



2019 Annual Report

Monterey Peninsula Water Management District

Accomplishments

- **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 project was virtually complete at the end of the year with delivery of water expected during February 2020. The District served as project manager for the injection well portion of the project.
- **Aquifer Storage and Recovery (ASR)** – The District operated the ASR facilities in coordination with California American Water (Cal-Am) while diverting 1,335 acre-feet (AF) of Carmel River Basin water for injection and storage in the Seaside Basin during the 2019 water year (WY). Since inception of the ASR program, a total of 9,895 AF has been diverted from the Carmel River for storage and subsequent recovery through the end of WY 2019. The District expanded its facility percolation pond to accommodate waters from two additional ASR wells to be constructed by Cal-Am. Facilities to treat produced waters began construction in 2019 to enable Cal-Am to recover ASR and Pure Water Monterey stored waters.
- **Water Availability** – In cooperation with the United States Geological Survey (USGS), the District continues to refine an integrated groundwater surface water GSFLOW/MODFLOW model to help understand Carmel River flows related to changes in groundwater pumping. 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 allow the District to simulate different water supply scenarios and their impacts on the Carmel River environment in the Los Padres removal analysis currently underway in conjunction with Cal-Am and the National Marine Fisheries Service.
- **Well Permitting** – MPWMD issued 16 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 water projects. The District represented the Monterey Peninsula, Carmel Bay and South Monterey Bay Regional Water Management Group submission to the Central Coast funding area application for Proposition 1 Integrated Regional Water Management Disadvantaged Community Involvement Grant funds. In 2019, the Monterey Peninsula was awarded \$465,000 for Disadvantaged Community Involvement projects. The no-match grant funds were 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 pilot program project.



Construction of Santa Margarita Water Treatment Facility underway in 2019. Planned for treatment of stored water from the Pure Water Monterey Project, and other ASR sources.

In 2019 the District took the lead role to coordinate the IRWM plan update, expected to be approved by the State in early 2020. The IRWM Group also expanded by 9 members bringing the total number of partners to 16.

- Legally-Mandated Carmel River Mitigation and Stewardship** – The District secured authorizations for an upgrade to the Sleepy Hollow Steelhead Rearing Facility (SHSRF) in 2018. Construction began in 2019. The upgrade 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. Currently the SHSRF is being tested in various modes and is expected to be running during the 2020 steelhead fish rescue and rearing season. The total project cost is estimated at \$2.8 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 District successfully rescued 15,013 fish from five Carmel River tributaries. No rescues were needed in the mainstem in 2019. All fish were released near the tributary's confluence with the Carmel River.

Staff also conducted late season redd (steelhead nests) surveys, counting 121 redds in 23 miles of river. And for the fourth year, Staff continued to work 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 tag detection arrays from the lower Carmel valley to above Los Padres Reservoir.



New construction at Sleepy Hollow Steelhead Rearing Facility. When the upgrade is completed the facility will operate during periods of extreme drought or high flows and should be operational for the 2020 fish rescue and rearing season.

District crews carried out the Vegetation Management Program in the active channel of the Carmel River at 6 sites to prevent debris dams and erosion. This includes trimming back encroaching vegetation and reducing the hazard of downed trees in preparation for winter flows. Trash was removed from the active channel of 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.

District staff completed revegetation and irrigation installation at the Carmel River Bank Stabilization Project just downstream of Rancho San Carlos Road. This work prevented streambanks from further collapse during the 2018-2019 winter season. MPWMD employed an environmentally friendly stabilization technique consisting of logs, rocks, and native plantings built into a cribwall at the site.

- 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 are in progress. District expenses have been 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 continued work on a Basin Study to evaluate future water demands and water supplies taking into account the effects of climate change. The area includes all 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 effort. A draft of the Study Metrics technical paper was circulated in 2019. The study, which began in 2017, is expected to take about four years to complete.

- **Conservation** – The District approved 893 rebate applications in the amount of \$259,601 for annual savings of 9.061 acre-feet of water. Staff conducted building-by-building inspections for compliance with the non-residential water efficiency requirements (Rule 143). More than 149 businesses were inspected. All Peninsula businesses will be verified by 2021. Staff completed an additional 1,139 property inspections to verify compliance with water efficiency standards for changes of ownership or use.

During 2019, the District issued 944 Water Permits and 105 Water Use Permits to Benefited Properties (i.e., properties eligible to receive a portion of a Water Entitlement). Staff conducted 740 inspections to verify compliance with permit water efficiency requirements.

As the regional entity responsible for compliance with State landscaping regulations, the District issued 31 Water Permits for new and refurbished landscapes. A total of 71,716 square feet of new landscape area was permitted. Rehabilitated area totaled 127,234 square feet. The District hosted several rainwater harvesting and water efficient irrigation workshops.

MPWMD partnered with Ecology Action to complete direct install retrofits in the disadvantaged communities in Seaside. As a result, 65 High Efficiency Clothes Washers, 8 water efficient dishwashers, and 56 Ultra-High Efficiency Toilets were installed. In addition, three leaks were repaired.

- **Community Outreach** - Posted regular updates to the District's Facebook page and Twitter account. Outreach to schools continued with presentations to classes at local schools and water curriculum provided as a partner with the Water Awareness Committee for Monterey County. Presentations were also made to many local associations and clubs. The District 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.
- **Measure J** – In November 2018, voters passed an initiative requiring the District to, if and when feasible, acquire all the water supply and distribution facilities of California American Water. The District assembled a team of experts to examine feasibility and to report its findings in mid-2019. The District reported on the initial findings that an acquisition is economically feasible in November 2019. The Board voted in December 2019 to approve second phase of the feasibility to be completed by July 2020.



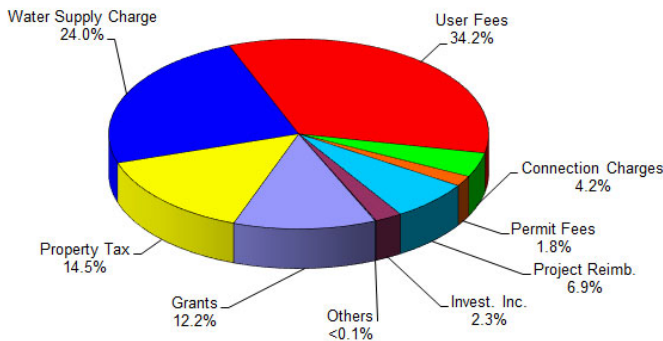
Water-wise landscaping and demonstration garden at Martin Luther King Jr. Middle School. The District's \$60,000 grant facilitated removal of 13,424 sq. feet of turf and 8,256 sq. feet of juniper to achieve an 84% reduction in water use on the site.

Financial Analysis

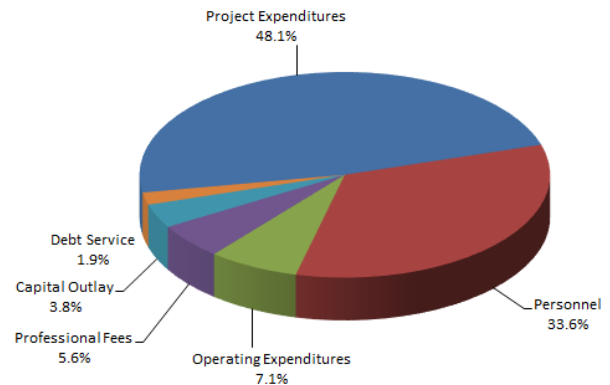
The District prepared a Comprehensive Annual Financial Report (CAFR), which is a set of government financial statements comprising the financial report of a municipality that complies with the accounting requirements promulgated by the Government Accounting Standards Board. MPWMD received a clean financial audit report with no material weakness or deficiencies. The audit for fiscal year 2018-2019 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, 2018. This District has received the CAFR award for 4 consecutive years.

As shown in the next page, total revenues received in Fiscal Year 2018-2019 were \$14,215,580, while expenditures totaled \$11,312,306, generating an increase in fund balance of \$2,903,274. As of June 30, 2019, the District's total fund balance was \$17,015,339. The budget for Fiscal Year 2019-2020 anticipates revenue of \$13,177,000 and expenditures of \$18,039,350 with \$4,862,350 coming from fund balance.

2018-19 Revenues
\$14,215,580



2018-19 Expenditures
\$11,312,306



Future Financing Methods

The District has historically paid for costs associated with water supply projects on a pay-as-you-go basis, with 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 collecting in April 2017. Possible sources of funds to pay for actual construction of future water supply projects include ongoing revenue increases, user fees, water supply charge, property tax, 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 WY 2019.

Available Water Supplies: In WY 2019, 10,130 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 Valley Alluvial Aquifer that depend on percolating groundwater rights pumped 1,071 AF in WY 2019.

Requirements for Future Capital Improvements: A 6,252 AFY desalination facility is planned for 2023 with the Pure Water Monterey project expected to create 3,500 AFY of new supply in 2020-21. Aquifer Storage and Recovery is expected to be doubled in capacity by 2020, to almost 3,000 AFY in good years. The District continues to develop plans for additional ASR opportunities for future water supply.