



Division Update and 2018 Priorities

Accomplishments in 2017

West Point Flooding and Restoration

- Dedication to public service was on full display at the West Point Treatment Plant in the wake of power outages, equipment failure and flooding the night of Feb. 9, 2017. Employees and contractors worked day and night to recover operations and restore critical equipment needed for secondary treatment. West Point resumed full compliance with its water quality permits on May 11, 2017, and remaining repairs and replacement of temporary equipment was completed at the end of the year. The cost estimate for repairs was substantially reduced from a range of \$49 to \$57 million to under \$26 million. Costs will largely be covered by insurance.

South Park Flooding Response

- WTD community services staff also assisted in a separate response to flooding in South Park that impacted 14 homes after a malfunction of a gate at the Eighth Avenue Regulator Station. Twenty-seven people were placed in temporary accommodations and the news media that covered the flooding was overall very complimentary toward WTD's sensitivity to the residents' needs.

Capital Improvements/Project Planning and Delivery

- WTD celebrated completion of the Fremont Siphon project in June with public facility tours and information about its public art and rain gardens. The project features twin siphons beneath the Lake Washington Ship Canal that will push up to 220 gallons of stormwater and wastewater from a large portion of north Seattle to the West Point Treatment plant while controlling combined sewer overflows. It also includes a robust odor control system to ensure the new facility is a good neighbor.
- The division also hosted a celebration to mark the completion of its Murray Combined Sewer Overflow (CSO) Control Project near Lowman Park Beach in West Seattle. The new facility features a 1 million gallon storage tank to control overflows of stormwater mixed with sewage into Puget Sound, as well as impressive community-led design that educates and engages the public about the facility's environmental purpose.
- WTD continues to work with Seattle Public Utilities on design and preconstruction on the Ship Canal Water Quality Project, a 2.7-mile tunnel from Ballard to Wallingford that will control combined sewer overflows for both agencies in accordance with their respective consent decrees.
- The division's inventive use of green infrastructure to keep polluted runoff out of Puget Sound earned honors from the Seattle chapter of the American Society of Civil Engineers. The organization recognized King County's Barton Combined Sewer Overflow

(CSO) Control Project as a 2017 Local Outstanding Civil Engineering Achievement in the water resources category.

- WTD also made progress on a number of other projects, which includes:
 - Demolition at the Georgetown Wet Weather Treatment Station site in south Seattle was completed last fall, and the construction contract was awarded to Flatiron Northwest.
 - Start of pipeline repair work at the South Magnolia CSO project.
 - Construction completion on a new sewer line as part of the Rainier Valley Wet Weather Storage Facility and made progress on the above-ground building that will hold the electrical controls and standby generator needed to run the facility.
 - Start of survey work on the North Mercer Island/Enatai and Coal Creek sewer upgrade projects.
 - Restoration work ahead of completion of the North Creek Interceptor Project this spring.
 - Planning and preliminary design on the Lake Hills/East Lake Sammamish project in Redmond.

Plant Operations

- The Wastewater Treatment Division earned several Peak Performance Awards from the National Association of Clean Water Agencies, or NACWA, for outstanding compliance with its NPDES effluent limits. As of 2016, South Treatment Plant attained 19 years of 100 percent permit compliance with its effluent limits, and West Point Treatment Plant attained 16 years of compliance. King County's Vashon and Carnation treatment plants also received Platinum awards from NACWA. The Brightwater Treatment Plant, which came online in 2011, earned its first ever Silver award.
- The Washington State Department of Ecology honored the Carnation, Vashon, Brightwater, and South treatment plants with the coveted "Outstanding Performance Award" for perfect compliance with all permit conditions in 2016. To earn the award, the plants had to pass all environmental tests, collect and analyze all required samples, turn in reports, and operate with no violations of any kind.
- Puget Sound Energy awarded King County's Wastewater Treatment Division (WTD) an \$894,970 grant for a project to replace aging pumps at South Treatment Plant with new energy efficient equipment that will save utility ratepayers an estimated \$4 million over the next 20 years. The new equipment replaces three of six raw sewage pumps in operation since South Plant came online 50 years ago. The new pumps, which feature variable frequency drives that can adjust to flow rates, will reduce the plant's energy consumption by 1.9 million kilowatt hours per year per year, equivalent to powering 212 homes annually.

- The division's paid Operator-in-Training Pilot Program started is demonstrating success in attracting qualified candidates seeking a rewarding clean-water career. In 2017, WTD recruited 263 applicants through the program, all of whom were invited in for testing.

Finance & Administration

- **Continuous Improvement and Lean:** The division will remain committed to Executive Constantine's efforts to reduce waste and create efficiencies through Lean, Continuous Improvement and Bright Ideas. As of 2016, Bright Ideas efficiencies have saved \$524,000. (The total savings for all combined efficiencies, including energy efficiencies, is \$7.5 million)
 - A sample of our accomplishments:
 - 30 Lean events completed to date, 15 active
 - Over 160 Bright Ideas submitted this year (over 1000 since Sept 2012)
- The Washington State Supreme Court upheld a 2013 trial court ruling that awarded King County \$14.7 million to cover legal fees stemming from a lawsuit against a Brightwater Project tunneling contractor.
- Infrastructure that protects regional water quality will now come with a lower price tag following a credit rating upgrade and bond refinancings that will yield \$77 million in savings over the next three decades. Since 2014, King County WTD has refinanced almost \$2 billion in outstanding debt that will save ratepayers more than \$446 million over the life of the bonds.
- Moody's Investor's Service upgraded the rating on WTD's sewer revenue bonds to Aa1 from Aa2, and Standard & Poor's affirmed its ratings of WTD's sewer revenue bonds at Aa2 and AA+. Both firms cited WTD's strong management practices, consistent financial performance and bright regional economic outlook.
- The County Council maintained a monthly wholesale sewer rate of \$44.22 through Jan. 1, 2019, which is unchanged from the rate adopted in June 2015. The capacity charge levied to newly connecting customers was raised for inflation from \$60.80 to \$62.20.

Pollution Control and Environmental Cleanup

- WTD continued its successful partnership with Seattle Public Utilities on the RainWise Program, which supports goals to control combined sewer overflows and consent decree requirements by offering incentives and rebates to private property owners who install rain gardens or cisterns. Now with over 1,400 participants, RainWise is effectively keeping 20 million gallons of stormwater runoff out of the sewer system each year.
- Seventy-six local facilities earned environmental awards from King County's Industrial Waste Program for dedication to business practices that protected regional water quality in 2016. The five facilities that earned Commitment to Compliance awards for meeting all permit requirements for five consecutive years included Alaskan Copper Works, Baker Commodities, Boeing Commercial Airplane, Seattle Public Utilities' Kent Highlands Landfill and Tri-Way Industries.

- WTD remained engaged with EPA, City of Seattle, Port of Seattle, and Boeing on the Lower Duwamish Superfund Cleanup.

Education, Community Outreach and Equity

- Environmental education at Brightwater and South Plant remains popular with local schools as well as community members. In 2015, WTD guided more than 17,000 community members and students through Brightwater's exhibit hall as well as tours, lectures and workshops.
- Through partnerships with area schools, labor organizations and non-profits, WTD engaged in efforts to attract more youth and people of color to job opportunities in the clean-water field.
- To bolster local efforts to protect water quality, control pollution and build healthy communities, King County's Wastewater Treatment Division is offering \$1,860,000 in funding for community-driven projects through its Waterworks Grant Program.
- WTD continues its effort to inform and engage the public about its work through digital tools including social media, and online open houses.

Resource Recovery, Energy and Sustainability

- The division recycled more than 116,000 tons of Loop biosolids, which was used for fertilizing commercial Douglas-fir forests in King County and dryland wheat farms in Douglas and Yakima counties, and as an ingredient in GroCo compost.
- WTD substantially completed a project at South Treatment Plant to supply compressed natural gas to filling stations, which could be an additional revenue source for WTD's energy products.
- In 2017, WTD substantially completed a two-year project to transport biomethane gas produced at South Treatment Plant to seven local filling stations that supply fuel for compressed natural gas vehicles.
- The division continued supplying recycled water to customers near its Brightwater and South Treatment Plants. Customers include Willows Run Golf Course, the Lake Washington Youth Soccer Association's play fields at 60 Acres Park, Starfire Sports Fields in Tukwila, and the City of Kirkland.

Awards

- WTD: [Utility of the Future](#) for Biosolids Recycling
- Vashon Treatment Plant, NACWA Peak Performance Platinum Award (for 2016)
- South Plant, NACWA Peak Performance Platinum Award (for 2016)
- West Point, NACWA Peak Performance Platinum Award (for 2016)
- Brightwater, NACWA Peak Performance Silver Award (for 2016)
- Carnation, NACWA Peak Performance Gold Award (for 2016)
- Fremont Siphon Project, Best Public Project over \$10M, NW Construction Consumer Council

- Barton CSO Control Project, Outstanding Civil Engineering Achievement Water Resources, American Society of Civil Engineers – Seattle Section
- WTD: Outstanding Leadership & Support by an Org, Pacific Northwest Section of the American Water Works Association
- South Plant, Outstanding Wastewater Treatment Plant Award (2016), Ecology
- Brightwater Reclaimed Water Treatment Plant, Outstanding Wastewater Treatment Plant Award (2016), Ecology
- Carnation, Outstanding Wastewater Treatment Plant Award (2016), Ecology
- Jeff Lundt received the *Heart & Soul Award – Outstanding Service & Exceptional Devotion to Activities* from the Pacific Northwest Section of the American Water Works Association

What's Ahead for 2018

WTD will remain committed to service excellence, focusing in particular on three key business areas that will touch all aspects of our work:

- **Fostering a Safe & Respectful Workplace**
 - Equity and Social Justice, Business Plan Goals -- The division will follow the guidance of the King County's Equity and Social Justice (ESJ) Strategic Plan to prioritize racial justice as part of our government work overall. By leading with racial justice we are committing to taking on the root causes of some of our most challenging problems and laying the groundwork for a strong and inclusive workforce.
- **Strengthening Partnerships**
 - System Planning -- In order to meet operational obligations while preserving rate affordability & predictability, WTD needs to comprehensively assess all the demands on the regional wastewater system within a larger systemwide planning framework. In 2018, we will convene a Regional Leaders Forum comprised of elected officials, local government representatives, tribal leaders, environmental groups, business interests, non-profit organizations and stakeholders with diverse experience and expertise to begin a dialog about investment priorities relative to utility operation and environmental benefit, rate affordability, and the associated tradeoffs. The forum will act as an advisory board to the King County Executive, making recommendations on alternatives and scenarios for consideration, and developing criteria that will determine which ideas advance for broader public consideration.
 - Operating Board -- To ensure accountability and transparency, WTD will create an Operating Board that will enable our stakeholders and customer agencies a greater role in decision making.
- **Earning the public trust**
 - Portfolio Management – With a growing number of asset management and capital improvement needs relative to budget forecasts, WTD will move ahead

with Portfolio Management as a comprehensive tool to prioritize projects and determine which ones best match the division's larger strategic vision.

- Asset Management -- Following the West Point flooding last year, the agency will move forward on recommendations for upgrades and improvements to increase system redundancy and resiliency. WTD will also complete upgrades to its Ovation control system software to prioritize alarms during emergencies so operators aren't overwhelmed.
- Life/Safety Training – Making sure operations employees have the tools and training to safely carry out their responsibilities and respond to emergencies will remain a primary focus area in 2018. WTD has already clarified emergency bypass protocols and will include more scenario-specific drills in its safety program.
- Recovery and Resiliency -- Following a report on facility resiliency due out in 2018, WTD will begin planning crucial retrofits to sewer infrastructure and buildings in preparation for potential seismic events. The goal is to protect public safety by avoiding or minimizing critical system damage that could occur during a natural disaster.

Other 2018 Priorities Include:

Capital Improvements/Project Planning and Delivery

- WTD will make progress on its CSO project commitments. A public groundbreaking on the Georgetown Wet Weather Treatment Facility will take place in March. Construction on the Rainier Wet Weather Storage facilities will wrap up in 2018, and the division will continue working with SPU on the Ship Canal Water Quality Project.
- The division will focus on systemwide planning, which includes upgrades and improvements at South Plant and West Point.
- Construction will continue on the Sunset/Heathfield pump station upgrades. Planning and design on the Lake Hills/NW Lake Sammamish Project, Coal Creek Sewer Upgrade, North Mercer Island/Enatai Sewer Upgrade will also move forward.
- Regional priorities in 2018 include the Duwamish Superfund, the Resiliency and Recovery Program, Conveyance System H2S corrosion rehabilitation and conveyance system improvements.

Education, Outreach and Community Services

- In 2018, WTD will continue programs to educate the public about wastewater operations, environmental stewardship and clean-water careers. The division plans to resume tours at West Point and will expand tour offerings at South Plant in 2018.
- Projects funded by the WaterWorks grant program in 2017 will get underway in 2018. The division awarded \$1.86 million in grant funding for the biennium. The next application cycle for new WaterWorks grants will begin in 2019.

Finance, Policy and Administration

- WTD will continue working with its MWPAAC partners as well as the King County Council toward developing new sewage disposal contracts, including development of the Operating Board.
- A sewer rate and capacity charge proposal for 2019/2020 will be transmitted to the King County Council in April.