

Monterey Peninsula Water Management District

2017 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 and Hilby Pump Station 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 additional excess Carmel River water to be delivered to the Aquifer Storage and Recovery wells in the winter
- **Pure Water Monterey Project** – The District provided the majority of preconstruction funding for this innovative water recycling plant, working in partnership with Monterey One Water which will own and operate the system. The Advanced Water Purification Facility (AWPF), facilities to bring source waters to the AWPF, the pipeline from the AWPF to the Injection Well Facilities, and the Injection Wells Facilities are all under construction. The District is acting as Project Manager for the Injection Wells Facilities component of Pure Water Monterey. Construction of the first injection well was successfully completed in 2017. Design of the remaining two injection wells and associated facilities required for injection was completed in 2017, and the project is out to bid.
- **Aquifer Storage and Recovery (ASR)** – The District operated the ASR facilities in coordination with Cal-Am while diverting 2,345 acre-feet (AF) of Carmel River Basin water for injection and storage in the Seaside Basin during the 2017 water year (WY). Since inception of the ASR program, a total of 8,030 AF has been diverted from the Carmel River for storage and subsequent recovery through the end of WY2017.
- **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. The model is due to be finalized in early 2018. In addition, the District completed a draft instream flow study and hydraulic model to simulate flow requirements for steelhead in the Carmel River. A final version will be developed after regulatory agencies complete their reviews. These models will allow the District to simulate different water supply scenarios and their impacts on the Carmel River environment.
- **Well Permitting** – MPWMD issued 2 Water Distribution System Permits and 21 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** – The District spearheaded an effort that will allow the Monterey Peninsula region to receive \$4.2 million for implementation of projects. At the State's direction, the first round awarded in 2017 will target conservation and supply projects in Disadvantaged Communities.



Maureen Hamilton, Project Manager for Injection Well Facilities for the Pure Water Monterey Project (PWM), with test wells. The first PWM injection well was completed in 2017.

The District represented the Monterey Peninsula Regional Water Management Group submission to the Central Coast funding area application for Proposition 1 Integrated Regional Water Management Disadvantaged Community Involvement Grant funds. Approximately \$465k in Disadvantaged Community Involvement funding is allocated for the Monterey Peninsula region. The no-match grant funds will be applied to a District initiated Disadvantaged Community Needs Assessment project that will provide a basis for future Disadvantaged Community Implementation grants; the City of Monterey Franklin Street Storm Drain project; and the District High Efficiency Applied Retrofit Targets (HEART) pilot program project.

- Legally-Mandated Carmel River Mitigation and Stewardship** – The District continued processing 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 60% design plans, specifications, and cost estimate were completed. The total project cost is estimated at \$2.5 million, including environmental compliance documents, design, permits and construction. The State Coastal Conservancy has approved up to \$2.25 million for reimbursement of expenses, which will come 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 2019.

The District successfully rescued 5,499 fish from the Carmel River, five tributaries, and the spillway at Los Padres Dam. All fish were released near the tributaries confluence with the Carmel River.

Staff reinstalled the Dual-frequency Identification Sonar (DIDSON) in the lower river at the end of December and operated it until the end of February, when extreme high flows scoured out the camera and caused it to blow out for the rest of the season. Staff also conducted late season Redd (steelhead nests) surveys, counting 36 over approximately 20 miles. Staff also continued to work for the third year with NMFS on field studies to develop a steelhead population life history model for the watershed, based on tagged fish from NMFS' studies and MPWMD fall population surveys. This effort included assisting NMFS with basin-wide population surveys and installing 4 tag detection arrays from the mouth up to the Old San Clemente Dam site.



Staff member Jordan Besson and Lea Bond with National Oceanographic Atmospheric Administration tagging steelhead fish as part of a joint program with NMFS to develop a life history model for the watershed.

District crews carried out the Vegetation Management Program in the active channel of the Carmel River at 15 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 continued and a study of alternatives to the dam and management of reservoir sediment was begun. 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 began 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)** – The District continued development of 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 being partially funded with a federal grant of \$280,000 to prepare the plan, which will be coordinated with the Basin Study.
- **Conservation** – The District approved 1,342 rebate applications in the amount of \$506,461 for annual savings of 28.7 acre-feet of water. Staff conducted building-by-building inspections for compliance with the non-residential water efficiency requirements (Rule 143). More than 557 businesses were inspected. All Peninsula businesses will be verified by 2020. On the residential side, 1,028 properties were inspected to verify compliance with water efficiency standards (Retrofit Upon Change of Ownership or Use).

867 Water Permits were issued, including 86 Water Use Permits for water entitlement holders.

The District hosted several rainwater harvesting, and water efficient irrigation workshops, as well as a hands-on sheet mulching workshop at Martin Luther King Elementary School. We also targeted Multi-Family Dwelling property owners and property management companies for a class on water efficiency requirements and opportunities. The District offered two Specialized Landscaping classes focused on drought tolerant landscape and native plant selections.

- **Community Outreach** - Posted weekly updates to the District's Facebook page. Outreach to schools continued with presentations to seniors of Environmental Science classes from Robert Louis Stevenson School, Carmel High, and graduate school classes at CSUMB in Watershed Science and Policy. Presentations were also made to the Carmel Valley Association and the Paso Hondo Neighborhood Community. We also executed over 20 presentations to community groups and city councils. The District also ran monthly ads covering District activities in local media. Conservation staff participated in numerous outreach events to provide information and water saving devices to the public.
- **Awards** - The District received the Association of California Water Agencies (ACWA) Most Active Small Agency of 2017 award and ACWA's Top Outreach Participation Agency in ACWA Region 5 award. We also entered a drought tolerant landscape display in the Monterey County Fair and was awarded first place in the Water-Wise Landscape category.



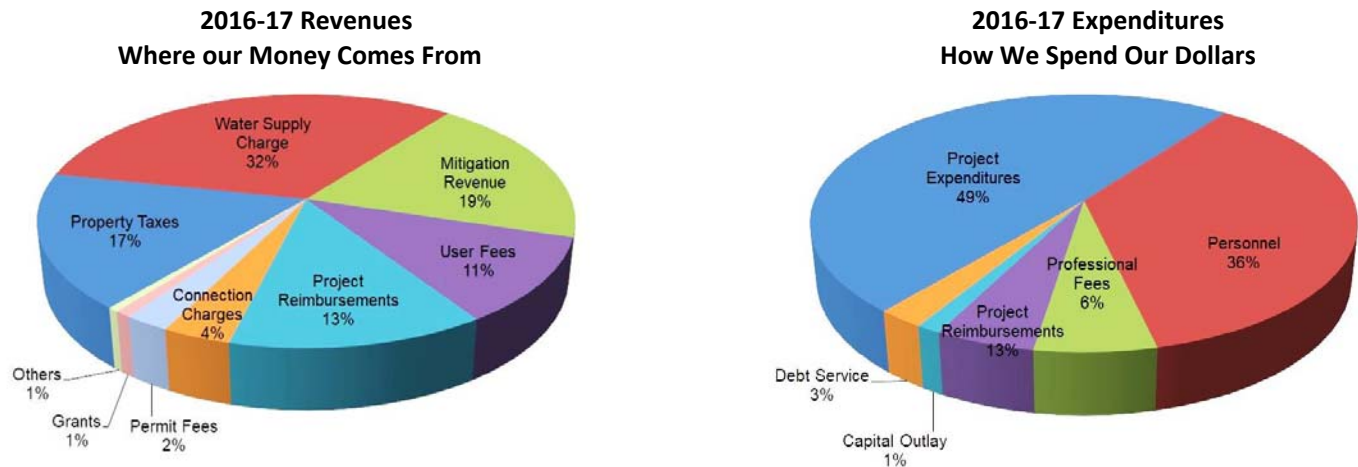
General Manager, David Stoldt, (second from the right) accepts the Most Active Small Agency award from ACWA.

Financial Analysis

The District prepared a Comprehensive Annual Financial Report (CAFR), which 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 2016-2017 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, 2016.

As shown in the charts on page 4, total revenues received in Fiscal Year 2016-2017 were \$10,557,511, while expenditures totaled \$9,332,655, generating an increase in fund balance of \$1,224,856. As of June 30, 2017, the

District's total fund balance was \$4,856,407. The budget for Fiscal Year 2017-18 anticipates expenditures of \$17,047,800.



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 was funding its water supply projects from the Water Supply Charge established in 2012. However, in 2017 the Supreme Court reinstated the User Fee, which the District began collection in April 2017. The District also has access to 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 was established in any zone of the District during WY2017.

Available Water Supplies: In WY2017, 10,609 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 939.3 AF in WY 2017.

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 in mid-2019. Aquifer Storage and Recovery is expected to be doubled in capacity by 2019, to almost 3,000 AFY in good years. The District continues to develop plans for additional ASR opportunities for future water supply.