King County

Operational performance metrics

The King County Wastewater Treatment Division (WTD) provides relevant information on operational, financial, regulatory and safety performance of the utility. Much of this information is updated monthly.

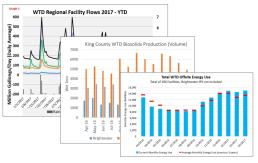
This information:

- Shares an overview of the system
- Presents operational patterns
- Illustrates system dynamics
- Identifies approaching challenges

Contact us

If you have questions regarding this information, please contact:

Olivia Robinson at Olivia.Robinson@kingcounty.gov , 206-477-3566



Operational metrics

The following metrics represent the performance of the King County Wastewater Treatment Division in four key performance areas:

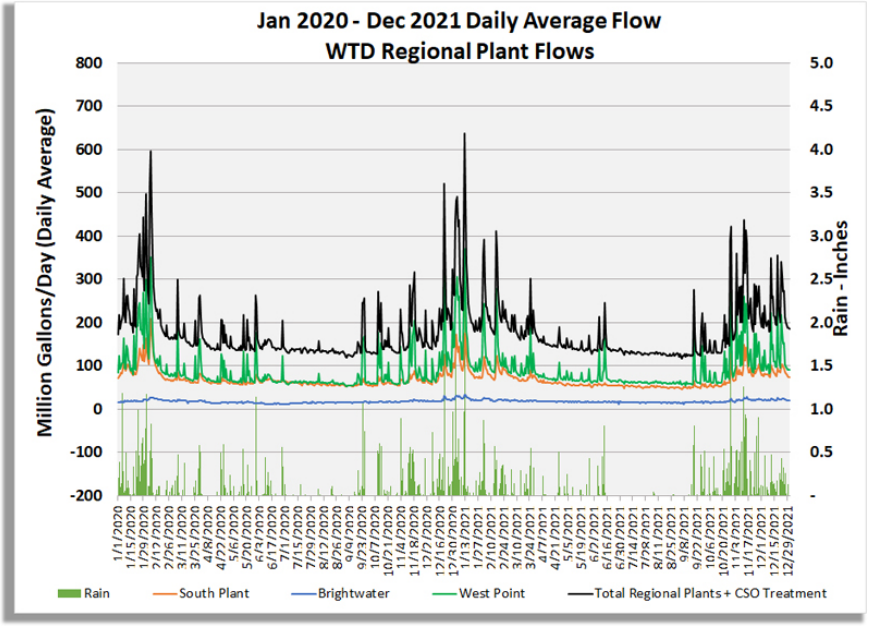
- Operational performance
- Regulatory performance
- Financial performance
- Safety performance

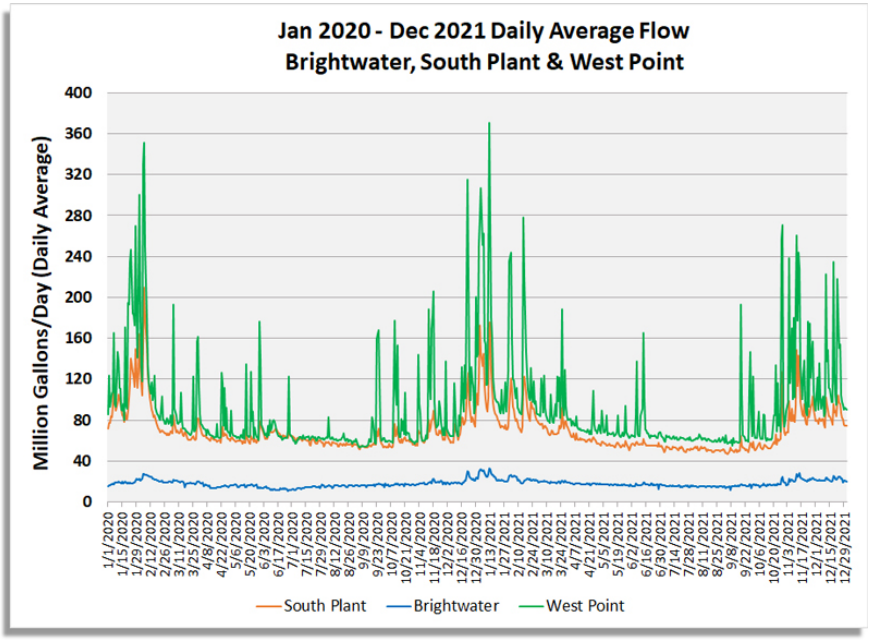
Operational performance (December 2021)

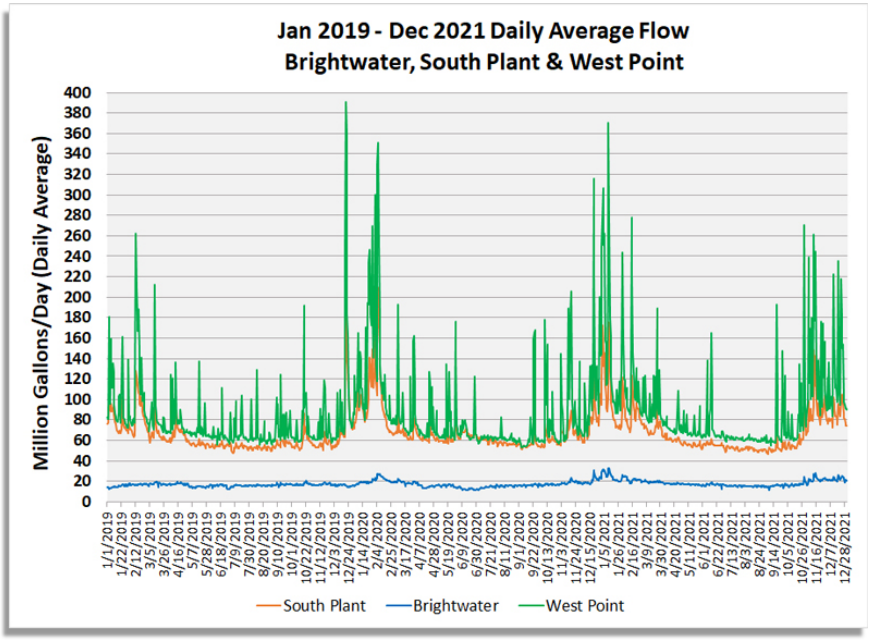
1. Flow volumes at regional plants and key points in the system +

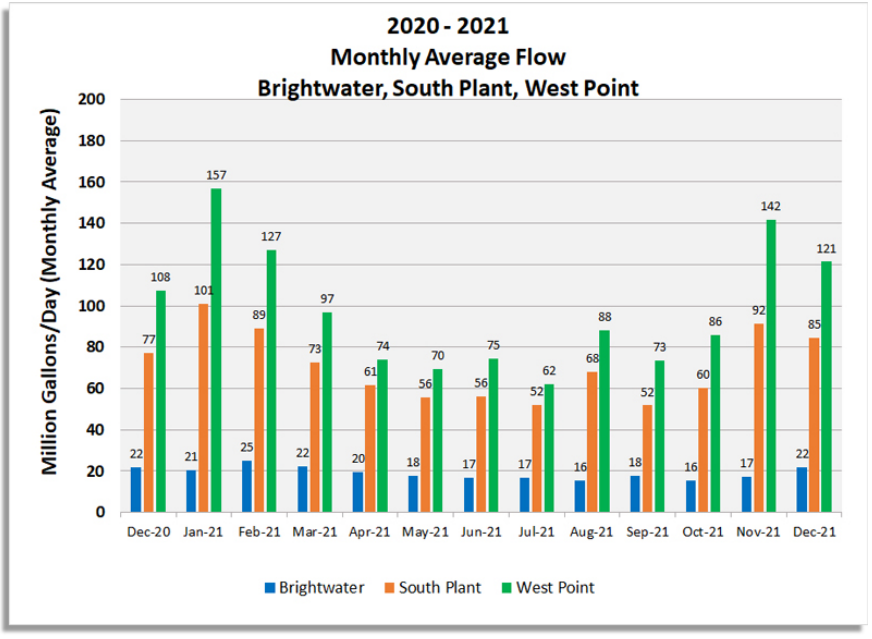
Flow volumes at regional plants and key points in the system

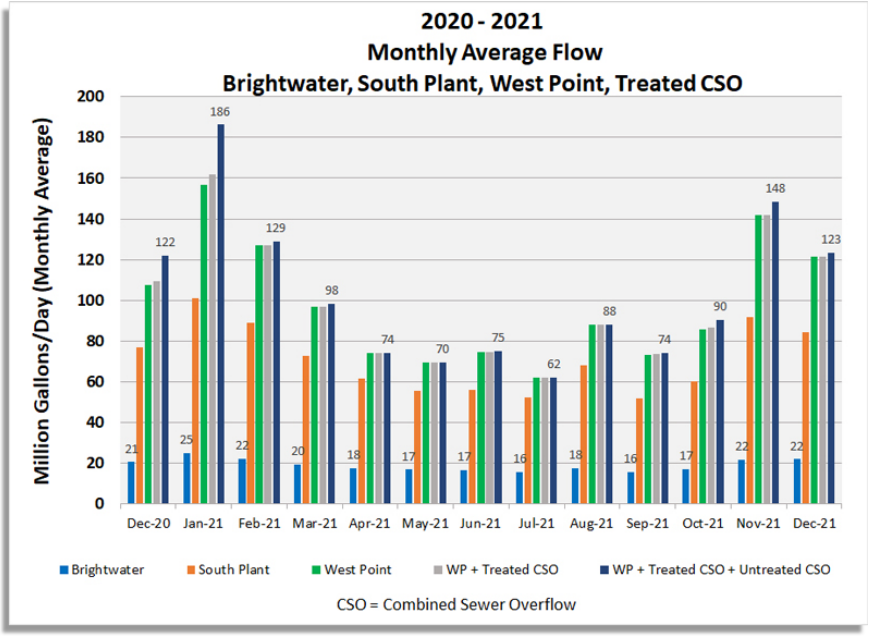
The following graphs illustrate the total amount of flow to each of our regional treatment plants over various periods of time including flows through the Combined Sewer Overflow system. The bars at the bottom of the first graph illustrate the impact that rainfall has on our system.




Jan 2020 - Dec 2021 Daily Average Flow
Brightwater, South Plant & West Point
Million Gallons/Day (Daily Average)
South Plant
Brightwater
West Point


Jan 2019 - Dec 2021 Daily Average Flow
Brightwater, South Plant & West Point
Million Gallons/Day (Daily Average)
South Plant
Brightwater
West Point

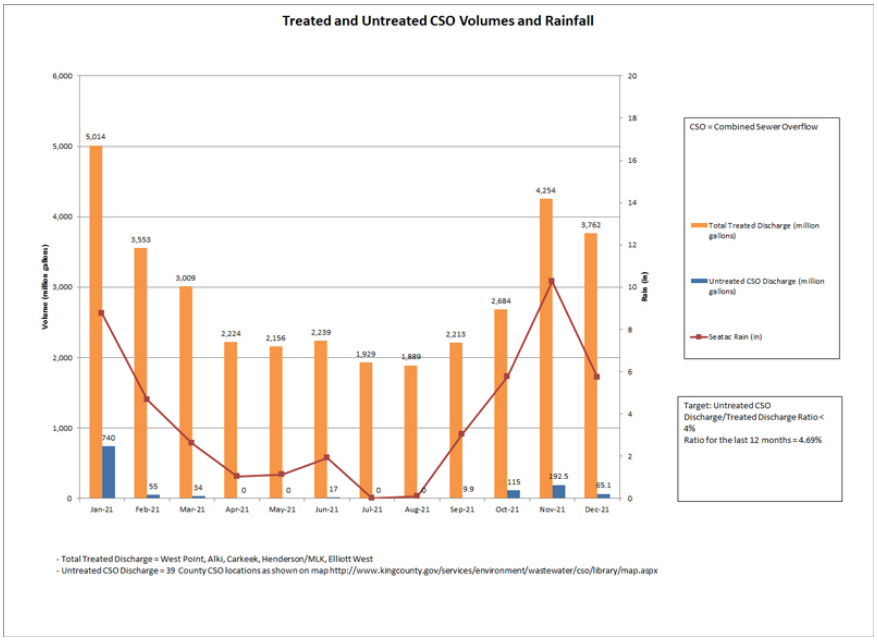

2020 - 2021
Monthly Average Flow
Brightwater, South Plant, West Point
Million Gallons/Day (Monthly Average)
Dec-20 Jan-21 Feb-21 Mar-21 Apr-21 May-21 Jun-21 Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21
Brightwater
South Plant
West Point



2. Combined Sewer Overflow (CSO) discharge volumes throughout the system +

Combined Sewer Overflow (CSO) discharge volumes throughout the system

The following graph illustrates the total amount of flow that is handled through the regional Combined Sewer Overflow system. Here is the link that shows our CSO locations: https://www.kingcounty.gov/services/environment/wastewater/cso/library/map.aspx

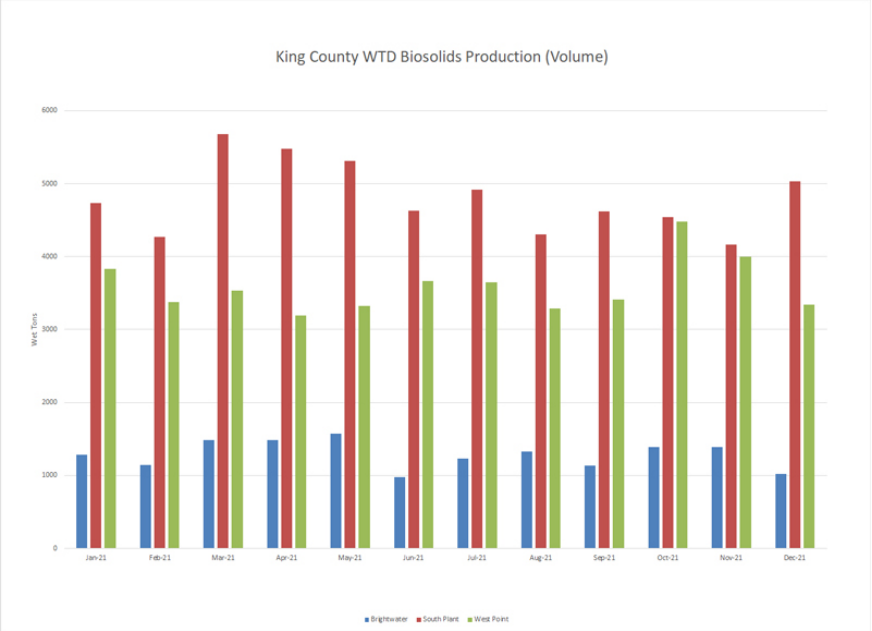


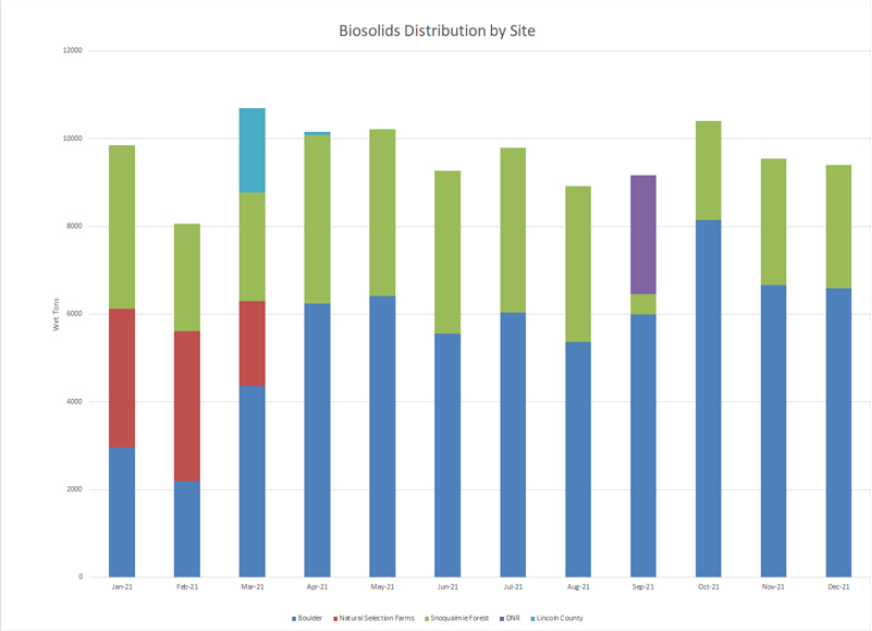
3. Production and distribution of Loop biosolids +

Production and distribution of Loop biosolids

Biosolids are the nutrient-rich product of the wastewater treatment process. Biosolids improve soil fertility and enhance plant growth and crop yield. Loop® is the brand name for biosolids produced by King County. Loop is used as fertilizer and soil amendment for commercial forestry and agriculture, and as an ingredient in compost for landscaping and home gardening.

King County's biosolids program is responsible for managing Loop recycling, including transportation and delivery, permitting and managing Loop applications, research and monitoring, and public outreach. Since 1973, we have worked with local organizations, farm groups, and university scientists to develop an award-winning program that serves as a model for safe, sustainable biosolids recycling.



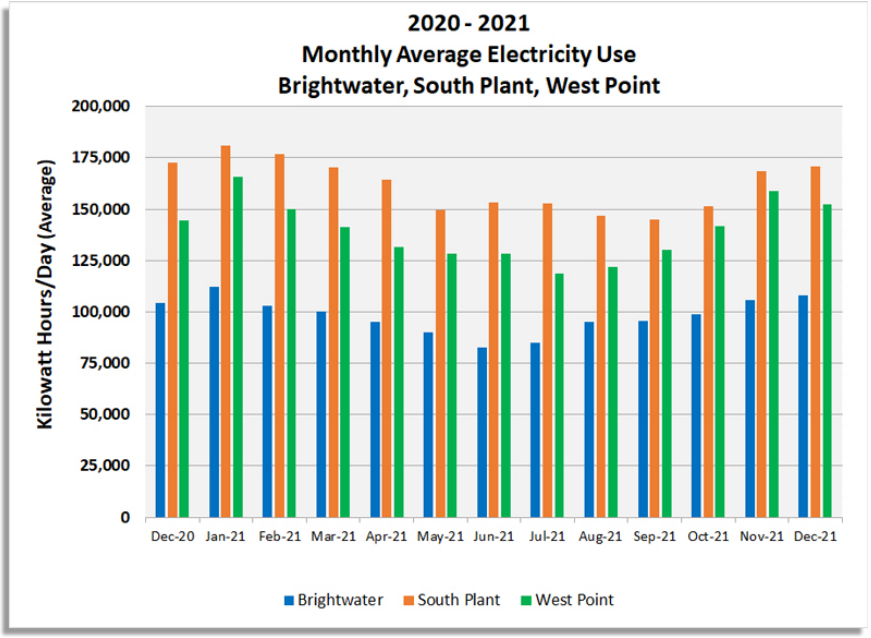


4. Electrical energy usage at each regional treatment plant and conveyance system +

Electrical energy usage at each regional treatment plant and conveyance system

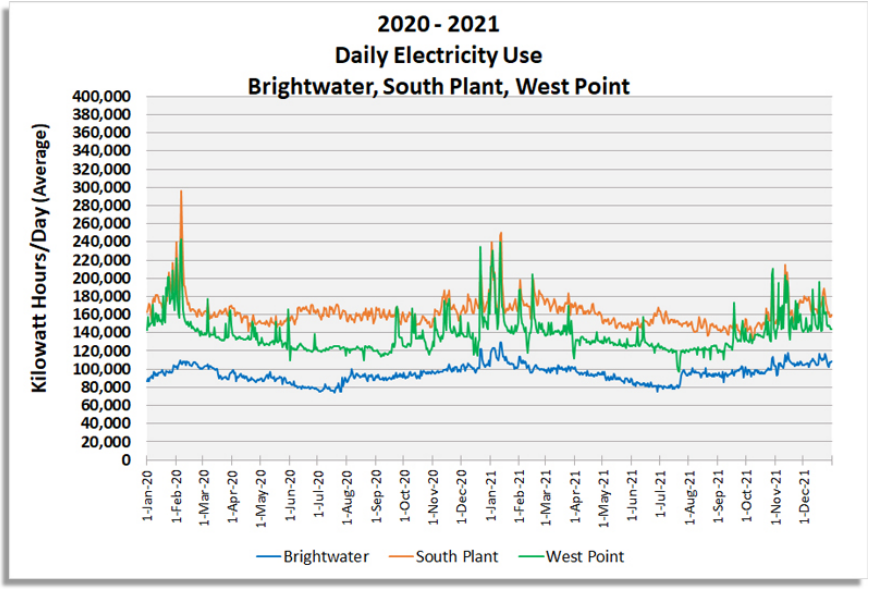
Monthly Average Electricity Use at Brightwater, South Plant and West Point:

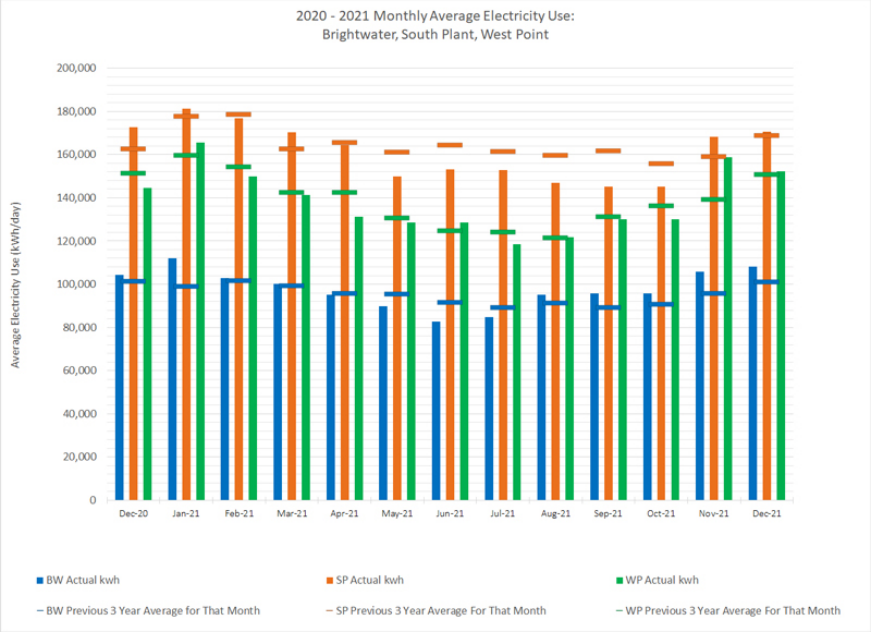
This diagram shows the average daily electricity use for the past 13 months for each of King County's three main treatment plants. West Point's electricity use depends mainly on treated volume. South Plant's electricity use is driven by influent flow and oxygen demand for nitrification. Brightwater's energy use is higher per gallon treated because of its elevated location, which requires more pumping, higher treatment standards, and stringent odor control requirements.



Electricity Use at Brightwater, South Plant and West Point:

This diagram shows daily electricity use for each treatment plant. It highlights how electricity use can double with high flow volumes at West Point.

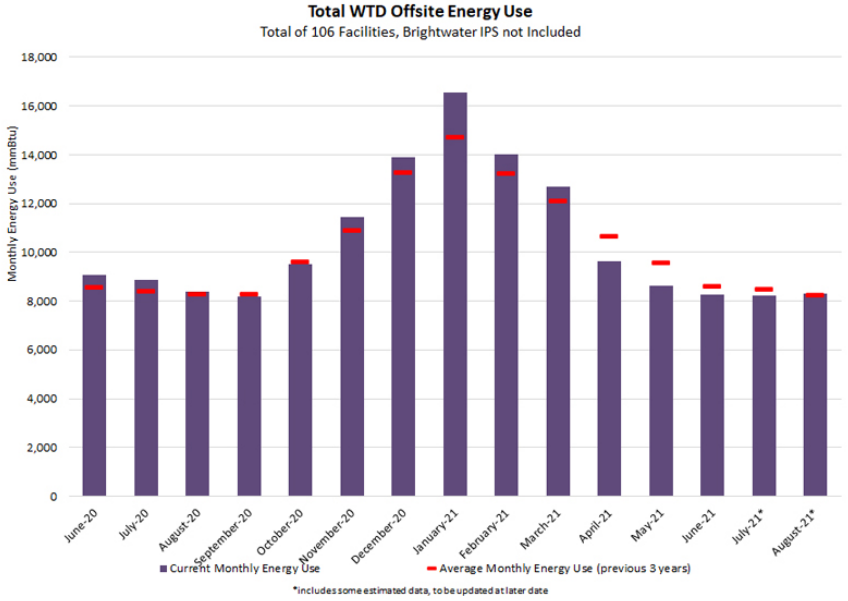




Total WTD Offsite Energy Use

This diagram shows the combined energy use of WTD's more than one hundred offsite facilities. Energy use at offsite facilities is driven by flow volumes and outside air temperatures.

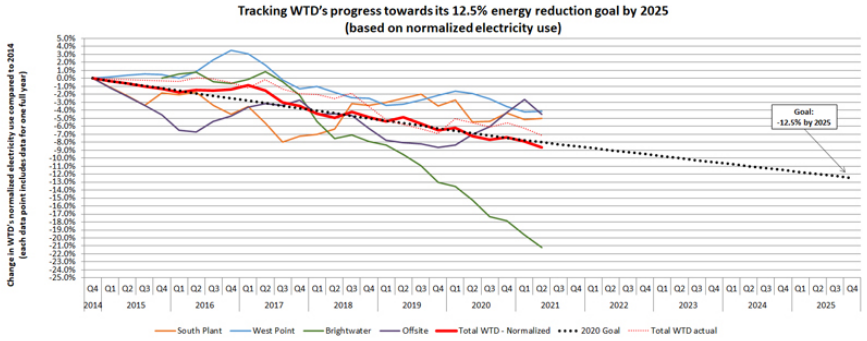
Please note: This information is updated monthly and will have a three-month lag when all of the data becomes available.



Tracking WTD's progress towards its 7.5% energy reduction goal.

Normalized electricity use describes the amount of electricity a facility would have used if the general conditions had been the same as they were in the baseline year (2014). Normalizing energy use allows us to track changes in energy use independent of factors we do not control such as air temperatures or flow volumes. This diagram shows the change in normalized electricity use for each treatment plant, offsite facilities and WTD in total and how these changes compare to the County wide 2020 energy reduction goal.

Please note: This normalized electricity use information is updated once a quarter with a lag time of about three months.



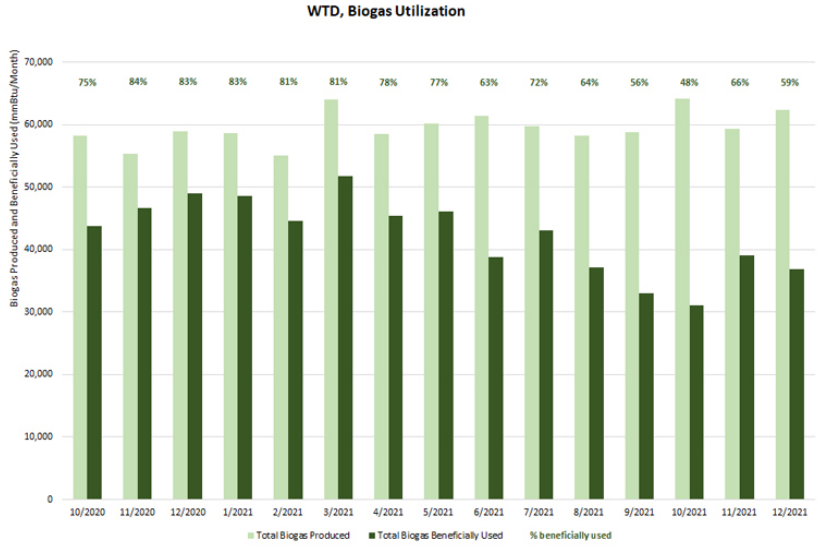
5. Production and usage of biogas +

Production and usage of biogas

WTD, Biogas Utilization

Biogas is used differently at each of the three treatment plants.

- At South Plant excess biogas can be fed into PSE's natural gas pipeline.
- At Brightwater and West Point biogas usage is limited to the equipment on site. At both of these plants there is a higher demand for biogas in winter when flows are higher and temperatures lower. The total amount of biogas beneficially used therefore tends to be higher in winter than in summer.



Regulatory performance (December 2021)

6. Significant power disruption events +

Significant power disruption events

The following table conveys information on the performance of the County's wastewater treatment facilities and conveyance system for any monthly exceedances of permit requirements that are caused by power disruption, or involve events with backups of the conveyance system and need for substantial responsive actions (e.g., cleanup of sanitary sewer overflows).

Wastewater Treatment and Conveyance System Compliance Events - Permit Requirement Exceedances Involving Power Disruption or Sewer Backup												
Facility	2021											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Wastewater Treatment Plants (e.g., effluent limit exceedance, unpermitted discharges)												
West Point	*a*											*a*
South Plant												
Brightwater												
Vashon												
Carnation												
CSO Treatment Facilities (e.g., effluent limit exceedance, disinfection failure)												
Henderson/MLK CSO		*	*	*	*	*	*	*	*	*	*	*
Alki CSO		*	*	*	*	*	*	*	*		*	*
Carkeek CSO		*	*	*	*	*	*	*			*	*
Elliott West CSO		*	*	*	*	*	*	*				*
West Section Conveyance System												
CSO Exacerbated Overflow												
CSO Dry Weather Overflow												
Sanitary Sewer Overflow	*b*											
East Section Conveyance System												
Sanitary Sewer Overflow	*b*											

Notes:

1	Number of power disruption/backup events in any month where exceedances occur.
	Represents any month where no events occurred, or if any non-compliance occurred it was unrelated to power disruption, or backups in the conveyance system.
	Non-compliance occurred and involved power disruption or conveyance system backup; however, repair/solution is known and the incident response and correction was immediate.
	Non-compliance involving power disruption or conveyance system backup, and evaluation and corrective action includes substantial effects on residents and businesses, level of effort and time to resolve, or costs to system operations.
*	Monitoring period characterized by sufficiently low flow conditions that the CSO treatment facility did not operate with a discharge to the outfall at any time in the month.

a Power disturbances at West Point contributed to a secondary diversion (i.e., unauthorized blending of primary and secondary treated flow) on January 9th, and a bypass of 11 million gallons to the emergency bypass outfall in Puget Sound during a large storm event on January 12-13. Ecology issued Administrative Order #19477 on February 2, 2021 that requires King County to plan and implement power reliability strategies and improvements to minimize the potential for secondary diversions and bypasses. On December 12, 2021, a power sag resulted in "exacerbation" of an ongoing secondary diversion event, resulting in the discharge of additional blended flow to occur had the power disturbance not occurred.

b A large storm on January 12-13 resulted in peak wastewater and combined stormwater flows along with widespread power outages and disturbances. The storm event was accompanied electrical- and telemetry-related disturbances at pump station facilities. Overflows occurred at separated system pump stations in the West section service area (Richmond Beach) and East section (Medina), and at a CSO pump station (East Pine).

7. Significant system process disruptions +

Significant system process disruptions

Updates

Medina

On Friday, January 7, King County reported an overflow from 1 to 2:30 p.m. at the Medina Pump Stations as a result of heavy rainfall that exceeded the station's capacity. King County's Wastewater Treatment Division has notified health and regulatory agencies and tested water quality. Medina Park beach was closed over the weekend, but reopened to the public Monday after water quality testing showed safe results.

Rainier Ave S

On Friday, January 7, a plumbing error at a home along Rainier Ave S in Seattle caused a sewer overflow along Lake Washington when a plumber opened a home's private side sewer connected to the County's sewer system, but could not close it. King County was informed and quickly capped the homeowner's side sewer and stopped the overflow. The County notified public health and regulatory agencies and posted signs in the area as a precaution to warn people to avoid contact with the water. Signs were removed Monday after water quality testing showed safe results.

Carkeek

Between 5:30 pm on Friday, January 7, and 2:30 pm on Saturday, January 8, there was a loss of disinfection at the Carkeek Wet Weather Treatment Station. During that time period, flows received full treatment excluding disinfection. The event ended when flow to the station was diverted to the West Point Treatment Plant for full treatment. King County notified health and regulatory agencies and water quality at Carkeek Park beach showed safe results. The disinfection system has been repaired and the station is ready to treat the next storm event.

Montlake

On Tuesday, January 4, WTD staff discovered a partially open outfall gate at the Montlake Regulator Station outfall. The stuck gate was approximately 30% open and caused an overflow starting at approximately 12:01 a.m. on January 3 until 12:15 p.m. on January 4. Staff installed a gate just upstream of the outfall gate at approximately 12:15 p.m. on January 4 to stop the overflow, and then closed the stuck gate manually. The outfall gate will remain closed until a necessary part arrives. An emergency overflow weir located upstream of the outfall gate location will be used until the gate is repaired. Samples were collected from five nearby locations for water quality analysis and regulatory agencies were notified.

The following table conveys information on the performance of the County's wastewater treatment facilities and conveyance system for any monthly exceedances of permit requirements that are caused by, or involve, process disruption (not power related) such as major equipment or biological treatment process failures, or industrial discharges.

Wastewater Treatment and Conveyance System Compliance Events - Permit Requirement Exceedances Involving Process Disruption

Facility	2021											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Wastewater Treatment Plants (e.g., effluent limit exceedance, unpermitted discharges)												
West Point												
South Plant												
Brightwater												
Vashon												
Carnation												
CSO Treatment Facilities (e.g., effluent limit exceedance, disinfection failure)												
Henderson/MLK CSO		*	*	*	*	*	*	*	*	*	*	*
Alki CSO		*	*	*	*	*	*	*	*		*	*
Carkeek CSO		*	*	*	*	*	*	*			*	*
Elliott West CSO	*a*	*	*	*	*	*	*	*			*a*	*
West Section Conveyance System												
Unpermitted Overflows												
East Section Conveyance System												
Sanitary Sewer Overflow												

Notes:

1	Number of process disruption events in any month where exceedances occur.
	Represents any month where no events occurred, or if any non-compliance occurred it was unrelated to process disruption.
	Non-compliance occurred and involved process disruption; however, repair/solution is known and the incident response and correction was immediate.
	Non-compliance involving process disruption, and evaluation and corrective action includes substantial effects on residents and businesses, level of effort and time to resolve, or costs to system operations.
*	Monitoring period characterized by sufficiently low flow conditions that the CSO treatment facility did not operate with a discharge to the outfall at any time in the month.

a Effluent limit exceedances at Elliott West associated with process control performance; a planning and facility improvements process is underway.

8. Regulatory compliance and performance +

Regulatory compliance and performance

The following table conveys information on the performance of King County's wastewater treatment facilities and conveyance system for any monthly exceedances of permit requirements that involve compliance with effluent limitations at the County's five wastewater treatment plants or four CSO treatment facilities, or unpermitted overflow events in the separated sanitary or combined stormwater-sewer conveyance system.

NPDES Permit Exceedances (Reportable Events Subject to Potential Penalties) – Wastewater Treatment Facilities or Conveyance System												
Facility	2021											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Effluent Limitations Exceedances at Wastewater Treatment Facilities												
West Point	*a*	*a*		*a*		*a*						
South Plant												
Brightwater												
Vashon												
Carnation												
Effluent Limitations Exceedances at CSO Treatment Facilities												
Henderson/MLK CSO		*	*	*	*	*	*	*	*	*	*	*
Alki CSO		*	*	*	*	*	*	*	*		*	*
Carkeek CSO		*	*	*	*	*	*	*			*	*
Elliott West CSO	*b*	*	*	*	*	*	*	*			*b*	*
Conveyance System Overflow Events in Combined or Separated Basins												
West Section – Dry Weather Overflows at CSO Outflalls	*c*											
West Section – Sanitary Sewer Overflows	*c*											
East Section – Sanitary Sewer Overflows	*c*											

Notes:

Compliance goal for all events is "zero", and all exceedances have potential to be assessed penalties.

No ongoing non-compliance; or events with known cause and immediate correction.

Ongoing compliance issue; but repairs/solution is known and underway for timely correction.

Substantial ongoing compliance issue with ongoing corrective actions, or response and/or planning for corrective action is underway.

* Monitoring period characterized by sufficiently low flow conditions that the CSO treatment facility did not operate with a discharge to the outfall at any time in the month.

a ***West Point Bypass and Secondary Diversion Events:*** Power disturbances at West Point contributed to a secondary diversion (i.e., unauthorized blending of primary and secondary treated flow) on January 9th, and a bypass of untreated wastewater from the emergency bypass outfall to Puget Sound during a large storm event on January 12-13 totaling about 11 million gallons. Ecology subsequently issued Administrative Order #19477 on February 2, 2021 that requires King County to plan for, and implement, power reliability strategies and improvements to minimize the potential for secondary diversions and bypasses. This footnote identifies and summarizes any bypass and secondary diversion events following the issuance of the administrative order.

- An inadvertent secondary diversion occurred on February 2, 2021 due to human error that resulted in the discharge of 3.5 million gallons over 39 minutes.
- A bypass of untreated wastewater from the emergency bypass outfall to Puget Sound occurred on April 29, 2021 due to a failed uninterruptable power supply (UPS) during a routine equipment testing procedure, resulting in a discharge of 900,000 gallons over 29 minutes.
- A large storm on Jun 13th resulted in plant inflows reaching about 331 mgd while the plant had seasonally reduced capacity of 240 mgd for scheduled construction work, and subsequently exacerbated the amount of the secondary diversion.

b A planning and facility improvements process is underway for Elliott West.

c A large storm on January 12-13 resulted in peak wastewater and combined stormwater flows along with widespread power outages and disturbances. The storm event was accompanied by electrical- and telemetry-related disturbances at pump station facilities. Overflows occurred at separated system pump stations in the West section service area (Richmond Beach) and East section (Medina), and at a CSO pump station (East Pine).

9. Water quality monitoring +

Water quality monitoring

King County WTD conducts routine effluent water quality monitoring for compliance with the NPDES permit requirements at the County's five wastewater treatment plants, and at the four CSO treatment facilities. Additionally, WTD (in conjunction with scientists in King County Water and Land Resources Division [WLRD]) conducts specific sediment and water quality monitoring studies required for compliance with the NPDES permit as well as the Post Construction Monitoring Program for the County's 2012 Long-term CSO Control Plan Amendment. The following sections further describe these monitoring programs and provide information on the status of currently available monitoring efforts and data reports.

Effluent Monitoring Data

WTD monitors treated wastewater (effluent) at each of the five main treatment plants (West Point, South Plant, Brightwater, Vashon, and Carnation) for a variety of conventional chemical and biological water quality properties which are used to track performance of the physical and biological treatment processes, and to ensure compliance with effluent limitations that are specified in the NPDES permit for the purposes of protecting the aquatic environment where the wastewater is discharged. WTD also conducts required effluent monitoring at the four CSO treatment facilities (Carkeek, Elliott West, Alki, and Henderson/Martin Luther King [H/MLK]) whenever wet weather storm events result in these facilities operating and discharging to their designated CSO outfalls. The majority of the routine effluent data that is collected to comply with applicable NDPES permit requirements is compiled and submitted to Ecology electronically as Discharge Monitoring Reports (DMRs) on a regular monthly basis.

The key parameters that are monitored for NPDES permit compliance with effluent limitations consist of biochemical oxygen demand (BOD), total suspended solids (TSS), settleable solids, pH, chlorine residual, and fecal coliform bacterial. The compliance with the effluent limitations is a primary method used by Ecology and WTD of evaluating routine and ongoing performance of the treatment processes. Accordingly, the reader is directed to review information presented above under "#8 –Regulatory Compliance and Performance" which provides a simplified summary of monthly plant performance that incorporates and interprets the diverse set of effluent monitoring data and information on any significant non-compliance events.

The effluent monitoring data and reports submitted to Ecology in monthly DMRs address many additional parameters that are not necessarily directly attributable to treatment process performance or NPDES regulatory compliance. However, the following attached files are the cover letters submitted for the most recent DMRs for each of the five wastewater treatment plants. The cover letters characterize each facility during the monitoring period including such items as flows, compliance with NPDES permit requirements, and any other important process performance events, news, or significant events. The facility DMR cover letters for the most recent monthly monitoring period follow:

- Brightwater (Permit No. WA0032247)
- Carnation (Permit No. WA0032182)
- South Plant (Permit No. WA0029581)
- Vashon (Permit No. WA0022527)
- West Point (Permit No. WA0029181)

Finally, the entire body of effluent monitoring data and reports that are submitted to Ecology as part a DMR package are available on Ecology's "PARIS" database by searching on the Permit No. for each plant (identified above) at the following:

https://fortress.wa.gov/ecy/paris/PermitLookup.aspx

WTD also conducted additional effluent monitoring during the restoration process for the West Point treatment plant following the February 9, 2017 flooding and damage incident. WTD established a dedicated temporary website to post the collected effluent data, summaries of the data, and other reports and information. With the restoration of the majority of treatment processes and equipment completed in May 2017, and West Point's return to its normal status of routine compliance with permit requirements, the additional monitoring was discontinued and WTD now intends to maintain the temporary website indefinitely until such time it is determined to no longer be necessary. The dedicated website for the environmental monitoring data is:

https://www.kingcounty.gov/depts/dnrp/wtd/system/west/west-point-restoration/environmental-monitoring.aspx

Water Quality Monitoring Data

The County's Water, Resources, and Land Division (WRLD) – Science Section, with assistance from the King County Environmental Laboratory (KCEL), conducts a variety of water quality monitoring programs in the Puget Sound, and the regions rivers and lakes that indirectly contribute to an understanding of the effects of County activities on environmental resources. However, with the exception of limited periodic and specific discharge event conditions, the County is not required under the NPDES permits for the wastewater treatment plants to conduct receiving water quality monitoring at our discharge outfall locations. Consequently, the reader is directed to the WLRD Science Section website where available information on the ambient marine water quality monitoring programs in Puget Sound can be found:

https://green2.kingcounty.gov/marine

Additionally, WTD in conjunction with WLRD Science Section staff, temporarily expanded and increased the frequency of the routine marine water quality monitoring in Puget Sound at sites near the West Point outfall while the restoration process for the West Point treatment plant was underway following the February 9, 2017 flooding and damage incident. WTD established a dedicated temporary website to post bi-weekly summary reports of Puget Sound water quality conditions during this period, and with West Point's return to a state of compliance with NPDES permit requirements, the additional monitoring was discontinued in June 2017. Furthermore, WTD and WLRD Science Section are involved in conducting supplemental environmental analyses to characterize conditions in Puget Sound resulting from the West Point incident to determine if any changes in contaminants of concern may have occurred in sediments or marine aquatic organisms. The dedicated website where information from the marine water quality monitoring, and the supplemental sediment and marine organism contaminant investigations, can be found at:

https://www.kingcounty.gov/depts/dnrp/wtd/system/west/west-point-restoration/marine-monitoring.aspx

Sediment Monitoring Data

WTD, with assistance from the WLRD Science Section, conducts extensive sediment quality monitoring and analysis for compliance with the NPDES permits for the West Point, South Plant, and Brightwater treatment plants. A large amount of the County's required sediment analysis work is conducted at CSO outfall locations to implement the Post Construction Monitoring Program for the County's 2012 Long-term CSO Control Plan Amendment under the West Point NPDES permit. The CSO program is focused on ensuring that the CSO outfalls meet Washington's sediment quality standards as hydraulic control of each outfall is achieved (i.e., not more than one overflow event per year on a 20-year average). The West Point NPDES permit also requires the County to prepare an update of the 2009 Sediment Data Report by December 1, 2018 to

provide a comprehensive summary of information for each CSO outfall and its status with respect to compliance with sediment quality standards. Finally, the County is implementing, and periodically updates, a Sediment Management Program that provides the overarching direction for all of the CSO discharge locations, summarizes ongoing and previously performed sediment cleanup work, summarizes the results of CSO discharge modeling, provides the status of existing sediment quality, and assigns an appropriate sediment management strategy for each CSO. In general, the sediment investigations and development of sediment management strategies at any given CSO outfall is a complex and lengthy process involving multiple actions and participants, and summary information on the status of each project is not readily summarized. Consequently, the reader is directed to the County's dedicated Sediment Management Plan website where available information, reports, news, and status of the program can be obtained:

https://www.kingcounty.gov/services/environment/wastewater/sediment-management/plan.aspx

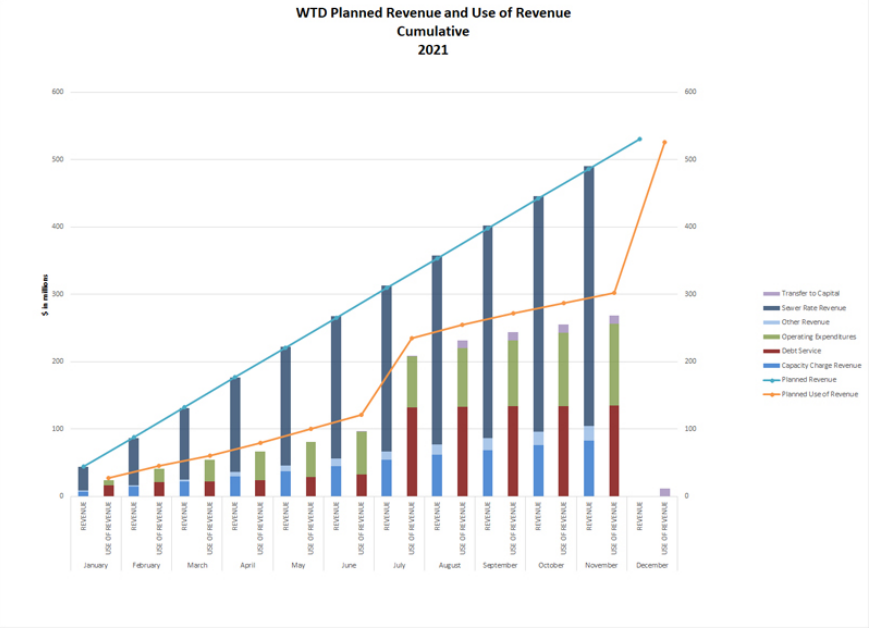
Financial performance (December 2021)

10. Wastewater planned revenue and use of revenue +

Wastewater planned revenue and use of revenue

This chart compares WTD planned revenue and use of revenue with monthly actual revenue and use of the revenue collections. Monthly actuals highlight total revenue collected by the sewer rate, capacity charge and other sources, and total use of the revenue collected by operating expenditures, debt service and transfer to capital.

WTD Finance is in the process of updating year-end information and new information will be posted soon.



11. Cost and schedule of baselined major capital projects +

Cost and schedule of baselined major capital projects

This table represents budget and schedule performance of projects with greater than $1M expected cost. Performance is measured relative to the baseline point which is established at approximately 30% design completion per established King County Project Management Standards.

Q4 2021 Baseline Report

Agency: Wastewater Treatment, Fund:All, Year: 2021, Qtr: 4th Quarter, Cost Status: All, Schedule Status: All, Scope Status: All, Project: All

Project Number	Project Name	Scope Status	Schedule Status	Current Substantial Completion Date	Baseline Duration	Current Duration	Variance at Completion (VAC)	% VAC	Cost Status	Baseline Budget at Completion (BAC)	Current Estimate At Completion (EAC)	Cost Variance At Completion (CVAC)	% CVAC	Report Date
3611 WATER QUALITY CONST-UNRES - Wastewater Treatment														
1038122	WTC SUNSET HEATH PS FM UPGRADE			1/31/2022	1,813	2,484	671	37 %		$69,754,491	$81,050,354	$11,295,863	16 %	Q4 2021
1114382	WTC NORTH CREEK INTERCEPTOR			3/10/2019	1,604	2,428	824	51 %		$56,590,659	$92,252,996	$35,662,337	63 %	Q4 2021
1116797	WTC JAM/ARC BLDG REPLACEMENT			5/10/2024	1,663	1,663	0	0 %		$71,290,311	$71,290,088	($223)	0 %	Q4 2021
1116800	WTC N MERCER ENATAI INT PAR			1/3/2025	2,121	2,761	640	30 %		$116,035,624	$150,655,934	$34,620,310	29 %	Q4 2021
1116801	WTC LK HILLS&NW LK SAM INTCPT			2/11/2027	1,995	3,439	1,444	72 %		$119,342,432	$119,342,430	($2)	0 %	Q4 2021
1120861	WTC MOBILE OC UNIT REPLACEMENT			5/16/2022	696	2,008	1,312	188 %		$3,171,445	$3,093,702	($77,743)	-2 %	Q4 2021
1121402	WTC GEORGETOWN WET WEATHER TREATMENT STATION			4/4/2022	2,141	2,176	35	1 %		$260,713,113	$241,096,021	($19,617,092)	-7 %	Q4 2021
1123517	WTC E FLEET MAINT FAC REPLCMNT			8/24/2022	750	2,143	1,393	185 %		$9,999,584	$24,797,611	$14,798,027	147 %	Q4 2021
1123624	WTC COAL CRK SIPHON TRUNK PARA			3/16/2027	2,432	2,723	291	11 %		$132,310,569	$132,310,567	($2)	0 %	Q4 2021
1123626	WTC SP BIOGAS HEAT SYS IMPROVE			6/24/2024	1,410	2,631	1,221	86 %		$59,897,304	$35,846,205	($24,051,099)	-40 %	Q4 2021
1123627	WTC WP 2ND MIX LIQ BLOWER REPL			12/17/2021	640	955	315	49 %		$3,994,447	$3,473,534	($520,913)	-13 %	Q4 2021
1127489	WP PRIMARY SED ROOF STRUCTURE			8/30/2024	1,387	2,060	673	48 %		$37,658,373	$45,821,835	$8,163,463	21 %	Q4 2021
1128354	WTC INTERBAY FORCE MAIN & ODOR CONTROL			12/23/2025	1,414	1,784	370	26 %		$5,386,868	$64,201,203	$58,814,335	1,091 %	Q4 2021
1129156	WTC JBAY RSP PROTECT SYS UPGRD			8/17/2022	407	407	0	0 %		$1,776,188	$1,776,188	$0	0 %	Q4 2021
1129526	WTC WP LSG PIPING REPLACEMENT			9/15/2025	2,634	2,162	-472	-17 %		$24,920,340	$24,913,640	($6,701)	0 %	Q4 2021
1129532	WTC BW OPTIMIZE AERATION BASIN			12/22/2023	927	1,172	245	26 %		$21,193,113	$21,193,112	($1)	0 %	Q4 2021
1130458	WTC SP AER BASIN SAFETY ACCESS			12/2/2021	753	1,172	419	55 %		$1,710,992	$1,402,123	($308,870)	-18 %	Q4 2021
1134063	WTC WP POWER MON UPGD			10/19/2022	1,269	568	-701	-55 %		$3,840,813	$3,840,812	($1)	0 %	Q4 2021
1134068	WTC ALKI PERM GENERATOR			10/26/2023	931	1,227	296	31 %		$14,812,683	$14,154,004	($658,680)	-4 %	Q4 2021
1134070	WTC CMMS UPGRADE			2/17/2023	437	437	0	0 %		$12,464,036	$12,464,036	$0	0 %	Q4 2021
1134071	WTC OVATION CONT SYS UPGD			9/16/2022	975	1,234	259	26 %		$15,547,968	$16,822,762	$1,274,794	8 %	Q4 2021
1134072	WTC PASS WEIR FOR EMG BYPASS			10/15/2025	1,408	1,408	0	0 %		$10,747,594	$10,747,594	$0	0 %	Q4 2021
1134301	WTC PIMS REPLACEMENT			12/29/2023	371	1,641	1,270	342 %		$1,844,892	$2,940,742	$1,095,850	59 %	Q4 2021
1136290	WTC WPTP TRAFFIC CONTROL GATE			6/18/2021	199	437	238	119 %		$755,578	$1,145,152	$389,575	51 %	Q4 2021

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Q4 2021 Baseline Report

Agency: Wastewater Treatment, Fund:All, Year: 2021, Qtr: 4th Quarter, Cost Status: All, Schedule Status: All, Scope Status: All, Project: All

Project Number	Project Name	Scope Status	Schedule Status	Current Substantial Completion Date	Baseline Duration	Current Duration	Variance at Completion (VAC)	% VAC	Cost Status	Baseline Budget at Completion (BAC)	Current Estimate At Completion (EAC)	Cost Variance At Completion (CVAC)	% CVAC	Report Date
3611 WATER QUALITY CONST-UNRES - Wastewater Treatment														
1136471	WTC DECOMISSION SP FUEL CELPP			3/25/2022	352	766	414	117 %		$1,323,892	$1,655,632	$331,740	25 %	Q4 2021
1137181	WTC RCH B PS MCC & SWITCH REPL			12/14/2022	769	981	212	27 %		$6,492,547	$6,215,961	($276,586)	-4 %	Q4 2021
1137329	WTC CARKEEK CSO DECHOLR MOD			3/31/2023	745	906	161	21 %		$1,953,306	$2,951,258	$997,952	51 %	Q4 2021
1137640	Small Generators Replacement - Group 1			4/4/2025	1,305	1,305	0	0 %		$5,401,119	$5,401,119	$0	0 %	Q4 2021
1137751	SP Essential Services Standby Generator Replacement			11/7/2022	616	783	167	27 %		$2,211,228	$2,211,228	$0	0 %	Q4 2021
1138496	Denny Way Regulator Erosion Control			5/31/2022	456	456	0	0 %		$1,106,000	$1,106,000	$0	0 %	Q4 2021
1138543	WTC SYS-WIDE ARCH FLASH ASSMT			9/30/2023	1,256	666	-590	-46 %		$2,490,193	$2,545,084	$54,891	2 %	Q4 2021
1139037	WTC LAKELAND HILLS INSTALL GEN			2/10/2023	859	1,225	366	42 %		$5,386,868	$6,168,600	$781,732	14 %	Q4 2021
1139038	WTC MEDINA PS MCC & GEN REPL			12/8/2022	727	800	73	10 %		$6,099,315	$6,099,312	($3)	0 %	Q4 2021
1139041	WTC BW STORAGE TANK SPRAY SYST			1/7/2022	470	752	282	60 %		$3,114,882	$2,796,482	($318,400)	-10 %	Q4 2021
1139044	WTC SP BIOSOLIDS COMPOST PILOT			2/14/2023	657	1,155	498	75 %		$3,325,570	$3,325,570	$0	0 %	Q4 2021
1139045	WTC SP ODOR CONTROL MODS P,S&D			1/10/2022	639	846	207	32 %		$2,655,637	$2,358,177	($297,460)	-11 %	Q4 2021
1139969	Environmental Lab Roof Replacement			2/4/2022	310	430	120	38 %		$1,750,729	$1,871,017	$120,289	6 %	Q4 2021
1141030	WTC WEST POINT POWER QUALITY IMPROVEMENT			12/31/2024	1,142	1,142	0	0 %		$159,066,642	$159,066,642	$0	0 %	Q4 2021
1141537	WTC VALLEY CREEK INTERCEPTOR REHABILITATION			2/15/2022	196	182	-14	-7 %		$1,767,165	$1,767,165	$0	0 %	Q4 2021

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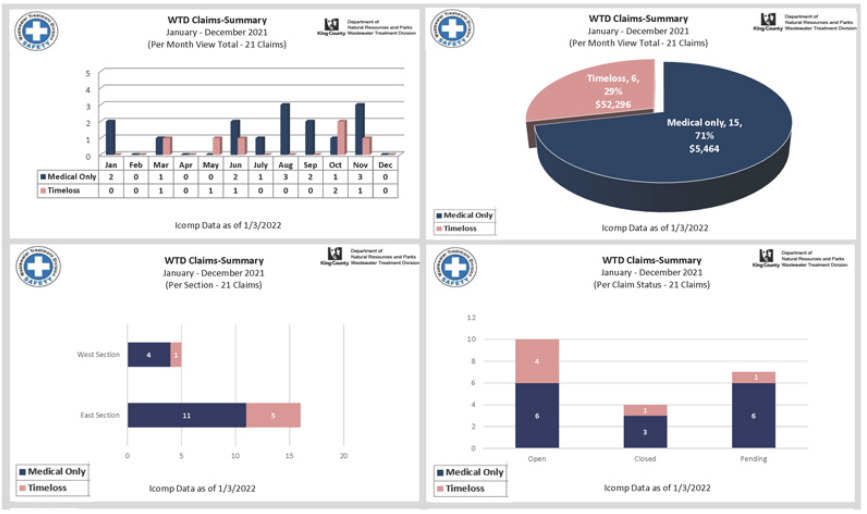
Safety performance (December 2021)

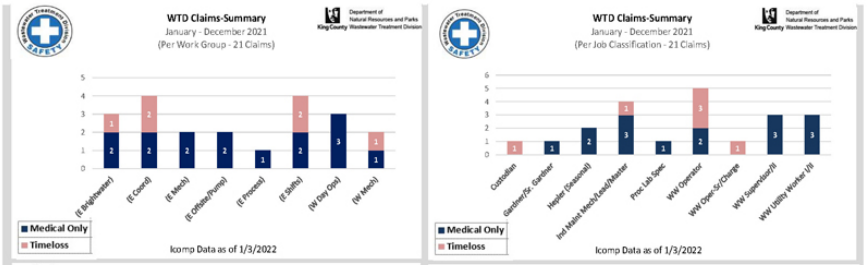
12. WTD accident (claim) summary +

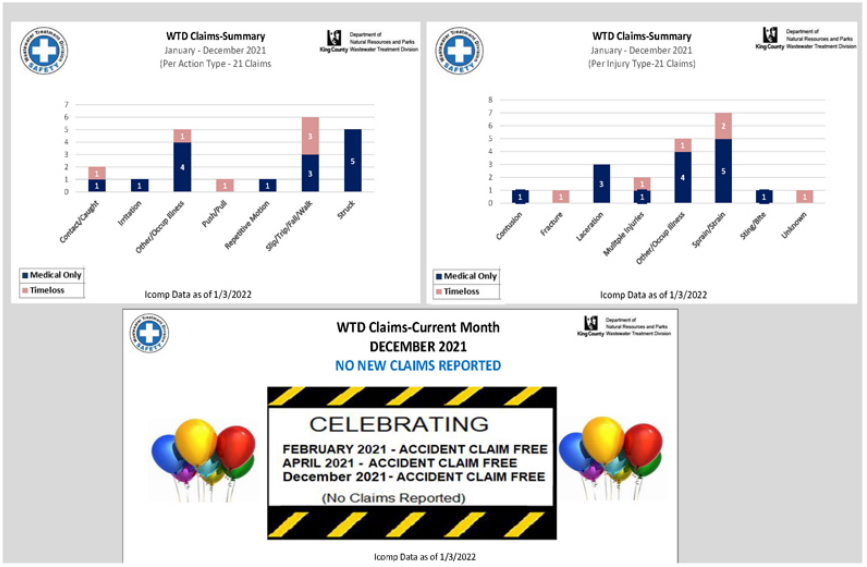
WTD accident (claim) summary

The following summary graphs illustrate employee accident and job injury claim experience (for current month and year to date) for the Wastewater Treatment Division.

WTD Claims Summary







- The term **Medical Only Claim** refers to employee accident that requires attention from a healthcare provider. The injured worker may be released completely after treatment or released with work restrictions requiring work accommodation.
- The term **Timeloss Claim** refers to claims that are serious enough to warrant the doctor taking the injured worker off his regular duty for a period of time. The injured worker may be released to modified (light) duty during his recovery period. As long as the employer accommodates the doctor's restrictions on the injured worker's activity during the light duty period, the claim may remain as medical only – if the injured worker returns to light duty before the elimination period lapses.

Monthly archives

Past performance metrics are posted by month in portable document format.

2021 +

- November 2021
- October 2021
- September 2021
- August 2021
- July 2021
- June 2021
- May 2021
- April 2021
- March 2021
- February 2021
- January 2021

2020 +

- December 2020
- November 2020
- October 2020
- September 2020
- August 2020
- July 2020
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- January 2020

2019 +

- December 2019
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- January 2019

2018 +

- December 2018
- November 2018
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- June 2018
- May 2018
- April 2018
- March 2018
- February 2018
- January 2018

2017 +

- December 2017
- November 2017
- October 2017

- September 2017
- August 2017
- July 2017

Wastewater Treatment Division

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