

# NORTH MARIN WATER DISTRICT ANNUAL REPORT FISCAL YEAR 2019-20

# NORTH MARIN WATER DISTRICT

#### **BOARD OF DIRECTORS**

Jack Baker, served since 1983	(Division 2)
Rick Fraites, served since 2003	(Division 5)
James Grossi, served since 2017	(Division 1)
Michael Joly, served since 2017	(Division 3)
Steve Petterle, served since 2001	(Division 4)

### OFFICERS

Drew McIntyre, General Manager, appointed 1998 Terrie Kehoe, District Secretary, appointed 2018 Julie Blue, Auditor-Controller, appointed 2018 Tony Williams, Assistant General Manager/Chief Engineer, appointed 2020

#### **DEPARTMENT MANAGERS**

Administration & Finance	Julie Blue
Construction/Maintenance	Tony Arendell
Engineering	Tony Williams
Operations/Maintenance	Robert Clark

#### **MISSION STATEMENT**

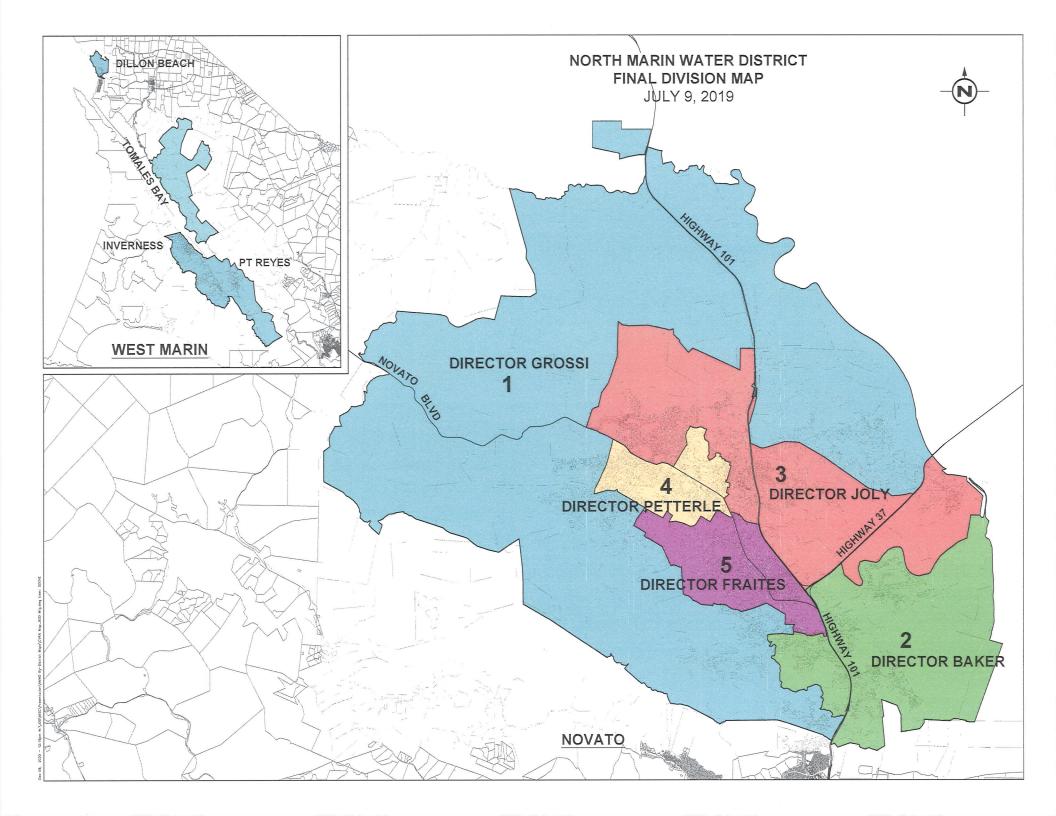
Our mission is to meet the expectations of our customers in providing potable and recycled water and sewer services that are reliable, high-quality, environmentally responsible, and reasonably priced.

#### **BOARD MEETINGS**

Regular Board meetings are held on the first and third Tuesday of each month at 6:00 p.m. Meetings are normally held at North Marin Water District headquarters, 999 Rush Creek Place, Novato. For meeting agendas, contact the District Secretary at 415-761-8921 or visit the website at <u>www.nmwd.com</u>

(Front cover photo: Crew under COVID-19 conditions)

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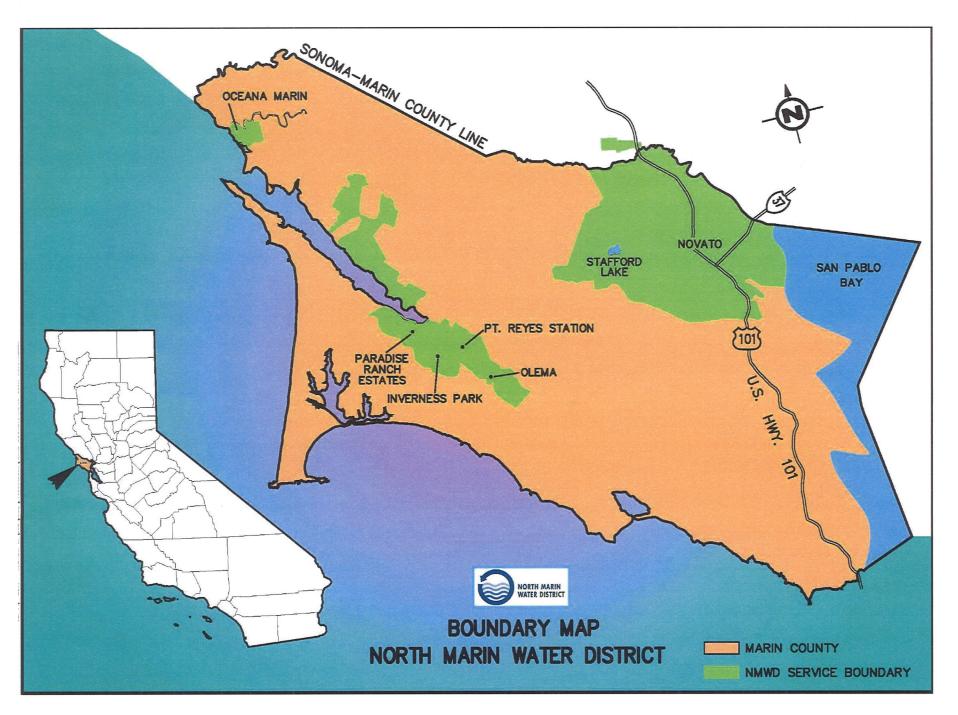


#### HISTORICAL HIGHLIGHTS

- **1948** The Novato community approves formation of North Marin Water District and purchase of the Novato Water Company.
- **1949** Novato voters impose a significant tax upon themselves (77¢/\$100 assessed value) to finance a \$2 million bond issue to purchase and upgrade the private water system and to construct a dam at Stafford Lake and build a water treatment plant.
- **1951** Contractor T.E. Connolly of San Francisco constructs Stafford Lake Dam, designed by Kennedy Engineers, to impound 560 million gallons (MG) of water.
- **1952** Stafford Water Treatment Plant, designed by Kennedy Engineers and built by C. Norman Peterson, goes into operation. It has a capacity of 3.75 million gallons per day (mgd).
- **1954** The spillway at Stafford Lake is raised to increase the reservoir capacity to 1.45 billion gallons, boosting the annual safe yield of Stafford Lake to 620MG.
- **1960** Voters approve a \$3.79 million bond issue to finance system improvements, Notably construction an aqueduct connecting Novato to the Russian River.
- **1961** The North Marin Aqueduct, a 9.4-mile, 30" pipeline from Petaluma to Novato is completed.
- **1963-66** Multiple water storage tanks are constructed, increasing storage from 2MG to 16MG.
- **1970s** Five small West Marin improvement districts are annexed into NMWD at the request of West Marin citizens: Oceana Marin Sewer in 1969; Point Reyes Station/Inverness Park Water in 1970; Olema Water in 1973; Tomales Sewer in 1975; and Paradise Ranch Estates Water in 1979.
- **1973-75** System storage capacity is increased to 26MG with construction of the Atherton (5MG welded steel) and Pacheco (5MG concrete) Tanks.
- **1974** Stafford Treatment Plant is modified to increase production capacity to 6.3 mgd.
- **1980s** North Marin assumes a leadership role in the water conservation field, pioneering programs such as connection fee discounts for installation of xeriscapes in new residential construction and "Cash-For-Grass" rebates for existing customers who replace irrigated turf with xerophytic plants.
- **1983** The US Army Corps of Engineers completes the construction of the Warm Springs Dam, creating a water supply pool in Lake Sonoma of 69 billion gallons.
- **1990s** Marin United Taxpayers twice touts NMWD as the Best Managed Public Agency in Marin County.
- **1998** The District celebrated 50 Golden Years of Quality, Excellent Service and Tradition.
- **2001** Marin Municipal Water District agrees to reorganize boundaries at Hamilton AFB to be coincident with Novato city limits, enabling NMWD to serve areas within Novato formerly served by MMWD.
- **2002** Amaroli Tank, a 4.5MG buried concrete tank adjacent to Highway 101 on Ammo Hill, is completed and increases total Novato area storage capacity to 33MG.
- **2005** A 180,000-gallon concrete storage tank is constructed in Point Reyes Station to replace a 36-year-old 100,000-gallon redwood tank serving the West Marin community.
- 2006 The Restructured Agreement for Water Supply with Sonoma County Water Agency (SCWA) is executed, authorizing SCWA to construct facilities to increase North Marin's water delivery entitlement to meet Novato's future needs consistent with the community general plan.
- **2006** The Stafford Water Treatment Plant \$16 million reconstruction project is completed enabling Stafford Lake water to meet anticipated future water quality standards.
- **2007** The 0.5 mgd Deer Island Recycled Water Facility, located adjacent to Highway 37 immediately south of Deer Island, commenced operation in June 2007 serving Stone Tree Golf Course.
- **2008** The 500,000-gallon Center Road Tank in west Novato is completed.
- **2009** Palmer Drive Tank is completed adding 3MG of first-zone storage in southern Novato, and increasing total Novato area storage capacity to 37MG.
- **2013** Expansion of the recycled water distribution system to north and south Novato is completed. Utilizing federal grant and loan funds and recycled water from both Novato & Las Gallinas Valley Sanitary Districts, the project will provide 130MG annually to large-landscape customers.
- **2015** The Gallagher Well Pipeline is completed principally with state grant financing, connecting the West Marin system to a new well located further upstream of Point Reyes Station in Lagunitas Creek, which is less susceptible to salt water intrusion.
- **2016** The \$22 million "Aqueduct Energy Efficiency Project" is completed, replacing the North Marin Aqueduct 30" diameter pipeline with a 42" pipeline from South Petaluma to Redwood Landfill, thereby eliminating the need for the Kastania Pump Station.
- **2017** To improve water use efficiency, accuracy and customer service, the District implemented an Advance Meter Information System (AMI) pilot project. The AMI project replaces the mechanical water meter register with an electronic register that transmits water use data securely to NMWD headquarters.
- 2018 Expansion of the recycled distribution system to Central Novato is completed. Using federal and state grant and loan funds and recycled water from Novato Sanitary District the project will provide at least 65 MG annually to large-landscape customers, including Marin Country Club Golf Course.

- During a series of public hearings held between April and June 2019, the District established five electoral Divisions in order to transition to a Division-based election in which each Board member is elected by a specific Division within the District. All five board members will continue to participate and vote on district wide matters regardless of what division they represent.
- The Board accepted the 2020 Novato and Recycled Water Rate Study after a series of several meetings with District Staff, the Board's Ad Hoc Subcommittee and two public workshops. This is the first comprehensive water rate study for Novato in over twenty years.

For a narrative description of North Marin Water District history of formation and expansion in Novato and West Marin, please visit our website at <u>www.nmwd.com</u> and click on Service Area.



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#### MESSAGE FROM THE GENERAL MANAGER ... Drew McIntyre

The North Marin Water District (North Marin) carries out its Mission with a highlymotivated and competent staff empowered to meet the expectations of our customers in providing services that are reliable, high-quality, environmentally responsible and reasonably priced. Each day, District employees strive to carry out their work mindful of these basic principles: Good Water, Good Service, Good Value, and A Safe Place to Work. This annual report updates customers on North Marin accomplishments in Fiscal Year (FY) 2019-20 and provides a snapshot of our current efforts and financial performance.

FY 2019-20 has presented many challenges, including low winter rainfall, regional wildfires, ongoing power shut-offs and a global health pandemic due to COVID-19. This year local water supply from Stafford Lake totaled 686 MG and provided up to 41% of peak summer demand on a monthly basis and 26% of annual demand. Rainfall in Novato totaled 19.0" which was 70% of average and Stafford Lake did not reach its maximum storage capacity this year peaking at El. 191.2' (76% capacity) in early April 2020. The Russian River water delivery system from Sonoma County Water Agency (SCWA) typically provides 70-80% of Novato's annual water supply. SCWA continues to focus on the 2008 Biological Opinion (BiOp) for water supply in the Russian River watershed issued by the National Marine Fisheries Service. The BiOp establishes requirements to preserve, protect and restore the fisheries and to maintain the existing Russian River water supply.

State legislation passed in November 2009 (SB7X-7) required a 20% reduction in per capita water use by 2020. North Marin Water District's current total water use of 115 gallons per day per capita (GPCD) represents a 35% reduction in water use, which is well below the state's 20% reduction target of 139 GPCD. Moving forward, the state is developing long-term water use efficiency measurements based on legislation passed in 2018. On May 31, 2018, Governor Brown signed two bills, SB 606 (Hertzberg) and AB 1668 (Friedman) to make California more resilient to impacts of future droughts. This legislation creates new efficiency standards for indoor water use, outdoor irrigation use and water loss. By 2023, North Marin will have a new water use objective based on these efficiency standards. In the meantime, North Marin customers continue to be efficient in their water use. Ample water was available in the Russian River system for fish, agriculture and urban deliveries. North Marin's Stafford Lake Water Treatment Plant was utilized to augment Russian River supplies with local potable water supply. In cooperation with Novato Sanitary and Las Gallinas Valley Sanitary Districts, North

Marin significantly expanded its distribution of recycled water, which supplies large landscape irrigation customers and various commercial car washes in Novato.

Recycled water customers have increased from 44 to 91 over the last six years. In total at 229 MG, recycled water delivery capacity is quickly approaching 35% of Stafford Treatment Plant Capacity. This directly addresses the District's 2018 Strategic Plan Goal No. 1: to increase local control and long-term water supply reliability.

To improve water, use efficiency, accuracy and customer service, North Marin has also implemented an Advanced Meter Information (AMI) project. With the AMI system, the customer's mechanical water meter register is replaced with an electronic register allowing digital meter data to be transmitted securely to North Marin's headquarters via wireless communication.

In West Marin, dry year water supply conditions on Lagunitas Creek prevailed, with total rainfall of 24" well short of the normal year minimum threshold of 28". Consequently, a water shortage emergency was declared and an emergency water conservation ordinance was approved by the Board at the May 5<sup>th</sup>, 2020 Meeting. With respect to capital improvement projects, construction is underway for replacement of the Paradise Ranch Estates Tank 4A, and planning continues for a second upstream well on Lagunitas Creek that that is free from salinity intrusion.

On October 1, 2020, a 6% Novato revenue rate increase became effective. At \$740 per year, the cost of water service for a typical Novato single family home using 84,000 gallons of water a year is at the median of Bay Area urban area water agencies (see chart on page 18). Water remains a good value for Novato customers.

#### WATER SUPPLY

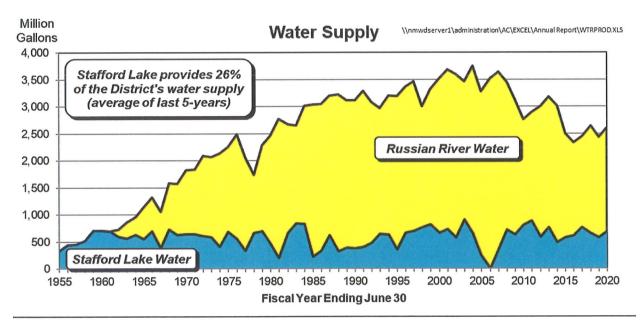
#### STAFFORD LAKE – Local Source Provides 25% of North Marin's Supply

Stafford Lake lies four miles west of downtown Novato and collects the runoff from 8.3 square miles of watershed land adjacent to the upper reaches of Novato Creek. The lake has a surface area of 230 acres and holds 4,450-acre feet or 1,450 million gallons (MG) of water. Water from Stafford Lake is fed into the Stafford Lake Water Treatment Plant, (located just below the dam) at a maximum rate of 6 million gallons per day (MGD). In FY 2019-20, 2,105-acre feet (686 MG) of water was produced from the facility.

#### **RUSSIAN RIVER – Provides 75% of North Marin's Annual Supply**

Russian River water originates from both the Eel River and the Russian River watersheds northeast of the City of Ukiah (Lake Mendocino) and west of Healdsburg (Lake Sonoma). The Coyote Dam at Lake Mendocino impounds the Eel River diversions and winter runoff from the local watershed. Warm Springs Dam at Lake Sonoma impounds winter runoff from the Dry Creek and Warm Springs local watersheds. Lakes Mendocino and Sonoma combined can store 367,500-acre feet to meet regional water supply needs, which totaled 46,200-acre feet in FY 2019-20. Releases from the lakes flow to a point about 10 miles upstream of Guerneville (see map on page 17 of this report), where six collector wells draw river water that has been filtered through 60 to 90 feet of natural sand and gravel to perforated pipes located at the bottom of each well. The thick layer of sand and gravel through which the water must pass before reaching the intake pipes provides a highly-efficient, natural filtration process which, with chlorination treatment, produces a clear, potable, bacteria-free water. This water is then fed directly into the SCWA aqueduct system.

In FY 2019-20, North Marin received 5,887-acre feet (1,918 MG) of Russian River water. North Marin has an agreement in place with SCWA to provide sufficient supply and meet Novato's current and future water supply needs. There continues to be competing interests for Russian River water, principally to protect steelhead and salmon listed as threatened or endangered species under the Endangered Species Act.



#### **ADMINISTRATION**

The Administration Department is comprised of the Administrative Services, Consumer Services, Finance, Human Resources and Information Systems.

#### **CONSUMER SERVICES**

Consumer Services is responsible for accurate and timely meter reading and billing of approximately 167,000 bills and reminder notices annually. During the year, field staff responded to 1,174 customer calls for water service assistance and received a 97% positive response from customers related to the services provided.

- A rate study for Novato Potable and Recycled Water was approved in March, 2020. Resulting rate and structure changes are estimated to provide a 6% increase in annual revenue. The proposed changes were based on detailed engineering, financial, and legal evaluations carried out with the assistance of recognized experts in water rate setting. The rates conform to California Law requiring that each class of customer (residential and commercial) pay their proportionate share of the cost to serve them. In recognition of the COVID-19 pandemic the Board of Directors delayed the effective date of the rate increases from July 2020 to October 2020.
- In March, the District's 2020 Monthly Water Bill Survey for Single Family Homes (see chart on page 18) showed that North Marin's cost of water service ranked 9<sup>th</sup> out of the seventeen urban agencies serving the greater San Francisco Bay Area.

#### ACCOUNTING

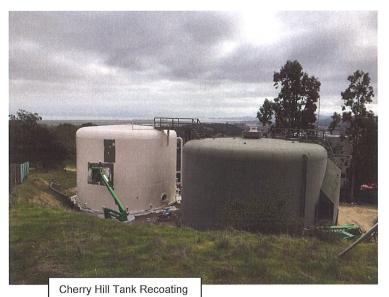
The Accounting Department is responsible for general accounting and budgeting, payroll, purchasing, treasury management, risk management, materials inventory and human resources. The accounting staff completes a full financial statement monthly with extensive cost-accounting detail allowing District managers to closely monitor revenue and expenditures relative to the adopted budget.

The Government Finance Officers Association (GFOA) has awarded the District a Certificate of Achievement for Excellence in Financial Reporting for its comprehensive annual financial report (CAFR) for fiscal year ended June 30, 2019. This is the eleventh consecutive year the District has received this award. The GFOA states that this Certificate of Achievement is the highest form of recognition in governmental accounting and financial reporting, and its

attainment represents a significant accomplishment by a government and its management. The following staff members made significant contributions to this CAFR: General Manager Drew McIntyre, Julie Blue, Nancy Holton, and Nancy Williamson.

#### Fiscal Year 2020 financial highlights include:

- The District, on a consolidated basis, received 103% of budgeted operating revenue and expended 109% of budgeted operating expenditures, resulting in a net income of \$786 thousand. Three million (56%) of the Capital Improvement Project Budget was expended. The year ended with a cash balance of \$22.2 million, an increase of \$3.3 million from the prior year.
- Novato potable water consumption increased 4% from the prior year. Stafford Lake Water Treatment Plant produced 686 MG, up 21% from the prior year. The net income of \$309 thousand fell short of the \$1.4 million budgeted net income, and compares to a net income of \$1.6 million the prior year. Novato Water ended the fiscal year with a cash balance of \$16.3 million. A 6% rate increase applicable to Novato water customers was approved effective October 1, 2020.
- The Novato Sanitary District and Las Gallinas Valley Sanitary District, along with the Deer Island Recycled Facility combined to produce 229 MG of Recycled Water, up 20% from the prior year. The fiscal year net income of \$53 thousand was slightly lower than the \$54 thousand budgeted income. Recycled Water ended the fiscal year with a cash balance of \$4.5 million. A 6% rate increase applicable to Recycled water customers was approved effective October 1, 2020.
- West Marin Water consumption was down 6% from the prior year. The \$322 thousand net income compares to a budgeted net income of \$254 thousand and to net income of \$247 thousand from the prior year. West Marin Water ended the fiscal year with a cash balance of \$1.1 million. A 4.5% increase applicable to West Marin water customers was approved effective October 1, 2020.
- Oceana Marin Sewer's net income of \$102 thousand compares to a budgeted net income of \$92 thousand and to net income of \$122 thousand from the prior year. Oceana Marin ended the year with a \$301 thousand cash balance. A 5% increase applicable to Oceana Marin Sewer customers was approved effective July 1, 2020.



#### ENGINEERING

The Engineering Department consists of professional and technical staff that oversee the planning, permitting, design, construction and project management of water supply, treatment, transmission and distribution facilities necessary to serve North Marin's customers in Novato and West Marin. Engineering functions for wastewater-related

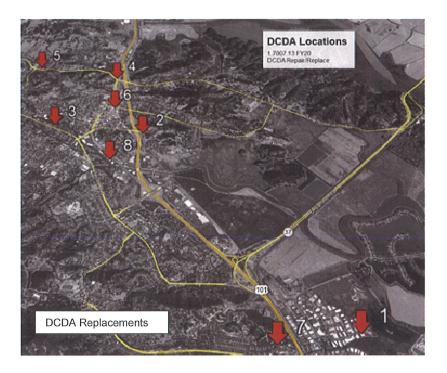
facilities are also provided by the Engineering Department to support North Marin's wastewater collection, treatment and disposal system in Oceana Marin. Property owners or developers desiring new water or wastewater service or an upgrade to their existing service are assisted by the Engineering Department pursuant to North Marin regulations.

In the Novato service area, twenty-five capital projects were originally budgeted. An



additional seven projects were added, three projects were carried over from the previous fiscal year, and no projects were deferred, resulting in an adjusted total of thirty-five projects. The Engineering Department oversaw seventeen of the thirty-five projects, and twenty-four of the total number of projects were completed within the fiscal year. Total expenditures equaled \$1,918,449. Some the of

significant projects included STP Backup Generator, DCDA Replacements, and Cherry Hill Tank #2 Recoating.



In the West Marin service area, including Oceana Marin, nine projects were originally budgeted, four projects were added, one was carried over and none were deferred, resulting in a total of fourteen projects. The Engineering Department oversaw seven of the fourteen projects, and combined fiscal year expenditures equaled \$1,181,027. The most significant project in West Marin was the Drakes View Drive Polybutylene (PB) Service Connections Replacement Project.

#### WATER CONSERVATION AND PUBLIC INFORMATION

North Marin Water District implements a comprehensive and innovative Water Conservation Program aimed at both residential and non-residential customers (commercial and large landscape). Each program element is analyzed to assure that it will efficiently produce long-lasting water savings mutually worthwhile to the customer and the District.



Residential activities include residential water use surveys (152), high-efficiency washing machine (HEW) rebates (7 rebates), high-efficiency toilet (HET) replacements (125 rebates), a Cash-for-Grass Program (12 rebates), flapper rebates, weather-based irrigation controller rebates, landscape efficiency rebates, a plumbing retrofiton-resale program (toilets, showerheads, and bathroom sink faucets) and rainwater collection

and gray water rebates. Hot Water Circulation and Pool Cover rebates were added in recent years along with the "Lawn Be Gone" program aimed at promoting the sheet mulching technique. Water conservation programs for non-residential customers include HET rebates, high-efficiency washing machine rebates, and free water audits/surveys. Large landscape audits and landscape efficiency upgrade rebates are also offered to mixed-use accounts and dedicated metered sites.



The Public Information Program includes a School Education Program (in cooperation with SCWA) and comprehensive Communications Program. In FY20, the District hired Kiosk to develop of a public communications plan (or public outreach plan) in response to a goal from the 2018 Strategic Plan. Kiosk completed the public outreach plan which recommended a series of communications actions aimed at achieving more comprehensive communications to the District customers. The District then

hired Kiosk to assist with the implementation a series of recommendations from the plan. To kick-off these recommended actions the Fall 2019 issue of the Novato *"Waterline"* (distributed in November 2019) was completely redesigned by Kiosk. This was followed up with Kiosk's redesign of the Spring *"Waterline"* newsletter for both Novato (distributed in June 2020) and

West Marin (distributed in May 2020). Kiosk was also tasked with the re-design of the District's website to include a fresh and modern design along with ADA complaint and mobile configuration attributes. Other communications actions implemented in the fiscal year included the redevelopment of the District "Brand" documents including logo and Brand guidelines, new photography of the Board (for the website and other outreach efforts), initiation of refreshment and redesign of District communications materials, and the initiation (currently in development) of a year-long social media campaign aimed at increasing the quality and frequency of the social media posts on Facebook, Instagram and Twitter.

The District actively maintains a Facebook, Nextdoor. Twitter and Instagram page with regular updates on water use efficiency, construction projects and other appropriate District outreach material. During the Fall 2019 power shutoff event, the District was able to communicate our efforts to provide uninterrupted water service to our customers through our social media platforms and received an excellent and favorable response from our customer base. Staff also used the WaterSmart AMI dashboard and customer portal as a public outreach tool to help inform customers on water use patterns and leaks and to also get information to the customers on the Rate Study process and related public workshops and hearings.



Model Water Efficient Landscape Ordinance.

Finally, the District requires new development to meet stringent water-use efficiency standards, including: installation of a high-efficiency washing machine, high-efficiency toilets, weather-based irrigation controllers, a maximum of 600 square feet of turf for new residential development and no turf for new commercial development, soil amendment and mulching requirements, drip or other subsurface irrigation for all irrigated non-turf areas, and other landscape irrigation efficiency measures that exceed the requirements of the updated State

#### **OPERATIONS AND MAINTENANCE DEPARTMENT**

The Operations and Maintenance Department is comprised of three groups –Operations, Maintenance and Water Quality – which work together to provide Novato and West Marin customers with good water and good service at good value while continuing to provide a safe place to work. Along with these groups, the O&M Technical Assistant provides document control for the Cross-Connection Control, Maintenance Management and Asset Management programs, as well as managing the District's Recycled Water Monitoring and water loss Programs. Additional programs managed by the O&M staff include Safety, Environmental, Water Treatment and Distribution operational permits and Water Quality compliance reporting.

#### **OPERATIONS**

The Operations Group is comprised of six staff that are certified in Water Distribution and Treatment Operations as well as two that are certified to operate our waste water collection and treatment facilities in Oceana Marin. This staff works closely with the Water Quality Group, sharing the responsibility of monitoring the Stafford Lake watershed and working cooperatively with landowners, the Indian Valley Golf Course and the Marin County Parks and Open Space District. The Group manages the potable water supply and distribution systems for Novato and West Marin communities and the waste water system in Ocean Marin as well as the Novato recycled water transmission and distribution system in Novato. Also, in Novato, this department balances the tasks of treating and distributing water from Stafford Lake and imported Russian River water while maintaining appropriate water storage and pressure levels to reliably meet all water system demands and fire protection requirements.

This is a photo of the Stafford Treatment Plant chemical storage tank replacement. Staff decommissioned and removed the old tank and installed the new tank.



In Novato, the group manages storage of 28 million gallons (MG) of potable finished water in 35 tanks through four hydraulic pressure zones with 27 pump stations. There are 1.5 million gallons of recycled water storage and 17 miles of distribution mains providing 92

customer sites with recycled water from the Deer Island, Novato Sanitary District and the Las Gallinas Valley Sanitary District Recycled Water Treatment Facilities. In fiscal year 2019-20 recycled water was 8% of the water supplied to our Novato customers with 24% from Stafford Treatment Plant and the remaining 68% from Sonoma Water.

In West Marin, the group operates the Lagunitas Creek wells, Point Reyes Treatment Plant, six pump stations and thirteen storage tanks in Point Reyes Station, Olema, Inverness Park, Paradise Ranch Estates, and Bear Valley. Additionally, the department operates and maintains nine miles of sewer collection piping and a 90,000 gallon per day facultative waste water treatment pond with an eight-acre irrigation field for the wastewater system in Oceana Marin.

Operations activities and accomplishments during 2019-20 included improvement projects during the winter shutdown and over 800 routine maintenance tasks throughout the year. Including Stafford Treatment Plant efficiency study and implementation of improved chemical mixing, chlorine dioxide mixing efficiency, and coagulation sand waste stream efficiencies. Stafford Replacement of the 6,000-gallon ferric chloride chemical storage tank.

#### MAINTENANCE

The Maintenance Group is comprised of seven technicians including Electrical/Mechanical, Building/Grounds, Fleet, Distribution Cross Connection Control and a Technical Program Administrator and are responsible for all maintenance tasks throughout the Novato, West Marin and Oceana Marin service areas.

Maintenance works closely with Engineering and Construction on new projects for electrical and mechanical installations and with Operations to ensure proper operation of Treatment and Distribution facilities for continuous service to our customers. Throughout the service area the E/M team maintains the Supervisory Control and Data Accusation (SCADA), Advanced Meter Infrastructure (AMI) and computer network communication systems.

In Novato, this includes the Stafford Lake Water Treatment plant, Deer Island Recycled Water Treatment Facility, pump stations, tanks, pressure regulators and cross connection devices while also maintaining the Office and Corporation yard facilities.

In West Marin, the Maintenance group maintains the Lagunitas Creek wells, Point Reyes treatment plant, tanks and pump stations. Additionally, the group maintains the collection and wastewater treatment operations in Oceana Marin.

Maintenance accomplishments during 2019-20 included five facilities improvement projects and over 500 routine maintenance tasks. Staff continued to execute the day-to-day activities while performing projects on PG&E Public Safety Power Shutoff planning and execution, Stafford Treatment Plant Generator installation, Main District Office roof replacement, COVID-19 remodel and employee separation, apartment remodel and Facilities site tree removal and trimming.



COVID-19 Office Modifications



Office Roof Replacement

#### WATER QUALITY

The Water Quality Group is comprised of five employees, chemists and lab technicians providing oversight to all aspects of North Marin operations to ensure that water quality is protected, using a multi-barrier approach. Surveillance and monitoring is performed at multiple points from source to tap. North Marin's laboratory performs thousands of water quality tests each year (as required under state and federal drinking water regulations) to support the work performed by other District departments. Annually, a water quality report is sent to all District customers in both Novato and West Marin. In addition, Water Quality staff responds to customer calls with specific information on water quality.

The primary goal of North Marin Water District is for water at every tap to be safe and taste good. The objectives toward meeting this goal, collaboratively established by the District's Board of Directors and staff, are to meet or exceed all regulatory standards, work to control or prevent all taste and odors and work with appropriate agencies to protect water quality.

North Marin Water District's Water Quality Division prides itself on providing exceptional customer service based on a commitment to public health and a safe water supply. The District's Water Quality laboratory is certified by the California Department of Health Services to perform analyses for both regulated and unregulated contaminants. The laboratory staff

provides testing services for other District divisions for quality control of the water supply as well as testing in response to customer concerns. Monitoring is from source to tap. Staff provides the Novato Sanitary District with sample collection, lab analysis and reporting.

Routine tests are performed on the bacterial, algal and chemical conditions of the source water in Stafford Lake and the Point Reyes wells. Tests are also conducted on the water purchased from Sonoma County Water Agency. High nutrient levels can increase algal growth, which can result in taste and odor problems. Source monitoring in the Point Reyes system focuses on a well quality. Salinity levels continue to rise above the notification level (chlorides – 100mg/L) despite the blending of the Gallagher well water with the Coast Guard wells. The laboratory staff supports the Operations staff with monitoring of Stafford Treatment plant to evaluate the effectiveness of the various treatment processes.

This is a photo of the tank aeration system installed at the Paradise Ranch Estates tank number two. This aids in the removal of disinfection by products created when additional disinfection is done at the Paradise Ranch Estates tank number one site.



The quality of water in the Novato and Point Reyes distribution system met all regulatory requirements. Operational controls to maintain chlorine residuals were effective in maintaining low heterotrophic bacteria counts, even when chlorine residuals were below detection. The distribution water quality programs including flushing and cross-connection control were performed. Storage tanks were inspected by the Maintenance staff, and Operations has slated collection of tank water for routine annual testing, which helps determine tank-cleaning priorities. During the year, Water Quality staff assisted the Department of Drinking Water on the West Marin system inspection and the Novato Sanitary District on the inspection of the Stafford Lake Treatment Plant discharge permit.

#### **CONSTRUCTION/MAINTENANCE DEPARTMENT**

The Construction/Maintenance Department installs repairs and replaces water main pipelines and their appurtenances (valves, hydrants, services and meters, etc.) in upgrading and maintaining our facilities. The Construction/Maintenance Department may be contracted by developers to install new water mains, services, fire hydrants and fire services. In addition, staff upgrades <sup>3</sup>/<sub>4</sub>" service lines to 1" and 2" to comply with the Novato Fire Protection District's requirements for sprinklers in new building construction. Staff is on call at all times and may be the first to respond to emergencies such as service leaks, main breaks, or knocked-over hydrants. Construction/Maintenance staff work hand-in-hand with the public, City and developers to install high-quality and reliable facilities to serve North Marin customers.

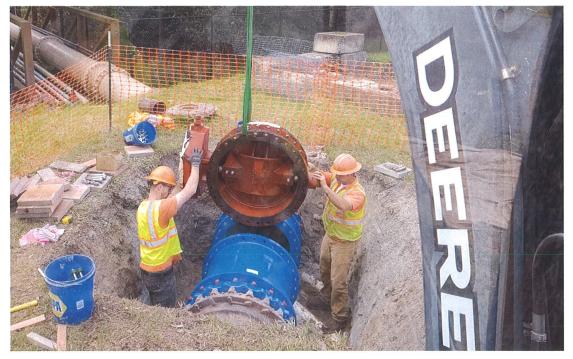


Crew working on air valve testing and repair.

During FY 2019/20, North Marin Water District's Construction crews, replaced 73 polybutylene water services, and 15 copper water service laterals because of leaks in Novato and West Marin service areas. The Crews upsized 20 service laterals for residential fire service. The Crews replaced 8 fire DCDA Fire service for commercial buildings.

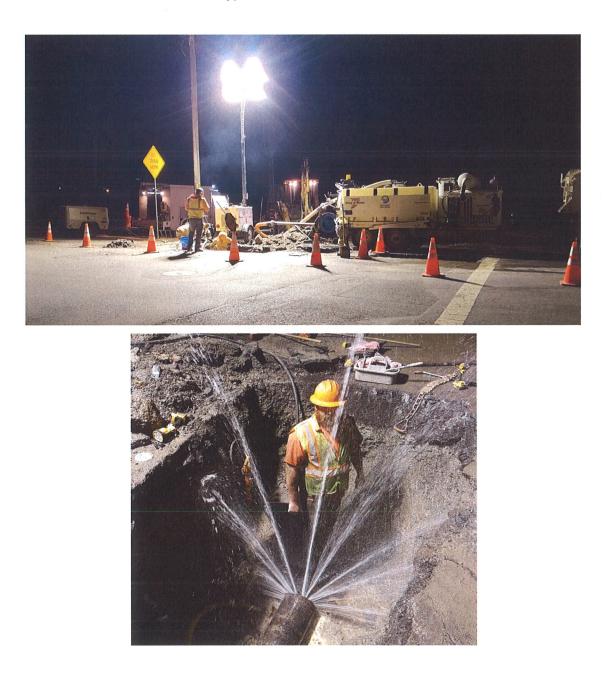
The Construction Crews work with developers on jobs, including Atherton Place, Park-a-Pup, McPhails Commercial Ph 1, IVC Organic farms and Oakmont Senior Living.

Crews worked on the following Capital Improvement Projects in the Novato, Point Reyes, and Oceana Marin systems. Crews replaced PB services during the annual PB replacement projects. In Novato services on Hach Rd and Marin Country Club Estates at the end of Fairway Dr. In Point Reyes on Drakes View Dr and State Route 1.

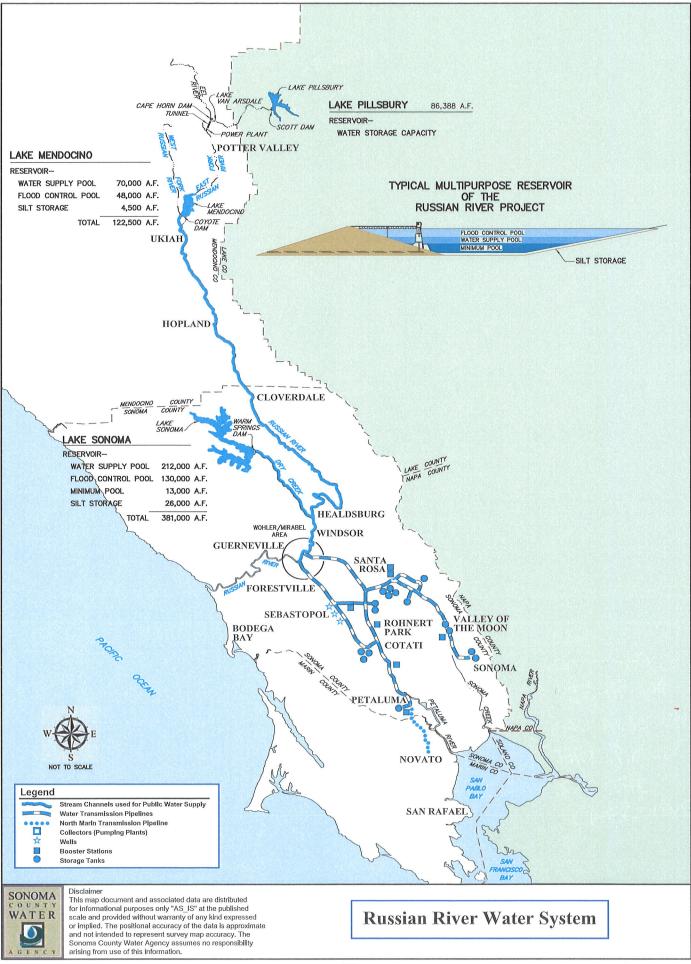


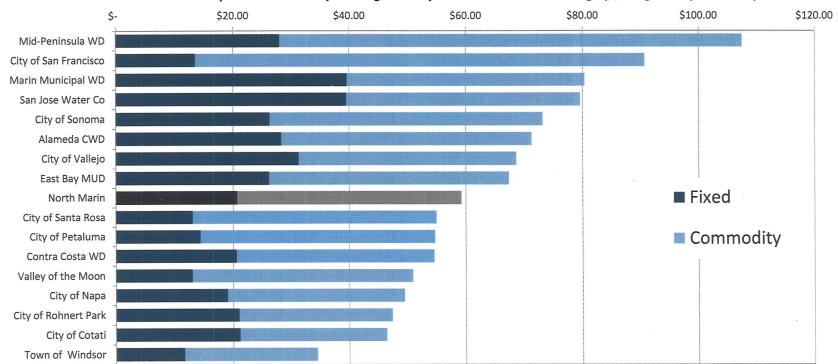
Crews working on Stafford Treatment Plant replacing a failing 30" Butterfly Valve to the Recovery Pond.

The Crews work on all types of leaks in the water and wastewater systems of NMWD, some of the more notable leaks are the following mains: the 12" Main on Olive Ave at Railroad Ave, a broken Tee on Del Oro Lagoon, 4" steel main on Bear Valley Rd. in Point Reyes, and 8" AC main on Devonshire Rd at Eucalyptus Ave.



Crews working to repair a 12" CI Water Main on Olive Ave at Railroad Ave the Crew installed a 12" Full Circle Repair clamp to stop the leak.



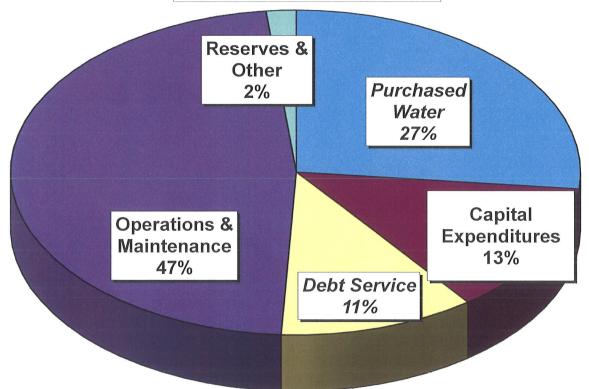


#### Monthly Water Bill Survey for Single Family Homes with Median Usage (7,000 gallons per month)

Source of Funds: \$26.2 Million Connection Fees 6% Other 6% Water Sales 88%

North Marin Water District - Fiscal Year 2019-20

Use of Funds: \$26.2 Million



#### CHARACTERISTICS OF SERVICE AREAS

	Wa	ter	Sewer		
	Novato	West Marin	Oceana		
Statistics (at June 30, 2020)	Potable & RW	Service Area	Marin	Total	
Service Area (Square Miles)	75	24	1	100	
Active Connections	20,645	782	235	21,662	
Dwelling Units	24,085	832	235	25,152	
Estimated Population	61,640	1,800	500	63,940	
Average Household Size (People)	2.6	2.2	2.1	2.5	
FTE Employees	50.0	-	-	50.0	
Fire Hydrants	2,690	172	-	2,862	
Miles of Pipeline	334	26	5	365	
Storage (million gallons)	39.0	1.0	-	40.0	
Annual Water Volumes (MG) (FY2019-20)					
Russian River Water Purchases	1,919			1,919	
Stafford Water Treatment Plant	686			686	
Recycled Water	229			229	
Point Reyes Water Treatment Plant		76		76	
Oceana Marin Wastewater Treatment			6	6_	
Total Water Production	2,833	76	6	2,915	
RR Water Wheeled to MMWD	1,800			1,800	
<u>Annual Budget - FY2019-20</u>					
Operating Revenue	\$21,818,000	\$919,000	\$261,000	\$22,998,000	
Connection Fees/Misc	1,137,000	94,000	68,000	1,299,000	
Grant/Loan Proceeds	0	0	69,000	69,000	
Contribution (To)/From Reserves	1,628,000	836,000	(143,000)	2,321,000	
Total Sources	\$24,583,000	\$1,849,000	\$255,000	\$26,687,000	
Operating Labor	\$6,222,000	\$236,000	\$53,000	\$6,511,000	
Other Operating Expense (less Deprec)	10,437,000	312,000	142,000	10,891,000	
Capital Expeditures	4,861,000	1,230,000	55,000	6,146,000	
Debt Service & Other Expenditures	3,068,000	71,000	0	3,139,000	
Total Outlays	\$24,588,000	\$1,849,000	\$250,000	\$26,687,000	
Annual Water/Sewer Cost (FY2019-20)					
to Typical Single-Family Detached Resider		¢21 15/2 ma	\$93.00/mo.		
Service Charge	\$34.15/2 mo.	\$34.15/2 mo.	\$93.00/mo.		
Annual Consumption (Typical)	84,000 gal	48,700 gal			
Wt'd Avg Water Rate / 1,000 gal <sup>1</sup>	\$6.37	\$10.94			
Typical Annual Cost:	#00F	<b>CODE</b>	¢1 146		
Service Charge	\$205 \$525	\$205 \$522	\$1,116		
Commodity Charge	\$535	\$533	\$0		
Allocated Tax <sup>2</sup>	\$0	\$74	\$251		
Total Annual Cost	\$740	\$812	\$1,367		

Notes

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1 FY20 weighted average commodity rate. Rates vary by elevation zone to reflect different energy, pumping and storage costs. Novato rates ranged from \$5.42 to \$7.50 per 1,000 gallons, and in West Marin from \$9.24 to \$15.42. Average excludes tier rate charges as typical residential consumption is below tier threshold.

2 FY20 allocated share of Marin County 1% ad valorem tax per active connection. Tax is collected by the County and allocated by formula to the West Marin districts.

# SUMMARY FINANCIAL INFORMATION

June 30, 2020

NET ASSETS			Novato	West Marin	Oceana
Assets	Total	Novato Water	Recycled	Water	Marin Sewer
Cash & Investments	\$22,248,818	\$16,348,817	\$4,451,119	\$1,147,745	\$301,137
Receivables & Other Assets	13,534,069	11,212,537	1,737,703	514,225	69,604
Construction-in-Progress	4,969,536	2,881,588	470,660	1,372,760	244,528
Property, Plant & Equipment (net)	133,442,554	95,807,371	31,535,583	5,073,883	1,025,717
Total Assets		\$126,250,313	\$38,195,065	\$8,108,613	\$1,640,986
Liabilities					
Current Liabilities	\$7,310,222	\$6,052,999	\$1,092,272	\$148,555	\$16,396
Long-Term Debt	50,170,990	35,247,486	14,308,277	615,227	-
Total Liabilities	\$57,481,212	\$41,300,485	\$15,400,549	\$763,782	\$16,396
Net Assets	<b>42</b> · <b>j</b> · <b>2</b> · <b>j</b> = · · ·	· · · · · · · · · · · · · · · · · · ·	. , ,		
Invested in Capital Assets	\$139,252,944	\$105,327,775	\$25,705,229	\$6,848,479	\$1,371,461
Restricted & Designated Reserves	10,499,383	5,862,128	4,347,953	414,755	(125,453)
Earned Surplus	(33,038,562)	(26,240,076)	(7,258,665)	81,597	378,582
	\$116,713,765	\$84,949,827	\$22,794,517	\$7,344,831	\$1,624,590
			<u> </u>		
<b>REVENUE &amp; EXPENSE</b>					
Operating Revenue	\$23,796,921	\$21,012,449	\$1,530,259	\$989,841	\$264,372
Operating Expense	22,773,370	20,730,643	1,033,357	776,619	232,750
Operating Income/(Loss)	\$1,023,551	\$281,806	\$496,902	\$213,222	\$31,622
Non-Operating Revenue/(Expense)	(237,270)	27,616	(444,373)	109,246	70,241
Non-Operating Revender (Lypense) Net Income/(Loss)	territoria and an an	\$309,422	\$52,529	\$322,468	\$101,863
Net mcome/(L033)	<del></del>		<i><b>402</b>,<b>020</b></i>		+
<u>CASH FLOW</u> Net Income/(Loss)	\$786,281	\$309,422	\$52,529	\$322,468	\$101,863
	3,366,215	2,660,688	473,828	185,652	46,047
Add Back Depreciation Cash Generated	\$4,152,496	\$2,970,110	\$526,357	\$508,120	\$147,910
Cash Generated	Ψ <del>4</del> , 102,490	φ2,370,110	ψ020,007	<i>\\</i> 000,120	φτη,στο
Other Sources/(Lises)					
Other Sources/(Uses) Connection Fees	\$1,531,535	\$1,531,535	\$0	\$0	\$0
	(3,419,819)	(2,232,209)	(6,584)	(1,023,482)	
Capital Asset Acquisition Principal Paid on Debt	(2,124,083)	(1,409,575)	(667,381)	(47,127)	
•	(2,124,003)	(1,409,070)	(007,001)	(47,127)	_
Grant Proceeds	20 510	20,510	-	-	-
Caltrans Capital Contributon	20,510	689,600	- (689,600)	-	-
Connection Fee Transfer	2 140 505			- 22,597	- 2 221
Working Capital & Miscellaneous	3,149,505	2,519,426	<u>605,151</u>	(\$1,048,011)	2,331 (\$155,214)
Total Other Sources/(Uses)	(\$842,352)	\$1,119,287	(\$758,414)	(φ1,0 <del>4</del> 0,011)	(\$100,214)
Not Cook Constant//land)	¢2 210 114	¢4 080 307	(\$232,056)	(\$539,891)	(\$7,306)
Net Cash Generated/(Used)		\$4,089,397			
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## HISTORICAL STATISTICS

Fiscal Ye	ear Ending June 30:	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
Active Services	-Novato Water	20,554	20,546	20,543	20,544	20,535
	-Novato Recycled	91	91	66	47	44
	-West Marin Water	782	783	783	780	780
	-Oceana Marin Sewer	235	234	234	231	230
	Total Active Services	21,662	21,654	21,626	21,602	21,589
	lent (FTE) Employees	50.0	52.0	53.0	53.7	50.7
FTE Employees	per 1,000 Active Services	2.3	2.4	2.5	2.5	2.3
Property, Plant a	nd Equipment (millions)	\$202.6	\$198.5	\$194.1	\$182.8	\$165.1
FTE Employees	per \$1M Capital Assets	0.25	0.26	0.27	0.29	0.31
Miles of Pipeline		365	364	364	364	358
Storage (MG)		40.0	40.0	40.0	39.4	39.4
Water Productio	on (MG)					
Point Reyes Trea	itment Plant	76	81	81	66	65
Stafford Treatme	nt Plant	686	567	646	756	601
Recycled Water		229	191	155	144	139
Russian River W	ater Purchases	1,919	1,863	1,947	1,681	1,687
	Total Water Production	2,910	2,702	2,829	2,647	2,492
Wheeled to Marin	n Municipal WD	1,800	1,728	1,683	1,670	1,725
Novato Service	Area Average Day Potable	Water Production	on (MG)			
	Annual	7.1	6.7	7.1	6.7	6.3
	Peak Month	14.5	11.9	10.7	10.0	10.2
	Peak Week	16.2	11.4	10.3	10.6	11.1
	Peak Day	18.1	13.7	13.2	15.6	12.2
Financial Histor	У					
Source of Funds						
	Water Sales	\$23,162,788	\$21,147,467	\$21,328,795	\$18,136,626	\$16,840,826
	Investment Earnings	632,208	484,686	243,752	156,662	125,078
	Tax Revenue	120,821	115,706	109,908	107,089	102,259
	Grant Proceeds	336,398	20,191	592,907	5,061,105	532,248
	Connection Fees	1,531,535	1,492,380	1,455,400	1,034,585	278,690
	Loan Proceeds	-	-	6,393,836	1,899,538	-
	Other Sources	3,718,247	1,698,238	1,413,583	5,981,896	3,944,898
	Reserves	(3,310,144)	(2,058,410)	(5,011,576)	2,937,250	1,155,661
		\$26,191,853	\$22,900,258	\$26,526,605	\$35,314,751	\$22,979,660
Use of Funds						
	Purchased Water	\$6,978,395	\$5,383,444	\$5,350,855	\$4,469,632	\$4,189,723
	Operation & Maintenance	12,428,759	10,987,701	11,110,175	10,630,056	9,228,266
	Debt Service	2,920,230	2,749,713	2,201,451	2,527,022	2,528,938
	Capital Expenditures	3,419,820	3,989,561	11,270,831	12,488,621	5,594,631
	Other Uses	444,649	(210,161)	(3,406,707)	5,199,420	1,438,102
		\$26,191,853	\$22,900,258	\$26,526,605	\$35,314,751	\$22,979,660
Net Assets						
	Assets	\$174,194,976	\$167,702,424	\$166,351,644	\$159,886,280	\$136,897,391
	Liabilities	57,481,213	56,903,171	59,528,196	55,974,308	44,224,607
	Net Assets	\$116,713,763	\$110,799,253	\$106,823,448	\$103,911,972	\$92,672,784
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