## TESTIMONY OF ANDREW M. BELL

I, Andrew M. Bell, provide the following prepared testimony under penalty of perjury, under the laws of the State of California, in relation to the State Water Resources Control Board (State Water Board or SWRCB) hearing to determine whether to adopt a draft Cease and Desist Order (CDO) against California American Water (CAW or Cal-Am) regarding its diversion of water from the Carmel River in Monterey County under SWRCB Order WR 95-10.

## Q1: PLEASE STATE YOUR NAME AND QUALIFICATIONS.

- 1. My name is Andrew M. Bell. My education includes a B.S. Degree in Civil Engineering from the University of California, Berkeley, and an M.S. Degree in Civil Engineering from Washington State University. I am registered in California as a Civil Engineer (C 25513) and as an Agricultural Engineer (AG 429). I have over 30 years of experience in water resources planning, engineering, and management in California and the Western United States working with local, state, and federal agencies, with specific professional experience in the fields of municipal water supply, water rights, agricultural water supply, crop irrigation, and geotechnical engineering. My professional memberships include the American Society of Civil Engineers and the American Water Works Association. I am presently employed as the District Engineer and Manager of Planning and Engineering for the Monterey Peninsula Water Management District (MPWMD, District, or Water Management District).
- 2. In my capacity as District Engineer and Manager of Planning and Engineering, I am knowledgeable regarding Monterey Peninsula water issues. I have participated in planning, engineering, and environmental impact investigations for near-term and long-term water supply projects to expand available supplies. These projects include MPWMD's New San Clemente Dam, MPWMD's New Los Padres Dam, California American Water's (CAW)

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Cañada Reservoir, CAW's Carmel River Dam and Reservoir, California Public Utilities Commission's ("CPUC") Carmel River Dam Alternative (Plan B) Project, CAW's Coastal Water Project ("CWP"), various seawater desalination projects, various wastewater recycling projects, and the MPWMD/CAW Seaside Groundwater Basin Aquifer Storage and Recovery ("ASR") Project. I am familiar with the process and projects developed by the Regional Plenary Oversight Group (REPOG), now known as the "Water for Monterey County Coalition," originally convened by the CPUC's Division of Ratepayer Advocates (DRA) to develop a more affordable alternative to the CWP. I am familiar with local, state, and federal regulations regarding permitting, construction and operation of water supply projects. I am also familiar with the Water Management District's management responsibility and practice with respect to CAW's water supply operations in the Monterey Peninsula area. I participate in the preparation of water right applications and petitions for MPWMD projects, in the resolution of protests of MPWMD's applications and petitions, in protests of applications by other entities for rights to water in the Carmel River system that are noticed by the State Water Resources Control Board (SWRCB), and in the maintenance of MPWMD's water right permits. My resume is provided as Exhibit MPWMD-AB2.

## Q2: PLEASE DESCRIBE MPWMD'S EFFORTS TO DEVELOP SEAWATER DESALINATION PROJECTS.

3. The Water Management District has conducted a number of studies and held several public workshops regarding seawater desalination as a supplemental water supply for the Monterey Peninsula area starting in 1989 and continuing through the present. In 1989, the MPWMD Board of Directors tasked staff with developing water supply options that could be supplemental to the New Los Padres Dam and Reservoir Project on the Carmel River. Variously labeled near-term or interim water supply projects, these efforts led to the conclusion that the best supplemental water supply project would be a small seawater desalination plant.

 Technical and environmental studies determined that a 3-million-gallon-per-day ("MGD") plant located in the City of Sand City was the preferred alternative. The Final EIR on that project, titled MPWMD Near-Term Desalination Project, was completed in December 1992, and the final Engineer's Report for the project, a required step in advance of the vote on the project, was issued in March 2003. MPWMD issued a Call for Bids for final design, construction, and operation of the project, and bids were received in April 1993. In the June 1993 election, the project measure was not approved by the voters, and as a result the project did not proceed.

- 4. Seawater desalination was one of the alternatives identified in environmental impact studies for the MPWMD and CAW dam projects on the Carmel River during the period 1987 through 1998. From 1998 through 2002, MPWMD participated in the California Public Utility Commission's "Plan B" process related to Cal-Am, which evaluated seawater desalination as the primary alternative to Cal-Am's Carmel River Dam and Reservoir Project. The project proposed in the Final Plan B Project Report (July 2002) became the basis of CAW's proposal for the CWP.
- 5. In 2002, the District began technical and environmental studies of a seawater desalination project in the City of Sand City area to provide 8,409 acre-feet per year of supply to support Cal-Am's water needs. These efforts included preparation of an administrative Draft EIR for the Monterey Peninsula Water Supply Project in December 2003, and issuance of technical reports as recently as June 2004. In 2004, the MPWMD Board determined not to complete the Draft EIR on this project and instead shifted its focus to CAW's CWP or other regional desalination project that could solve the Monterey Peninsula's long-term water supply need.
- 6. From 2004 through the present, MPWMD has prepared a series of reports summarizing water supply options available to the Monterey Peninsula area. These reports, each of which includes a "Matrix of Long-Term Water Supply Projects," provide information

on major seawater desalination projects, including CAW's CWP. The initial report in this series was prepared and presented in a public workshop in September 2004, and subsequent updates were presented in September 2005, October 2006, and March 2008. This latter matrix is presented as **Exhibit MPWMD-HS3**.

- evaluating technical, cost, and permitting aspects of four seawater desalination projects that have been proposed for the Monterey Peninsula. The four projects are CAW's CWP, Pajaro/Sunny Mesa Community Services District's (Pajaro/Sunny Mesa CSD) Monterey Bay Regional Seawater Desalination Project, MPWMD's Sand City Desalination Project, and Water Standard Company's Seawater Desalination Vessel. The final report for these studies, titled "Evaluation of Seawater Desalination Projects Proposed for the Monterey Peninsula" (February 20, 2008), was prepared for MPWMD by Bookman-Edmonston/GEI Consultants, Separation Processes, Inc., and Malcom-Pirnie, Inc. (B-E/GEI Consultants, et al.). A summary of desalination plant capacities and estimated costs provided by the respective project proponents is presented in Table ES-1 of this report (located on page ES-8 of the report, Exhibit MPWMD-AB3).
- 8. In early 2008, the MPWMD Board of Directors directed staff to review the potential for the seawater desalination project in the City of Sand City and former Fort Ord area studied by MPWMD from 2002 through 2004. A report on the feasibility of this project is scheduled for presentation to the MPWMD Board at their August 2008 meeting.
- Q3: WHAT ARE ANTICIPATED WATER DELIVERY DATES FOR MAJOR WATER SUPPLY PROJECTS CURRENTLY PROPOSED TO SERVE THE MONTEREY PENINSULA AREA?
- 9. In a presentation to the MPWMD Board of Directors (page 11 of March 27, 2008 presentation titled "Update of Projected Water Supply Needs and Solutions," **Exhibit**

MPWMD-AB4), CAW states an anticipated final construction date for the CWP of July 2015. This schedule also indicates that a Draft EIR for the project was anticipated to be released in July 2008. However, at the June 4, 2008 meeting of the group known as the Regional Plenary Oversight Group (REPOG), or the Water for Monterey County Coalition, it was stated that the Draft EIR for the CWP is anticipated to be issued at the end of 2008 or the beginning of 2009. This statement was made by the lead consultant preparing a regional water supply alternative to the CWP, which is proposed to be one of the project alternatives evaluated in the Draft EIR for the CWP. This indicates a delay in the CWP project schedule by at least five months.

- 10. MPWMD consultants currently evaluating the potential for the MPWMD seawater desalination project in the City of Sand City area have made a preliminary estimate that the project could be in operation in 2015 to 2016, assuming no major permitting or legal obstructions.
- 11. In a report by Pajaro/Sunny Mesa CSD in cooperation with Poseidon Resources Corporation titled "Monterey Bay Regional Desalination Project, Conceptual Design Report" (April 2006), the "target completion date" for commercial operation of Pajaro/Sunny Mesa CSD's seawater desalination project in Moss Landing is stated to be July 2010. However, target completion dates for other phases of this project (environmental review and permitting, water supply arrangements, and design) have passed but have not been met.
- 12. In the February 20, 2008 report by B-E/GEI Consultants, et al., titled "Evaluation of Seawater Desalination Projects Proposed for the Monterey Peninsula," Water Standard Company is reported to have stated that water delivery with the Seawater Desalination Vessel Project "... will commence three years after contractual agreements are signed." The B-E/GEI report continues, "In our opinion, this seems optimistic given the uncertainties in the permitting process."

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Board for the right to divert and store water from the Carmel River and its associated alluvial aquifer, Permits 7130B, 20808A, and 20808B. A description of these permits, including the dates of filing and issuance and the respective quantities and seasons of diversion and storage, is provided in **Exhibit MPWMD-AB5**. Permit 20808A was issued jointly to MPWMD and CAW in support of the Seaside Groundwater Basin Phase 1 Aquifer Storage and Recovery (ASR) Project. The Water Management District is working to use its other permits in support of future water supply projects. On June 30, 2008, the District submitted a Petition for Change to Permit 20808B for the planned Phase 2 ASR Project. A description of the rights requested in this Petition is provided in **Exhibit MPWMD-AB6**.