

# Monterey Peninsula Water Management District 2016 Annual Report

## Accomplishments

- **Monterey Peninsula Water Supply Project** – The District has made continued progress on the Monterey Peninsula Water Supply Project working jointly with California American Water (Cal-Am), the Monterey Peninsula Regional Water Authority, and other parties. This past year, Cal-Am began work on the Monterey Pipeline.
- **Pure Water Monterey Project** – The District provided the majority of funding and provided services for work on this innovative water recycling plant, working in partnership with the Monterey Regional Water Pollution Control Agency (MRWPCA) which will own and operate the system.

This past year, the project partners successfully obtained water rights for the project, secured State Revolving Fund loan monies from the State Water Resources Control Board (SWRCB) to build the project, and certified an Addendum to the Environmental Impact Report to add the Monterey Pipeline and Hilby Pump Station. Construction on the Monterey Pipeline began in late 2016 with the District acting as Project Manager for environmental compliance assurance. When completed, the pipeline will allow Pure Water Monterey water to be supplied to Pebble Beach, Carmel and Carmel Valley and also allow excess Carmel River water to be delivered to the ASR wells in the winter.

- **Aquifer Storage and Recovery (ASR)** – The District operated the ASR facilities in coordination with Cal-Am while diverting 699 acre-feet (AF) of Carmel River Basin water for injection and storage in the Seaside Basin during the 2016 water year (WY). Since inception of the ASR program, a total of 5,685 AF has been diverted from the Carmel River for storage and subsequent recovery through the end of WY 2016.
- **Water Availability** – In cooperation with the United States Geological Survey (USGS), the District worked to calibrate an integrated ground water-surface water GSFLOW/MODFLOW model to update water availability for additional water supply from the Carmel River. In addition, the District completed a draft instream flow study and hydraulic model to simulate flow requirements for steelhead in the Carmel River. These models will be finalized in mid-2017, and allow the District to model different water supply scenarios and their impacts on the Carmel River environment.
- **Well Permitting** – MPWMD issued 11 Water Distribution System Permits and 13 Confirmation of Exemptions for private properties that met the criteria established in District Rules and Regulations. Applications were reviewed for potential impacts to the water resource system and other water users.
- **Proposition 1 Integrated Regional Water Management (IRWM) Program** – An agreement for sharing Proposition 1 funds in the Central Coast funding area was executed that will allow the Monterey Peninsula region to receive \$4.2 million for



*Above - New Monterey Pipeline under construction to facilitate distribution of water from the Pure Water Monterey project, and transmit excess Carmel River water to ASR wells in the winter.*  
*Below – Backflush pit at ASR site. 699 AF of Carmel River water were injected for storage in the Seaside Basin in 2016.*



- implementation of projects. Initial scopes of work were also developed for projects to ensure the involvement of Disadvantaged Communities in IRWM planning efforts.
- **Legally-Mandated Carmel River Mitigation and Stewardship** – Approved an Initial Study/Mitigated Negative Declaration and completed permit applications for an upgrade to the Sleepy Hollow Steelhead Rearing Facility, which includes construction of a new intake and water supply system to protect the facility from changes in river flows due to the removal of San Clemente Dam and to allow the facility to continue to operate during periods of extreme drought or high flows. The total project cost is estimated at \$2.2 million and will be reimbursed from funds generated by a Settlement Agreement between Cal-Am and the National Marine Fisheries Service (NMFS). The project is scheduled to be completed in 2018.



*Rescued Carmel River steelhead fish are released into the Sleepy Hollow Steelhead Rearing Facility. In 2016, the District reared 425 rescued steelhead at the facility.*

The District successfully rescued 425 wild steelhead from approximately 10.9 miles of the Carmel River, and reared them in the Sleepy Hollow Steelhead Rearing Facility. All fish were electronically tagged and released into the lower river in early December. An additional 239 steelhead were rescued from an isolated pool below Los Padres Dam and released into the river.

Staff reinstalled the Dual-frequency Identification Sonar (DIDSON) in the lower river from January through May to count immigrating adult steelhead for the fourth year in a row. Staff also continued to work for the second year with NMFS, the USGS, and California State University at Monterey Bay on field studies to: (a) evaluate the impact of removing San Clemente Dam, and (b) develop a steelhead population life history model for the watershed, based on tagged fish from NMFS' studies, MPWMD fall population surveys, and fish released from the Sleepy Hollow Steelhead Rearing Facility. This effort included NMFS reinstallation, for the second year, of a tag detection array at the Carmel Area Wastewater District's treatment plant. Fisheries staff also completed three additional miles of survey work in the lower 15 miles of the Carmel River to document changes in the profile of the channel bottom since 2007.

District crews carried out a Vegetation Management Program in the active channel of the Carmel River at 13 sites to prevent debris dams and erosion, trimming back encroaching vegetation and reducing the hazard of downed trees in preparation for winter flows. Trash was removed from along the river before winter rains washed it into the ocean. District staff also planted native trees on exposed banks to improve habitat value, protect water quality, and reduce bank erosion.

- **Los Padres Dam Improvements** – A study of upstream volitional fish passage alternatives was started and proposals received for studying alternatives to the dam and management of reservoir sediment. District expenses will be partially reimbursed by Cal-Am under a Public Utilities Commission decision to plan for the long-term future of the dam and associated reservoir.
- **Salinas and Carmel Rivers Basin Study** – The District developed a final Plan of Study for a Basin Study that will evaluate future water demands and water supplies taking into account the effects of climate change. The area includes all of the Salinas River Valley through Monterey and San Luis Obispo Counties, the Monterey Peninsula, and the Carmel River Basin. The US Bureau of Reclamation is providing \$1.8 million in grant funds for the study, which is expected to take about four years to complete.
- **North Monterey County Drought Contingency Plan (DCP)** – Received a federal grant of \$280,000 to prepare a plan for North Monterey County areas from Salinas to the Monterey Peninsula to better cope with recurring droughts in the region. The DCP is to be coordinated with the Basin Plan.

- **Conservation** – The District approved 1,602 rebate applications \$537,239 for annual savings of 28.9 acre-feet of water. Staff began inspecting building-by-building for compliance with the non-residential water efficiency requirements (Rule 143). More than 744 businesses were inspected. All Peninsula businesses will be verified by 2019.

1,163 residential properties were inspected to verify compliance with water efficiency standards (Retrofit Upon Change of Ownership or Use).

933 water permits were issued, including 108 water permits for water entitlement holders.

*Workshops:* Hosted several greywater (“Laundry to Landscape”) rainwater harvesting, and water efficient irrigation workshops, including hands-on demonstration installations at local locations. One of the locations was Garland Ranch Regional Park, where a cistern was installed to water a drought-tolerant demonstration garden. Hosted a hands-on sheet mulching workshop at Carmel Middle School.

- **Community Outreach** - During 2016, the District’s website was updated and converted to a new format. Constituents were contacted through direct mail, radio, and print ads on a variety of topics including adoption of the Monterey Peninsula Water Conservation and Rationing Program. Posted weekly updates to the District’s Facebook page. New signage was installed at the ASR site.

Outreach to schools continued with presentations to fifth graders from the International School of Monterey; Chartwell High School; seniors of Environmental Science classes from Robert Louis Stevenson School and graduate school classes at CSUMB in Watershed Science and Policy. Presentations were also made to the Carmel Valley Village Improvement Committee and the California Naturalist program.

Executed over 25 presentations to community groups and city councils, and several guest opinions in local media. The District promoted and participated in an Ultra-High Efficiency Toilet rebate event at Home Depot, and Conservation staff participated in numerous outreach events to provide information and water saving devices to the public.

- **Awards** - Received the Association of California Water Agencies Region 5 Outstanding Outreach Participation Award. Entered a drought tolerant landscape display in the Monterey County Fair and was awarded second place in the Water-Wise Landscape category, and second place in the category of Gardens of Monterey County: Featuring Native/Drought Tolerant Landscaping, by the Water Awareness Committee of Monterey County.



*ACWA Region 5 Outstanding Outreach Participation award. Left to right: David Stoldt, Steve Thomas, Stephanie Locke and ACWA President, Kathleen J. Tieg*

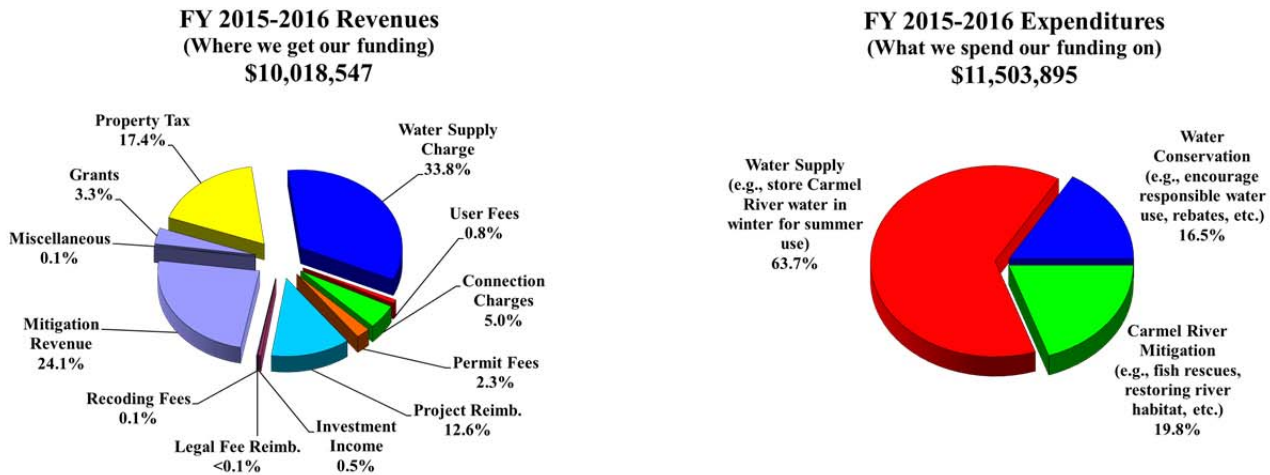


*Suresh Prasad, Chief Financial Officer, pictured with the Certificate of Achievement for Financial Excellence awarded to the District by the GFOA.*

## Financial Analysis

The District has prepared a Comprehensive Annual Financial Report (CAFR). A CAFR is a set of government financial statements comprising the financial report of a municipality that complies with the accounting requirements promulgated by the Government Accounting Standards Board. MPWMD received a clean financial audit report with no material weakness or deficiencies. The audit for fiscal year 2015-2016 was conducted by Hayashi Wayland, an independent auditing firm. The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the District for its CAFR for the fiscal year ended June 30, 2015. (*Financial Analysis continued page 4*)

As shown in the charts on the next page, total revenues received in Fiscal Year 2015-2016 were \$10,018,547, while expenditures totaled \$11,503,895, generating a decrease in fund balance of \$1,485,348. As of June 30, 2016, the District's total fund balance was \$3,631,551. The budget for Fiscal Year 2016-17 anticipates expenditures of \$12,560,650.



## Future Financing Methods

The District has historically paid for costs associated with water supply projects on a pay-as-you-go basis with the majority of the funding coming from user fees, which was the District's largest and most fluid revenue source. However, beginning in 2012 the User Fee revenue from Cal-Am customers was not available to the District. The District now funds its water supply projects from the Water Supply Charge established in 2012. The District also uses a line of credit to provide additional funding for preliminary costs of current and future potential water supply projects. Possible sources of funds to pay for actual construction of future water supply projects include ongoing revenue increases, user fees, water supply charge, new revenue categories, grants, and bond financing. Actual funding sources will be dependent on the type of project, the amount of funding needed and other variables.

## Water Supply

**Groundwater Zone Charge:** In June 1980, the District Board approved formation of a groundwater charge zone to provide the legal basis for a comprehensive well-monitoring program consisting of well registration, well metering, and water production reporting. However, the District abandoned this source as a revenue and no groundwater charge will be levied in any zone of the District during Water Year 2016.

**Available Water Supplies:** In Water Year 2016, 12,002 AF of water was legally available to serve Cal-Am customers within the District. Similarly, approximately 3,046 AF of water were assumed to be available to serve non-Cal-Am users extracting water from the Carmel Valley Aquifer and the Seaside Basin. However, because of legal and regulatory constraints, long-term water supplies available to Cal-Am's customers in the future will be reduced to approximately 5,500 acre-feet per year (AFY) assuming that Cal-Am will retain rights to produce 774 AFY from Seaside Groundwater sources (restored to 1,474 in 25 years), 94 AFY from the Sand City Desalination Facility, 1,300 AFY from Aquifer Storage and Recovery, and 3,376 AFY from Carmel River sources.

Non-Cal-Am pumpers outside of the Seaside Basin and Carmel River Basin that depend on percolating groundwater rights pumped 925.2 acre-feet in Water Year 2016.

**Requirements for Future Capital Improvements:** A 6,252 AFY desalination facility is expected by 2021 with the Pure Water Monterey project expected to create 3,500 AFY of new supply is expected in late 2018. Aquifer Storage and Recovery is expected to be doubled in capacity by 2018, to almost 3,000 AFY in good years. The District continues to develop plans for additional ASR opportunities for future water supply.