

The Lens

Issue Number 17 Winter 2009

Montara Water and Sanitary District

NEW MWSD GENERAL MANAGER



Clemens Heldmaier, formerly the District's Water Superintendent, was promoted to General Manager in July to fill the vacancy resulting from George Irving's retirement. George had been with the District for 12 years, overseeing major projects involving the District such as the Sewer Authority Mid-Coastside wastewater treatment plant expansion (completed in 1999) and the planning and acquisition of the local water system (completed in 2003), followed by major improvements to the former Citizens Utilities water supply, treatment, distribution, billing, and customer service components.

Clemens and his family moved to the Montara / Moss Beach area in 2002 from Kaiserslautern, Germany. They chose the Coastside because of its rural atmosphere yet close to San Francisco. "We really love and enjoy living here," Clemens said, referring also to his wife Angelle and children Lena and Marius. His goal is to establish a good water supply for the District.

Clemens received his degree in geology from Philipps University Marburg, then worked as an environmental geologist heading an environmental lab studying soil and water samples for hazardous waste investigation and remediation. He joined Citizens Utilities in 2002 and has thus observed first-hand the many improvements in the water system over the five years of public ownership. "The District has added more reliable water supply in the past five years than Citizens added in the previous 25 years," he said.

The District hired Jeff Page as our new Water Superintendent, who is responsible for day-to-day operations of the water system as well as supervising our water operators, Julian Martinez, Derek Walker, and Jeff Shackelford. We'll introduce each of these employees in future issues of The Lens.

FIFTIETH PLUS FIFTH ANNIVERSARY CELEBRATIONS HELD IN AUGUST

August 24, 2008, was declared "Quentin L. Kopp Day" in honor of the former State Senator who was instrumental in achieving water independence for the community. Senator Kopp gave the keynote address for the District's celebration at the Point Montara Lighthouse Hostel recognizing the community's achievements over 50 years in meeting wastewater and solid waste needs, and over 5 years of public ownership operating and improving the local water system. In addition to former Senator Kopp, speakers included representatives of the District, elected officials, neighboring districts, and the community organizations that worked so hard to achieve the goal of a safe, reliable, and affordable water system.

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WET WEATHER FLOW

As you probably know, our sewer flow from Montara and Moss Beach is directed through a main pipeline south to be combined with Granada Sanitary District, the total is then pumped through a single pipe line to the Sewer Authority Mid-Coastside or SAM processing plant which is located in Half Moon Bay. Most of the pipeline to the SAM plant is gravity flow, but there is a section where the sewer is pumped up a slight slope between Miramar and Frenchman's Creek.

During dry weather the SAM plant runs below capacity, but when there is substantial rain, the total flow from Half Moon Bay, El Granada, and Montara/Moss Beach is increased. When the rain is heavy over an extended period of time, the sewer flow from all three districts can be substantially above the processing capability of the SAM plant.

The SAM plant is located in Half Moon Bay, which normally has 50% of the processing

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WET WEATHER FLOW

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capability reserved. In wet weather conditions when it rains hard over an extended period of time, they may increase the flow into the plant as high as 70% of the SAM plant capacity. This means that Montara/Moss Beach and El Granada, will have to shunt their flow so that a backup will not cause a spill in the pipeline or at the pumping station. The extra wet weather flow is caused mainly by an increase in rain water flow into private home laterals which are the pipes which connect our homes to the main sewer lines. Older laterals often have leaks in them through which water from the ground infiltrates, sometimes in very large amounts.

Right now the extra wet weather flow is temporarily stored in two places. There is a one million gallon cement storage tank behind the District offices and temporarily placed tanks located at the El Granada pumping station. These interim tanks look like large shipping containers and are rented at a significant cost.



Million gallon storage tank

The three SAM agencies have planned for the last four years to build a more efficient and economical wet weather flow system. Unfortunately, even though all three sewer agencies would benefit, Half Moon Bay has withdrawn from the project and El Granada and Montara/Moss Beach have begun planning and performing environmental studies on their own in order to move the project forward.

The project involves laying two large parallel pipes in the El Granada area which will temporarily fill up with waste when the main pipe line going to the SAM plant is held up because of the increased volume of sewage being processed. When the storm is over and when the main pipe line can handle the capacity, the stored sewer in the parallel storage pipes will empty into the main pipe line and continue on to the SAM plant to be processed. There are no pumps or valves involved in this wet weather storage project and the two districts are happy that it will be run at the lowest possible cost.

MONTARA/MOSS BEACH HISTORY

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provide capacity sufficient to serve the population allowed at buildout of the local coastal programs.

Meanwhile, the local private water system operated by Citizens Utilities Company of California was unable to keep pace with the influx of new residents. By the time of the severe drought in 1976, water outages and water supply problems were so bad that the California Public Utilities Commission ordered an investigation. Citizens Utilities made minimal attempts to find new sources of water and poorly maintained the system's infrastructure. Citizens Utilities repeatedly requested water rate increases from the PUC with promises to improve the system, but would never follow through after receiving the rate increases. Citizens Utilities finally added enough storage to barely meet the fire district's requirements.

Water problems plagued the community for the next two decades, resulting in frequent water shortages and finally an imposed moratorium on all new water connections. Community members reacted to the continuing failure of the private water utility to meet community needs by working for public ownership. A group of local citizens formed the Montara-Moss Beach Water Improvement Association (MMBWIA) and requested the District's cooperation. As Jim Harvey, a founding member of MMBWIA who was active in obtaining water powers for the District, recalled, "There was overwhelming interest in the community to become an independent water district with local control and ownership." With the invaluable assistance of State Senator Quentin L. Kopp, the MMBWIA and community at large succeeded in obtaining authority to operate the water system.

Community support for this effort was overwhelming. More than 80% of voters supported the District proceeding to implement its recently granted water powers. Over 80% of voters in a second election agreed to finance the acquisition and improvement of the water system. The community finally was able to take control of its own destiny when the Montara Water and Sanitary District purchased the privately owned water system in August 2003 and took over operations. This hard-fought accomplishment allowed the community to move forward on solving the long-standing water system problems.

In the five years of public ownership, the District developed a major new water source with the new Alta Vista Well, rehabilitated the Wagner Well, Airport Well #3, and South Airport Well, and restored the Portola 3 Well. These projects increased the water supply available to serve existing customers, allowing MWSD to operate during the current drought period with no water use restrictions.

The District also replaced the disintegrating Montara Creek supply pipeline, rehabilitated the antiquated Alta Vista Water Treatment Plant, added an ion-exchange treatment facility for the Airport Wells, and reduced operating costs by improving the energy efficiency of the District's wells. Pipeline replacement projects eliminated many of the problems with water leaks in the District and improved fire flow capacity for better community fire protection. The District replaced all obsolete fire hydrants in the District with modern hydrants. The final projects to complete the voter mandate from 2001 are included in the District's Public Works Plan, Phase I, recently approved by the California Coastal Commission. One of the most significant operational improvements for the District was installation of remote-read water meters, which cut the staff time required every month for water billing by approximately 95%. Water system operators can now devote more of their time to preventive maintenance and upgrades to the water system.

MWSD installed solar panels on the roof of the Alta Vista Reservoir earlier this year, becoming the first Midcoast public agency to use renewable energy. The District also studied the potential for using desalination as a long-term reliable water source to meet future growth needs in the community, and is currently working with neighboring agencies towards a recycled water project.

In 2000, Citizens Utilities had applied for water rate increases that would have resulted in rates rising more than 108% by 2008. Instead, under MWSD ownership and control, base tier residential rates are up only 14% over this time period. This compares favorably with neighboring water districts that depend on San Francisco's Hetch Hetchy system, who are facing dramatic cost increases to pay for the multi-billion dollar seismic retrofit program.

WATER SUPPLY AND DROUGHT PREPARATION

For the second consecutive year the precipitation in California is below average. Water districts all throughout the Bay Area are calling for voluntary and even mandatory measures to reduce the overall water consumption. In contrast MWSD has not issued Water Alerts in the past 2 years and currently does not face a water shortage. Why don't we have the same problem (yet) as our neighbors?

MWSD relies entirely on local sources for water production. We operate 9 groundwater wells and 1 surface water treatment plant in Montara and Moss Beach to produce 100% of the water we serve to our customers.

Other Water districts depend on water sources outside their boundaries and buy water from other providers like San Francisco's Hetch Hetchy water system. The source for Hetch Hetchy water is the snow pack in some regions of the Sierra Nevada Mountain Range. Due to the warmer climate in recent years, the snow pack was less than normal. Higher temperatures in spring cause the majority of the snow pack to melt faster than usual. Therefore there is very little runoff captured in the summertime.



MWSD's sources depend entirely on the local precipitation at the slopes of Montara Mountain. Even though the precipitation was about 10% less than average in the past year, a particularly wet January 2008 helped to recharge our aquifers. The water operations team and our hydrologist are continually monitoring the water levels in our wells, and the overall production rates. Observing precipitation and well water levels help us to determine the availability of water for the near term future. If the current drought situation in California continues, it is unclear if and when the local water supply in Montara and Moss Beach will be affected. This is the right time for us to prepare for the situation other water districts are dealing with today. Therefore we recently prepared a drought contingency plan. Contingency planning before a shortage allows selection of appropriate responses consistent with the varying severity of shortages. A defined plan helps to determine when to act and what action is needed to keep us providing water for public health and safety during a drought.

Our newest source of water - the Alta Vista Well - is still in a test phase. To guarantee the sustainability of the water source we are monitoring it throughout the different seasons. However, this well already produces a significant amount of water that can help us to overcome a possible water shortage. With the addition of the Alta Vista Well we are in a better situation to satisfy existing water needs. The added water production capability is addressing the current demand deficit in the district and brings us one step closer towards ending the moratorium on water connections. We also rehabilitated most of our existing water production wells and the treatment plant to maximize their performance. MWSD's water availability has changed and planned tank upgrades will further improve our capability to handle shortages.

Another positive factor that influences our water production is the decline of overall usage. The recent pipe replacement projects lowered the loss of unaccounted water below 8%. That means we don't lose water through old leaky pipes. Most people in this community are educated about water related issues and are saving water. Many have participated in our Rebate Program for Low Flow Toilets and High Efficiency Clothes Washer. Drought tolerant landscaping seems to be the new standard and green lawns are disappearing.

WATER CONSERVATION TIPS

- Plant native plants, shrubs, ground covers and drought tolerant plants. Your water use can be reduced significantly if you plant shrubs and ground covers rather than grass. To conserve even more water, plant drought tolerant plants.

- Avoid watering on windy days or midday when evaporation is high. Water early in the morning before 6:00 a.m. Evenings after 8:00 p.m. is second best but the fungus has all night to attack moist foliage. Avoid watering during the peak water use hours of 5:00 p.m. to 8:00 p.m.

- Turn off the faucet when you are brushing your teeth or doing your dishes.

- Take shorter showers. Each minute you cut saves 2.5 Gallons.

- Operate your clothes and dishwasher with full loads only, even if the machine has an adjustable load setting.

- Use a broom to clean driveways and pavement instead of using a hose.

- Detect leaks. Do you hear the toilet running or your faucet dripping? Conducting a Dye-Test in toilet tanks can identify costly silent leaks. Dye tablets are available at the MWSD offices.

- Installing aerators on bathroom and kitchen sinks can reduce indoor water use. Aerators are available at the MWSD offices.

- Replace your old toilet, the largest water user inside your home. New high-efficiency toilet models flush at 1.3 gallons or less. You can receive information about our rebate program for low flow toilets on our web page mwsd.montara.org.

- Replace your clothes washer, the second largest water user in your home. High efficiency clothes washers can reduce water and energy use by 40%. You can receive information about our rebate program for high efficiency clothes washers on our web page mwsd.montara.org.

By employing these and other methods, you will:

Save Energy

By reducing the amount of hot water you use and by saving electricity used to pump water.

Save Money

By reducing water usage, you will reduce water and utility bills, sewer and septic costs, and state and local taxes.

Save the Environment

By using less water, you are helping to ease the burden on local water supplies.

A HISTORY OF MONTARA/MOSS BEACH WATER SERVICES

The Montara / Moss Beach area was mostly farming or grazing a hundred years ago. A fog signal station had been established at Point Montara as early as 1875, but it wasn't until the Great San Francisco Earthquake and Fire of 1906 and construction of the Ocean Shore Railroad that real estate speculators subdivided large tracts known as Farallone City, Haneman's Seaside Park, Montara, Moss Beach, and other tracts, hoping for an influx of residents relocating from San Francisco.

For a variety of reasons, the Montara / Moss Beach community grew slowly prior to World War II. Early subdividers provided some basic water and sewer mains, but most sewage discharged into the Pacific Ocean with little or no treatment – in some cases, just a community septic tank. San Mateo County had formed a Montara Sewer Maintenance District to levy taxes for maintenance of sewers, but there was no authority for large capital projects needed to provide serious wastewater treatment.

World War II brought many changes to our coastal area, including an Army airfield (now the Half Moon Bay Airport) and the Navy's Anti-Aircraft Training Center, operated from 1942 to 1946 adjacent to the Point Montara Lighthouse. San Mateo County's population had more than doubled, from 111,782 in 1940, before the war, to 235,659 in 1950, a few years after the war ended. By the mid 1950's, the County was approaching 350,000 residents. "The county is fast running out of flat, easily usable land for large-scale subdivisions, and development in the remaining hill areas is relatively more costly and time consuming. The coastside now stands out as a major source of buildable land," according to a 1962 Preliminary General Plan for the Mid-Coastside District.

Plans for development of the Coastside between Devil's Slide and Pescadero depended on a network of proposed freeways, sewage treatment facilities, and water supplies. For water – a projected demand of 40,000 acre feet of water per year – most of the major coastal creeks would have been dammed to create reservoirs on Arroyo Leon, Butano, Denniston, Frenchman's, Mills, Pescadero, Pilarcitos, and Purissima Creeks. For roads, the County was counting on the new Federal Interstate and Defense Highway System to provide funding. For sewer treatment, the County proposed to form a county sanitation district with a single centralized wastewater treatment plant for the entire Coastside – and burden the existing property owners with bond debt that exceeded the entire assessed valuation of all properties, according to newspaper accounts from the time.

Coastside property owners rejected the County's plan and proposed, instead, to form local sanitary districts to meet the needs of the communities at much lower cost. Granada Sanitary District was formed in April 1958, followed quickly by Montara Sanitary District of San Mateo County, officially formed on August 5, 1958. Our locally elected special district allowed the small Montara / Moss Beach community of barely 275 homes and a small number of businesses to design, finance, and construct a sewer system and treatment plant to handle the community's sewage. The Montara treatment facility was the most advanced on the Midcoast when it was completed in 1963, able to treat 500,000 gallons per day to secondary standards. Availability of modern sewage capacity led to rapid growth of the Montara / Moss Beach community, with more than 1,000 homes constructed in the 25 years after the District was formed.

The San Mateo County Board of Supervisors created the James V. Fitzgerald Marine Reserve in 1969, drawing a boundary that they thought included both the Granada and Montara treatment plant outfalls, setting more-stringent discharge requirements to protect the environmentally sensitive aquatic habitat areas. They missed MSD's outfall the first time, but extended the Reserve's boundary further north, effectively forcing MSD to either upgrade the decade-old treatment plant or combine forces with other Coastside agencies for a regional plant eligible for funding under the Clean Water Act.

Under these imposed circumstances, the District joined with Granada Sanitary District and the City of Half Moon Bay in 1976 to create the Sewer Authority Mid-Coastside, a joint powers agency. SAM began planning for a regional water treatment plant. This regional solution resulted in a loss of treatment capacity for the Montara / Moss Beach community, because the San Mateo County Local Coastal Program certified in 1980 allocated only 400,000 gallons per day to the Montara / Moss Beach community. The SAM plant was expanded in 1999 to

ANNIVERSARY PARTY

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Proclamations honoring the community achievements were presented from Senators Dianne Feinstein and Barbara Boxer, Congresswomen Anna Eshoo and



Jackie Speier, State Senator Leland Yee, Assemblyman Gene Mullin, the San Mateo Board of Supervisors, Coastside County Water District, Granada Sanitary District, Sewer Authority Mid-Coastside, North Coast County Water District, and the Midcoast Community Council. District President Paul Perkovic presented a brief history of the area, the formation of the District, and the many steps involved in bringing water supply under local control to meet community needs.



Food and beverages donated by local businesses, as well as entertainment by local residents, created a pleasant party atmosphere attended by several hundred local residents. The District would like to thank the following community participants for their contributions to the success of this celebration: Caffè Lucca, Cypress Flower Farm, The Graphic Works, Mark Hamilton, McDonald's Serramonte, Midcoast Community Council, Montara-Moss Beach Water Improvement Association, Moss Beach Distillery, Nancy Margulies, Neighborhood Mart, Pizzeria del Sol, Point Montara Lighthouse Hostel, Rocha Photography, San Mateo County Harbor District, Seacoast Disposal, Seventh Street Montara Restaurant, Sewer Authority Mid-Coastside, SRT Consultants, and Three-Zero Café.

A short video of the presentations during the ceremonies is available on the District's web site.

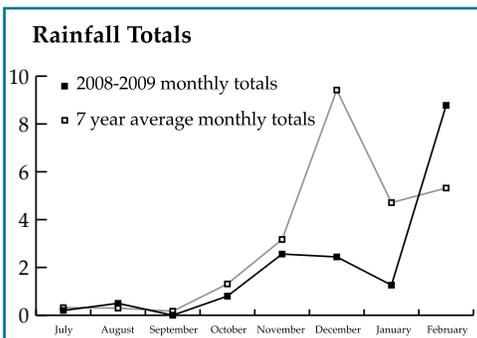
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Photos by Cheri Parr

DROUGHT PREPARATION

Although we are currently in a Stage 1 water condition, where the District's supply and distribution system is able to meet all the water demands of its customers in the immediate future, drought is always a possibility in the near future. Adherence to the following guidelines will help to maintain adequate supplies of this critical resource.

- Water will be used for beneficial use; all unnecessary and wasteful uses of water are prohibited.
- Landscape and pasture shall be irrigated early in the day or late in the evening.
- Water shall be confined to the consumer's property and shall not be allowed to run off to adjoining property or the roadside ditch or gutter. Care shall be taken not to water past the point of saturation.
- Leaking consumer pipes or faulty sprinklers shall be repaired within five (5) days or less if warranted by the severity of the problem.
- No hosing down of automobiles, boats, sidewalks and/or driveways. Please wash automobiles or equipment on the lawn or at a commercial establishment that uses recycled or reclaimed water.
- Washing of streets, parking lots and buildings except as necessary for health, sanitary or fire protection purposes shall be prohibited.
- Attach automatic shut-off devices on any hose or filling apparatus in use.
- No water from the District's system shall be used to fill or refill swimming pools, spas, artificial lakes, ponds or streams except as necessary for public health or fire protection. Customer requests must be substantiated in writing by a pool consultant and approved by the district.
- No outdoor water use of any kind during power outages.

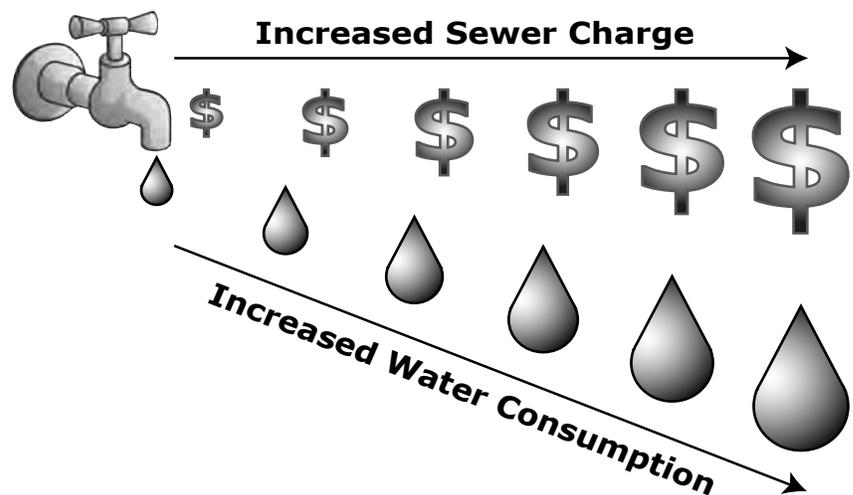


HOW SEWER CHARGE RATES ARE CALCULATED

Your Sewer Service Charge appears on your tax bill. The District uses the wet weather months, November through February, to calculate the water use for purposes of preparing the Sewer Service Charge. The water used during those months is then multiplied by the rate that is adopted by the Board every year. This means that the more water a person uses during those months, the higher their Sewer Service Charge. The reason these four months are used is because the majority of that water will be put into the drain and treated by the sewer plant in Half Moon Bay. There is generally less water used for outside purposes such as landscape irrigation during those rainy months. The wet weather period upon which you are billed is from the water used in the prior year. This means that the water used from November 2007 through February 2008 were used to calculate the Sewer Service Charges for the FY2008-2009 tax bill.

WATER RATES

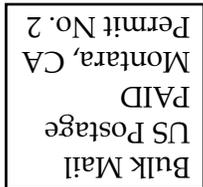
Your water bill is based on the actual water consumption and a base charge according to the size of your water meter. We use a bi-monthly billing cycle, that means you receive a water bill every two months. The District has a two-tier rate structure for water, with approximately 75% of our customers in the first tier, and 25% in the second tier. The first tier applies to consumption through 19 HCF (hundred cubic feet; 1 HCF = 748 gallons) of metered water used. The second tier, for those who use more than 19 HCF of metered water in a two-month billing period, is set at a higher rate. Conserving water does not only save the environment, it also helps to keep your water AND sewer bills low.



NEW WATER REFUND POLICY

To minimize the loss of water due to leaks the District is constantly upgrading and replacing pipes and other parts of the distribution system. As a result, the number of leaks has been significantly reduced in the last five years. This has not only saved water but also decreased the District's operational costs. Now we would like to encourage our customers to minimize the loss of water due to leaks on their side of the meter.

On February 5, 2009 the District changed its water refund policy; refunds due to water leaks will not be granted in the future. We ask that you, as a homeowner, please take responsibility for the plumbing inside your house. Check your property frequently for running toilets and faucets, and replace old or leaky pipes. To help find undetected leaks on your property the District uses its automated meter reading system. We recently doubled the reading frequency for leak detection and now check every meter in the system monthly for movement. You will be notified by the District if a leak has been detected. We also recommend shutting your water house valve off when leaving for an extended period of time. Please check with your plumber to make sure you will not damage hot water heaters, icemakers or other appliances before turning off your main valve. We sincerely appreciate your cooperation as we move forward with this new policy; every drop of water is valuable, especially during these times of drought.



MWSD BOARD OF DIRECTORS

Paul Perkovic, President
Term: 2005 - 2009

Jim Harvey, President Pro Tem
Term: 2005 - 2009

Scott Boyd, Secretary
Term: 2007 - 2011

Bob Ptacek, Treasurer
Term: 2005 - 2009

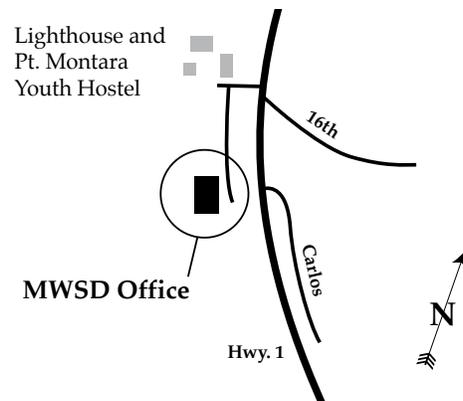
Kathryn Slater-Carter, Director
Term: 2007 - 2011

MONTARA WATER AND SANITARY DISTRICT

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Board meetings are held the first and third Thursday of each month at 7:30 p.m. at the District Office at 8888 Cabrillo Highway, Montara, CA



Montara Water & Sanitary District
P.O. Box 370131, Montara, CA 94037

STAFF SPOTLIGHT

KRISTA TEIGE

This native of El Granada comes to the District by way of Wellesley College in Massachusetts, where she received a Bachelor of Arts degree in economics, and also played on Wellesley's volleyball team.



In her position as District Clerk Krista is at the center of the administrative side of day-to-day MWSD operations. From handling customer service issues, to carrying out research requests on the part of District staff, to helping to administer the District's finances, Krista is an integral part of the team that manages and delivers our community's water resources.

Krista is eagerly soaking up as much as she can at MWSD, as she intends to return to school for a master's degree in environmental science and management. In the meantime, we are lucky to have her here!