Monterey Peninsula Water Management District
2018 Annual Report

Accomplishments

- **Monterey Peninsula Water Supply Project** – The District has made continued progress on the Monterey Peninsula Water Supply Project (MPWSP) working jointly with California American Water (Cal-Am), the Monterey Peninsula Regional Water Authority, and other parties. This past year, Cal-Am completed the Monterey Pipeline and the Hilby Pump Station with the District acting as Project Manager for environmental compliance assurance. The proposed MPWSP desalination plant was given approval to proceed by the California Public Utilities Commission in September.

- **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 85% complete at the end of the year with delivery of water expected during summer of 2019. The District served as project manager for the injection well portion of the project.

Construction of expanded percolation pond to accommodate waters from four existing and two future ASR wells.

- **Aquifer Storage and Recovery (ASR)** – The District operated the ASR facilities in coordination with Cal-Am while diverting 530 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 8,561 AF has been diverted from the Carmel River for storage and subsequent recovery through the end of WY2018. 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 are being designed 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 completed calibration of 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. A final version is due to be completed in early 2019. These models will allow the District to simulate different water supply scenarios and their impacts on the Carmel River environment.

- **Well Permitting –** MPWMD issued 25 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 Regional Water Management Group (RWMG) submission to the Central Coast funding area application for Proposition 1 Integrated Regional Water Management Disadvantaged Community Involvement Grant funds. In 2018, the Monterey Peninsula was awarded $465k 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 (HEART) pilot program project.

2019 the District will take the lead role to coordinate the RWMG application for the next round of Proposition 1 Implementation grant funds.

- **Legally-Mandated Carmel River Mitigation and Stewardship** – The District secured authorizations 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. Construction began in September 2018 and is expected to be completed in mid-2019. 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 District successfully rescued 4,958 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 also conducted late season Redd (steelhead nests) surveys, counting 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.

View from above, as District staff use a hoe ram to remove a concrete bridge pier lying in the Carmel River.

  District crews carried out the Vegetation Management Program in the active channel of the Carmel River at 13 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 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. In addition, the District removed a large concrete bridge pier and deck that was lying in the Carmel River. This bridge originally collapsed in the 1995 flood.

  In October 2018, the District completed construction of the Carmel River Bank Stabilization Project at Rancho San Carlos Road. Work included installation of about 250 lineal feet of bank stabilization to protect both streambanks from further collapse just downstream of the Rancho San Carlos Road bridge. MPWMD employed an environmentally friendly stabilization technique consisting of logs and rocks built into a cribwall at the site, which has high visibility due to traffic over the bridge. Total cost for the project including environmental compliance documents, permit acquisition, and construction was approximately $650,000. District staff will complete revegetation and irrigation installation in 2019.

- **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. A sediment transport model was completed and reviewed by regulatory agencies. 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 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 Study Metrics technical paper and evaluation strategies were outlined in 2018. The study, which began in 2017, 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 1,135 rebate applications in the amount of $398,658.17 for annual savings of 18.14 acre-feet of water. Staff conducted building-by-building inspections for compliance with the non-residential water efficiency requirements (Rule 143). More than 208 businesses were inspected. All Peninsula businesses will be verified by 2021. Staff completed an additional 1,037 property inspections to verify compliance with water efficiency standards for changes of ownership or use).

  During 2018, the District issued 976 Water Permits and 86 Water Use Permits to Benefited Properties (i.e., properties eligible to receive a portion of a Water Entitlement). Staff conducted 911 inspections to verify compliance with permit water efficiency requirements.

  As the regional entity responsible for compliance with State landscaping regulations, the District issued 44 Water Permits for new and refurbished landscapes. An ongoing program to assist schools with water saving practices, a 13,424 square-foot turf conversion project began at Martin Luther King Elementary School in Seaside. Two native plant workshops were held at the site in collaboration with CSUMB's Return of the Natives. The District hosted several rainwater harvesting and water efficient irrigation workshops.

Volunteers assisted with turf conversion project at Martin Luther King Elementary School in Seaside.

- **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 CSUMB. Presentations were also made to many local associations and clubs. 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.

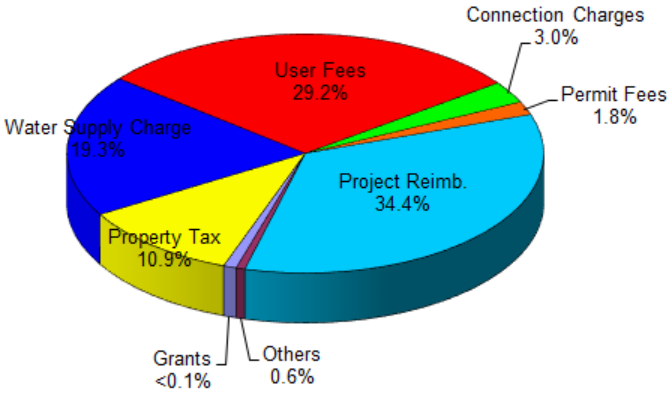
- **Measure J** – In November, voters passed an initiative requiring the District to, if and when feasible, acquire all the water supply and distribution facilities of California American Water. The District has assembled a team of experts to examine feasibility and to report its findings in mid-2019

Financial Analysis

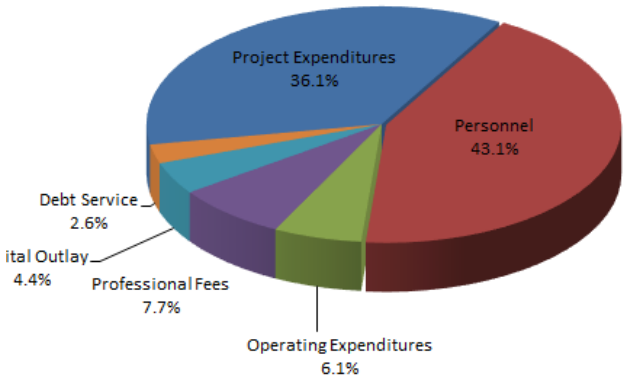
The District prepared a Comprehensive Annual Financial Report (CAFR), which is a set of government financial statements comprising the financial report of a municipality that complies with the accounting requirements promulgated by the Government Accounting Standards Board. MPWMD received a clean financial audit report with no material weakness or deficiencies. The audit for fiscal year 2017-2018 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, 2017. This District received the CAFR award for 3 consecutive years.

As shown in the charts on page 4, total revenues received in Fiscal Year 2017-2018 were $17,653,958, while expenditures totaled $8,398,300, generating an increase in fund balance of $9,255,658. As of June 30, 2018, the District's total fund balance was $14,112,065. The budget for Fiscal Year 2018-19 anticipates expenditures of $15,989,300 and revenue of $13,845,800 with $2,143,500 coming from fund balance.

2017-18 Revenues
Where our Money Comes From



2017-18 Expenditures
How We Spend Our Dollars



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 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 2018.

Available Water Supplies: In WY201, 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 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 2020, to almost 3,000 AFY in good years. The District continues to develop plans for additional ASR opportunities for future water supply.