provided				\$94,002,000
102	TOTAL CAPITAL COST	\$191,090,000 for proposed project (11,730 AFY) Based on 10% contingencies - B-E/GEI recommends 25% contingencies. B-E/GEI evaluated only the desalination component of the project, and not the ASR component.	\$132,000,000 for 20 MGD project \$169,030,000 (B-E/GEI Consultants, based on increasing contingencies by 10-15% to 25%)				\$176,200,000 - \$193,000,000
103	ANNUAL O&M COST DETAIL						
104	Energy	included in total O&M	Information not provided				\$7,200,000 - \$7,550,000
105	Facilities O&M	included in total O&M	Information not provided				\$5,200,000 - \$5,550,000 (B-E/GEI Consultants)
106	Mitigation O&M	to be determined	None identified				\$1,540,000
107	TOTAL O&M (\$/yr)	\$6,372,000	\$13,360,000				\$8,740,000 - \$9,090,000/yr to be determined \$6,740,000 - \$7,090,000/yr (B-E/GEI Consultants)
108	SOURCES FOR COSTS	Costs presented in Amended CPCN Application, July 14, 2005, including detailed Basis of Cost documents and tables. Seawater Desalination Projects Evaluation, B-E/GEI Consultants, June 26, 2006	Total capital and O&M costs were provided by Poseidon Resources. Cost breakdowns were provided to B-E/GEI Consultants under condition of confidentiality. Pilot plant capital costs are provided in application by P/SM to California Department of Water Resources for Proposition 50 grant, March 24, 2006. Seawater Desalination Projects Evaluation, B-E/GEI Consultants, June 26, 2006				Monterey Peninsula Water Supply Project, Phase 2 Technical Memorandum, Project Facilities Alternatives for the Sand City Desalination Project, June 23, 2004, CDM, p 6-2. Seawater Desalination Projects Evaluation, B-E/GEI Consultants, June 26, 2006

EXHIBIT 13-A
MPWMD Comparative Matrix, Part I-A, Desalination Projects

A		B	C	D
DECISION ELEMENT		COASTAL WATER PROJECT	NORTH MONTEREY COUNTY DESALINATION PROJECT	LONG-TERM WATER SUPPLY PROJECT (Sand City Desal)
4				
116				
117	ACRONYMS			
118	\$/AF	cost per acre-foot		
119	\$/kwh-	cost per kilowatt-hour		
120	ac	acre		
121	AFY	acre-feet per year		
122	ARB	Air Resources Board		
123	ASR	aquifer storage and recovery		
124	B-E/GEI	Bookman-Edmonston/GEI Consultants		
125	BRAC	Base Realignment and Closure Office (US Army)		
126	BRDEIR	Board Review Draft EIR on MPWMD Water Supply Project (interim draft, Dec 2003)		
127	Cal-Am	California American Water		
128	CalTrans	Cal. Dept. of Transportation		
129	CAW	California American Water		
130	CCC	California Coastal Commission		
131	CDFG	Cal. Dept. Fish & Game		
132	CDM	Camp Dresser & McKee, Inc		
133	CDTIS	Cal. Dept. of Toxic Substances		
134	CEC	California Energy Commission		
135	CEQA	California Environmental Quality Act		
136	COP	Certificate of Participation		
137	CPCN	Certificate of Public Convenience and Necessity		
138	CPUC	Cal. Public Utilities Commission		
139	CR	Carmel River		
140	CSD	Community Services District		
141	CWP	Coastal Water Project		
142	DBO	design-build-operate		
143	DEIR	Draft EIR		
144	DHS	Cal. Dept. of Health Services		
145	DPR	Cal. Dept. of Parks & Recreation		
146	Duke	Duke Energy Corporation		
147	DWR	Cal. Dept. of Water Resources		
148	EIR	Environmental Impact Report		
149	EIS	Environmental Impact Statement		
150	FEIR	Final EIR		
151	FORA	Fort Ord Reuse Authority		
152	HDD	horizontal directional drilling		
153	IS	Initial Study		
154	JPA	Joint Powers Authority		
155	KJ	Kennedy Jenks Engineers, Inc.		

EXHIBIT 13-A
MPWMD Comparative Matrix, Part I-A, Desalination Projects

A		B	C	D
DECISION ELEMENT	COASTAL WATER PROJECT	NORTH MONTEREY COUNTY DESALINATION PROJECT	LONG-TERM WATER SUPPLY PROJECT (Sand City Desal)	
4				
156	MBNMS	Monterey Bay National Marine Sanctuary		
157	MBUAPCD	Monterey Bay Unified Air Pollution Control District		
158	MCEH	Monterey County Environmental Health		
159	MCPBI	Monterey County Dept. Planning & Building Inspection		
160	MCPCW	Monterey County Public Works		
161	MCWD	Marina Coast Water District		
162	MCWRA	Monterey County Water Resources Agency		
163	MLHD	Moss Landing Harbor District		
164	MLML	Moss Landing Marine Laboratory		
165	MLPP	Moss Landing Power Plant		
166	MoCo	Monterey County		
167	MP	Monterey Peninsula		
168	MPWMD	Monterey Peninsula Water Management District		
169	MRWPCA	Monterey Regional Water Pollution Control Agency		
170	N/A	not applicable		
171	NEPA	National Environmental Policy Act		
172	NMCDP	North Monterey County Desalination Project		
173	NOAA Fish	National Marine Fisheries Service (part of Natl Oceanic and Atmospheric Administration)		
174	NOP	Notice of Preparation		
175	NorCo	North Monterey County		
176	O&M	operations and maintenance		
177	PEA	Proponent's Environmental Assessment		
178	P/SM	Pajaro/Sunny Mesa Community Services District		
179	RBF	RBF Consulting, Inc		
180	ROD	Record of Decision		
181	ROW	right-of-way		
182	RWQCB	Regional Water Quality Control Board		
183	SHPO	State Historic Preservation Office		
184	SLC	State Lands Commission		
185	SRF	State Revolving Fund, a loan administered by SWRCB		
186	SWRCB	State Water Resources Control Board		
187	TAMC	Transportation Agency of Monterey County		
188	TBD	to be determined		
189	USACOE	US Army Corps of Engineers		
190	USBLM	US Bureau of Land Management		
191	USBR	US Bureau of Reclamation		
192	USCG	US Coast Guard		
193	ESEPA	US Environmental Protection Agency		
194	USFWS	US Fish & Wildlife Service		
195				
196				
197				

EXHIBIT 13-B
MPWMD Comparative Matrix, Part I-B, Desalination Projects

A		B
1	FINAL for 10/16/06 Meeting	MPWMD Comparative Matrix, Part I-A, Desalination Projects
2		
3		
4	DECISION ELEMENT	Seawater Conversion Vessel
5	PROponent/SPONSOR	Water Standard Company
	PROJECT DESCRIPTION	Completely self contained seawater desalination treatment plant installed on a ship. Electrical energy and propulsion will be provided by gas turbine engines fueled with Biodiesel. No seabed intake or outfall lines are required. Water produced on the ship will be shuttled to shore as required. Facilities required to distribute the water to customers on shore are unknown at this time but could be assumed to be similar to those required in the other alternatives. Size of project is unknown but assumed to be 20 MGD (approx 22,000AFY).
6	Pilot Project	None planned. State currently requires pilot plans but that requirement was written around land based facilities. WSC sees no need to pilot the process since we have over 2,000 ships currently successfully treating seawater. Issues needs to be discussed with the State DOHS.
7		Actual yield based on commitments of purveyor customers Yes, and can easily meet all future needs
8	PROJECT YIELD	
9	Comply with Order 95-10? Water for Seaside Basin?	Could easily be sized for all future needs
10	Future Mont. Penin. Needs?	Could easily be sized for all future needs
11	Future Non-MP Needs	Could easily be sized for all future needs
12	TOTAL YIELD	
13	Yield Phasing to Mont Penin	Phasing will be based on demands. Larger size initially is better.
14		
15	PROJECT COST	
	Capital - see lines 77-106	Costs in 2006 dollars for 22,000 AFY (approx 20 MGD) project provided by WSC \$129,000,000 for 20 MGD SCV (with power plant). Distribution improvements unknown.
16		
17	Amortized Cap. Cost (\$/yr)	Information not provided
18	O&M - see lines 108-112	Information not provided
19	Assumed energy cost (\$/kwh)	\$0.05 / kwh (using Biodiesel with current US government rebate tax incentive) information not provided
20	Total Annual Cost	
21	Time frame for estimates	2006, costs not escalated

EXHIBIT 13-B
MPWMD Comparative Matrix, Part I-B, Desalination Projects

	A	B
4	DECISION ELEMENT	Seawater Conversion Vessel
22	COST TO PENINSULA	
23	Share of total project cost	
24	How share determined	
25	Cost sharing of existing vs. future Cal-Am ratepayers	
	Cost of Water (\$/AF)	Cost of water produced on the SCV estimated to be less than \$1,000 AF. Costs for required distribution and pumping unknown
26		
27	Impact to Cal-Am Bill	N/A
28		
	FINANCING ASSUMPTIONS	WSC funding can be used. Prefer a public private partnership with MPWMD
29	Interest rate (%)	80% at 7% interest and 20% at 12% if private, 7% if municipal
30	Term (yrs)	20 years if private, 30 yrs if municipal
31	Public vote required?	
32	Grants (describe)	Office of Emergency Services or other Homeland Security funding should be looked into. WSC has not done that.
33		
34		
35	TIMELINE	
36	Draft EIR (and/or EIS)	No actions taken on CEQA activities
37	Certify FEIR (EIS ROD)	
38	Obtain key permits	none applied for at this time
39	Secure financing	Upon municipal agency approval
40	Secure ROW/property access	NA for SCV
41	Start construction	Information not provided
42	Commence water delivery	3 years after contractual arrangements
43	Total time to water delivery	3 years after contractual arrangements

EXHIBIT 13-B
MPWMD Comparative Matrix, Part I-B, Desalination Projects

	A	B
4	DECISION ELEMENT	Seawater Conversion Vessel
44		
45	PERMITS/REGS	
	Federal Agencies	Same as land based facility except Coast guard must review operational plans.
46		
47	EIS needed?	
48	Fed lead agency?	to be determined, if needed
49	Sanctuary approval?	permit will be required. Not applied for yet
50	State Agencies	same as any land based treatment plant
51	CPUC approval?	N/A
52	EIR lead agency	MPWMD
53	SWRCB/Water Rights	N/A
54	Regional Agencies	None required for SCV
55	Monterey County	None required for SCV
	Local Agencies	None required for SCV. Distribution system requires construction and use permits within affected jurisdictions
56		
57		
58	SITE CONTROL	
	Confirmed site?	Location doesn't really matter for the SCV itself. Shuttle ship off loading site must be selected depending on who the customers are.
59		
	Alternative sites and projects?	No restrictions. No land required. SCV can be located anywhere.
60		

EXHIBIT 13-B
MPWMD Comparative Matrix, Part I-B, Desalination Projects

	A	B
4	DECISION ELEMENT	Seawater Conversion Vessel
61		
62	OPERATIONS/OTHER	
	Technical, Managerial and Financial Capabilities (TMF) to meet DHS standards	Assume implementing entity would operate desal plant with MPWMD oversight.
63	Back-up: water production interruptions (e.g., power or intake water)	Redundant treatment equipment per State codes; back-up gas turbine planned
64		
65		
66	PROJECT PARTICIPANTS	
	Overview	Willing to expand plant to meet needs of others such as FORA, MCWD and Monterey Peninsula. Shuttle ship concept may allow cities up and down the coast to participate.
67		
68	MPWMD participation	MPWMD currently envisioned as sole sponsor.
69	Other entities participation	None specified; partnerships possible.
70		
71	PUBLIC INVOLVEMENT	
72	Outreach programs	Presentations by WSC to MPWMD
73		
74	INFORMATION SOURCES	
75		Materials submitted by PBS&J

MPWMD Comparative Matrix, Part I-B, Desalination Projects

A		B
DECISION ELEMENT	Seawater Conversion Vessel	
4		
76		
77	CAPITAL COST DETAIL	
78	DESALINATION	Year 2006 costs (assume 20 MGD facility)
79	Intake	included in SCV cost
80	Pre-treatment	included in SCV cost
	Desal Plant	Ship cost with retrofitting/conversion cost is \$41,000,000 + \$40,000,000 for all PALL process equipment + shuttle ship costs at \$33,000,000
81		included in SCV cost
82	Post-treatment	included in SCV cost
83	Brine discharge	included in SCV cost
84	Storage	unknown
85	Transmission Pipelines	unknown
86	Pump stations	SCV seawater intake PS included
	Energy facilities	2 gas turbines for \$15,000,000 (most desal plants do not include a power plant)
87		\$129,000,000
88	DESAL SUBTOTAL	
89		
90	ASR COSTS	N/A
91	RECYCLED WATER COSTS	N/A
92	OTHER WATER SOURCES	N/A
93		
94	ADDL CAPITAL COSTS	
95	Pilot Plant	Need has to be resolved with State Health
	Distribution system improvements	none identified
96		
97	Right-of-way	N/A for SCV.
98	Envl review, permits, etc.	unknown
99	Engineering	included in SCV cost
100	Construction Management	included in SCV cost
101	Admin/legal	included in SCV cost
102	Mitigation measures	N/A for SCV.
103	Contingencies	included in SCV cost
104	SUBTOTAL	
105		
	TOTAL CAPITAL COST	Capital costs for SCV are \$129,000,000. (including the power plant) Distribution system costs are unknown at this time
106		
107		
108	ANNUAL O&M COST DETAIL	
	Energy	included in total O&M
109		
110	Facilities O&M	included in total O&M
111	Mitigation O&M	N/A
	TOTAL O&M (\$/yr)	\$12,000,000
112		
113		
114	SOURCES FOR COSTS	Total capital and O&M costs were provided by WSC based on detailed estimates from V_Ship, Pall Corp, GE_Energy
115		

EXHIBIT 13-B
MPWMD Comparative Matrix, Part I-B, Desalination Projects

A		B
4	DECISION ELEMENT	Seawater Conversion Vessel
116		
117	ACRONYMS	
118	\$/AF	cost per acre-foot
119	\$/kwh-	cost per kilowatt-hour
120	ac	acre
121	AFY	acre-feet per year
122	ARB	Air Resources Board
123	ASR	aquifer storage and recovery
124	B-E/GEI	Bookman-Edmonston/GEI Consultants
125	BRAC	Base Realignment and Closure Office (US Army)
126	BRDEIR	Board Review Draft EIR on MPWMD Water Supply Project (interim)
127	Cal-Am	California American Water
128	CalTrans	Cal. Dept. of Transportation
129	CAW	California American Water
130	CCC	California Coastal Commission
131	CDFG	Cal. Dept. Fish & Game
132	CDM	Camp Dresser & McKee, Inc
133	CDTS	Cal. Dept. of Toxic Substances
134	CEC	California Energy Commission
135	CEQA	California Environmental Quality Act
136	COP	Certificate of Participation
137	CPCN	Certificate of Public Convenience and Necessity
138	CPUC	Cal. Public Utilities Commission
139	CR	Carmel River
140	CSD	Community Services District
141	CWP	Coastal Water Project
142	DBO	design-build-operate
143	DEIR	Draft EIR
144	DHS	Cal. Dept. of Health Services
145	DPR	Cal. Dept. of Parks & Recreation
146	Duke	Duke Energy Corporation
147	DWR	Cal. Dept. of Water Resources
148	EIR	Environmental Impact Report
149	EIS	Environmental Impact Statement
150	FEIR	Final EIR
151	FORA	Fort Ord Reuse Authority
152	HDD	horizontal directional drilling
153	IS	Initial Study
154	JPA	Joint Powers Authority
155	KJ	Kennedy Jenks Engineers, Inc.

EXHIBIT 13-B

MPWMD Comparative Matrix, Part I-B, Desalination Projects

	A	B
4	DECISION ELEMENT	Seawater Conversion Vessel
156	MBNMS	Monterey Bay National Marine Sanctuary
157	MBUAPCD	Monterey Bay Unified Air Pollution Control District
158	MCEH	Monterey County Environmental Health
159	MCPBI	Monterey County Dept. Planning & Building Inspection
160	MCPW	Monterey County Public Works
161	MCWD	Marina Coast Water District
162	MCWRA	Monterey County Water Resources Agency
163	MLHD	Moss Landing Harbor District
164	MLML	Moss Landing Marine Laboratory
165	MLPP	Moss Landing Power Plant
166	MoCo	Monterey County
167	MP	Monterey Peninsula
168	MPWMD	Monterey Peninsula Water Management District
169	MRWPCA	Monterey Regional Water Pollution Control Agency
170	N/A	not applicable
171	NEPA	National Environmental Policy Act
172	NMCDP	North Monterey County Desalination Project
173	NOAA Fish	National Marine Fisheries Service (part of Natl. Oceanic and Atmosp
174	NOP	Notice of Preparation
175	NorCo	North Monterey County
176	O&M	operations and maintenance
177	PEA	Proponent's Environmental Assessment
178	P/SM	Pajaro/Sunny Mesa Community Services District
179	RBF	RBF Consulting, Inc
180	ROD	Record of Decision
181	ROW	right-of-way
182	RWQCB	Regional Water Quality Control Board
183	SHPO	State Historic Preservation Office
184	SLC	State Lands Commission
185	SRF	State Revolving Fund, a loan administered by SWRCB
186	SWRCB	State Water Resources Control Board
187	TAMC	Transportation Agency of Monterey County
188	TBD	to be determined
189	USACOE	US Army Corps of Engineers
190	USBLM	US Bureau of Land Management
191	USBR	US Bureau of Reclamation
192	USCG	US Coast Guard
193	ESEPA	US Environmental Protection Agency
194	USFWS	US Fish & Wildlife Service
195	CG	US Coast Guard
196	SCV	Seawater Conversion Vessel
197	WSC	Water Standard Company
198	PBS&J	Post, Buckley, Schuh & Jernigan, Inc.
199	V Ships	V Ships, Inc.
200	Pall	Pall Corporation

EXHIBIT 13-C
MPWMD Comparative Matrix, Part II, Projects Other Than Desalination

A		B		C		D	
FINAL for 10/16/06 Meeting		MPWMD Comparative Matrix, Part II, Projects Other Than Desalination		MPWMD Comparative Matrix, Part II, Projects Other Than Desalination		MPWMD Comparative Matrix, Part II, Projects Other Than Desalination	
1							
2							
3							
4	DECISION ELEMENT	PHASE 1 AQUIFER STORAGE AND RECOVERY (Seaside Basin)	REGIONAL URBAN WATER AUGMENTATION PROJECT (RUWAP)	SEASIDE BASIN GROUNDWATER REPLENISHMENT PROJECT (GRP)			
5	PROponent/SPONSOR	MPWMD	MCWWD for desal project; MCWWD and MRWPCA for recycled water project	MRWPCA			
6	PROJECT DESCRIPTION	Divert treated excess Carmel River winter flow via existing Cal-Am pipelines (and those planned up Gen Jim Moore Blvd) to ASR wells in Seaside Basin. Phase 1 is second well at existing Santa Margarita test site. Phases 2 and 3 to be considered in future.	Desalinated water provided for potable uses. Reclaimed wastewater provided for nonpotable irrigation in Marina, Ord Community, Seaside, Del Rey Oaks and Monterey. Reclaimed water in first phase: 1,500 AFY; possible second phase: 3,300 AFY total, including Phase 1. Surface storage reservoir, ASR and/or tank needed to meet peak demand in Phase 2.	Repurified water from the MRWPCA reclamation plant provided to Seaside GW Basin to help recharge it. Initial project size estimated at 2,400 AFY.			
7	Pilot Project	Successful pilot and full-scale test wells since 1998; annual reporting to SWRCB and MPWMD.	MCWWD Desal Plant built in 1997. Salinas Valley Reclamation Project completed in 1997 providing irrigation water to agriculture. Pilot recycled project in progress on Seaside golf course.	Pilot testing (treatment and percolation) anticipated in 2007			
8	PROJECT YIELD	Maximum CR diversion and injection is 2,420 AFY; maximum extraction from Seaside is 1,500 AFY; average annual yield is 920 AFY based on August 2006 computer modeling.	Desal component: 1,500 AFY. 1,200 AFY is available for the Ord Community and 300 AFY will replace MCWWD's existing desalination plant. Reclaimed water: Phase 1 - 1,500 AFY, of which 1,200 AFY will be used in the Ord Community and 300 AFY will be available for the Monterey Peninsula. Possible Phase 2 - 3,300 AFY total, including Phase 1. Surface storage reservoir, ASR and/or tank needed to meet peak demand in Phase 2.	2,400 AFY in initial project, possibly expandable in the future			
9	Comply with Order 95-10? Water for Seaside Basin?	No, unless teamed with other large project(s); up to 2,420 AFY injected into Seaside Basin	No, unless teamed with other large project(s)	300 AFY to the Monterey Peninsula for irrigation use; see Line 8.	No, unless teamed with another large project, up to 2,400 AFY recharged into Seaside Basin		
10	Future Mont. Penin. Needs?	No, unless teamed with other large project(s)	No, unless teamed with other large project(s)	No, see Line 8.	No, unless teamed with another large project		
11	TOTAL YIELD	See line 8; 920 AFY average annual yield.	Desal project: 1,200 AFA. Reclaimed project: 1,200 AFY (Phase 1); 3,000 AFY (Phase 2 - includes Phase 1 amount)	Desal project: 1,200 AFY. Reclaimed project: 1,200 AFY (Phase 1); 3,000 AFY (Phase 2 - includes Phase 1 amount)	None		
12	Yield Phasing to Mont Penin	No phasing; build facilities	No phasing; build facilities	Desal project: 1,500 AFY. Reclaimed project: 1,500 AFY (Phase 1); 3,300 AFY (Phase 2 - includes Phase 1 amount)	2,400 AFY in initial project, possibly expandable in the future		
13	PROJECT COST	Costs for Phase 1 Project only	Costs for Phase 1 Project only	Desal project: None currently identified. Reclaimed project: 300 AFY (Phase 1)	2,400 AFY in initial project, possibly expandable in the future		
14	Capital - see lines 77-106	\$3,255,600 (year 2005 dollars)	\$3,255,600 (year 2005 dollars)	Desal project: TBD. Reclaimed project: Phase 1 - \$54 mil; Phase 2 - not yet determined	\$41.2 mil		
15	Amortized Cap. Cost (\$/yr)	\$261,100/yr (amortized at 5% for 20 yrs)	\$261,100/yr (amortized at 5% for 20 yrs)	Desal project: TBD. Reclaimed project: costs not yet determined	Not yet determined - depends on availability of Prop. 50 grants and other funding sources		
16	O&M - see lines 108-112	\$300,000/yr	\$300,000/yr	Not yet determined	\$1,325,000/yr		
17	Assumed energy cost (\$/kwh)	\$0.10/kwh	\$0.10/kwh	Not yet determined	\$0.11/kwh		
18	Total Annual Cost	\$561,100/yr	\$561,100/yr	Not yet determined	Not yet determined - depends on availability of Prop. 50 grants and other funding sources		
19	Time frame for estimates	2005	2005	Aug. 2006	Aug. 2006		

EXHIBIT 13-C
MPWMD Comparative Matrix, Part II, Projects Other Than Desalination

	A	B	C	D
	DECISION ELEMENT	PHASE 1 AQUIFER STORAGE AND RECOVERY (Seaside Basin)	REGIONAL URBAN WATER AUGMENTATION PROJECT (RUWAP)	SEASIDE BASIN GROUNDWATER REPLENISHMENT PROJECT (GRP)
4				
22	COST TO PENINSULA Share of total project cost	Entire cost to be paid by Peninsula consumers.	Desal project: TBD. Reclaimed project water users to pay estimated \$1,100/AF (cost based on no connection fees)	Not yet determined
23				
24	How share determined	N/A	Prorata share	Not yet determined
25	Cost sharing of existing vs. future Cal-Am ratepayers	New users pay connection fee similar to current system	Recycled water users will pay for their share of the recycled water.	Not yet determined
26	Cost of Water (\$/AF) Impact to Cal-Am Bill	\$610/AF based on 920 AFY average yield Ordinance 123 authorized 1.2% user fee added to Cal-Am bill to construct Phase 1 ASR; assumes payoff of future pooled debt issuance.	Not yet determined. Financing will determine cost. No impacts anticipated.	Not yet determined, but goal is \$1,200/AF Not yet determined
27				
28				
29	FINANCING ASSUMPTIONS	pursuant to District Law		
30	Interest rate (%)	5%	3% (assume SRF loan)	Assume either Prop. 50 grant, 3% SRF loan, or both.
31	Term (yrs)	20 years	20 years	20 years if SRF loan
32	Public vote required?	No	No	No
33	Grants (describe)	Applied for Prop 50 grant; top priority project.	A Prop 50 grant application was submitted, but not approved. No grants currently anticipated.	Have applied under Prop. 50
34				
35	TIMELINE			See MRWPCA materials.
36	Draft EIR (and/or EIS)	DEIR/EA issued March 2006.	DEIR distributed June 04.	Pilot facility - start in late 2006 and be completed in early 2007. Full facility - start in late 2008.
37	Certify FEIR (EIS ROD)	FEIR/EA certified August 2006	EIR certified in October 2004; no info on NEPA	Anticipate this to occur in mid 2009
38	Obtain key permits	Summer/Fall 2006 (3-6 mos from FEIR/EA)	2006/2007	Anticipate this to be complete in late 2009
39	Secure financing	Late 2006 (concurrent with permits)	2006/2007	Anticipate this to occur by 2008
40	Secure ROW/property access	Summer/Fall 2006 (US Army)	2006/2007	Anticipate this to be complete in late 2009
41	Start construction	Late 2006	Desalination project: 2008. Reclaimed project: 2007	Anticipate starting construction of full scale-project in early 2010
42	Commence water delivery	Late 2007 (assume 1 yr for all tasks)	Desalination project: 2009. Reclaimed project: Phase 1 in 2008; Phase 2 TBD	Anticipate completion of construction in late 2010 with commencement of delivery of water immediately thereafter
43	Total time to water delivery	1+ years from Sep 2006	Desalination project: 3 years from Sep 2006. Reclaimed project: 2 years from Sep 2006.	Approximately 4-1/2 years from Sep 2006

EXHIBIT 13-C
MPWMD Comparative Matrix, Part II, Projects Other Than Desalination

A		B		C		D	
DECISION ELEMENT		PHASE 1 AQUIFER STORAGE AND RECOVERY (Seaside Basin)		REGIONAL URBAN WATER AUGMENTATION PROJECT (RUWAP)		SEASIDE BASIN GROUNDWATER REPLENISHMENT PROJECT (GRP)	
4							
44							
45	PERMITS/REGS Federal Agencies	US Army Ft Ord: amend existing easement agreement to add second well site	USACOE; USBR; other federal agencies possible as part of NEPA review				U.S. Bureau of Reclamation, U.S. Army Base Realignment and Closure (BRAC), U.S. Bureau of Land Management (BLM)
46	EIS needed?	NEPA review; Army will use combined EIR/EA	NEPA review required but EIS not anticipated (tier off EIR)				Unknown. Will depend on where recharge facilities are sited.
47	Fed lead agency?	US Army	USBR assumed				USBR assumed.
48	Sanctuary permit?	No	none expected to be required				none expected to be required
49	State Agencies	SWRCB, RWQCB, CDFG, DHS	DHS, RWQCB, CCC anticipated				DHS, RWQCB
50	Regional Agencies	N/A	N/A				Not anticipated.
51	EIR lead agency	MPWMD	MCWD				MRWPCA
52	SWRCB/Water Rights	Yes, diversion of Carmel River. Petition for Change	N/A				
53	Regional Agencies	none	MPWMD, MBUAPCD, FORA				FORA, MPWMD, Cal-Am, PG&E
54	Monterey County	MCEH	MCPW, MCPBI, MCEH, MCWRA				MCEH, P&B, MCWRA
55	Local Agencies	Construction and use permits within jurisdictions to receive federal land (Seaside)	Marina, Seaside, Del Rey Oaks, Monterey				Seaside, MCWD
56							
57							
58	SITE CONTROL Confirmed site?	Current 50-year easement with US Army at present site of full-scale test well.	Desal project: Yes. Reclaimed project: Treatment facilities, yes. ROW will be needed.				No. Still investigating site locations. Likely on former Fort Ord east of Gen. Jim Moore Blvd., possibly in PG&E right-of-way.
59	Alternative sites and projects?	Contiguous and non-contiguous injection well locations and alternative projects evaluated in pending EIR/EA	N/A				None planned at present.
60							

EXHIBIT 13-C
MPWMD Comparative Matrix, Part II, Projects Other Than Desalination

A		B		C		D	
DECISION ELEMENT		PHASE 1 AQUIFER STORAGE AND RECOVERY (Seaside Basin)		REGIONAL URBAN WATER AUGMENTATION PROJECT (RUWAP)		SEASIDE BASIN GROUNDWATER REPLENISHMENT PROJECT (GRP)	
61	OPERATIONS/OTHER						
62	Technical, Managerial and Financial Capabilities (TMF) to meet DHS standards	Cal-Am and MPWMD are developing a long-term management and operations agreement for ASR.	MRWPCA and MCWD are established and certified water system and reclamation plant operators.			MRWPCA is an established and certified reclamation system operator.	
63	Water production interruptions (e.g., power or intake water)	Back-up generators		Desal plant and related pump stations will have back-up generators.		Pump stations will not have back-up generators.	
64							
65							
66	PROJECT PARTICIPANTS						
67	Overview	Funded by MPWMD via methods allowed by MPWMD Law; possible public-private partnership or JPA.		Desalination project: Participants TBD. Reclaimed water; possible areas identified in EIR.		Previous agreements spell out MRWPCA recycled water entitlements.	
68	MPWMD participation	MPWMD envisioned as sole sponsor in coordination with Cal-Am.		No MPWMD participation required. Possible co-sponsorship through agreement with project proponents.		Close coordination with MPWMD due to proximity of MPWMD's ASR wells to the proposed recharge sites, and due to MPWMD's water management role in the Cal-Am service area.	
69	Other entities participation	ASR could be coordinated with any other larger water supply project to meet community needs.		None anticipated at this time.		MCWD, Cal-Am, Seaside, and others possible	
70							
71	PUBLIC INVOLVEMENT						
72	Outreach programs	Monthly or quarterly updates; oral reports Board meetings.		Anticipated in 2006; budget of \$250,000. Golf courses would be largest customers of Reclaimed Project.		Began outreach to community leaders in 2005 with trips to view similar projects. Outreach to general public to begin in late 2006 or early 2007.	
73	INFORMATION SOURCES	MPWMD staff and consultant technical reports and memoranda (Padre Consultants, 2005; Jones & Stokes Associates, 2006)		Regional Urban Recycled Water Distribution Project, July 2003; MCWD Regional Urban Water Augmentation Project EIR, October 2004		Materials submitted by Bob Holden, Water Recycling Projects Coordinator	
74							
75							

EXHIBIT 13-C
MPWMD Comparative Matrix, Part II, Projects Other Than Desalination

A		B		C		D	
DECISION ELEMENT	PHASE 1 AQUIFER STORAGE AND RECOVERY (Seaside Basin)	REGIONAL URBAN WATER AUGMENTATION PROJECT (RUWAP)	SEASIDE BASIN GROUNDWATER REPLENISHMENT PROJECT (GRP)				
4							
76							
77	CAPITAL COST DETAIL						
78	DESALINATION						
79	Intake	N/A					
80	Pre-treatment	N/A					
81	Desal Plant	N/A					
82	Post-treatment	N/A					
83	Brine discharge	N/A					
84	Storage	N/A					
85	Transmission Pipelines	N/A					
86	Pump stations	N/A					
87	Energy facilities	N/A					
88	DESAL SUBTOTAL	N/A					
89							
90	ASR CONSTRUCTION	\$1,815,000					
91	RECYCLED WATER COSTS	N/A		Breakdown of costs not provided			
92	OTHER WATER SOURCES	N/A		N/A			
93							
94	ADDL CAPITAL COSTS						
95	Pilot Plant	MPWMD plant already operational		N/A		\$500,000	Included in line 91
96	Distribution system	N/A					
96	Improvements						
97	Right-of-way	\$10,000		Breakdown of costs not provided			Not yet determined
98	Envrl review, permits, etc.	\$117,600		Breakdown of costs not provided			Not yet determined
99	Engineering	\$535,000		Breakdown of costs not provided		\$3,000,000	
100	Construction Management	included in engineering		Breakdown of costs not provided		\$50,000	
101	Admin/legal	\$310,000		Breakdown of costs not provided		\$200,000	
102	Mitigation measures	none anticipated in addition to project description		Breakdown of costs not provided		None anticipated	
103	Contingencies	\$468,000		Breakdown of costs not provided		Included in line 91	
104	SUBTOTAL	\$1,440,600		Breakdown of costs not provided		\$3,750,000	
105							
105	TOTAL CAPITAL COST	\$3,255,600		Desal project: TBD. Reclaimed project: Phase 1 - \$54 mil; Phase 2 - not yet determined		\$41.2 mil	
106							
107							
108	ANNUAL O&M COST DETAIL						
109	Energy	\$200,000		Not yet determined		\$281,000	
110	Facilities O&M	\$100,000		Not yet determined		\$1,044,000	
111	Mitigation O&M	none anticipated		none anticipated		None anticipated	
112	TOTAL O&M (\$/yr)	\$300,000		Not yet determined		\$1,325,000	
113							
114	SOURCES FOR COSTS	MPWMD staff and consultant technical memoranda, 2005.		Regional Urban Recycled Water Distribution Project, Prepared for MCWD and MRWPCA, July 2003, RBF Consulting, pp 6-3 and 6-9; Marc Lucca, MCWD General Manager, Aug 2006; RMC Water and Environment, Sep 2006.			CDM draft memo dated August 2, 2006
115							

EXHIBIT 13-C
MPWMD Comparative Matrix, Part II, Projects Other Than Desalination

A		B		C		D	
DECISION ELEMENT		PHASE 1 AQUIFER STORAGE AND RECOVERY (Seaside Basin)		REGIONAL URBAN WATER AUGMENTATION PROJECT (RUWAP)		SEASIDE BASIN GROUNDWATER REPLENISHMENT PROJECT (GRP)	
116							
117	ACRONYMS						
118	\$/AF	cost per acre-foot					
119	\$/kwh-	cost per kilowatt-hour					
120	ac	acre					
121	AFY	acre-feet per year					
122	ARB	Air Resources Board					
123	ASR	aquifer storage and recovery					
124	BRAC	Base Realignment and Closure Office (US Army)					
125	BRDEIR	Board Review Draft EIR on MPWMD Water Supply Project (interim draft, Dec 2003)					
126	Cal-Am	California American Water					
127	CalTrans	Cal. Dept. of Transportation					
128	CAW	California American Water					
129	CCC	California Coastal Commission					
130	CDFG	Cal. Dept. Fish & Game					
131	CDM	Camp Dresser & McKee, Inc					
132	CDS	Cal. Dept. of Toxic Substances					
133	CEC	California Energy Commission					
134	CEQA	California Environmental Quality Act					
135	COP	Certificate of Participation					
136	CPUC	Cal. Public Utilities Commission					
137	CR	Carmel River					
138	CSD	Community Services District					
139	CWP	Coastal Water Project					
140	DBO	design-build-operate					
141	DEIR	Draft EIR					
142	DHS	Cal. Dept. of Health Services					
143	DPR	Cal. Dept. of Parks & Recreation					
144	Duke	Duke Energy Corporation					
145	DWR	Cal. Dept. of Water Resources					
146	EA	Environmental Assessment (federal)					
147	EIR	Environmental Impact Report					
148	EIS	Environmental Impact Statement					
149	FEIR	Final EIR					
150	FORA	Fort Ord Reuse Authority					
151	GRP	Seaside Basin Groundwater Recharge Project					
152	HDD	horizontal directional drilling					
153	IS	Initial Study					
154	JPA	Joint Powers Authority					
155	KJ	Kennedy Jenks Engineers, Inc.					

EXHIBIT 13-C
MPWMD Comparative Matrix, Part II, Projects Other Than Desalination

A		B		C		D	
DECISION ELEMENT		PHASE 1 AQUIFER STORAGE AND RECOVERY (Seaside Basin)		REGIONAL URBAN WATER AUGMENTATION PROJECT (RUWAP)		SEASIDE BASIN GROUNDWATER REPLENISHMENT PROJECT (GRP)	
4	MBNMS	Monterey Bay National Marine Sanctuary					
156	MBUAPCD	Monterey Bay Unified Air Pollution Control District					
157	MCEH	Monterey County Environmental Health					
158	MCWD	Marina Coast Water District					
159	MCWRA	Monterey County Water Resources Agency					
160	MLHD	Moss Landing Harbor District					
161	MoCo	Monterey County					
162	MP	Monterey Peninsula					
163	MPWMD	Monterey Peninsula Water Management District					
164	MRWPCA	Monterey Regional Water Pollution Control Agency					
165	N/A	not applicable					
166	NEPA	National Environmental Policy Act					
167	NMCDP	North Monterey County Desalination Project					
168	NOAA Fish	National Marine Fisheries Service (part of Natl Oceanic and Atmospheric Administration)					
169	NOP	Notice of Preparation					
170	NorCo	North Monterey County					
171	O&M	operations and maintenance					
172	PEA	Proponent's Environmental Assessment					
173	P&B	Monterey County Dept. Planning & Building Inspection					
174	P/SM	Pajaro/Sunny Mesa Community Services District					
175	RBF	RBF Consulting, Inc					
176	ROD	Record of Decision					
177	ROW	right-of-way					
178	RWQCB	Regional Water Quality Control Board					
179	RUWAP	Regional Urban Water Augmentation Project					
180	SLC	State Lands Commission					
181	SFR	State Revolving Fund, a loan administered by SWRCB					
182	SWRCB	State Water Resources Control Board					
183	TBD	to be determined					
184	USACOE	US Army Corps of Engineers					
185	USBLM	US Bureau of Land Management					
186	USBR	US Bureau of Reclamation					
187	USCG	US Coast Guard					
188	ESEPA	US Environmental Protection Agency					
189	USFWS	US Fish & Wildlife Service					
190							
191							
192							
193							

Appendix D

MINUTES OF COMMITTEE MEETINGS AND RECORD OF COMMITTEE MEMBER COMMENTS

•Indicates Discussion of Water Supply Alternatives

February 6, 2007	Organizational Meeting	59
• February 26, 2007	Aquifer Storage and Recovery in Seaside Basin <i>Monterey Peninsula Water Management District</i>	61
• March 26, 2007	Regional Urban Water Augmentation Project <i>Marina Coast Water District and Monterey Regional Water Pollution Control Agency</i>	67
	Groundwater Replenishment Project <i>Monterey Regional Water Pollution Control Agency</i>	
• April 23, 2007	Long-Term Water Supply Project/Desalination in Sand City <i>Monterey Peninsula Water Management District</i>	73
• May 29, 2007	Coastal Water Project/Desalination <i>California American Water Company</i>	79
• June 25, 2007	North Monterey County Desalination Project <i>Pajaro/Sunny Mesa Community Services District</i>	87
• July 23, 2007	Seawater Conversion Vessels/Desalination <i>Water Standard Company</i>	93
August 27, 2007	Meeting cancelled due to lack of a quorum	
September 11, 2007	Present new information on projects listed in Comparative Matrix. Review draft final report from CAC to the MPWMD Board of Directors and refer to Board for receipt on September 17, 2007.	99

Note: An outline of each report on water supply projects presented by the project sponsors can be viewed on the District's website at <http://www.mpwmd.dst.ca.us/asd/board/committees/cac/2007/2007.htm>.

FINAL MINUTES

**Community Advisory Committee of the
Monterey Peninsula Water Management District
February 6, 2007**

Members Present:

Janet Brennan - League of Women Voters
Paul Bruno - Water For Us
David Dilworth – Helping Our Peninsula’s Environment (HOPE)
Bob McKenzie – Monterey County Hospitality Association
Roy Thomas – Carmel River Steelhead Association;
Dewey Baird; Ron Chesshire; Bruce Crist; Peter Dausen; Manuel Fierro; Robert Greenwood; Sheryl McKenzie

Members Absent:

Lupe Garcia – LandWatch of Monterey County
Tom Rowley – Monterey Peninsula Taxpayers Association

District Staff Present:

David Berger – General Manager
Andy Bell – Planning and Engineering Division Manager
Henrietta Stern – Project Manager
Arlene Tavani – Executive Assistant

1. Call to Order

The meeting was called to order at 2 PM in the Conference Room of the Monterey Peninsula Water Management District.

2. Comments from Public

No comments.

3. Review Committee Charge, Meeting Procedures, and Committee Report Development/Format

A. Citizens Advisory Committee Charge

General Manager Berger reviewed the charge. There were no comments from the committee or the public regarding the charge.

B. Meeting Procedures and Decorum Rules

General Manager Berger reviewed the meeting procedures and decorum rules. Committee members Fierro, Dilworth, Dausen, Brennan, Crist, Thomas, Sheryl McKenzie and Bob McKenzie commented.

Mr. McKenzie made a motion that was seconded by Mr. Bruno to adopt the Meeting Procedures and Decorum Rules with the following changes: (a) item 3, add the word “normally” before the word “limited;” (b) item 5, add the word “public” before the word “speaker;” and (c) item 6, delete the words “Clapping, heckling or other oral” and replace with the word “audible.” The motion was approved unanimously. There were no comments from the public on this item.

C. Agenda Format and Meeting Schedule

All committee members voiced their preference for the location and start time of future committee meetings. There was consensus that the committee would meet on the fourth Monday, at 2 PM in the MPWMD conference room. The May 28 meeting was rescheduled to Tuesday, May 29, and the September 11 meeting was rescheduled to Tuesday, September 11 due to conflicts with state and national holidays.

Committee members Brennan, Bruno, Dilworth, Fierro and Thomas commented on the priority order in which water supply projects listed on the Matrix would be discussed.

There was a suggestion from the committee that written comments submitted by committee members to District staff be forwarded to the entire committee. General Manager Berger advised that he would check with District Counsel to determine if this would be allowed under the Brown Act. The committee also requested that the three-minute time limit on individual committee member comments be removed from future agendas. There were no comments from the public on item C.

D. Approach to Developing Report and Report Format

There was consensus that at each meeting comments made by committee members on the merits and drawbacks of the project should be recorded at the meeting using flip charts, or a computer and LCD projector. A printout of the comments could be attached to the action minutes of the meeting. All committee members spoke to these suggestions. Mr. Crist and Ms. McKenzie volunteered to serve as recorders. There were no comments from the public on item D.

E. District Staff Support

Andy Bell, Planning and Engineering Manager, distributed copies of the Comparative Matrix of Water Supply Alternatives, Parts 1-A, 1-B, and Part II; and copies of the June 26, 2006 Seawater Desalination Projects Evaluation prepared by Bookman-Edmonston/GEI.

4. **Adjourn**

The meeting was adjourned at 4:10 PM.

Note: An audio recording of the meeting is available for review and copies can be purchased. Contact Arlene Tavani at 658-5652 or arlene@mpwmd.dst.ca.us. Written comments submitted by committee members are also available upon request.

REVISED FINAL MINUTES

**Community Advisory Committee of the
Monterey Peninsula Water Management District
February 26, 2007**

Members Present:

Janet Brennan - League of Women Voters
Paul Bruno - Water For Us
Tom Rowley – Monterey Peninsula Taxpayers Association
Roy Thomas – Carmel River Steelhead Association;
Dewey Baird; Ron Chesshire (arrived at 2:55 PM); Peter Dausen; Manuel Fierro; Robert Greenwood

Members Absent:

Vacant – LandWatch of Monterey County
David Dilworth – Helping Our Peninsula's Environment (HOPE)
Bob McKenzie – Monterey County Hospitality Association (notified Chair in advance of absence)
Bruce Crist
Sheryl McKenzie (notified Chair in advance of absence)

District Staff Present:

David A. Berger – General Manager (and CAC Chair)
Andy Bell – Planning and Engineering Division Manager
Joe Oliver – Senior Hydrogeologist
Darby Fuerst -- Water Resources Division Manager
Heidi Quinn – Associate Counsel
Arlene Tavani – Executive Assistant

1. Call to Order

The meeting was called to order at 2 PM in the Conference Room of the Monterey Peninsula Water Management District.

2. Comments from Public

No comments.

3. Receive Action Minutes of February 6, 2007 Committee Meetings

There were no questions or comments from the committee. Staff was directed to file the minutes as presented.

4. Presentation on Aquifer Storage and Recovery in the Seaside Basin

Joe Oliver gave a presentation on the item. A summary of the presentation is on file at the District office and on the MPWMD website. During the question and answer period, questions were raised by Tom Rowley, Roy Thomas, Manuel Fierro and Peter Dausen, and were responded to by District staff. Andy Bell responded to written questions about

the project that had been submitted in advance of the meeting. Additional questions were asked by Janet Brennan, Roy Thomas, Paul Bruno and Robert Greenwood, and were responded to by District staff.

Andy Bell distributed the staff report from the January 23, 2007, Technical Advisory Committee meeting titled Review Proposed Yield Targets to Satisfy Existing Water Needs of the Monterey Peninsula. Questions were asked by Janet Brennan, Paul Bruno and Robert Greenwood, and were responded to by District staff.

5. Public Comment on Aquifer Storage and Recovery in Seaside Basin

There were no comments from the public.

6. Comments on Aquifer Storage and Recovery from Committee Members

All committee members that were present commented on the project. Their comments are summarized on Attachment 1.

7. Approach to Development of Final Report and Report Format

This item was not discussed.

8. Adjourn

The meeting was adjourned at 4:20 PM.

Note: An audio recording of the meeting is available for review and copies can be purchased. Contact Arlene Tavani at 658-5652 or arlene@mpwmd.dst.ca.us. Written comments submitted by committee members are also available upon request.

ATTACHMENT 1

<p align="center">Community Advisory Committee Comments Aquifer Storage and Recovery in Seaside Basin February 26, 2007</p>	
<p align="center">Merits</p>	<p align="center">Drawbacks</p>
<p>Peter Dausen</p> <ol style="list-style-type: none"> 1. Common sense solution. 2. Savings account with water. 3. Keeps Carmel River charged better than ordinarily would be. 4. Cost avoidance so river is not overdrawn in dry months. <p>Roy Thomas – Carmel River Steelhead Association</p> <ol style="list-style-type: none"> 1. Concept is good. 2. Flexible in that you can use other sources of water, not just the Carmel River. You can use cheaper sources of water. 	<ol style="list-style-type: none"> 1. Make sure there is some type of legal management of the ASR recovery to prevent Cal Am from drawing against Carmel River. 2. As long as water withdrawals and injection are well monitored you have a good system. 3. Need to store water immediately when flows are high. 4. Why does water need to be treated prior to injection? <ol style="list-style-type: none"> 1. The way it is being done is not good. 2. There are surplus flows in the river, but you need a faster way to extract. The surplus flows are short lived. NOAA Fisheries guidelines are flawed, especially in spring for emerging toads and frogs. 3. Expensive. 4. Should not filter or chlorinate water before it is injected because of cost and lack of storage. 5. Need an unlined pond next to injection well so water can percolate back into ground when not needed. 6. Taking too much water over a long period of time. 7. Not reliable each year due to variation in rainfall and river flow.

Community Advisory Committee Comments
Aquifer Storage and Recovery in Seaside Basin
February 26, 2007
 Page 2 of 3

Merits	Drawbacks
<p>Tom Rowley – Monterey Peninsula Taxpayers Association</p> <ol style="list-style-type: none"> Any water stored is a benefit. <p>Manuel Fierro</p> <ol style="list-style-type: none"> Protects ecosystem of Carmel River. Secondary benefits to Seaside Basin. No water for new construction or remodels. Can be teamed with other projects to comply with Order 95-10. Amortize cost over 20 years. New users would pay connection fees. Grant has been applied for. <p>Janet Brennan – League of Women Voters</p> <ol style="list-style-type: none"> Captures excess flow without the negative impacts, i.e. environmental impacts of dams which relate to sedimentation. More energy efficient than other alternatives. Better for the environment. <p>Dewey Baird</p> <ol style="list-style-type: none"> Second most economical project aware of without further study. It is a make-sense project, already in progress. Pipeline may eventually be buried. Makes environmental sense. 	<ol style="list-style-type: none"> Where do we store excess flows is the problem. Why was Cañada de la Segunda Dam and Reservoir proposal abandoned? This is a variation of ASR in that it relied on excess Carmel River winter flows. <ol style="list-style-type: none"> No water for new construction or remodels. Water rights adjudication is confusing. Above ground pipeline. District and Cal Am signed MOA on near and long term projects. Cal Am selling or being put on the stock exchange. Seaside basin 40 to 45% overdrawn already. In itself, ASR does not comply with Order 95-10. <ol style="list-style-type: none"> Because window of opportunity for injection/recovery is so small, no assurance project is there every year. Need some sort of increased infrastructure. Possibly new pipeline or surface storage would be solution.

Community Advisory Committee Comments
 Aquifer Storage and Recovery in Seaside Basin
 February 26, 2007
 Page 3 of 3

Merits

- Paul Bruno – Water for Us
1. Captures excess flows prior to being contaminated by salt. Technically feasible.
 2. Cost effective.
 3. Utilizes a lot of existing Cal Am infrastructure.
 4. Wells can have dual use.
 5. Pumping could be modulated to minimize environmental degradation and impact on Carmel River.
 6. Above-ground pipe will be buried.

Robert Greenwood

1. Support.
2. Could be improved if provide for greatly increased extraction from Carmel River during high flows.

Ron Chesshire

1. Good project as a supplement with other projects.
2. Very cost effective.
3. Studied for a long time, much is known about the project. Common sense approach.
4. Could be expanded upon.

Drawbacks

1. There are ways to better pump from river rather than sending it to Seaside and storing it in the ground.
2. Suggest modify Order 95-10.
3. Due to artificial cap of Order 95-10 we are over-pumping.
4. You would not be penalized during high flow periods if better pumping regimen is developed.
5. Maximum in-lieu recharge.

1. This does not meet the water needs of the Peninsula.

E-Mail from Roy Thomas

From: IIWINOS@aol.com [mailto:IIWINOS@aol.com]
Sent: Thursday, March 15, 2007 3:58 PM
To: Arlene Tavani
Subject: comments

3-15-07

To: Andy Bell @ MPWMD

Re: COMMUNITY ADVISORY COMMITTEE COMMENTS

.....Since public money dedicated to mitigate for the over extraction of Carmel River water is being used on the A.S.R. Project; there needs to be a non revocable requirement to cut diversion of surface flow in Spring, Summer, and Fall, so that the aquatic creatures (fish & frogs) on the Carmel River receive commensurate and tangible benefits; that is full benefits for the use of all the Carmel River ASR water.

.....Any reduction in Spring flows that cause the river to reduce bank coverage is a direct loss of habitat for fish and frogs. No water should be removed for A.S.R. in the Spring except in an El Nino year with flows above bank full conditions.

.....Case #. M66343 Amended Decision.....The Provision in the Adjudication that allows cities to be able to claim use of excess A.S.R. water goes contrary to the claim A.S.R. is to help the Carmel River.

FINAL MINUTES

**Community Advisory Committee of the
Monterey Peninsula Water Management District
March 26, 2007**

Members Present:

Janet Brennan - League of Women Voters
Paul Bruno - Water For Us
Bob McKenzie – Monterey County Hospitality Association
Greg Pickens – Monterey Alliance of Neighborhoods
Tom Rowley – Monterey Peninsula Taxpayers Association
Roy Thomas – Carmel River Steelhead Association (arrived at 2:15 PM)
Dewey Baird; Bruce Crist; Peter Dausen; Manuel Fierro; Robert Greenwood; Sheryl McKenzie

Members Absent:

David Dilworth – Helping Our Peninsula’s Environment (HOPE)
Ron Chesshire

District Staff Present:

David A. Berger – General Manager (and CAC Chair)
Andy Bell – Planning and Engineering Division Manager
Heidi Quinn – Associate Counsel
Arlene Tavani – Executive Assistant

Presenters:

Marc Lucca, General Manager, Marina Coast Water District
Keith Israel, General Manager, Monterey Regional Water Pollution Control Agency

1. Call to Order

The meeting was called to order at 2 PM in the Conference Room of the Monterey Peninsula Water Management District.

2. Comments from Public

No comments.

3. Receive Action Minutes of February 6, 2007 Committee Meetings

Staff was directed to: (A) note on the minutes that Sheryl and Bob McKenzie had provided advance notice of their absence; and (B) modify the comment made by Tom Rowley to state that the Cañada de la Segunda Dam and Reservoir proposal was a “variation” of ASR in that it relied on excess Carmel River winter flows.

4. Presentation on Regional Urban Water Augmentation Project by Marina Coast Water District and Monterey Regional Water Pollution Control Agency

Marc Lucca, General Manager of the Marina Coast Water District gave the presentation. A summary of the presentation is on file at the District office and on the District's website. During the discussion, questions were raised by Brennan, Dausen and Thomas.

5. Presentation on Groundwater Replenishment Project by the Monterey Regional Water Pollution Control Agency

Keith Israel, General Manager of the Monterey Regional Water Pollution Control Agency gave the presentation. A summary of the presentation is on file at the District office and on the District's web site. During the discussion, questions were raised by Greenwood, Thomas, Rowley, Fierro, Bruno, Crist, Brennan, Dausen and Baird.

6. Public Comment on the Regional Urban Water Augmentation Project and the Groundwater Replenishment Project

There were no comments from the public.

7. Committee Comments on Regional Urban Water Augmentation Project and the Groundwater Replenishment Project

Comments from the committee members are recorded on Attachment 1. Bob McKenzie excused himself from the meeting prior to receipt of committee comments.

8. Approach to Development of Final Report and Report Format

This item was not discussed.

9. Adjourn

The meeting was adjourned at 4:30 PM.

Note: An audio recording of the meeting is available for review and copies can be purchased. Contact Arlene Tavani at 658-5652 or arlene@mpwmd.dst.ca.us. Written comments submitted by committee members are also available upon request.

ATTACHMENT 1

<p align="center">Community Advisory Committee Comments Regional Urban Water Augmentation Project (RUWAP) by the MCWD and Groundwater Replenishment Project (GRP) by the MRWPCA March 26, 2007</p>	
<p align="center">Merits</p>	<p align="center">Drawbacks</p>
<p>Robert Greenwood</p> <p>Peter Dausen</p> <ol style="list-style-type: none"> Both projects useful in increasing water supply for area. Great technology and great way to tap into a resource for increased portfolio of water <p>Janet Brennan</p> <ol style="list-style-type: none"> Both projects compatible. Both projects work together well. GRP project is energy efficient. <p>Manuel Fierro</p> <p>RUWAP</p> <ol style="list-style-type: none"> Recycled water used for non potable needs. Helps some with 95-10 issue. Can be part of a regional solution. Redundancy in case of a breakdown of other projects. 	<p>RUWAP</p> <ol style="list-style-type: none"> Does not reduce our deficit, only 300 AF of supply to offset demand. RUWAP can stand alone, but GRP cannot stand alone. Should be looked at as one consolidated project. Need regionalization. <p>RUWAP</p> <ol style="list-style-type: none"> May spend money when not needed. Redundant issue. California Coastal Commission may not approve a new desalination plant. Monterey County Health Department is promoting one large desalination plant.

Community Advisory Committee Comments
 Regional Urban Water Augmentation Project (RUWAP) by the MCWD and
 Groundwater Replenishment Project (GRP) by the MRWPCA

Page 2 of 3

Merits

Drawbacks

GRP

1. Provides water to Seaside Basin as required by Watermaster Management Team.
2. Could help solve 95-10 issue.

Roy Thomas

RUWAP – project is underway.

GRP – saves fresh water, expands groundwater storage, could provide surface water habitat.

Sheryl McKenzie

Both projects -- Commendable use of technology and conservation.

Bruce Crist

GRP –

1. Dynamite idea, support recycling of wastewater.
2. Relatively energy efficient.

Tom Rowley

Agrees with comments made by McKenzie and Dausen.

GRP

1. Doesn't totally solve 95-10 by itself.
2. Costs 37.9 million and O&M is \$1,325,000 per year.
3. Further costs not known.

RUWAP – not keeping cost down – need to cooperate with other regional projects – share infrastructure.

GRP – should be expanded to utilize storm water and excess Salinas River water.

Both projects have limited potential for new supplies within MPWMD.

1. Agrees with comments made by McKenzie and Greenwood.
2. If we add up price and operating costs for all projects, we cannot afford them. These are all technically feasible projects, but can we afford all the individual projects?

Community Advisory Committee Comments

Regional Urban Water Augmentation Project (RUWAP) by the MCWD and
Groundwater Replenishment Project (GRP) by the MRWPCA

Page 3 of 3

Merits

Drawbacks

Paul Bruno

1. Both projects technically feasible. Permits are obtainable on both.
2. Both projects will be built whether or not the MPWMD agrees.
3. Infrastructure can be used as part of a regional system.
4. Recharge of aquifers is an advantage.
5. Proposition 84 funds available for these types of projects.

Dewey Baird

1. Proponent of both projects.
2. Support Factory 21 Purified Recycled Water project.
3. Agrees with Bruno's comments.

RUWAP -- Limited benefit to MPWMD as currently presented.

Both projects -- Issues of cost effectiveness. There may be less expensive options related to easing governmental regulations.

1. Concern regarding collective cost of all projects.
2. Need a matrix that outlines cost to ratepayers for one or more of the projects.

FINAL MINUTES

**Community Advisory Committee of the
Monterey Peninsula Water Management District
April 23, 2007**

Members Present:

Janet Brennan - League of Women Voters
Paul Bruno - Water For Us
Greg Pickens – Monterey Alliance of Neighborhoods
Tom Rowley – Monterey Peninsula Taxpayers Association
Roy Thomas – Carmel River Steelhead Association (arrived at 2:15 PM)
Dewey Baird; Manuel Fierro; Robert Greenwood; Sheryl McKenzie

Members Absent:

David Dilworth – Helping Our Peninsula's Environment (HOPE)
Bob McKenzie – Monterey County Hospitality Association (notified in advance of absence)
Ron Chesshire
Bruce Crist (notified in advance of absence)
Peter Dausen (notified in advance of absence)

District Staff Present:

David A. Berger – General Manager (and CAC Chair)
Andy Bell – Planning and Engineering Division Manager
Joe Oliver – Senior Hydrogeologist
Heidi Quinn – Associate Counsel
Arlene Tavani – Executive Assistant

Presenters:

Andy Bell, Planning and Engineering Manager

1. Call to Order

The meeting was called to order at 2 PM in the Conference Room of the Monterey Peninsula Water Management District.

2. Comments from Public

No comments.

3. Receive Action Minutes of March 26, 2007 Committee Meetings

The minutes were received. Staff was directed to note in past and future minutes the names of committee members who have provided, or will provide advance notice of their absence from a meeting.

4. Presentation on MPWMD Long-Term Water Supply Project/Desalination in Sand City from Monterey Peninsula Water Management District

Andy Bell gave the presentation. A summary of the presentation is on file at the District office and on the District's website. Mr. Bell and Mr. Oliver responded to questions raised by Baird, Brennan, Bruno, Dausen, Fierro, Greenwood, Rowley and Thomas. Mr. Bell offered to provide to the committee members a memorandum by District Counsel, David Laredo, regarding legal requirements for authorizing votes on water supply projects. He will also submit to the committee members an estimate of the aggregate cost for an acre-foot of water charged by California American Water in the Monterey District.

5. Public Comment on the MPWMD Long-Term Water Supply Project/Desalination in Sand City from Monterey Peninsula Water Management District

Steven Leonard, California American Water, expressed confidence in the CAC's project review process, and said that the committee members were asking good questions.

6. Committee Comments on MPWMD Long-Term Water Supply Project/Desalination in Sand City from Monterey Peninsula Water Management District

Comments from the committee members are recorded on Attachment 1.

7. Approach to Development of Final Report and Report Format

This item was not discussed.

8. Adjourn

Prior to adjournment, Mr. Rowley announced that he could not participate in the May 29, 2007 meeting, and that Dick Donagon from the Monterey Peninsula Taxpayers Association will be in the audience. Sheryl McKenzie also noted that she will not be in attendance at the May 29 meeting. The meeting was adjourned at approximately 4:00 PM.

Note: An audio recording of the meeting is available for review and copies can be purchased. Contact Arlene Tavani at 658-5652 or arlene@mpwmd.dst.ca.us. Written comments submitted by committee members are also available upon request.

Attachment 1

Community Advisory Committee Comments – Revised 5/29/07
 MPWMD Long-Term Water Supply Project/Desalination in Sand City
April 23, 2007

Merits	Drawbacks
<p>Paul Bruno</p> <ol style="list-style-type: none"> 1. Technically feasible for desalination project, but not necessarily wells. 2. Project size can be scaled. 3. Does not rely upon rainfall. <p>Manuel Fierro</p> <ol style="list-style-type: none"> 1. Combined with ASR and RUWAP could comply with SWRCB Order 95-10 and get water to Seaside aquifer. 2. Enough water to comply with SWRCB Order 95-10 but not for growth. 3. California Public Utilities Commission (CPUC) not involved. 4. Would be a public/private entity. <p>Janet Brennan</p> <ol style="list-style-type: none"> 1. Local control over project design and capacity. 2. Possibility of voter approval for the project. 3. Distribution costs would appear to be lower than for North coast desalination projects. 4. There are environmental benefits in terms of the HDD wells. 	<ol style="list-style-type: none"> 1. Plant sites are theoretical at this time. 2. Potential issues with erosion over time for anything west of Highway 1. 3. Brine disposal by way of wells seems to be less favorable than by way of outfall. 4. Coastal commission prefers a regional desalination facility system versus a series of small plants. 5. Costs need to be updated because they reflect 2002 dollars. <ol style="list-style-type: none"> 1. Costs extremely high for amount of water produced. 2. Enough water to comply with SWRCB Order 95-10 but not for growth. 3. California American Water (CAW) may not own the desalination plant. <ol style="list-style-type: none"> 1. High energy demand.

Community Advisory Committee Comments
 Aquifer Storage and Recovery in Seaside Basin
April 23, 2007
 Page 2 of 4

Merits

Dewey Baird

1. Theoretically because water is potable, it has a potential for helping with SWRCB Order 95-10 and the Seaside Groundwater Basin problems.

Tom Rowley

1. Agree with Mr. Bruno about not relying on a water supply that is dependant upon rainfall.
2. Project is rainfall proof.
3. Coastal Commission is not expert.

Sheryl McKenzie

1. Doesn't depend on rainfall.

Drawbacks

1. CIP costs as compared to the yield (ratio) are negative.
2. The technology is problematic, unproven.
3. Potential problems with permitting. Site belongs to California Department of Parks and Recreation.

1. HDD well technology is questionable.
2. Should check with Ed Thornton at Naval Postgraduate School before conducting an HDD well test.
3. Cost – building this piecemeal will not work. Result in high cost.
4. Storage vs. surge capacity. This is not addressed in the proposed project, the need for adequate storage during peak demand or when there is low rainfall. No reserve capacity.

1. Not enough water to meet SWRCB Order 95-10, unless combined with other projects.
2. Untested technology.
3. High energy costs.
4. Politicizing of voter approval – growth vs. no growth.

Community Advisory Committee Comments
Aquifer Storage and Recovery in Seaside Basin
April 23, 2007
 Page 3 of 4

Merits

Drawbacks

Greg Pickens

1. Supports comments made by Bruno and Fierro.

1. Location still in question. No land leased or purchased at this time.
2. Technology feasible but not proven.
3. Radial Collector Well technology might be suitable for fresh water/river bed collection but questionable for onshore ocean water extraction.
4. HDD is limited with horizontal reach (100-200 ft offshore to start of screen filter) due to estimated pump setting calculations.
5. Possible retreat strategy required due to erosion (entry points/desal plant needing to be moved inland).
6. Potential multiple bring discharge solutions required. MRWPCA plus injector wells (or alternative methods).
7. Size of location may prohibit expansion beyond meeting minimal 95-10 water supply requirements. Number of offshore collection or discharge pipes limited by location.

Roy Thomas

1. Drought proof.
2. Less plumbing needed.
3. Within District boundaries.
4. Expandable.
5. Sites available.
6. Ocean is nearby.

1. Wells are too expensive and may not work as currently designed.
2. Need small test project to see where mistakes have been made.
3. More planning for storage and blending of the desalinated water needs to be done.

Community Advisory Committee Comments
Aquifer Storage and Recovery in Seaside Basin
April 23, 2007
Page 4 of 4

Merits

Drawbacks

Robert Greenwood

1. Supports comments made by Janet Brennan.

1. Supports comments made by Janet Brennan.

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FINAL MINUTES

**Community Advisory Committee of the
Monterey Peninsula Water Management District
May 29, 2007**

Members Present:

Janet Brennan - League of Women Voters
Paul Bruno - Water For Us
David Dilworth – Helping Our Peninsula’s Environment (arrived at 2:35 PM)
Greg Pickens – Monterey Alliance of Neighborhoods
Dewey Baird
Ron Chesshire
Manuel Fierro
Robert Greenwood

Members Absent:

Bob McKenzie – Monterey County Hospitality Association (notified in advance of absence)
Tom Rowley – Monterey Peninsula Taxpayers Association (notified in advance of absence)
Roy Thomas – Carmel River Steelhead Association (notified in advance of absence)
Bruce Crist (notified in advance of absence)
Peter Dausen (notified in advance of absence)
Sheryl McKenzie (notified in advance of absence)

District Staff Present:

David A. Berger – General Manager (and CAC Chair)
Andy Bell – Planning and Engineering Division Manager
Heidi Quinn – Associate Counsel
Arlene Tavani – Executive Assistant

Presenters:

Catherine Bowie – California American Water
Paul Findley, RBF Consulting

1. Call to Order

The meeting was called to order at 2:17 PM in the Conference Room of the Monterey Peninsula Water Management District. There being no quorum, Chair Berger declared this to be an unofficial meeting. No formal action would be taken on any agenda item.

2. Comments from Public

No comments.

3. Receive Action Minutes of April 23, 2007 Committee Meetings

No action was taken due to lack of a quorum. The item was deferred to the June 25, 2007 committee meeting.

4. **Presentation on the Coastal Water Project Proposed by California American Water**
Ms. Bowie and Mr. Findley presented the report. A summary of the presentation is on file at the District office and available on the District's website. Questions were posed by Chesshire, Brennan, Crist, Dilworth, Greenwood, Bruno and Fierro. In response to a question from the Committee, Ms. Bowie stated she would submit to staff for distribution to the committee: (1) an estimate of the number of connections within the CAW system, and the number of persons that were served by those connections in 1988 and 1995; and (2) cost estimate for the 20,272 AFY regional alternative discussed in the PEA.

5. **Public Comment on the Coastal Water Project Proposed by California American Water**

Judi Lehman asked what amount of water the District was authorized to withdraw from the Carmel River to supply the Aquifer and Storage Recovery (ASR) project.

Committee Comments on Coastal Water Project Proposed by California American Water

Comments from the Committee members are summarized on **Attachment 1**.

6. **Approach to Development of Final Report and Report Format**

This item was not discussed.

7. **Adjourn**

The meeting was adjourned at approximately 4:30 PM.

Note: An audio recording of the meeting is available for review and copies can be purchased. Contact Arlene Tavani at 658-5652 or arlene@mpwmd.dst.ca.us. Written comments submitted by committee members are also available upon request.

Attachment 1

Community Advisory Committee Comments
 Coastal Water Project (CWP)
 May 29, 2007

Community Advisory Committee Comments	
Merits	Drawbacks
<p>Manual Fierro</p> <ol style="list-style-type: none"> Complies with Order 95-10 Provides 1,000 acre-feet per year (AFY) for Seaside Basin Can be modified to provide 20,272 AFY as a regional project California American Water (CAW) knows problems the system has had past and present Can provide 11,738 AFY for a small project CAW stated the possibility of joining with a public partner <p>Paul Bruno</p> <ol style="list-style-type: none"> Technically feasible Progress is being made on the PEA and EIR Project is a product of the Plan B community process which was Assembly Bill 1182 Does not rely on rainfall Addresses Order 95-10 	<ol style="list-style-type: none"> \$230 million for 11,738 AFY is too costly CAW's Peninsula rate payers would pay the total cost at 9.9% profit for CAW High cost per AF at \$1,725 No public vote required unless public funds are used Does not conform with Monterey County Ordinance 10.72 The California Public Utilities Commission (CPUC) controls rates customers must pay Lead agency is the CPUC No confirmed site for a desalination plant Sale of CAW parent company on the stock exchange means no local control, you have a governance issue 11,730 AFY does not meet with the desired requirements of Monterey County <ol style="list-style-type: none"> Dependant upon electricity to operate Entrainment is a significant issue when using once-through cooling Its potential for success makes it a target for the no-growth community

Community Advisory Committee Comments
 Coastal Water Project
 May 29, 2007
 Page 2 of 5

Merits	Drawbacks
<p>6. Subsurface intake alternative addresses entrainment</p> <p>7. Scaleable</p> <p>8. Aquifer Storage/Recovery (ASR) component decreases the size and cost of the CWP</p> <p>9. Extensive public outreach in the planning process</p> <p>10. Project planning includes integration into the current water system</p> <p>11. No public vote required unless public funds are used</p> <p>12. CPUC controls rates</p> <p>13. CPUC is the lead agency</p> <p>Ron Chesshire</p> <ol style="list-style-type: none"> 1. Agree with most of Mr. Bruno's statements on merits of the project 2. Facility like this has tremendous potential to get us out of problems we are facing which makes it a target 3. Moss Landing power plant is largest electrical producer in California and is unlikely to be closed down for any reasons <p>Dewey Baird</p> <ol style="list-style-type: none"> 1. Potential mitigation of Order 95-10 and Seaside Groundwater Basin adjudication 2. Has an ASR component 3. Company has made a lot of progress so far 4. Mitigates saltwater intrusion 5. Partial restoration of the Carmel River summer flows 	<ol style="list-style-type: none"> 1. Agree with Paul Bruno's statements on drawbacks of the project 2. Concerns re operation and maintenance costs -- if left unchecked or not dealt with -- to provide a cheaper source of electricity with RO membranes, costs are ongoing and might tend to add up over the years. <ol style="list-style-type: none"> 1. Electricity dependant (Moss Landing power plant may not close soon, but electricity is fossil fuel dependant which is an issue now) 2. At least 4.5 years out with 40 permitting hurdles facing it

Community Advisory Committee Comments

Coastal Water Project

May 29, 2007

Page 3 of 5

Merits

Drawbacks

<p>6. Not weather dependant</p> <p>7. Agree with Mr. Bruno -- support CPUC as lead agency and approving rates</p> <p>Janet Brennan</p> <p>1. Once-through cooling has least environmental impacts due to use of water that has been produced, and disposal of brine.</p> <p>2. Slant drilling alternative has benefits from an environmental perspective and may provide a net energy use reduction over the once-through cooling system.</p> <p>Greg Pickens</p> <p>1. Agree with positive comments made by Manuel Fierro</p>	<p>3. The 70% ultimate rate increase is hard to swallow, although do not know of an alternative</p> <p>1. We don't have a good example of a large, water producing desalination plant in the U.S. The one that does exist is in Florida and the cost of maintaining that facility is enormous, requiring continual membrane replacement. I question the technical feasibility of the larger facility.</p> <p>2. The energy demand is significant and may face hurdles under State regulatory scheme to reduce CO² emissions.</p> <p>1. No alternative water source intake discussed if the Moss Landing Power Plant cooling water discharge was not available</p> <p>2. "Trough" used for saltwater prevention is questionable due to rising sea levels, inland waterway, storms and erosion</p> <p>3. Potential multiple brine discharge solutions required. Monterey Regional Water Pollution Control Agency plus?</p> <p>4. Slant well intake system. The Dana Point pilot site is not sufficient to be considered proven technology.</p>
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Community Advisory Committee Comments

Coastal Water Project

May 29, 2007

Page 4 of 5

Merits

Drawbacks

<p>David Dilworth</p> <ol style="list-style-type: none">1. Agree with some of positive comments.2. Agree with some of Manuel Fierro's comments on merits of project	<p>What other locations use slant wells? The technical studies listed refer to HDD wells. Are there any studies for slant wells that can be provided?</p> <ol style="list-style-type: none">5. Construction timeframe is too long, cost is too high, and location has not been secured6. Rate recovery has begun. Does this imply that if an alternative to CWP is selected, rate payers will be credited the collected amount so that it can be applied to the other project?
	<ol style="list-style-type: none">1. Project is illegal as proposed, contrary to Monterey County ordinance2. Disconnect between public sentiment and project design. CAW recognizes that no-growth is appropriate, but have proposed this large-growth project3. Project is too big. Not a replacement, not a right-sized project, it is a large-growth project4. Extremely expensive drought protection5. Public outreach CAW has done has been meaningless because there is a disconnect between public sentiment and project design.6. 2012 construction date is not soon.7. 4 to 5 million gallons per day (mgd) for each slant well is more than double that of any operating well project configuration. The 4 to 5 mgd may not be achievable. It is untested.

Community Advisory Committee Comments

Coastal Water Project

May 29, 2007

Page 5 of 5

Merits

Drawbacks

8. Cones of depression and rate of infiltration -- may not be able to get enough water to the pipes
9. Maintenance is horribly expensive.
10. CPUC is an outrageous agency to authorize this project.
11. Once-through cooling is wasteful technology. Above ground radiators are current technology.
12. Tremendous amount of larvae are killed by the current once-through project. In order to stop that, must use other technology.
13. 20-mile pipeline is nontrivial project that is subject to breakage and leakage.

Robert Greenwood

1. Support 11,730 AF alternative
2. Support the idea of putting the desalination plant in Marina because it would greatly decrease the cost of transmission to the Monterey Peninsula.

1. No comment to make regarding project drawbacks.

FINAL MINUTES

**Community Advisory Committee of the
Monterey Peninsula Water Management District**
June 25, 2007

Members Present:

Janet Brennan - League of Women Voters
Bob McKenzie – Monterey County Hospitality Association (arrived at 3:05 PM)
Tom Rowley – Monterey Peninsula Taxpayers Association
Roy Thomas – Carmel River Steelhead Association (arrived at 2:25 PM)
Dewey Baird
Ron Chesshire
Bruce Crist (Left the meeting at 3:30 PM)
Robert Greenwood
Sheryl McKenzie

Members Absent:

Paul Bruno (notified in advance of absence)
Peter Dausen (notified in advance of absence)
David Dilworth
Manuel Fierro (notified in advance of absence)
Greg Pickens (notified in advance of absence)

District Staff Present:

David A. Berger – General Manager (and CAC Chair)
Andy Bell – Planning and Engineering Division Manager
Heidi Quinn – Associate Counsel
Arlene Tavani – Executive Assistant

Presenters:

Peter McLaggen of Poseidon Resources Corporation

1. Call to Order

2. Comments from Public

No comments.

3. Receive Action Minutes of April 23, 2007 and May 29, 2007 Committee Meetings

When a quorum was established, the minutes of both meetings were received unanimously.

4. Presentation on the Monterey Bay Regional Desalination Project Proposed by the Pajaro/Sunny Mesa Community Services District

Peter McLaggen gave the presentation. Questions were asked by Brennan, Rowley, Greenwood, Crist, Chesshire, Baird, Sheryl McKenzie and Thomas. Mr. McLaggen agreed to provide a written response to the questions that Bruno had submitted prior to the meeting.

5. Public Comment on the Monterey Bay Regional Desalination Project Proposed by the Pajaro/Sunny Mesa Community Services District

Steve Leonard, California American Water, stated that he had not met with representatives of Poseidon regarding a cooperative project. Mr. Leonard noted that he did meet with Joe Rosa and Marc Del Piero of Pajaro/Sunny Mesa Community Services District regarding a water supply contract, but they have not responded to the inquiry.

6. Committee Comments on the Monterey Bay Regional Desalination Project Proposed by the Pajaro/Sunny Mesa Community Services District

A summary of those comments is provided as Attachment 1.

7. Approach to Development of Final Report and Report Format

On a motion by Bob McKenzie and second by Rowley, the committee voted unanimously to establish a five-person subcommittee to prepare the draft report for presentation at the August 27, 2007 meeting. Committee members Brennan, Chesshire and Bob McKenzie volunteered to serve on the subcommittee. Committee Chair Berger was authorized to contact committee members that were not present and determine if two of them would serve on the subcommittee.

8. Adjourn

The meeting was adjourned at approximately 4:00 PM.

Note: An audio recording of the meeting is available for review and copies can be purchased. Contact Arlene Tavani at 658-5652 or arlene@mpwmd.dst.ca.us. Written comments submitted by committee members are also available upon request.

Attachment 1

Community Advisory Committee Comments
Monterey Bay Regional Desalination Project
June 25, 2007

Merits	Drawbacks
<p>Ron Chesshire:</p> <ol style="list-style-type: none">1. Tremendous potential to get us out of situation we are in. Seems like less bureaucracy involved then last time.2. Willing to enter into long term agreements for price guarantee. <p>Bruce Crist</p> <ol style="list-style-type: none">1. Regional approach is right approach. <p>Janet Brennan</p> <ol style="list-style-type: none">1. Local control with ownership	<ol style="list-style-type: none">1. Concerned re things that have not been done. Process that has stopped on EIR. Waiting for something. Possibly political or public pressure may get talks going with California American Water (CAW) in regards to working together.2. Concerns re cost of operations and maintenance. If unchecked, could drive up costs.3. Concerned about discussions with CAW. Could determine if this is good or bad, and that has not been determined. <ol style="list-style-type: none">1. Parties have or have not coordinated their discussions. Would be good to see parties talk in a meaningful manner. <ol style="list-style-type: none">1. Longer permitting process with regional approach2. Costs do not include transmission costs3. Environmental impacts would be better or worse because of direct discharge into bay. No benefit of dilution going through power plant.4. High energy cost is a huge issue.5. Technical uncertainties related to desalination.

Community Advisory Committee Comments
 Monterey Bay Regional Desalination Project Proposed by the
 Pajaro/Sunny Mesa Community Services District

June 25, 2007

Page 2 of 3

Merits

Drawbacks

Roy Thomas

1. Drought proof component
2. Expandable
3. Form of public ownership
4. Limited exposure to increased costs
5. Some of facilities exist.

Robert Greenwood

Tom Rowley

1. Regional concept makes sense
2. Public Utilities Commission(PUC)/Department of Ratepayer Advocates ongoing discussions looking at alternatives
3. District adopted MOU for Monterey Bay Regional Water Solutions Task Force. Separate efforts of PUC and water agencies to look at a regional solution.

1. Reliability of facility
2. What do you do if it doesn't work?
3. Cost controls
4. Ownership question
5. Dealing with a private organization. What if they do not want to renew your contract?
6. Long term reliability

1. Pajaro/Sunny Mesa Community Services District (PSM) said Poseidon was capable and up to date. But a 2006 report states that Tampa Bay Project was taken over by local authorities, due to filter plant failure and bankruptcies.
2. Confusion between PSM and CAW as to if they will work together.

1. No storage to meet surge demands. A great need.
2. Leads to a bigger project and higher capital and operation/maintenance costs. Major defect
3. Obtaining regional project will not be easy.

Community Advisory Committee Comments
 Monterey Bay Regional Desalination Project Proposed by the
 Pajaro/Sunny Mesa Community Services District
June 25, 2007
 Page 3 of 3

Merits

Drawbacks

Bob McKenzie

1. Welcome help with water supply alternative ideas

PSM is very small community services district, governed by an entity that is unknown to him. No history or track record for dealing with water supply at this level. History of PSM indicates they have had a hard time passing tax measures to finance their operations.

Dewey Baird

1. Agree with other comments.

1. Financial, technical, agency cooperative, permitting, and easement issues that are uncertain
2. No ASR component

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**HAND
DELIVERED**

RECEIVED

JUN 27 2007

MPWMD

North Monterey County Desalination Project

29 June 2007

23

Positive aspects:

Complies with 95-10

Meets Monterey County requirements of being large enough to address regional needs, and it must be publicly owned and publicly operated in order to keep costs down

Will incorporate solar power to keep costs down and be "green"

Cost of construction to be borne by bonds, certificates of participation and possible Poseidon funding

Low costs of water per acre foot

Will be controlled by the people of Monterey County (setting rates)

Has a confirmed site

Can provide 20,000 to 22,400 AFY

Lowest desal project cost

Has TMF capabilities

Has a storage capacity for 11 day supply

Lowest Lowest total capital cost

Can be teamed with ASR

Negative aspects:

Needs to provide environmental review and permitting information

High total O&M costs



FINAL MINUTES

**Community Advisory Committee of the
Monterey Peninsula Water Management District
July 23, 2007**

Members Present:

Janet Brennan - League of Women Voters
Paul Bruno – Water for Us
Bob McKenzie – Monterey County Hospitality Association
Tom Rowley – Monterey Peninsula Taxpayers Association
Roy Thomas – Carmel River Steelhead Association
Ron Chesshire
Bruce Crist
Peter Dausen
Manuel Fierro
Robert Greenwood
Sheryl McKenzie

Members Absent:

David Dilworth
Greg Pickens
Dewey Baird (notified in advance of absence)

District Staff Present:

David A. Berger – General Manager (and CAC Chair)
Andy Bell – Planning and Engineering Division Manager
Heidi Quinn – Associate Counsel
Arlene Tavani – Executive Assistant

Presenters:

1. **Call to Order**
The meeting was called to order at 2:15 PM.
2. **Comments from Public**
No comments.
3. **Receive Action Minutes of June 25, 2007 Committee Meeting**
The minutes were received unanimously.

4. **Presentation on the Seawater Desalination Vessel Project Proposed by Water Standard Company**
Amanda Brock of Water Standard Company gave the presentation. Questions were asked by Brennan, Bruno, Greenwood, Fierro, Rowley, Crist, Baird, Bob McKenzie, Sheryl McKenzie and Thomas. Skip Griffin of Water Standard Company and David Armanasco of Armanasco Public Relations Inc. also responded to questions.
5. **Public Comment on the Seawater Desalination Vessel Project Proposed by Water Standard Company**
There was no public comment.
6. **Committee Comments on the Seawater Desalination Vessel Project Proposed by Water Standard Company**
A summary of those comments is provided as **Attachment 1**.
7. **Adjourn**
The meeting was adjourned at approximately 4:10 PM.

Note: An audio recording of the meeting is available for review and copies can be purchased. Contact Arlene Tavani at 658-5652 or arlene@mpwmd.dst.ca.us. Written comments submitted by committee members are also available upon request.

Attachment 1

Final

Community Advisory Committee Comments
 Seawater Desalination Vessel Project Proposed by Water Standard Company
July 23, 2007

Merits	Drawbacks
<p>Janet Brennan</p> <ol style="list-style-type: none"> Least impacts on ocean resources of any desalination project we have reviewed. Technology is proven although not in this application <p>Pete Dausen</p> <ol style="list-style-type: none"> Facility is flexible and fully expandable All components can be replaced as needed Innovative contracts such as with GE on turbine replacement Least amount of environmental impact One system that can work despite drought conditions in coastal areas <p>Manual Fierro</p> <ol style="list-style-type: none"> Water Standard could possibly fully fund and operate the project 	<ol style="list-style-type: none"> Uncertainty re relationship with water agencies and contractual arrangements needed to get the water on shore Emissions of oxides of nitrogen on regional air pollution Some uncertainty related to storage capacity Without a lead agency we can't undertake CEQA review Some uncertainty about permitting process and how long it would take to complete environmental review <ol style="list-style-type: none"> No prototype yet Need a visual to show the view of the vessel from shore <ol style="list-style-type: none"> Concern with 5 mile-long pipeline being solid or flexible. Feasibility of installing a pipeline Not clear who provides or maintains storage facilities Question about how costs will be recovered from 39,000 ratepayers over a 30 year period

Final Community Advisory Committee Comments
 Seawater Desalination Vessel Project Proposed by Water Standard Company
July 23, 2007
 Page 2 of 3

Merits

Drawbacks

Bob McKenzie

1. Cost superior to any other project
2. Environmentally superior to other projects
3. Due to capitalization, will be difficult not to do serious work.
4. All technology is proven

Bruce Crist

1. Seemingly great environmental approach
2. Proven technology
3. Excellent organizational structure in joining with other companies around the world

Ron Chesshire

1. Flexibility as to size
2. Interesting project that could be feasible

Tom Rowley

1. Cutting edge technology
2. Environmentally too good to be true
3. Cost too good to be true

1. There is a need for a lead agency in a region that has difficulty identifying a lead agency
2. The lead agency has not been identified
3. Unmanageable, long lead time for permitting process

1. Private company will produce water and deliver it to land. There is no mechanism for a public agency or lead agency to own the water.

1. No prototype available
2. Underestimating the oceanographic engineering and technology needed to operate a ship on Monterey Bay for 12-month period.
3. Concern re drilling
4. Overly optimistic on cost projections
5. Project is proposed before its time.

Final Community Advisory Committee Comments
 Seawater Desalination Vessel Project Proposed by Water Standard Company
 July 23, 2007
 Page 3 of 3

Merits

Drawbacks

Sheryl McKenzie

1. Agrees with other committee members that this proposal is innovative and flexible. Outstanding project if all we have heard is true.

Robert Greenwood

1. Support technological aspects of this proposal

Roy Thomas

1. Less visible plumbing.
2. Cheaper to supply desalinated water under this scenario
3. Can be removed if necessary.

1. One obstacle is that cooperation and support of other organizations such as the proposed Monterey Regional Water Solutions Leadership Task Force, local water agencies, California American Water or others is needed for the project to be a success.

1. Concerns about previous experience of Water Standard. Need more information on what they have accomplished.

1. The difficulties of anchoring a vessel in the ocean are being overlooked

FINAL MINUTES

**Community Advisory Committee of the
Monterey Peninsula Water Management District
September 11, 2007**

Members Present:

Janet Brennan - League of Women Voters
Paul Bruno – Water for Us
Bob McKenzie – Monterey County Hospitality Association
Tom Rowley – Monterey Peninsula Taxpayers Association
Greg Pickens – Monterey Alliance of Neighborhoods
Dewey Baird
Bruce Crist
Sheryl McKenzie

Members Absent:

Roy Thomas – Carmel River Steelhead Association (notified in advance of absence)
Ron Chesshire (notified in advance of absence)
Peter Dausen (notified in advance of absence)
David Dilworth
Manuel Fierro (notified in advance of absence)
Robert Greenwood (notified in advance of absence)

District Staff Present:

David A. Berger – General Manager (and CAC Chair)
Andy Bell – Planning and Engineering Division Manager
Heidi Quinn – Associate Counsel
Arlene Tavani – Executive Assistant

1. Call to Order

The meeting was called to order at 2:15 PM.

2. Comments from Public

No comments.

3. Receive Action Minutes of July 23, 2007 Committee Meeting

The minutes were received.

**4. Committee Review, Comment and Action on the Final Draft Report from the
Community Advisory Committee to the MPWMD Board of Directors**

The committee members reviewed the report and agreed on amendments that should be incorporated into the Executive Summary. The amendments are reflected in the Executive Summary that is contained in the Final Report from the Community Advisory Committee to the Monterey Peninsula Water Management District Board of Directors dated September 11, 2007. The Committee requested that the staff report transmitting the report to the Board include the following paragraph: “In the Committee’s

deliberations, it found the following common themes: the projects are complex, expensive in comparison to current water costs, and for the most part will require a lengthy and difficult permitting process. The community must move forward to solve its water supply problem despite these issues.” No comments from the public were presented to the committee on this item.

5. Adjourn

The meeting was adjourned at approximately 4:10 PM.

Note: An audio recording of the meeting is available for review and copies can be purchased. Contact Arlene Tavani at 658-5652 or arlene@mpwmd.dst.ca.us. Written comments submitted by committee members are also available upon request.

Appendix E

LIST OF COMMUNITY GROUPS CONTACTED AS TO THEIR INTEREST IN PARTICIPATION ON COMMUNITY ADVISORY COMMITTEE

Response to Inquiry Regarding Participation on Community Advisory Committee			
Organization	Responded?	Agreed to Participate?	Response received to inquiry on questionnaire: "Comments the District Board should consider in its decision to form a CAC."
Builders Exchange Central Coast	Yes	Yes	Representation from all the business/industries in the MPWMD Community.
Carmel River Steelhead Association	Yes	Yes	It needs a real function with back and forth communication with staff and board.
Carmel Valley Association	Yes	Yes	To a great extent, the functions of a CAC are already provided by the Oral Communications at every Board meeting.
Coalition of Homeless Services Providers	Yes	Yes	We would like the Advisory Board to consider the impact of the current water credit system on affordable housing development. We would like the committee to recommend changes to promote affordable housing.
Friends of the Sea Otter	Yes	Yes	Water is quickly becoming more valuable than oil. Monterey Peninsula has many water issues that are critical both to health and our economy. Having a CAC is critical to having outside expertise in water issues. All water flows to the ocean which not only sea otters but humans use and enjoy.
Helping Our Peninsula's Environment	Yes	Yes	Currently this water District's Advisory Committees (PAC/TAC) are grossly biased against the voters interests; the public interests. The only existing exception is the Carmel River Advisory Committee, but their mission is severely constrained in their geographic scope and issue breadth. This proposed committee could help meet this District's goal to have the Peninsula citizens (not merely the wealthy and politically powerful) more involved in our water planning future. It's about time.
LandWatch of Monterey County	Yes	Yes	It is important to involve a cross-section of the community in order to reach consensus on managing water resources.
*League of Women Voters of the Monterey Peninsula	Yes	Yes	See Attachment A.

*Prior to mailing the questionnaire, the LWV sent a letter supporting creation of the CAC and expressed an interest in serving.

Organization	Responded?	Agreed to Participate?	Response received to inquiry on questionnaire: "Comments the District Board should consider in its decision to form a CAC."
Monterey Alliance of Neighborhoods	Yes	Yes	<p>The Community Advisory Committee should include city residents, as represented by neighborhood association boards. The Monterey Alliance of Neighborhoods was started as a forum for residents of the City of Monterey to discuss issues of common concern. Representatives of all fourteen city neighborhoods are invited to attend our monthly meetings. As such, the group is a cross-section of Monterey residents from throughout the city. Our Mission Statement is as follows: "The Monterey Alliance of Neighborhoods recognizes that the neighborhood is the basic building block of the community. Our mission is to be a unified and effective voice for Monterey neighborhoods to protect and enhance our quality of living." Issues related to the use, consumption and supply of water are of concern to the group and we would welcome the opportunity to provide our input to the MPWMD Board of Directors on important water policy issues.</p>
Monterey County Association of Realtors	Yes	Yes	<p>The Monterey County Association of Realtors would be pleased to have a representative participate in a CAC, but only if the Committee is expanded to truly represent the community. I do not believe a five member committee could or would be able to represent the many and varied interests in the District. As outlined, the proposed five member CAC appointed by the five elected Directors would be more of a political committee, representing the views of the Directors. The District had a CAC in the late 1990s that proved to be quite successful in making recommendations to the Board on water conservation issues. This previous CAC had a membership of approximately 15 individuals who represented business, residential and environmental groups. With all points of view and potential impacts aired and discussed, the CAC has a meaningful purpose. The Board is better served if it receives recommendations that have been evaluated by the parties that will be affected by the proposed rules and regulations.</p>
Monterey County Hospitality Association	Yes	Yes	<p>MCHA is interested in serving on a CAC only if the CAC is organized to be broadly representative of community interests. The draft proposal for a CAC of only 5 members appointed by elected directors does not strike us as workable and would instead be a mini-board as opposed to a genuine "community" advisory body. MCHA was pleased to have representatives on the Citizens Advisory Committee in the late 1990s that worked hard and successfully on preparing the District's Expanded Water Conservation and Standby Rationing Plan ordinance adopted by the District and also approved by the Public Utilities Commission in slightly modified form as a plan of the California American Water Company, Monterey Division. That CAC had roughly 15 members broadly representative of business, residential, municipal and environmental interests. We believe that CAC is a suitable model for forming a Community Advisory Committee if the District chooses to proceed.</p>

Organization	Responded?	Agreed to Participate?	Response received to inquiry on questionnaire: "Comments the District Board should consider in its decision to form a CAC."
Naval Postgraduate School	Yes	Yes	Staff at the NPS contacted the District by telephone and said they do want to participate. Written notification will be provided.
New Monterey Neighborhood Association	Yes	Yes	We believe that it is critical that the District Board receives substantive input from residents via the CAC.
Presidio of Monterey	Yes	Yes	The Presidio of Monterey welcomes an opportunity to work with the community on such important issues.
Water for Us	Yes	Yes	
Monterey County Convention & Visitors Bureau	Yes	No	We are primarily a marketing organization. We do not have resources to participate in such activities. We depend on the MCHA to be the voice in tourism.
Carmel Chamber of Commerce	No		
Carmel Residents Association	No		
Carmel Valley Chamber of Commerce	No		
Monterey Commercial Property Owners Association	No		
Monterey County African American Chamber of Commerce	No		
Monterey Peninsula Chamber of Commerce	No		
Monterey Peninsula Taxpayers Association	No		
New Monterey Business Association	No		
Pacific Grove Chamber of Commerce	No		
**Planning and Conservation League Foundation	No		
Seaside/Sand City Chamber of Commerce	No		
Sierra Club, Ventana Chapter	No		
***Technical Advisory Committee Members	No		

** Letter returned to District marked undeliverable. On 6/7/06 emailed letter to Central Coast Regional Coordinator. Awaiting a reply.

*** Emailed all TAC members and asked them to provide the District with names of neighborhood groups within their jurisdictions. No response received.

**COMMUNITY GROUPS THAT INDICATED AN INTEREST IN PARTICIPATING
ON THE COMMUNITY ADVISORY COMMITTEE**
December 2006

	ORGANIZATION	CONTACT
1.	Builders Exchange of the Central Coast	Gwen Wells
2.	Carmel River Steelhead Association	Roy Thomas
3.	Carmel Valley Association	Robert Greenwood
4.	Coalition of Homeless Services Providers	Glorietta Rowland
5.	Friends of the Sea Otter	D'Anne Albers
6.	Helping Our Peninsula's Environment	David Dilworth
7.	Housing Authority of Monterey County	Alan Styles
8.	LandWatch of Monterey County	Lupe Garcia
9.	League of Women Voters of the Monterey Peninsula	Janet Brennen
10.	Monterey Alliance of Neighborhoods	Greg Pickens
11.	Monterey County Association of Realtors	Sheryl McKenzie
12.	Monterey County Hospitality Association	Bob McKenzie
13.	Monterey Peninsula Chamber of Commerce	Elizabeth Vitarisi-Suro
14.	Monterey Peninsula Taxpayers Association	Tom Rowley
15.	Naval Postgraduate School	Peter Dausen
16.	New Monterey Neighborhood Association	Bruce Crist
17.	Presidio of Monterey	Dewey Baird
18.	Water for Us	Paul Bruno

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Appendix F

Questions and Answers Submitted in Writing

(Includes questions submitted in writing by CAC members and written responses received from the water supply project sponsors. Many questions received were responded to orally by the project sponsors during their presentations to the CAC. All written questions were submitted to the project sponsors, but responses have not been received for every question.)

From: Janet B rennan [janetb@montereybay.com]

Sent: Wednesday, February 07, 2007 9:00 AM

To: Andy Bell

Subject: Questions Regarding Aquifer Storage and Recovery in Seaside Basin

Andy - I've the following questions:

1. What is the current status of Phase I?
2. What is the status of Phase II?
3. What environmental impacts and mitigation measures, if any, were identified in the EIR on Phase I?
4. What is the relationship between this project and the Seaside Groundwater Basin Watermaster Board? Does the Board have any jurisdiction over the project?

I don't mind if you share these with the rest of the Committee. Janet

From: Rgreenwood@aol.com
Sent: Thursday, February 08, 2007 9:43 AM
To: Andy Bell
Subject: CAC

The Matrix cites a cost of \$610/AF for A.S. & R. For comparison with this and other WSP's, what is the average cost/AF to Cal-Am for our existing water supplies? Robert Greenwood

From: liWINOS@aol.com

Sent: Monday, February 12, 2007 5:14 PM

To: Andy Bell

Subject: Questions for A.S.R. from Roy Thomas

- 1.) What is the maximum amount (C.F.S.) of water that can now be removed from the Carmel River. ?
- 2.) Where is the requirement that river water stored in the Seaside Basin will be offset with water taken out during Spring, Summer, and Fall. ?
- 3.) In the past how much Carmel River water was used to offset the Seaside Basin by all extractors (people who pump water) ?
- 4.) Why not pump (extract) out water only during high flow (more than 100 CFS) times of year. ?
- 5.) Doesn't Spring extraction of river water have a negative effect on all fish hatchlings, frogs, and turtles when the " river flow" is less than " bank full flows".?
- 6.) Are there other sources of excess water that could be stored above or in the Seaside basin.?
- 7.) Is water stored and recovered in the A.S.R. Project subject to the provisions of order 95-10 , which requires new water be traded for reduction in Carmel River Diversions.?

From: Ron Chesshire [rchesshire@nccrc.org]

Sent: Monday, February 12, 2007 3:22 PM

To: Andy Bell

Subject: ??? Questions prior to Feb 13th

Andy, in A. Citizens Advisory Committee Charge, pg 1, bottom, it states that we are to prepare a report summarizing our comments on the 7 projects, including merits and drawbacks of each project, ***in terms of its capability to address the Monterey Peninsula's water supply need.*** So, 1. How much water does the Monterey Peninsula need? 2. Does the District prefer to address the need with a single project, multiple projects, or it doesn't have a preference. Thank you, Ron Chesshire

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FEB 13 2007

MPWMD

Questions on ASR

Feb. 13, 2007

From Manuel G. Fierro

Whose water is the water pumped by the ASR?

What is the cost to pump the water?

Explain the Cal Am water rights and how it will affect the system when Cal Am goes on the stock exchange.

If a 20,000 to 22,000 AFY desal plant is built, will the ASR system be needed? Explain why even if a yes or no answer is given.

If Prop 50 funds are available, won't this be the misuse of public funds by paying Cal Am for the use of their pipe line?

How will Cal Am's sale on the stock exchange in the fall affect Cal Am's role in the implementation of the ASR?

Explain the water rights Cal Am has in the Seaside Basin.

13 Feb 07

TO: MR. ANDREW M. BELL, P.E., MPWMD

SUBJECT: QUESTIONS RELATIVE TO 26 FEB 07 REVIEW OF PROPOSED
WATER PROJECT NO. 1 – AQUIFER STORAGE AND RECOVERY IN SEASIDE
BASIN (MPWMD PROPONENT)

1. Clarification of item 7, "Project Yield"
 - a. Is the maximum CR diversion of 2,420 AFY limited by permit, pipe size or what?
 - b. Is the maximum Seaside extraction from Seaside of 1,500 AFY limited by infrastructure capabilities or a historical extraction figure?
 - c. Is the Seaside annual yield of 920 AFY what MPWMD suggests is a "safe" yield after implementation of the Seaside ASR project?
2. Clarification of item 9, "Comply w/ Ord 95-10"
 - a. My understanding of this ASR project is that 920 AFY ASR water will reduce the amount that Cal-Am will need to pump. Is 920 AFY ASR water subtracted from the amount legally pumped during the water year or does 920 AFY reduce the amount in violation (70%) that is pumped from the river?
3. What is the relationship, if any of the MPWMD Seaside ASR Project and the Seaside Adjudication mandate?
4. Can the CAC get a reader's digest briefing of the Seaside Basin Adjudication issue?
5. Can the CAC be provided with a copy of the Padre Consultants 2005 report (Block 74/75)?

Thank You,
Dewey J. Baird
Presidio of Monterey

MPWMD CITIZENS ADVISORY COMMITTEE
Questions & Answers between CAC Member Robert Greenwood and MPWMD Staff
Regarding the MPWMD Sand City Desalination Project

March 27, 2007

Robert Greenwood to District Engineer Andy Bell

Question: what data are available to validate the practicality of low-angle beach wells ?

March 28, 2007

Andy Bell to Robert Greenwood

I posed your question to Joe Oliver, and he asked that I confirm with you the following:

Are you inquiring about "offshore" (i.e., perpendicular to shoreline) HDD well, or "onshore" (i.e., parallel to shoreline) HDD wells?

From the work that CDM compiled for the District on the MPWMD Sand City Desalination Project evaluation, we know that there are serious questions about the feasibility of "offshore" HDD wells, due to the unproven technology of drilling by the "dead end" method into the local shallow offshore aquifer system. The "onshore" HDD well drilling technology, however, is quite different and is not a "dead end" method in that the well casing can be advanced from one end of the borehole and pulled through from the other end. This type of HDD is more common and has less uncertainty than the "offshore" concept.

Once we get your response, we will attempt to better answer your question.

March 29, 2007

Robert Greenwood to Andy Bell and Senior Hydrogeologist Joe Oliver

Thanks for explaining the two different kinds of near-horizontal wells. I had only heard of the "off-shore" variety. As for the "onshore," why should they be low-angle when vertical wells are simpler?

March 30, 2007

Joe Oliver

Robert is correct that vertical wells are simpler (and less expensive!) to construct than HDD wells. The main reason that HDD wells have been considered for this area is that the limited Sand City beachfront area available for desalination plant influent water also limits the production potential available from conventional vertical wells to capacities that did not meet the needs for the District's Sand City Desalination Project. At our current level of understanding, the "onshore" HDD well option has greater potential to meet the project's production needs than vertical wells. A less critical reason for HDD wells that did get some discussion at the time this project study was underway was that the HDD wells would create less of a "footprint" on the ground and less associated surface environmental disruption than conventional vertical wells.

From: Greg Pickens [gregpickens@comcast.net]
Sent: Monday, April 09, 2007 12:09 AM
To: Arlene Tavani
Subject: Questions for Sand City Desalination Project (SCDP) - CAC review meeting

Arlene,

My questions are:

- 1) Is HDD wells (Horizontal Directionally Drilled) or radial collector wells still the preferred intake method?
- 2) Is HDD/use of the regional wastewater treatment facility still the preferred brine disposal method?
- 3) How is redundancy addressed for SCDP and is it included in the cost projections (Bookman-Edmonston pg 5-13/14 notes 1,2 & 6).
- 4) Could SCDP be expanded to achieve the 12,500 AFY replacement goal plus 4,500 AFY future/projected need?
- 5) If SCDP could be expanded, would the ASR project (Carmel River diversion) still be required?
- 6) Does the SCDP and RUWAP (Regional Urban Water Augmentation Project) compete against each other? Could they be combined?

Please let me know if you would like this as a word attachment in the future.

Greg Pickens
643-0798

From: Paul Bruno [paul@mpe2000.com]
Sent: Tuesday, May 08, 2007 9:26 AM
To: Andy Bell
Subject: CAC questions re: PSM Desal

1. At this time, does PSM have any valid permits that would be applicable to the proposed desalination plant?
2. How much is the estimated cost? What is PSM's credit rating for a financing of this scale? Show us something that says that PSM could actually finance something this large.
3. PSM has made statements about things that it was going to do such as hire a consultant to prepare an Environmental Impact Report, hire engineers, build a pilot project, etc.. What substantive work has been done in the last 6 months? Please provide a detailed description of each activity, when it was completed, who performed the work, how much did it cost, who paid for it, etc.
4. Please provide any studies or other analyses that PSM did to investigate other sites for a desalination plant in the Moss Landing area.
5. How much would it cost to build the delivery and water storage system to get the water from Moss Landing to CalAm's water system? What have you done on the engineering, design, and environmental studies for this part of the system? Show us specifics.
6. How many staff assigned to water supply services does PSM presently have? How many staff would it take for the new water supply project—all aspects including the associated infrastructure?
7. How would PSM staff the desal plant and operation of all of the associated infrastructure (treatment plant, storage facilities, pipelines, pumps, etc.)? Would PSM enter into an Operating Agreement with Poseidon? What operating experience do they have? Do they have approvals from the State to operate facilities? Have they shown the technical, financial, and management expertise required by the State?
8. What financial projections have been made regarding the price that PSM would have to charge for the water supplied to its own ratepayers? Please provide that analysis. How would decisions be made for future water rates for customers who are not PSM ratepayers? Would such decisions be made by the PSM board of directors?

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5/8/2007

Paul Bruno Questions re:

Pajaro/Sunny Mesa Community Services District Project

Responses provided by Peter MacLaggan, Poseidon Resources, July 10, 2007

1. At this time, does PSM have any valid permits that would be applicable to the proposed desalination plant?

Response: Monterey County and the Central Coast Regional Water Quality Control Board have issued permits for Pajaro-Sunny Mesa Community Service District's (PSM) proposed pilot plant. Unlike a privately owned utility, PSMCSD is acting as the lead agency for its project for CEQA purposes. PSMCSD is not subject to the control or regulation of the CPUC.

2. How much is the estimated cost? What is PSM's credit rating for a financing of this scale? Show us something that says that PSM could actually finance something this large.

Response: In 2005, Poseidon Resources prepared a preliminary cost estimate for the 20 million gallon per day Monterey Bay Regional Desalination Plant (Project). The estimated cost of construction at that time including contingencies was \$132,000,000. A detailed breakdown of the cost estimate was provided to the Monterey Peninsula Water Management District (MPWMD) consultant on May 30, 2006. PSM is a public entity that has the statutory authority to sell long-term bonds or certificates of participation. See attached letter from PSM's bond counsel describing the District's bonding capacity for the desalination plant and appurtenances (Attachment 1).

3. PSM has made statements about things that it was going to do such as hire a consultant to prepare an Environmental Impact Report, hire engineers, build a pilot project, etc. What substantive work has been done in the last 6 months? Please provide a detailed description of each activity, when it was completed, who performed the work, how much did it cost, who paid for it, etc.

Response: Earlier this year, PSM suspended work on the environmental impact report and pilot plant pending outcome of three consensus processes that are currently underway to develop a comprehensive water resource plan for the Monterey Bay Region: (1) MPWMD Community Advisory Group; (2) Managers' Group; and (3) CPUC Division of Rate Payer Advocates.

4. Please provide any studies or other analyses that PSM did to investigate other sites for a desalination plant in the Moss Landing area.

Response: PSM consultants and attorneys conducted a full survey and analysis of every parcel of land within the North Monterey County Local Coastal Plan (LCP) that would allow the development of a seawater desalination plant. They also analyzed available infrastructure. PSM's consultants discussed the District's desire and search for a site to remedy existing water supply

problems with senior Coastal Commission staff. PSM staff and contract attorneys and engineers reviewed and analyzed existing county ordinances and county and regional plans, including federal and state agreements and privately held historical records of the development and drafting of the North County LCP, to determine that the PSM location (National Refractories) was the premier site for a plant to provide water to PSM customers and North County. The District Board of Directors received this information during several meetings. Discussions were also held with Duke Energy employees and PSM staff and consultants, but PSM concerns about significant public opposition and regulatory disfavor toward the long term viability of "once through" cooling, and its significant local environmental impacts, made the Duke site problematic and less viable to our agency.

5. How much would it cost to build the delivery and water storage system to get the water from Moss Landing to Cal-Am's water system? What have you done on the engineering, design, and environmental studies for this part of the system? Show us specifics.

Response: In 2004, PSM consultant Kennedy/Jenks Consultants (KJC) prepared a preliminary design for the pumping, storage and transmission line facilities for the Monterey Bay Regional Desalination Plant. On September 15, 2004, KJC submitted the preliminary cost estimate for the pumping, storage and transmission line facilities to the MPWMD. The estimated cost of construction at that time including contingencies was \$38,500,000. On May 31, 2006, KJC provided the MPWMD's consultant with an updated cost estimate. The estimated cost of construction at that time including contingencies was \$50,755,500. KJC used the ENR index to update the cost estimate for the pumping and storage facility. To update the cost estimate for the transmission line, KJC used unit prices for a similar job that it recently bid. The proposed alignment for the Monterey Peninsula transmission pipeline is shown in **Figure 1**.

6. How many staff assigned to water supply services does PSM presently have? How many staff would it take for the new water supply project-all aspects including the associated infrastructure?

Response: PSM has nine water employees, not including administrative staff and contract engineers. The District currently produces, operates, and provides, consistent with California law, public water services and supplies to customers, households, commercial and industrial businesses, and agricultural enterprises both inside and outside the District's boundaries. The District's service area is shown in **Figure 2**.

7. How would PSM staff the desal plant and operation of all of the associated infrastructure (treatment plant, storage facilities, pipelines, pumps, etc.)? Would PSM enter into an Operating Agreement with Poseidon?

Response: PSM, after research and review, has concluded that Poseidon Resources Corporation (Poseidon) is qualified to develop, construct and manage the district's proposed desalination plant at Moss Landing. PSM and Poseidon entered into a Development and Management

Agreement on July 25, 2005, for the purposes of facilitating the permitting and entitlement of the actual development of the Project to produce potable water and serve customers in Monterey County and adjacent areas. PSM is negotiating a management and services agreement with Poseidon with respect to the development, financing (if necessary), construction, operation and management of the Project.

8. What operating experience do they have?

Response: Poseidon is currently engaged in the permitting, development, financing, construction and operation of both publicly owned and privately owned water infrastructure projects throughout North America for the purpose of the production, treatment and delivery of water. See Attachment 2 for a description of Poseidon's representative experience.

9. Do they have approvals from the State to operate facilities? Have they shown the technical, financial, and management expertise required by the State?

Response: The San Diego and Santa Ana Regional Water Quality Control Boards (RWQCBs) have issued National Pollution Discharge Elimination System (NPDES) permits and waste discharge requirements for the Carlsbad and Huntington Beach projects, respectively. These projects are the only large-scale desalination projects in the State of California to receive such approval from the RWQCBs. The California Department of Health Services (DHS) has notified Poseidon in writing of its conceptual approval of Poseidon's plans to construct and operate both the Carlsbad and Huntington Beach seawater desalination projects and deliver the desalinated water into the public water systems to be served by the projects. These two projects are the only large-scale desalination projects in the State of California to receive such approval from the DHS. Once the project design is complete, Poseidon will formally apply for a domestic water supply permit. This process includes the submission of information necessary to comply with the Technical, Managerial and Financial Capacity requirements.

PSM has current TFM certification by DHS. Further, as a California public governmental agency legally authorized to act pursuant to the California Constitution and the California Government Code, PSMCSD is conclusively presumed to have all of the expertise authorized, required, and necessary to develop, own, manage, and operate a desalination plant for the purposes of producing potable water for the uses that PSMCSD is authorized to serve water. These include all domestic, residential, commercial, industrial, and agricultural uses of water.

8. What financial projections have been made regarding the price that PSM would have to charge for the water supplied to its own ratepayers? Please provide that analysis. How would decisions be made for future water rates for customers who are not PSM ratepayers? Would such decisions be made by the PSM board of directors?

Response: The estimated cost of water produced by the proposed Project is \$1,100 to \$1,200 per acre-foot (2005 \$). A detailed breakdown of the cost estimate was provided to the

Monterey Peninsula Water Management District (MPWMD) consultant on May 30, 2006. Future water rates for customers who are not PSM ratepayers would be established through mutually acceptable long-term water purchase agreements between the purchasers and PSM, or the entity ultimately responsible for the Project. The purpose of the water purchase agreements is to set forth certain binding understandings regarding the purchase of desalinated water from the proposed Project including, but not limited to, quantity, quality, reliability, delivery point/regime, price and term.

Law Office of
ROBERT M. HAIGHT
ATTORNEY AT LAW
Municipal Bond Counsel

July 9, 2007

Joe Rosa General Manager
Pajaro/Sunny Mesa Community Services District
136 San Juan Road
Watsonville, California 95076

Re: Bonding Capacity for Desalinization Plant and Appurtenances (the "Project")

Dear Mr. Rosa:

You have requested my opinion regarding the legal capacity of the Pajaro/Sunny Mesa Community Services District (the "District") to provide bonding capacity for your proposed Project, which is estimated to cost approximately \$180 million.

Presently, the District has jurisdiction over water, street lighting and park services within the District boundaries. A seawater desalinization project would qualify as a water project.

The District may also provide financing for the Project. Such financings would include an issuance of Certificates of Participation (the "Certificates") to be executed and delivered in such principal amounts as are necessary to construct and/or acquire the Project and pay all incidental expenses and costs of issuance therefore.

You have indicated that the Project would cost \$180 million. Please be advised that the District has no particular dollar amount that it is limited to in its financings. The only limitation would be the District's ability to pay the obligation back over a period of 30-40 years. The District would be required to secure its revenue sources prior to or concurrently with, the execution and delivery of the Certificates. Securing its revenues means that the District would have water delivery contracts in place with other municipal agencies within the counties of Monterey, Santa Cruz, and/or San Benito and that the net water sales would amount to at least 115% of the debt service on the Certificates.

I would propose the District appoint a fiscal agent (the "Fiscal Agent") such as Union Bank of California, N.A., to handle and manage the various funds that the issue would require (i.e., project fund, reserve fund, costs of issuance fund and payment fund. It is my opinion that with the appointment of a Fiscal Agent, the District has sufficient staff to administer the financing portion of the Project.

Please advise any further questions.

Very truly yours,



ROBERT M. HAIGHT

cc: Marc Del Piero, Esq.

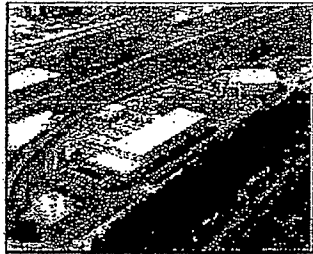
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Email: rmhaight@sbcglobal.net

Representative Project Experience

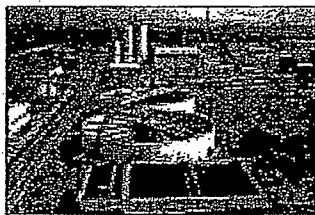
Poseidon Resources Corporation

Tampa Bay Seawater Desalination Facility



The 25 million gallon per day Tampa Bay Desalination Project is the largest potable desalination plant of its kind in the United States. The Tampa Project gained national recognition as the first major seawater desalination project to produce drinking water at a cost comparable to other new water sources. Poseidon in partnership with Stone & Webster won this project in competition with the Ionics team; the Israeli Desalination Engineering (IDE)/Parsons Team; and the Dupont/US Water team. The Tampa desalination plant includes a 25 MGD reverse osmosis facility; over 14 miles of product water conveyance pipeline and a 350-horsepower product water pump station. The project, financed with non-recourse tax-exempt debt, is the first of its kind in the United States. Poseidon, permitted, financed, designed, and oversaw project implementation through mid-term of construction. The project was subsequently purchased by Tampa Bay Water Authority in March of 2002. Since it began operation in February of 2003, the Tampa desalination plant has produced and delivered over 5.0 billion gallons of fresh potable water to the Tampa region. Currently, this facility is undergoing process enhancements aimed to address challenges in pretreatment system performance and is expected to reach full production capacity by the fall of 2007.

Cadereyta Water Reclamation Facility



In October 1996, Poseidon Resources Corporation, through the special purpose company Aguas Tratadas de Cadereyta, signed a contract with the Petroleum Company of Mexico (PEMEX) to treat waste streams from the refinery at Cadereyta, Mexico for reuse at the refinery. The Reclamation Facility began full operation in October 1998. This facility consists of three trains for separate treatment of municipal wastewater, refinery process waste flows, and cooling tower blowdown, and demineralizer regeneration streams, a total of 13.8 MGD. Treatment of the latter streams



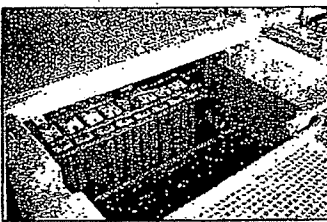
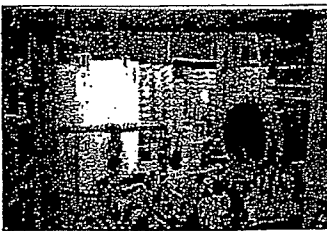
consists of warm softening, filtration, and desalination by reverse osmosis, with the reject passing to evaporation and crystallization to create a zero-discharge facility. The product from desalination treatment is used for boiler feed water. The only waste streams from the plant are sludge and salt crystals.

Madero Water Reclamation Facility



Poseidon Resources Corporation, through the special purpose company Aquas Tratadas de Madero, signed a contract with the PEMEX in October 1997, to treat waste streams from the refinery at Madero, Mexico for reuse at the refinery. The Reclamation Facility began full operation in November 1999. The facility has a total treatment capacity of 3.5 MGD and consists of two treatment trains treating refinery process waste flows, and cooling tower blowdown and demineralizer regeneration streams. The latter streams are treated by warm softening and filtration, combined with the treated process water (having received biological and filtration treatment), and the total flow is desalted using reverse osmosis, with the reject passing to evaporation and crystallization. The product from desalination treatment is used for boiler feed water. The only waste streams from the plant are sludge and salt crystals.

Minatitlan Water Reclamation Facility



The Petroleum Company of Mexico signed a contract with Poseidon Resources Corporation, through the special purpose company Aquas Tratadas de Minatitlan, in November 1999 to finance, design, construct and operate a reclamation facility to treat waste streams from the refinery at Minatitlan, Mexico for reuse at the refinery. The Reclamation Facility is in operation since December 2001. The treatment scheme consists of two trains, one for advanced biological treatment of municipal wastewater and the second for biological treatment of refinery process waste flows, a combined total capacity of 15.7 MGD. Of the total flow, 9.1 MGD is further treated using ultrafiltration (UF) membrane pretreatment system followed by reverse osmosis desalination facility. The product from desalination treatment is used for boiler feed water and other industrial process needs.

Salina Cruz Water Treatment Facility

The Salina Cruz water treatment facility is located in the state of Oaxaca, a moderately arid region within Mexico. Oaxaca receives most of its water during a winter rainy season and experiences water shortages during the drier summer months. To address the regions water needs, our industrial customer Pemex, specified a multi-train water treatment and reuse system integrated with an ocean desalination system. The seawater desalination facility uses large intake beach wells, greensand filters and reverse osmosis membranes. The beach wells used at the Salina Cruz facility are the largest seawater intake wells in North America - three Raney-type radial collectors with capacity of 3.8 MGD, each. The facility operates on a continuous basis since the fall of 2002 and has a capacity utilization factor of over 95%.

Tula Wastewater Treatment Facility

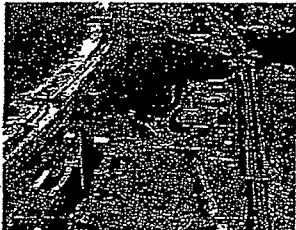
The 5.5 MGD Tula wastewater treatment plant is located in the northern suburbs of Mexico City. The purpose of this plant is to produce effluent for water reuse in the PEMEX's Tula facility. The wastewater plant consists of primary treatment facilities, biological wastewater treatment, and chemical filtration. Sludge from the biological treatment processes is disposed to a local landfill. The plant is in operation since October 2000. The facility operational downtime is less than 2 %, which is well within the contractual agreement.

Cranston, Rhode Island Wastewater Treatment Plant



Poseidon Resources Corporation, through its special purpose company Triton Ocean State LLC, was selected by the city of Cranston, Rhode Island to make upgrades and improvements to the city's wastewater treatment plant and to operate the plant under a twenty-five year lease and water treatment arrangement. Triton has completed over \$30 million in required upgrades and improvements to the treatment plant (23 MGD capacity) and collection system since the contract commenced in September 1997. Additionally, Poseidon made an upfront payment of \$48 million, which the city used to defuse existing debt, repay inter-government obligations, and provide rate reduction for customers. Poseidon provided equity, and the debt was financed on a non-recourse basis with taxable institutional debt and tax-exempt revenue bonds.

Large-Scale Seawater Desalination Plant, Carlsbad, California



Poseidon has been working with the City of Carlsbad since 1998 on a public-private partnership to construct a 50 MGD (190,000 m³/d) plant at the site of the Encina Power Station. The plant is scheduled to be completed by 2010, and will produce enough drinking water to serve 300,000 residents annually.

In 2006, Poseidon and the City of Carlsbad completed the last in a series of agreements that provide Carlsbad with a high quality, locally-controlled, drought-proof supply of water. Under the agreements, Poseidon will provide the City of Carlsbad with its entire daily requirement for water, up to 25 MGD, and assume all risks and responsibility for the financing, development, construction and operation of the project. This past year Valley Center Municipal Water District, Rincon del Diablo Water District and Sweetwater Authority entered into similar water purchase agreements with Poseidon to purchase a percentage of their supply. The Carlsbad plant is over 65% subscribed and Poseidon is currently in negotiations with additional local water agencies for the remaining output.

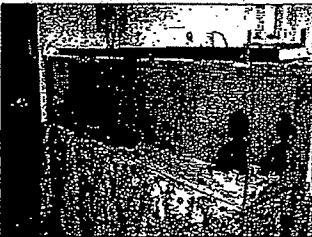
Also in 2006, the City of Carlsbad's City Council unanimously approved certification of the Environmental Impact Report (EIR)

and local land use permits for the Carlsbad desalination plant being developed by Poseidon. The desalination project's environmental review process commenced in May 2004 and benefited from significant public input and involvement over a 18 month period. In approving the desalination plant's EIR, the City Council concluded there were no significant, unavoidable impacts for both the construction and on-going operation of the plant related to thirteen different areas studied including noise, traffic, growth-inducement, air and water quality, land use, public utilities and natural resources. The EIR was independently prepared for the City of Carlsbad by consulting firm Dudek & Associates, Inc.

On August 16, 2006 the San Diego Regional Water Quality Control Board issued a five-year discharge permit, which includes a number of environmental protections designed to regulate the discharge of the concentrated seawater byproduct of the desalination process at the Carlsbad plant. Also in August Poseidon submitted its coastal development permit application to the California Coastal Commission and is on schedule for a public hearing in 2007. The Coastal Development Permit is a critical discretionary permit required to build the 50-million-gallon-per-day desalination plant in Carlsbad. Finally, on October 25, 2006, the California State Department of Health Services (DHS) issued its preliminary approval for the Carlsbad desalination plant to produce drinking water. DHS' conditional conceptual Domestic Water Supply Permit will be finalized once the plant has received its remaining development permits and prior to the completion of construction.

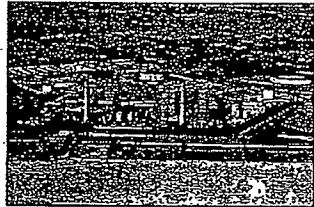
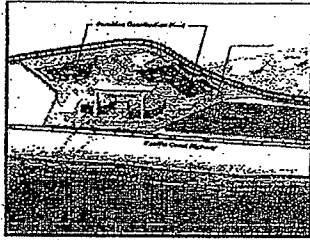
An internationally-renowned team selected to design, engineer, construct and startup the Carlsbad seawater desalination project. In support of Poseidon Resources, the team consisting of Acciona Agua and its partners, American Water, the J.R. Filanc Construction Company and PBS&J, will be responsible for building the largest seawater desalination plant in the Western Hemisphere. GE Water & Process Technologies, has also joined the team to invest in the final stage of the Carlsbad project.

Carlsbad Demonstration Seawater Desalination Facility, California



In order to develop comprehensive background information for the design and permitting of several large seawater desalination plants in Southern California, Poseidon Resources has constructed a demonstration seawater desalination plant at the Encina Power Plant in Carlsbad. The seawater desalination demonstration facility consists of a 110-gpm raw water intake feed pump station; basket strainer; feed storage tank; a 50-gpm conventional and microfiltration pretreatment systems; filter effluent transfer pumps; RO feed water storage tank; 5-micron cartridge filter; 40-gpm high-pressure reverse osmosis (RO) feed pump; a single-stage RO system; lime conditioning post-treatment system; and ultraviolet (UV) disinfection system. The demonstration plant is fully automated and is equipped with computerized data generation, monitoring and logging system. Demonstration plant's state-of-the-art design, configuration and multifunctional use have been recognized by the San Diego Section of the American Planning Association, which granted this project the Year 2003 First Place Award in the Category of Innovative Use of Technology. The demonstration plant also received the American Academy of Environmental Engineers 2006 Grand Prize for Excellence in Environmental Engineering Research. In addition, on September 12, 2006 the International Water Association (IWA) awarded Poseidon Resources the 2006 Global Grand Prize in the Applied Research category for advancing seawater desalination science. The demonstration plant is equipped with a marine aquarium where aquatic organisms endogenous to the area to test the effect of the desalination plant discharge on the aquatic life. The marine species have adopted seamlessly and after more than six months of continuous exposure to the elevated salinity concentration, are healthy and tolerate the new discharge conditions very well.

Seawater Desalination Plant at Huntington Beach, California



The Poseidon Seawater Desalination Project at Huntington Beach is a 50 MGD seawater desalination plant that would provide a reliable new local source of high quality water for the residents of Orange County, California. Huntington Beach has the opportunity to be at the front of the pipeline of this new local, drought-proof water supply. The desalination facility in Huntington Beach would also be the home to a 10-million gallon water storage tank of drinking water. On a regional level, Orange County will benefit from a new source of water supply in the basin, enhanced system reliability, higher water quality, and an environmentally friendly project that reduces dependency on imported water from Northern California and the Colorado River. The desalinated water would go through a newly constructed a seven mile pipeline to carry the water into the regional distribution system serving Orange County water agencies. The Huntington Beach Desalination Project is expected to be operational in 2010.

From: Janet Brennan [janetb@montereybay.com]

Sent: Tuesday, May 15, 2007 10:09 AM

To: Andy Bell

Subject: Re: Order of presentations changed - Cal-Am's Coastal Water Project will be the topic of the May 29 Community Advisory Committee meeting

My question: What is the planned capacity for the transmission pipeline to the Monterey Peninsula?

From: Greg Pickens [gregpickens@comcast.net]
Sent: Wednesday, June 13, 2007 1:38 PM
To: Arlene Tavani
Subject: Pajaro/Sunny Mesa Project - Questions
4.yr: -1

Arlene, I will not be able to attend however, here are my questions. I would also like to get a copy of the recording/presentation if the meeting is held. In advance, thanks...

- 1) Is there any update on pipeline right-of-way costs?
- 2) Am I correct in understanding that the cost of water is based on contract volume plus pipelines, pumping facilities and right-of-ways. Does this mean that if Poseidon finances the project, Monterey Peninsula users pay only for water delivered and is not responsible for the capital costs or success of the project?
- 3) What is the status of other Poseidon projects in California, the US and the world that is similar in size/scope?
- 4) What guarantee does the Monterey rate payer have that the rates will remain consistent with what they are today?
- 5) What participation will be expected of MPWMD and CAL AM if awarded the project?

Thanks Arlene,

Greg Pickens

643-0798