



2021 Annual Report

Monterey Peninsula Water Management District

Accomplishments

- **Pure Water Monterey Project** – The District provided project management for the 1st Quarter startup of the Project, working in partnership with Monterey One Water, which owns and operates the system. The project injected 3,591 AF (Acre Feet) into the Seaside Groundwater Basin and Cal-Am recovered 3,122 AF for customer service. The remainder was used to build up the Operational Reserve for the Project. At 3,500 AF per year, it is the largest project to come online to date to help offset the Cease and Desist Order.
- **Aquifer Storage and Recovery (ASR)** – Since inception of the ASR program in 1998, a total of 10,873 AF has been diverted from the Carmel River for storage and subsequent recovery through the end of Water Year (WY) 2020. Cal-Am continued to use District facilities to treat produced waters recovered from ASR and Pure Water Monterey.
- **Pumping's Effect on the River** – The District has made progress on developing models to help understand how changes in groundwater pumping impact Carmel River flows. In cooperation with the United States Geological Survey (USGS), the District finished an integrated groundwater/surface water model known as GSFLOW/MODFLOW. 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. The simulations will be used in the Los Padres Dam alternatives study (see below) currently underway.
- **Los Padres Dam Alternatives** – MPWMD and Cal-Am are working with a team of engineering and science consultants to investigate the technical, biological, and economic feasibility of a broad suite of alternatives for Los Padres Dam and Reservoir. Alternatives include removal, sediment management, expansion of storage by dredging, and fish passage improvements. This study has been partially funded by Cal-Am, the owner and operator of the dam. The final report is anticipated to be complete in October of 2022.
- **Integrated Regional Water Management Program (IRWM)** – The District continued to manage an IRWM Implementation Round 1 Grant agreement for the Monterey Peninsula region in the amount of \$2,238,904. The District, as “Grantee”, has many duties including: (a) administration of the agreement with California Department of Water Resources; (b) invoicing, with documentation, on behalf of the Local Project Sponsors; and (c) progress reporting. There are three projects – all non-District—that are being supported by this Grant: (1) The Coe Avenue Recycled Water Pipeline in Seaside sponsored by Marina Coast Water District; (2) the Del Monte Manor Low Impact Development Project sponsored by the City of Seaside; and (3) the West End Stormwater Improvement Project in Sand City.
- **Legally-Mandated Carmel River Mitigation and Stewardship** – The District carries out the Mitigation Program associated with its Water Allocation Environmental Impact Report required by the California Environmental Quality Act. This Mitigation Program is designed to offset the impacts associated with water extraction in the Carmel River Alluvial Aquifer and ultimately the flows in the Carmel River. The Mitigation Program includes rescue



Pure Water Monterey Groundwater Replenishment Project | Recipient of the American Society of Civil Engineers – 2022 Honor Award

and rearing of threatened steelhead from drying portions of the Carmel River, streambank restoration and maintenance, and lagoon habitat monitoring.

The District successfully rescued 7,961 steelhead from the Carmel River Basin in 2021, including 11 adult steelhead (kelts) trying to get back out to the ocean. Approximately 7,724 rescued steelhead were taken to the Sleepy Hollow Steelhead Rearing Facility (SHSRF). Over 5,000 were released back into the Carmel River from SHSRF, including 3,200 implanted with a tag in January 2022.



Fish Release into the Carmel River from the Sleepy Hollow Rearing Facility

A total of 123 adults were counted at the District's steelhead counting station in 2021. Of those, 100 were implanted with a tag in order to collect data on fish migration and survival. These data assist with ongoing studies that the District and NOAA Fisheries have been collaborating on. The District also monitors the health of the juvenile population, which is continuing to increase since the last drought, which ended in 2015.

District crews carries out the Vegetation Management Program in the active channel of the Carmel River at six 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 continued revegetation and irrigation at the Carmel River Bank Stabilization Project just downstream of Rancho San Carlos Road. This work prevented streambanks from further collapse during the 2021-2022 winter season. MPWMD employed an environmentally friendly stabilization technique consisting of logs, rocks, and native plantings built into a cribwall at the site.

- **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 U.S. Bureau of Reclamation is providing \$1.8 million in grant funds for the effort. The study began in 2017 and expected to be completed in 2022. In 2021, study metrics and refining of hydrologic modeling of ASR operations were carried out.
- **Well Permitting** – MPWMD approved 2 amendments to Cal-Am Water Distribution Systems, one for the Wolter properties and the other for Moo Land Company. Nineteen Confirmation of Exemptions from the Water Distribution System permit requirements were issued for private properties that met criteria established in District Rules and Regulations. Applications were reviewed for potential impacts to the water resource system and other water users.
- **Conservation** – The Conservation and Permits office reopened to the public after COVID shutdown on July 6, 2021. During 2021, the District approved 913 rebate applications in the amount of \$341,997, for quantifiable annual savings of 12.127-plus acre-feet of water. Properties transferring ownership continued to self-certify compliance with the water efficiency requirements, and the District provided a Certification of Compliance as verification.

During 2021, the District issued 761 Water Permits and 85 Water Use Permits to Benefited Properties (i.e., properties eligible to receive a portion of a Water Entitlement).

As the regional entity responsible for compliance with State landscaping regulations, the District issued 62 Water Permits for new and refurbished landscapes. A total of 213,823 square feet of new landscape area was permitted.

Rehabilitated area totaled 127,357 square feet. Staff completed 815 property inspections to verify compliance with water efficiency standards for changes of ownership and use and 595 inspections were done to verify compliance with Water Permits. Staff implemented COVID-19 protocols for safety.

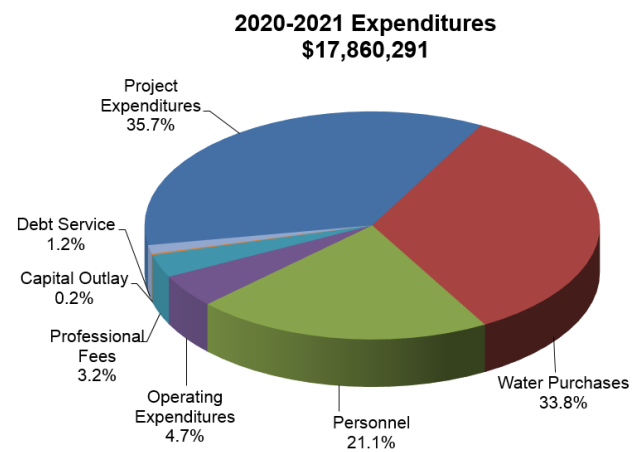
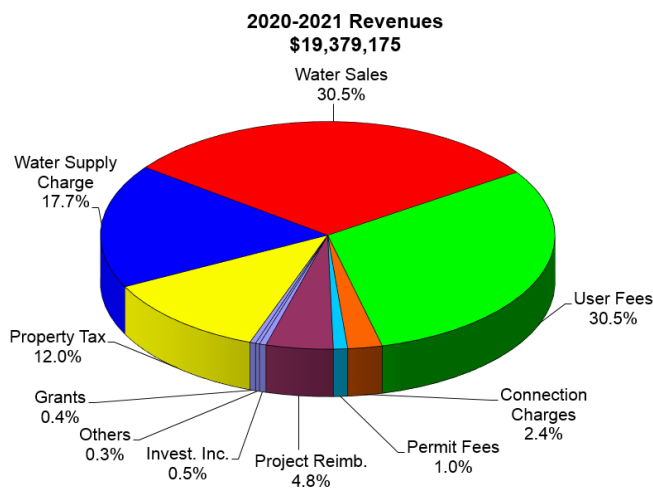
- Community Outreach** – The District hosted four virtual classes on water conservation topics such as rainwater capture, composting to improve soil water holding capacity, landscape design, and removing lawn. Staff distributed water conservation devices at various community events including the Carmel Valley Fiesta, Monterey County Fair, and the West End Celebration. The District posted regular updates to its Facebook page and Twitter account. As a partner with the Water Awareness Committee for Monterey County, the District participated in presentations and assemblies at local schools. The District also ran monthly ads covering District activities in local media.
- Summer Splash** – With the continued spread of COVID-19 and the inability to gather in-person throughout much of 2021, the District, in partnership with Cal-Am, again sponsored a fun family-oriented conservation game called *Summer Splash Water Challenge Giveaway 2*. The challenge was to complete an educational gameboard where participants visited the event website and watched water efficiency videos to find the answers to the gameboard questions. The Challenge was designed for families and was launched in the summer when children were out of school. Completed gameboards could be submitted for an entry into a sweepstakes to win prizes. The prizes offered included a High Efficiency Clothes Washer, Amazon Gift Cards, and an iPad. The gameboards were printed in the newspaper, and the event was promoted on Facebook. The challenge went for one month and received 65 entries for the sweepstakes.
- Measure J** – In November 2018, voters passed an initiative requiring the District to acquire the local water supply and distribution facilities of California American Water, if feasible. In 2021, the District prepared an application to the Monterey County Local Agency Formation Commission (LAFCO) to annex 58 parcels (Yankee Point and Hidden Hills), update its Municipal Services Review (MSR), and to “activate” the District’s authority to provide water service directly to end-use customers. LAFCO approved the annexation and MSR but denied the activation of powers. The District challenged that denial in a petition for writ of review filed in April 2022.



Photo of Paul DeGiere from Monterey for Winning a Brand New iPad- 2021 Summer Splash 2

Financial Analysis

The District prepared its seventh consecutive Annual Comprehensive Financial Report (ACFR), which is a set of government financial statements comprising a report that complies with the accounting requirements promulgated by the Government Accounting Standards Board, as well as relevant statistical information about the District. MPWMD received a clean financial audit report with no material weakness or deficiencies. The audit for fiscal year 2020-2021 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 ACFR for the fiscal year ended June 30, 2020. The District has received the ACFR award for six consecutive years. As shown on the next page, total revenues in Fiscal Year 2020-2021 were \$19,379,175, while expenditures totaled \$17,860,291, generating an increase in fund balance of \$1,518,884. As of June 30, 2021, the District’s total fund balance was \$19,610,793. The budget for Fiscal Year 2021-2022 anticipates revenues of \$24,495,700 and expenditures of \$27,297,800 with \$2,802,100 coming from fund balance.



Future Financing Methods

Until 2012, the District 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. User Fees were the district's largest and most fluid revenue source. However, the User Fee was suspended by the Public Utilities Commission in 2012. Since then, the District has been funding its water supply projects from the Water Supply Charge established in 2012. In 2016 the California Supreme Court reinstated the User Fee, which the District resumed collecting in April 2017. Possible sources of funds to pay for construction of future water supply projects include ongoing revenue increases, user fees, water supply charge, property tax, Pure Water Monterey water sales, new revenue categories, grants, and bond financing.¹ Actual funding sources will depend on the type of project, the amount of funding needed, and other variables.

Water Supply

- Available Water Supplies:** In WY 2021, approximately 9,850 AF of water was legally available to serve Cal-Am customers within the District, assuming 1,474 AFY from Seaside Groundwater sources, 200 AFY from the Sand City Desalination Facility, 1,300 AFY from Aquifer Storage and Recovery, 3,500 AFY from Pure Water Monterey and 3,376 AFY from Carmel River sources. 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.
- Future Capital Improvements:** Because of legal and regulatory constraints on taking water from the Carmel River and Seaside Aquifer, long-term water supplies available to Cal-Am's customers in the future will be reduced and new, permanent replacement water supplies will be required. Cal-Am continues to pursue a 6,252 AFY desalination plant in North Marina which was supposed to become operational by December 2021. However, Cal-Am's efforts to obtain a Coastal Development Permit have been unsuccessful, and as of April 2022, a separate legal challenge to the project brought by the City of Marina is still pending before an appellate court. The District's assessment is that expansion of Pure Water Monterey is more affordable and better for the environment. A Water Purchase Agreement to support a 2,250 AFY expansion of the Pure Water Monterey project was submitted to the California Public Utilities Commission for approval in 2021. The District is advocating for its approval.

¹ **Groundwater Charge Zone:** In June 1980, the District Board approved formation of a groundwater charge (or fee) zone to provide a revenue source for a well-monitoring program consisting of well registration, well metering, and water production reporting. However, the District has abandoned groundwater charges as a source of revenue. No groundwater charges were established during 2021.