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

Operational metrics

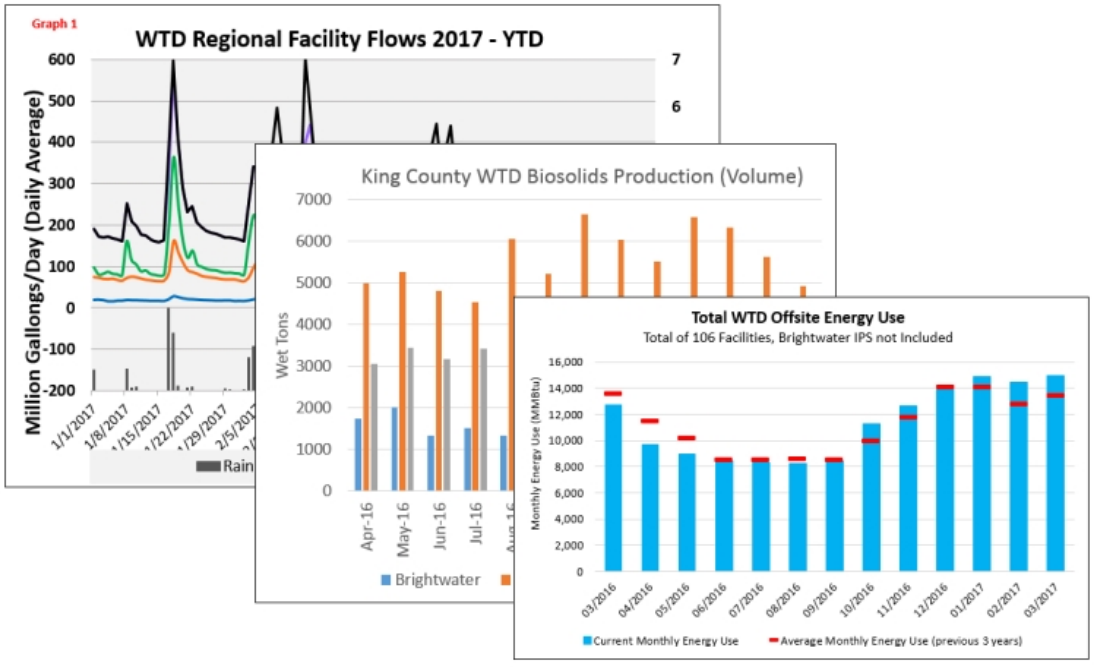
The following metrics represent the performance of the King County Wastewater Treatment Division in four key performance areas:

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

Contact us

If you have questions regarding this information, please contact:

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

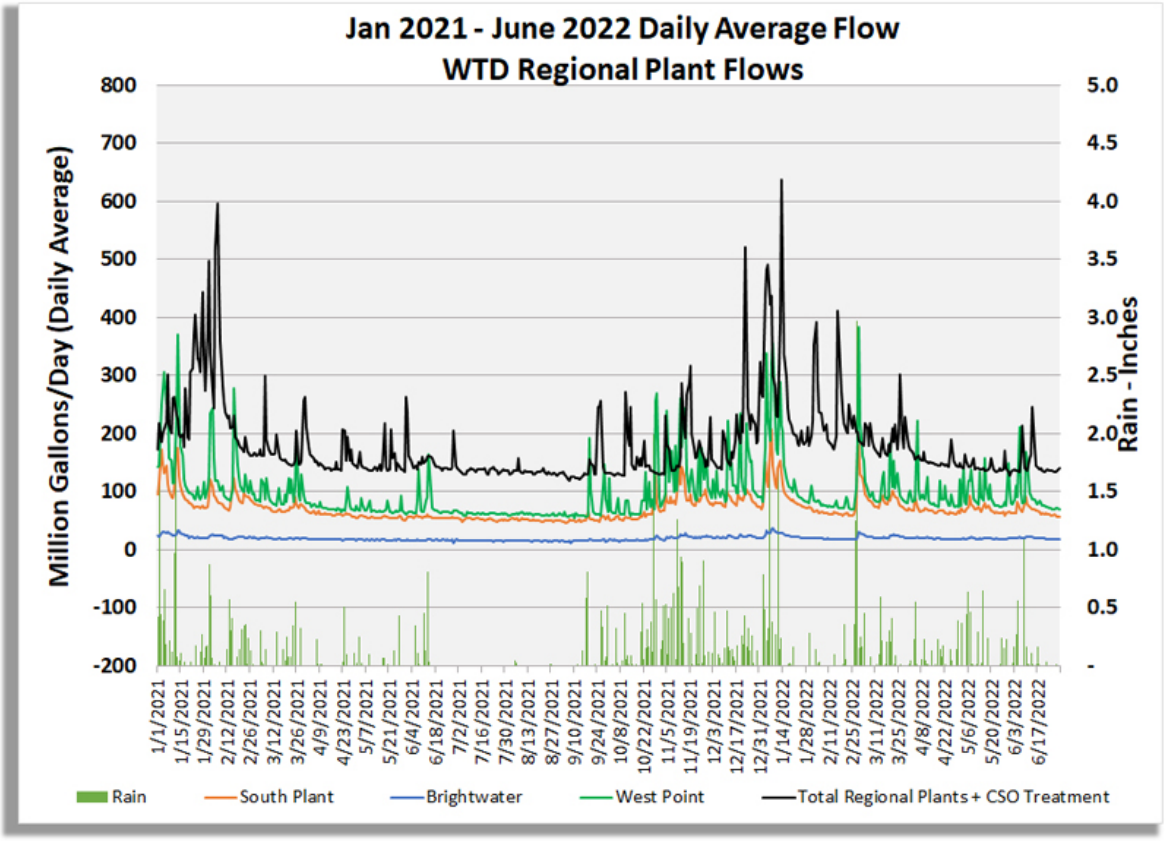


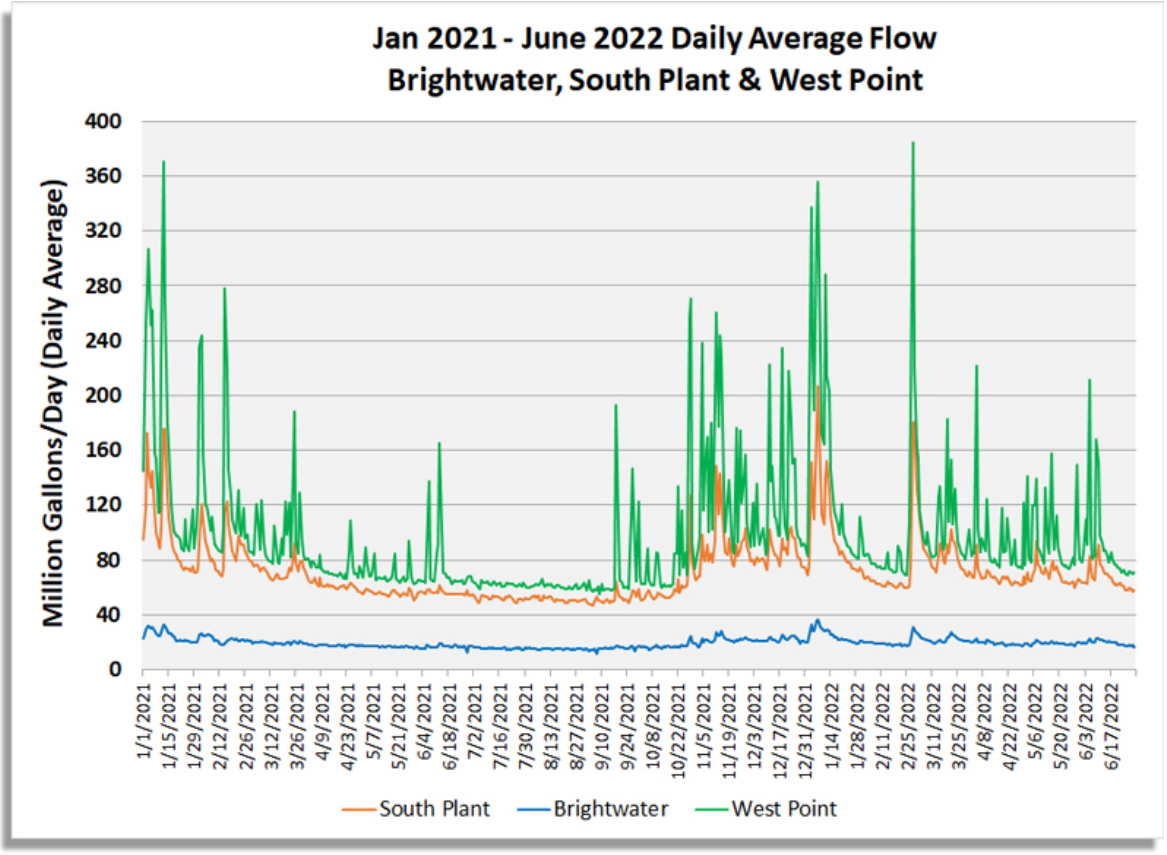
Operational performance (June 2022)

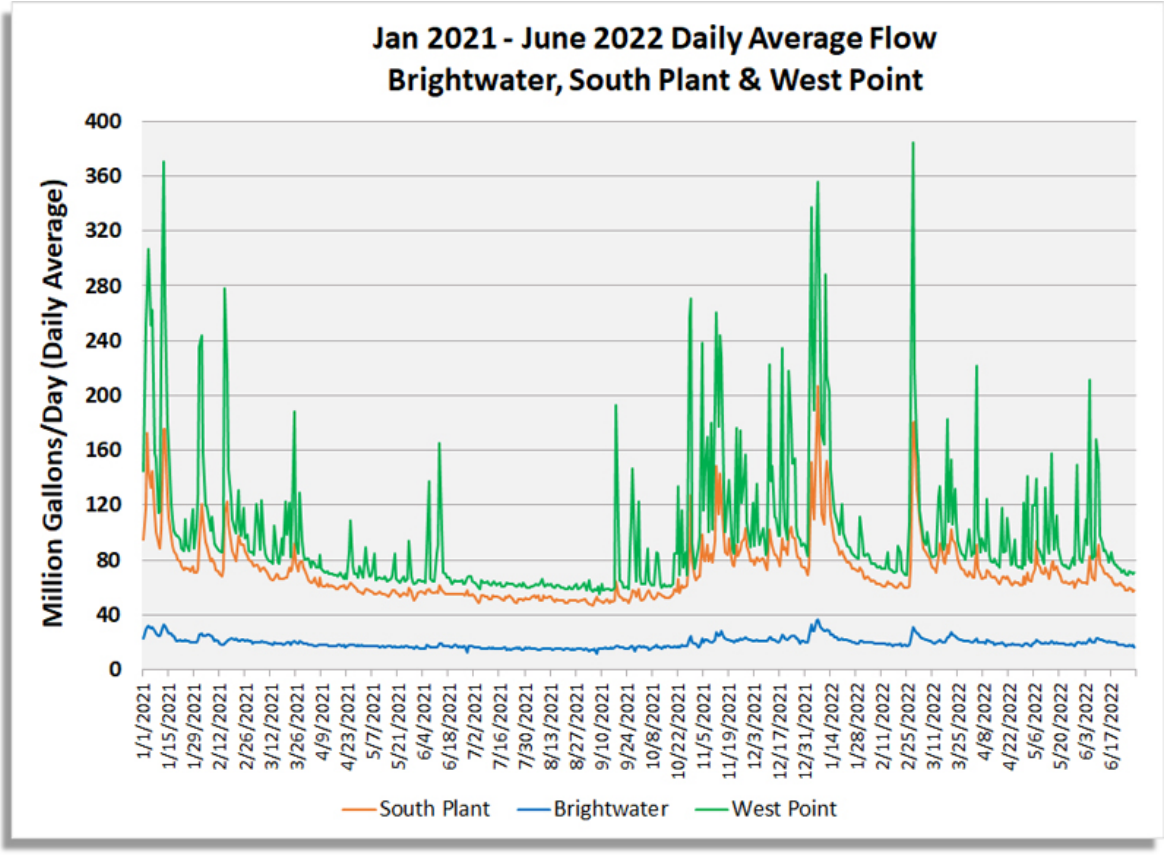
1. Flow volumes at regional plants and key points in the system +

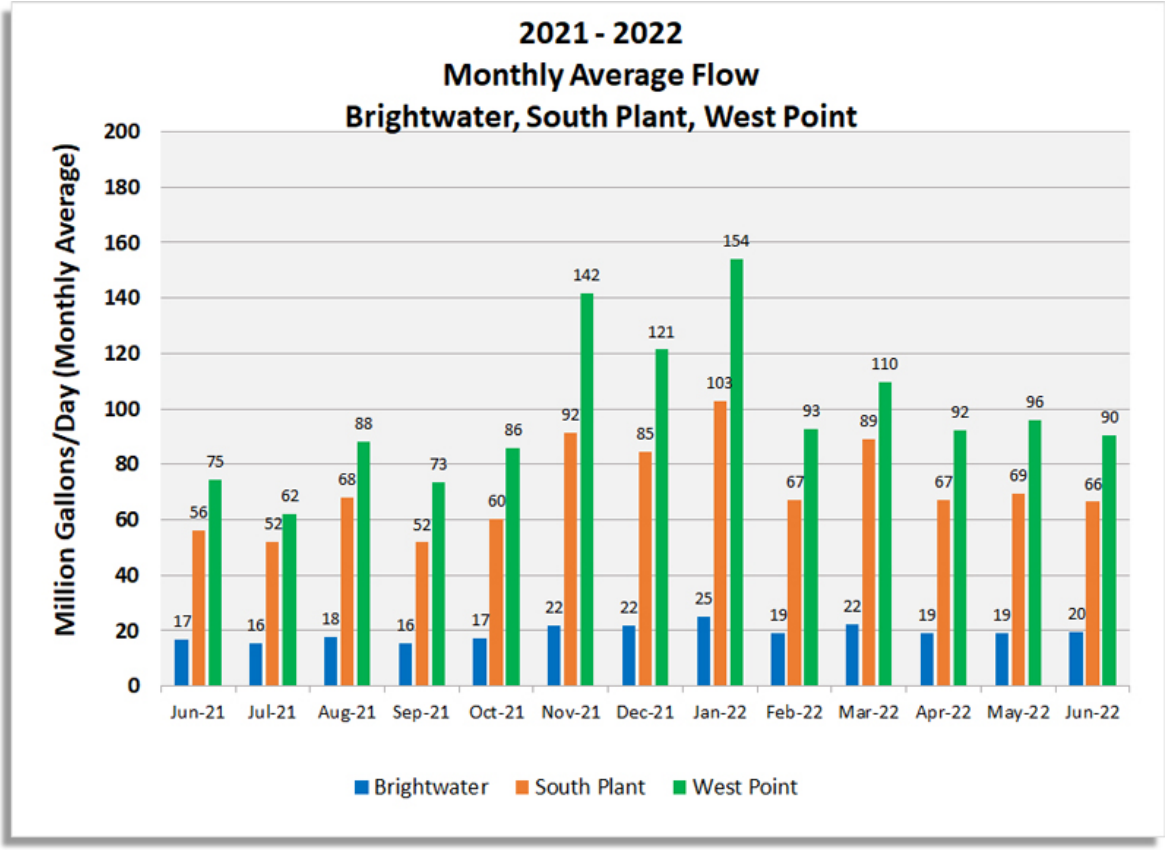
Flow volumes at regional plants and key points in the system

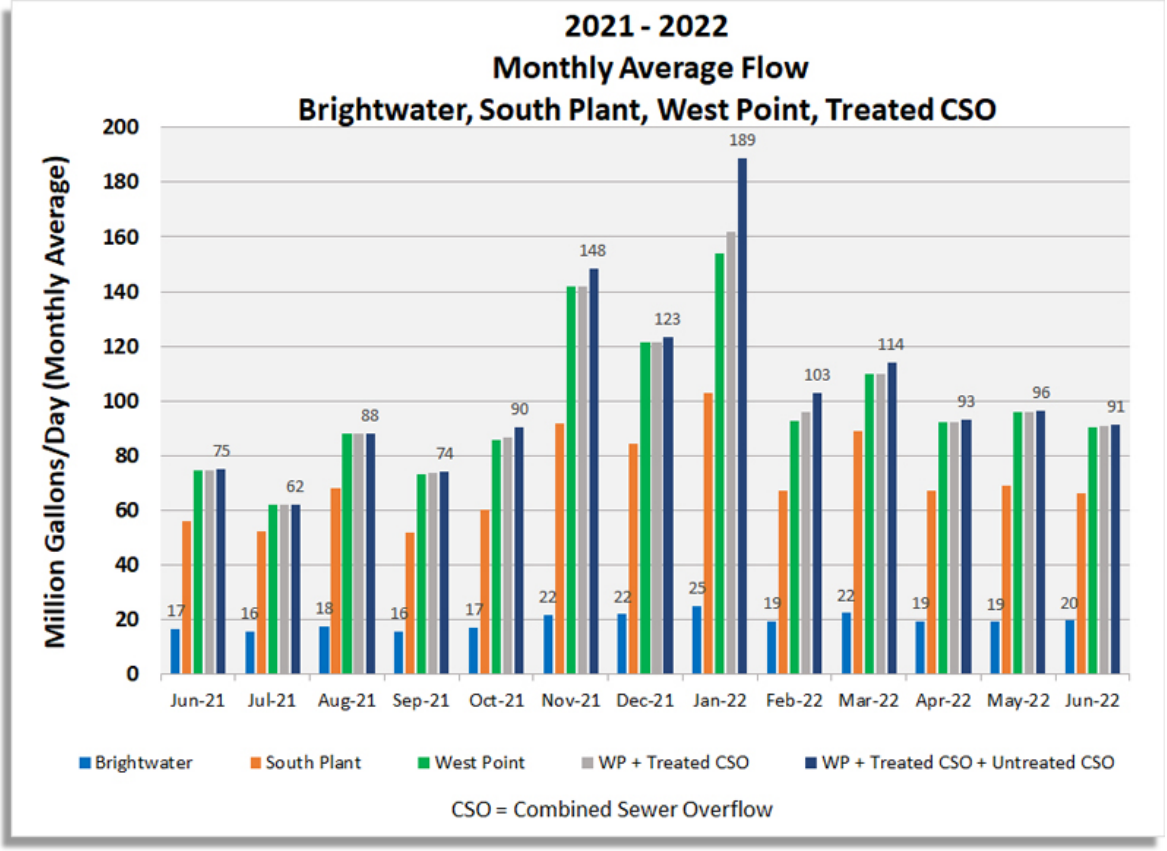
The following graphs illustrate the total amount of flow to each of our regional treatment plants over various periods of time including flows through the Combined Sewer Overflow system. The bars at the bottom of the first graph illustrate the impact that rainfall has on our system.






Jan 2021 - June 2022 Daily Average Flow
Brightwater, South Plant & West Point
Million Gallons/Day (Daily Average)
400
360
320
280
240
200
160
120
80
40
0
1/1/2021
1/15/2021
1/29/2021
2/12/2021
2/26/2021
3/12/2021
3/26/2021
4/9/2021
4/23/2021
5/7/2021
5/21/2021
6/4/2021
6/18/2021
7/2/2021
7/16/2021
7/30/2021
8/13/2021
8/27/2021
9/10/2021
9/24/2021
10/8/2021
10/22/2021
11/5/2021
11/19/2021
12/3/2021
12/17/2021
12/31/2021
1/14/2022
1/28/2022
2/11/2022
2/25/2022
3/11/2022
3/25/2022
4/8/2022
4/22/2022
5/6/2022
5/20/2022
6/3/2022
6/17/2022
South Plant
Brightwater
West Point

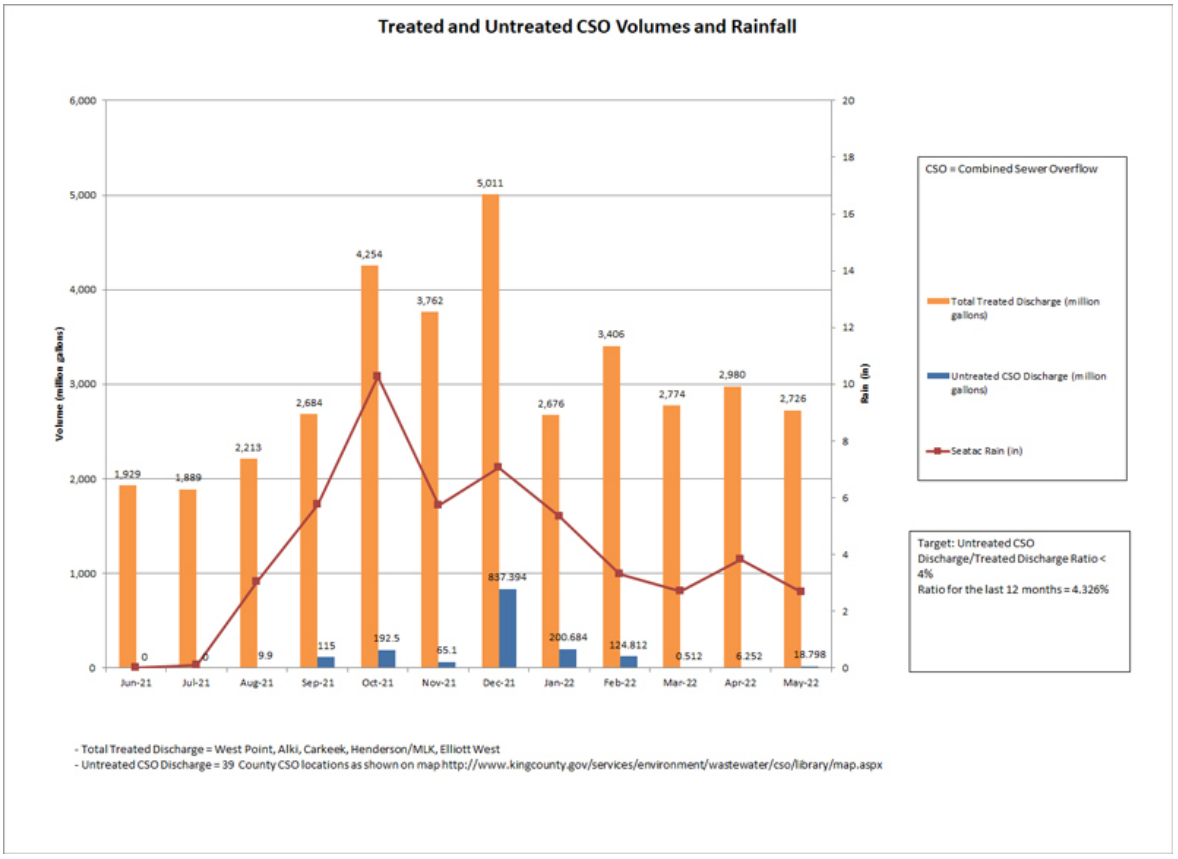

2021 - 2022
Monthly Average Flow
Brightwater, South Plant, West Point
Million Gallons/Day (Monthly Average)
200
180
160
140
120
100
80
60
40
20
0
17
56
75
16
52
62
18
68
88
16
52
73
17
60
86
22
92
142
22
85
121
25
103
154
19
67
93
22
89
110
19
67
92
19
69
96
20
66
90
Jun-21
Jul-21
Aug-21
Sep-21
Oct-21
Nov-21
Dec-21
Jan-22
Feb-22
Mar-22
Apr-22
May-22
Jun-22
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

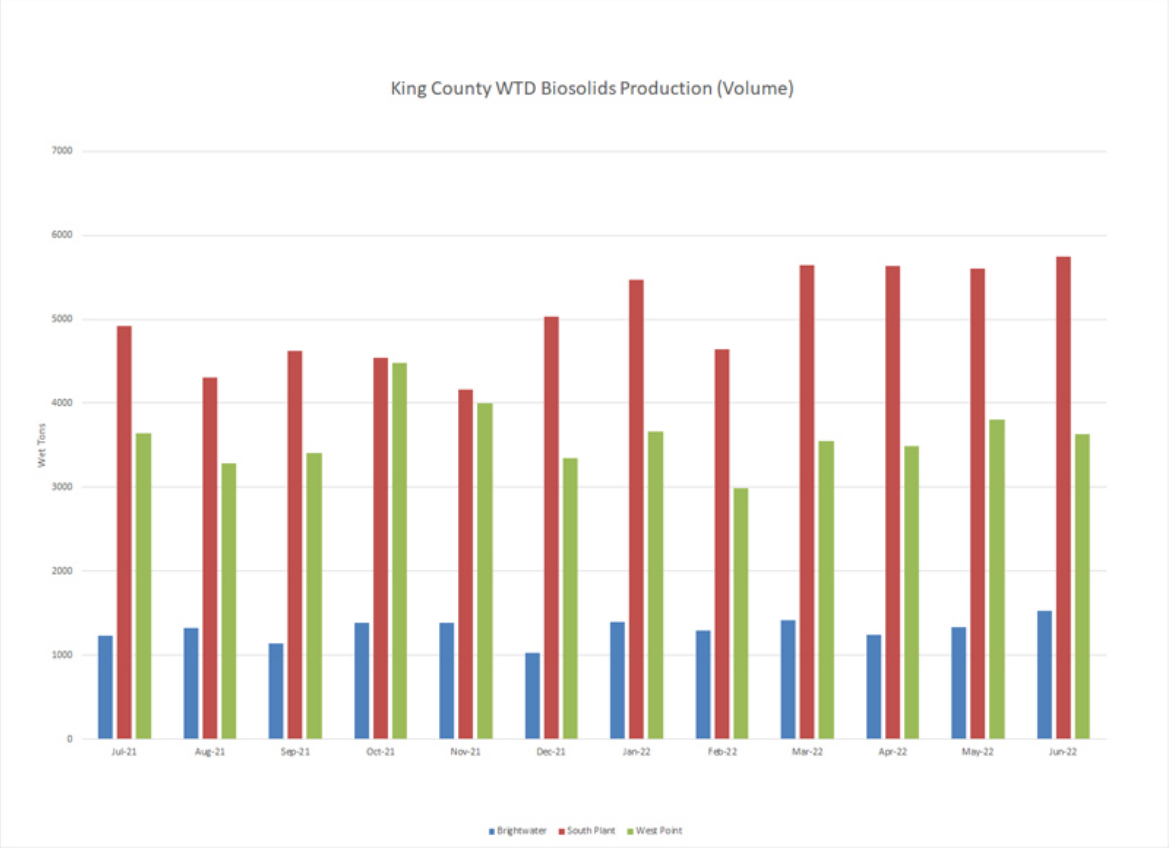


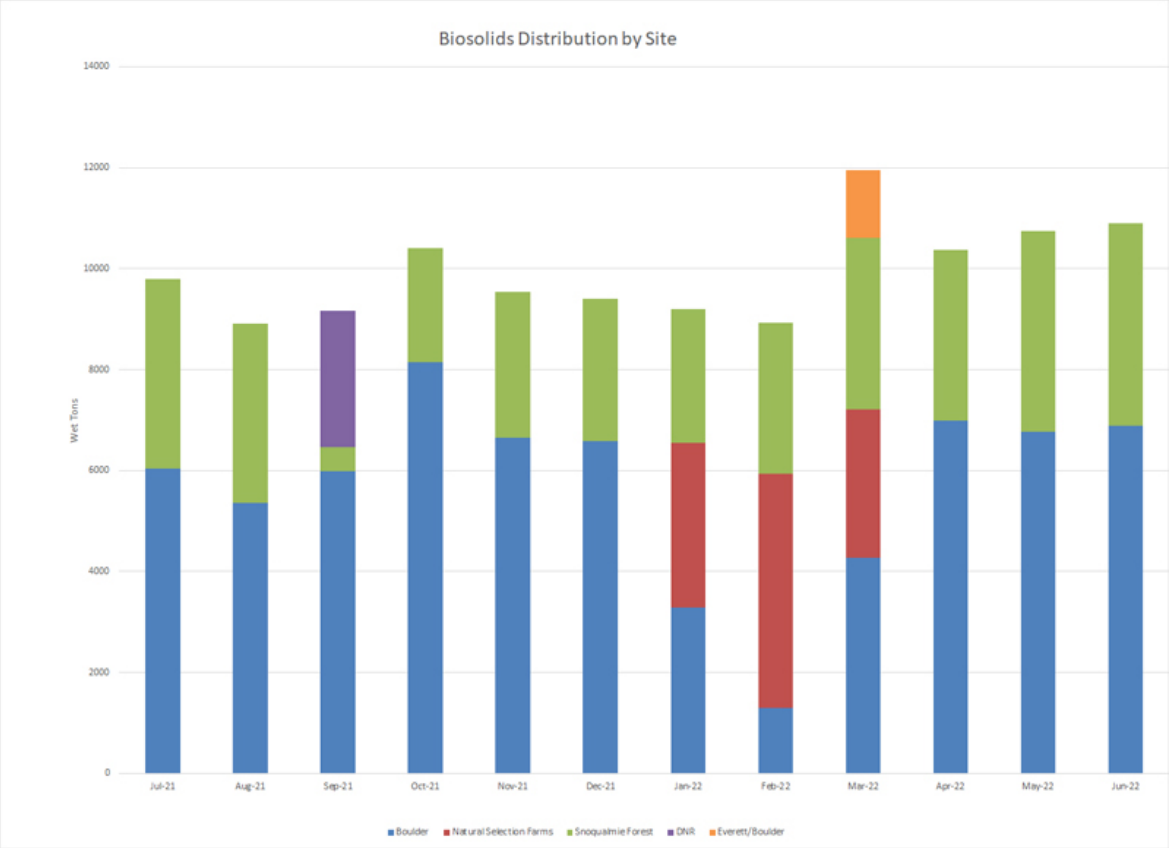
3. Production and distribution of Loop biosolids +

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.



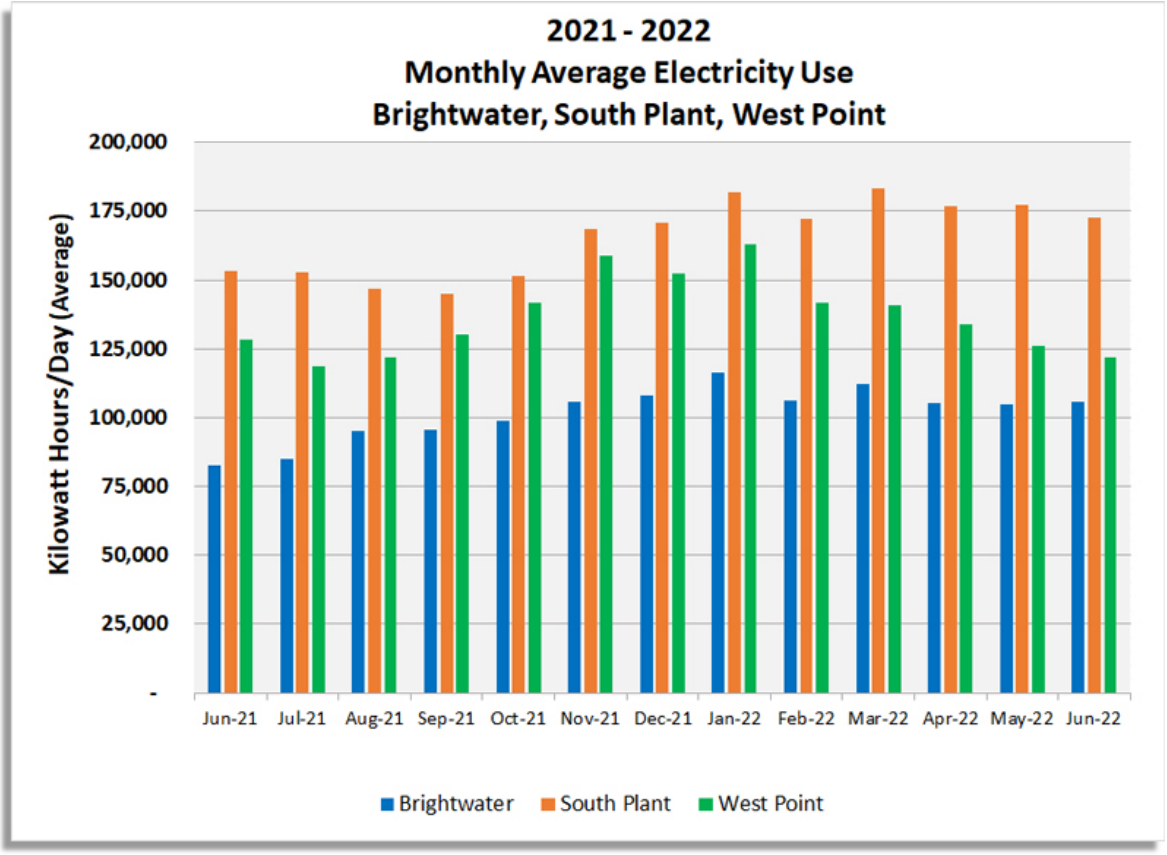


4. Electrical energy usage at each regional treatment plant and conveyance system +

Electrical energy usage at each regional treatment plant and conveyance system

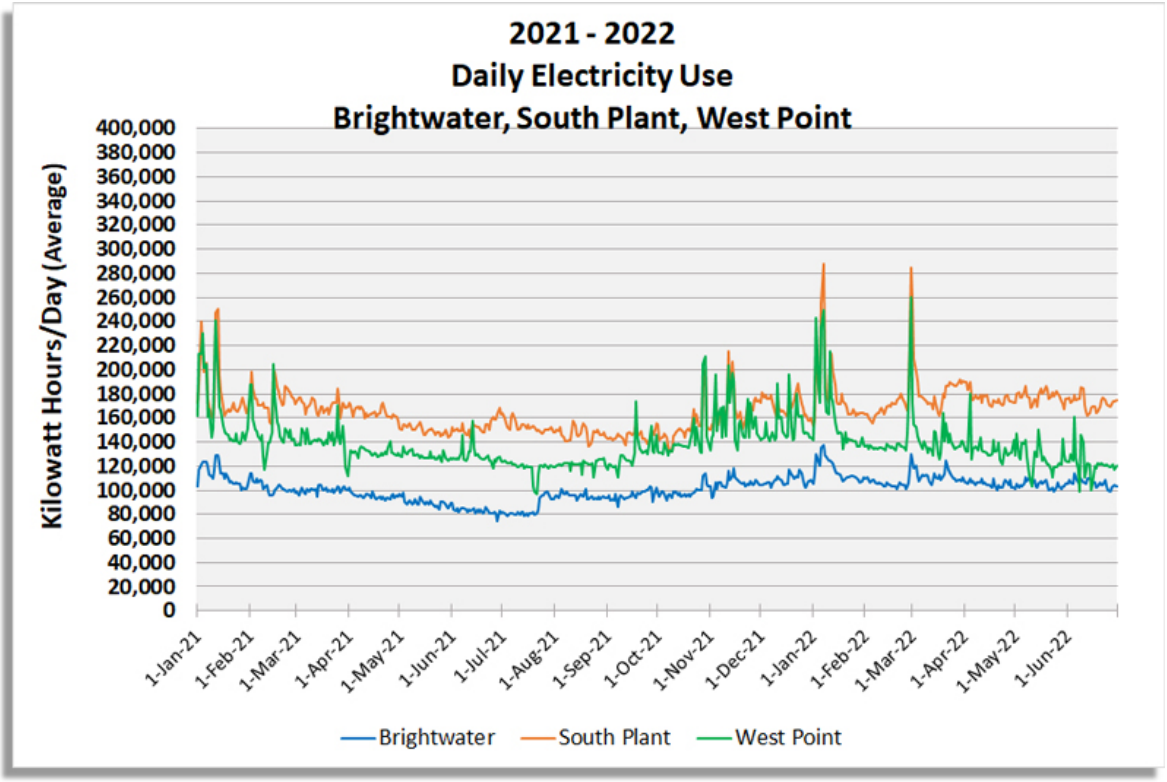
Monthly Average Electricity Use at Brightwater, South Plant and West Point:

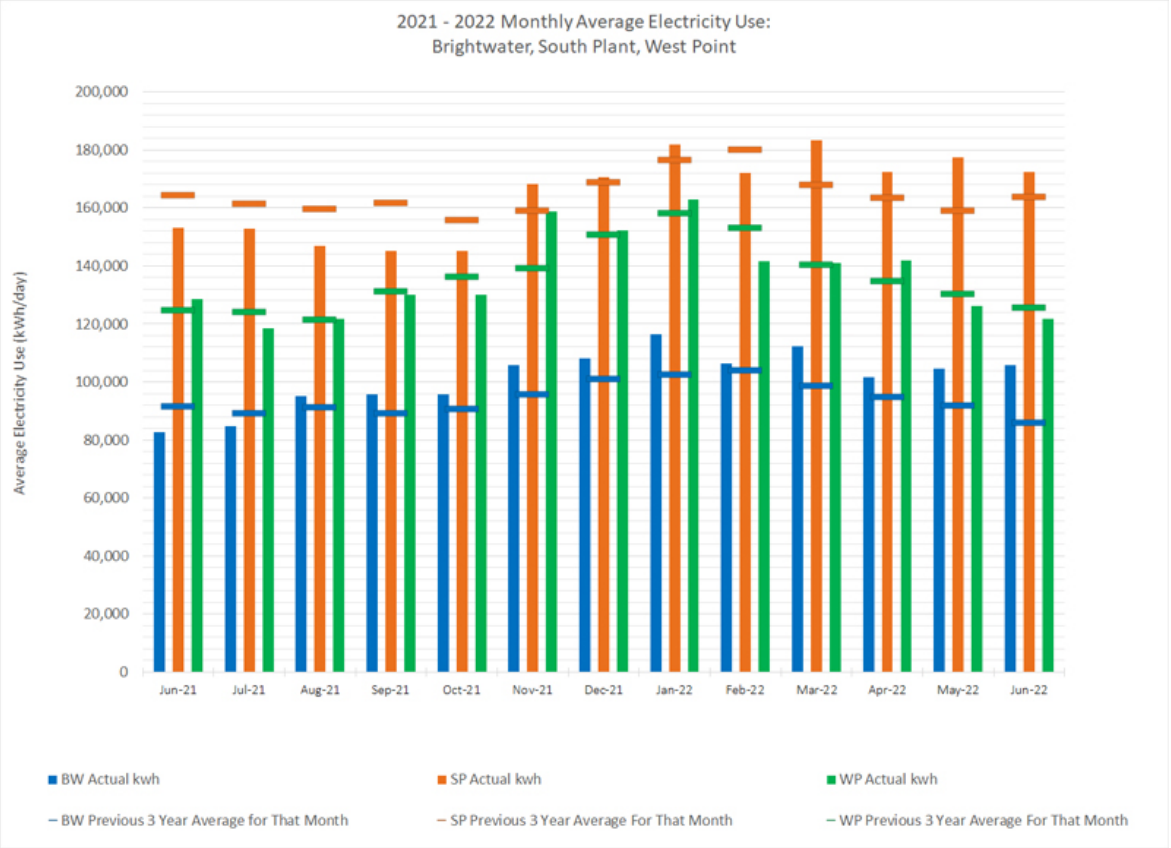
This diagram shows the average daily electricity use for the past 13 months for each of King County's three main treatment plants. West Point's electricity use depends mainly on treated volume. South Plant's electricity use is driven by influent flow and oxygen demand for nitrification. Brightwater's 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.

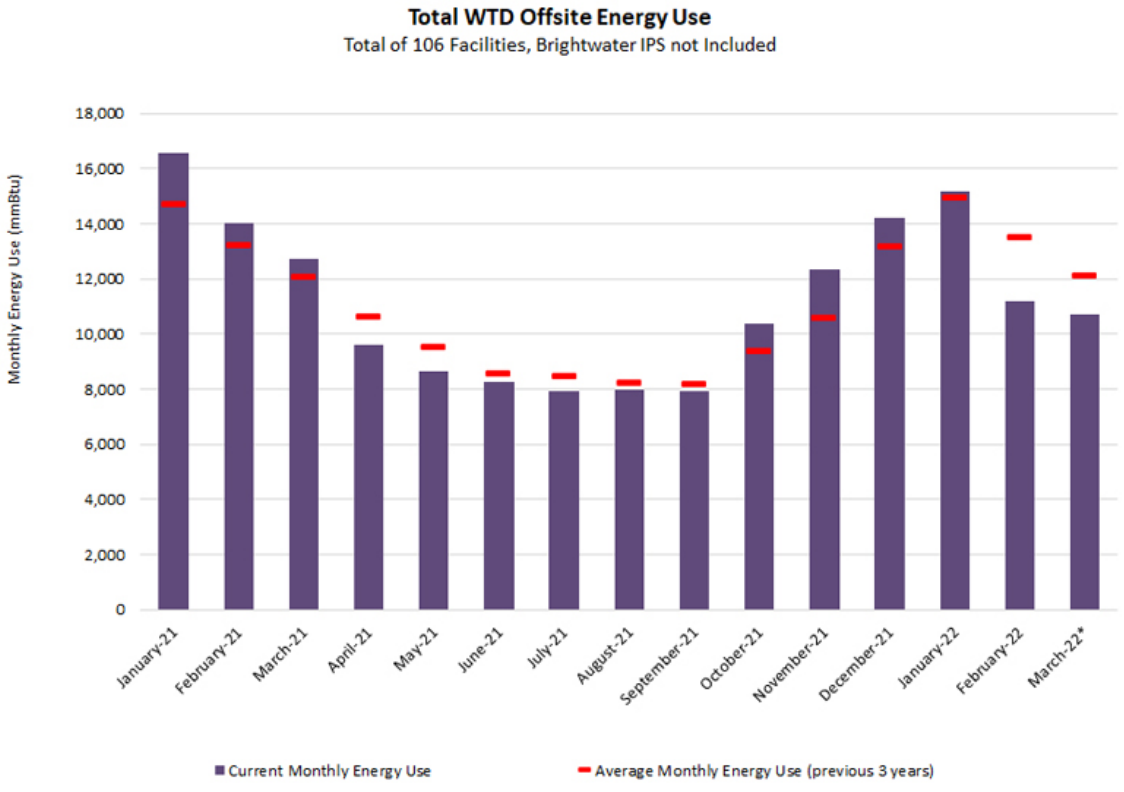




Total WTD Offsite Energy Use

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.

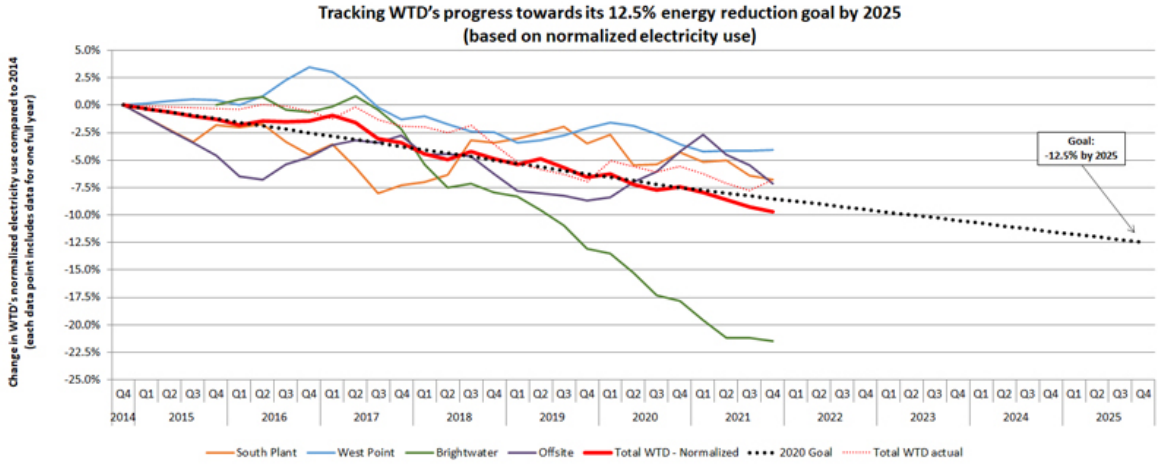
Please note: This information is updated monthly and will have a three-month lag when all of the data becomes available.



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.



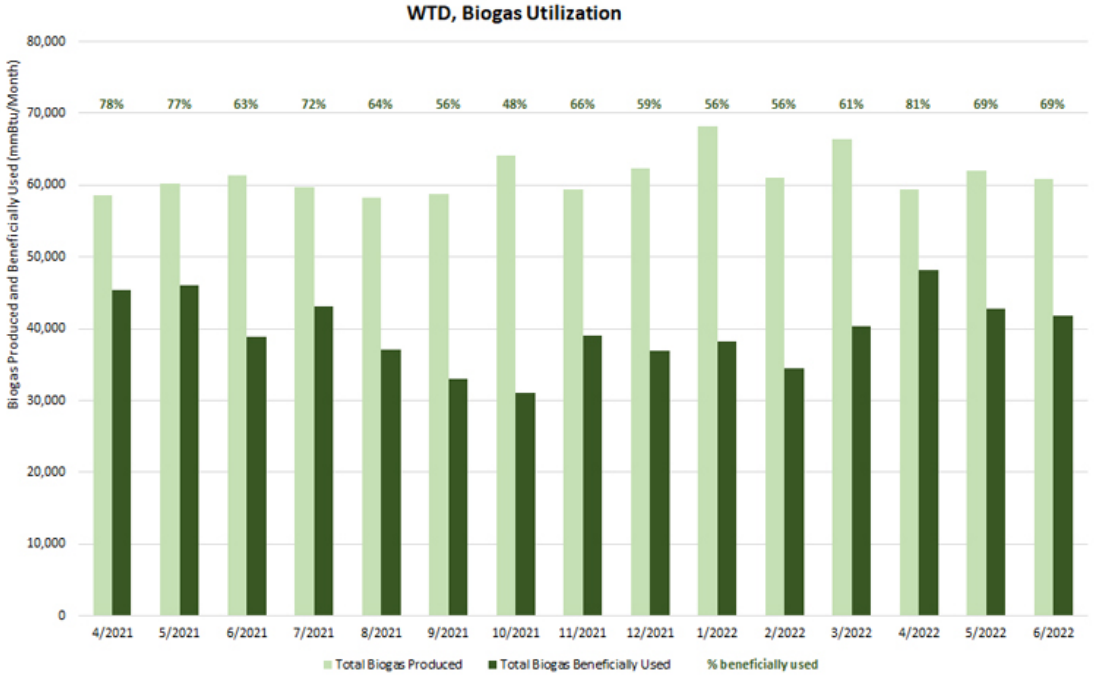
5. Production and usage of biogas +

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 (June 2022)

6. Significant power disruption events +

Significant power disruption events

Update

On Monday, August 22, a power outage at the East Pine Street Pump Station in Madrona shut down equipment and caused an overflow into Lake Washington. Crews brought the pump station back online and it is now performing properly. The staff is working to determine why the generator failed to turn on automatically. King County notified appropriate health and regulatory agencies and staff will monitor water quality. Staff have also posted beach closure signs between Madrona Beach and Howell Park, warning people to avoid contact with the water over the next several days as a precaution.

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						2022					
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Wastewater Treatment Plants (e.g., effluent limit exceedance, unpermitted discharges)												
West Point						*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												
East Section Conveyance System												
Sanitary Sewer Overflow												

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 secondary diversions (i.e., unauthorized blending of primary and secondary treated flow) and a bypass of untreated wastewater from the emergency bypass outfall to Puget Sound during a large storm event on January 12-13, 2021 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. See "NPDES Permit Exceedances (Reportable Events Subject to Potential Penalties)" performance data sheet for additional details on West Point power-related disturbance events.

7. Significant system process disruptions +

Significant system process disruptions

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						2022					
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
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	*	*			*	*		*a*	*	*	*	*
Elliott West CSO	*	*			*b*	*	*b*	*b*	*	*	*	*b*
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 The Carkeek wet weather treatment station experienced intermittent disinfection failures similar to an event in January, with hypochlorite pumps operating but failing to continuously deliver hypochlorite. The pumps are being rebuilt, a temporary portable hypochlorite pumping system was installed as a backup until pumps are returned to service, and two spare pumps are being purchased.

b 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						2022					
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Effluent Limitations Exceedances at Wastewater Treatment Facilities												
West Point												*a*
South Plant												
Brightwater												
Vashon												
Carnation												
Effluent Limitations Exceedances at CSO Treatment Facilities												
Henderson/MLK CSO	*	*	*	*	*	*			*	*	*	*
Alki CSO	*	*	*		*	*	*b*		*	*	*	*
Carkeek CSO	*	*			*	*		*c*	*	*	*	*
Elliott West CSO	*	*			*d*	*	*d*	*d*	*	*d*	*	*d*
Conveyance System Overflow Events in Combined or Separated Basins												
West Section – Dry Weather Overflows at CSO Outfalls												
West Section – Sanitary Sewer Overflows												
East Section – Sanitary Sewer Overflows												

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, 2021 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 13, 2021 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.
- A power outage on June 7, 2022 due to a failed breaker at the Seattle City Light switchyard located at the plant caused a power outage of approximately 2 hours, and a resulting secondary diversion of 400,000 gallons over 109 minutes.

b A project is underway for the Alki wet weather station to assess solids removal performance.

c 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.

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

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:

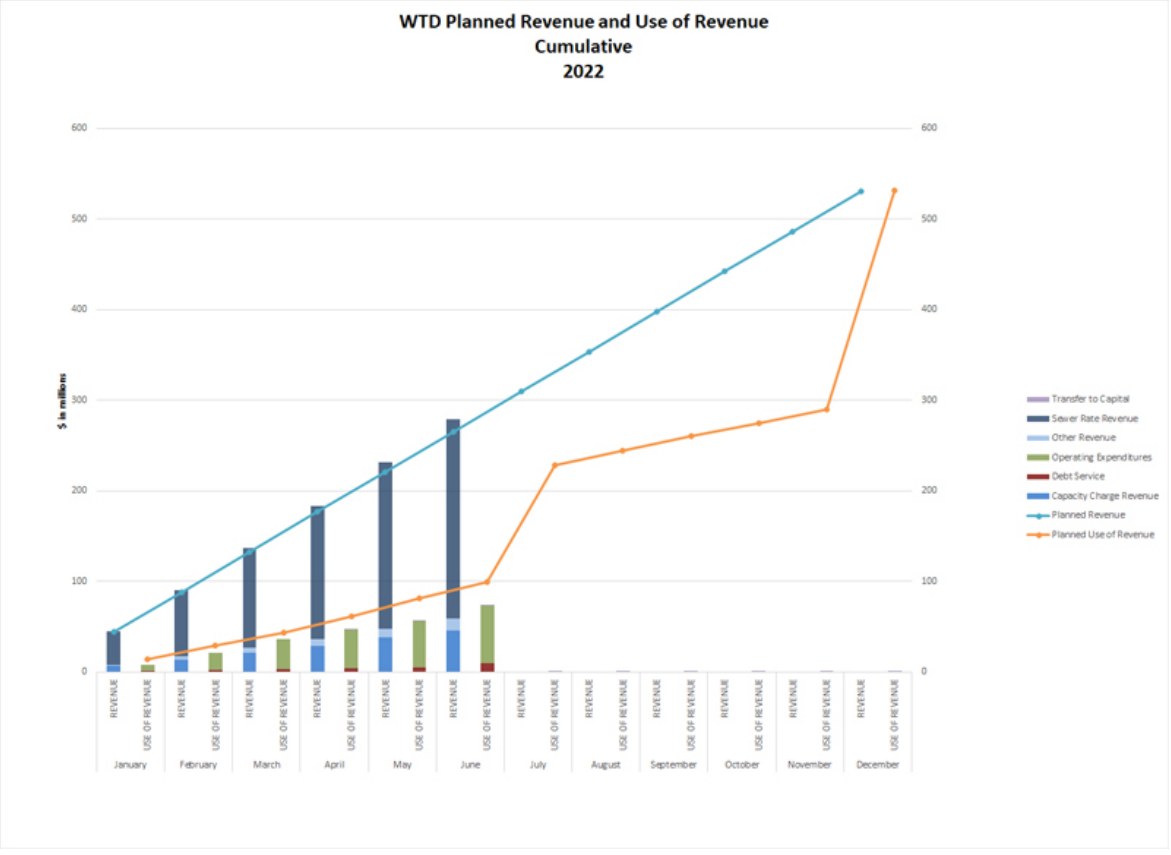
https://www.kingcounty.gov/services/environment/wastewater/sediment-management/plan.aspx

Financial performance (June 2022)

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.



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.

Q2 2022 Baseline Report

Agency: Wastewater Treatment, Fund:All, Year: 2022, Qtr: 2nd 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	Green	Red	6/16/2022	1,813	2,620	807	44 %	Red	$69,754,491	$87,195,084	$17,440,593	25 %	Q2 2022
1116797	WTC JAM/ARC BLDG REPLACEMENT	Yellow	Green	10/31/2023	1,663	1,471	-192	-11 %	Green	$71,290,311	$24,278,767	($47,011,544)	-65 %	Q2 2022
1116800	WTC N MERCER ENATAI INT PAR	Green	Red	1/3/2025	2,121	2,761	640	30 %	Red	$116,035,624	$179,841,790	$63,806,166	54 %	Q2 2022
1116801	WTC LK HILLS&NW LK SAM INTCPT	Yellow	Red	4/23/2027	1,995	3,510	1,515	75 %	Red	$119,342,432	$165,380,952	$46,038,520	38 %	Q2 2022
1120861	WTC MOBILE OC UNIT REPLACEMENT	Yellow	Red	6/30/2024	696	2,784	2,088	300 %	Green	$3,171,445	$3,170,401	($1,044)	0 %	Q2 2022
1121402	WTC GEORGETOWN WET WEATHER TREATMENT STATION	Green	Yellow	10/15/2022	2,141	2,370	229	10 %	Green	$260,713,113	$241,504,316	($19,208,798)	-7 %	Q2 2022
1121409	WTC WEST DUWAMISH CSO CONTROL	Green	Green	3/1/2027	1,833	1,833	0	0 %	Green	$107,117,981	$107,117,981	$0	0 %	Q2 2022
1123517	WTC E FLEET MAINT FAC REPLCMNT	Green	Red	8/24/2022	750	2,143	1,393	185 %	Red	$9,999,584	$24,014,694	$14,015,110	140 %	Q2 2022
1123624	WTC COAL CRK SIPHON TRUNK PARA	Green	Yellow	3/22/2027	2,432	2,729	297	12 %	Green	$132,310,569	$132,306,992	($3,577)	0 %	Q2 2022
1123626	WTC SP BIOGAS HEAT SYS IMPROVE	Yellow	Red	7/29/2024	1,410	2,666	1,256	89 %	Green	$59,897,304	$40,095,532	($19,801,772)	-33 %	Q2 2022
1123627	WTC WP 2ND MIX LIQ BLOWER REPL	Green	Red	12/17/2021	640	955	315	49 %	Green	$3,994,447	$2,980,254	($1,014,193)	-25 %	Q2 2022
1127489	WP PRIMARY SED ROOF STRUCTURE	Yellow	Red	8/30/2024	1,387	2,060	673	48 %	Red	$37,658,373	$46,945,079	$9,286,707	24 %	Q2 2022
1128354	WTC INTERBAY FORCE MAIN & ODOR CONTROL	Green	Red	12/23/2025	1,414	1,784	370	26 %	Red	$5,386,868	$67,880,928	$62,494,060	1,160 %	Q2 2022
1129156	WTC JBAY RSP PROTECT SYS UPGRD	Green	Red	10/24/2022	407	475	68	16 %	Red	$1,776,188	$2,100,758	$324,570	18 %	Q2 2022
1129526	WTC WP LSG PIPING REPLACEMENT	Green	Green	9/15/2025	2,634	2,162	-472	-17 %	Yellow	$24,920,340	$27,303,826	$2,383,486	9 %	Q2 2022
1129532	WTC BW OPTIMIZE AERATION BASIN	Green	Red	12/22/2023	927	1,172	245	26 %	Green	$21,193,113	$21,193,002	($111)	0 %	Q2 2022
1130458	WTC SP AER BASIN SAFETY ACCESS	Green	Red	12/2/2021	753	1,172	419	55 %	Green	$1,710,992	$1,189,562	($521,430)	-30 %	Q2 2022
1134063	WTC WP POWER MON UPGD	Green	Green	10/26/2022	1,269	575	-694	-54 %	Red	$3,840,813	$8,053,990	$4,213,177	109 %	Q2 2022
1134068	WTC ALKI PERM GENERATOR	Green	Red	1/9/2025	931	1,668	737	79 %	Green	$14,812,683	$14,812,684	$0	0 %	Q2 2022
1134069	WTC WP RSP REPLACEMENT	Green	Green	9/18/2029	2,639	2,639	0	0 %	Green	$216,305,529	$216,305,529	$0	0 %	Q2 2022
1134070	WTC CMMS UPGRADE	Green	Green	2/17/2023	437	437	0	0 %	Green	$12,464,036	$11,865,475	($598,562)	-4 %	Q2 2022
1134071	WTC OVATION CONT SYS UPGD	Green	Red	9/30/2023	975	1,613	638	65 %	Yellow	$15,547,968	$17,802,399	$2,254,432	14 %	Q2 2022
1134072	WTC PASS WEIR FOR EMG BYPASS	Green	Green	10/15/2025	1,408	1,408	0	0 %	Green	$10,747,594	$10,747,594	$0	0 %	Q2 2022

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Q2 2022 Baseline Report

Agency: Wastewater Treatment, Fund:All, Year: 2022, Qtr: 2nd 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														
1134075	WTC LK HILLS INT A REFURB	Green	Green	12/15/2023	682	682	0	0 %	Green	$29,601,534	$29,601,533	$0	0 %	Q2 2022
1134301	WTC PIMS REPLACEMENT	Red	Red	12/29/2023	371	1,641	1,270	342 %	Red	$1,844,892	$2,940,743	$1,095,851	59 %	Q2 2022
1134438	WTC SP BULD FIRE & ALARM UPGRD	Green	Green	10/9/2024	939	939	0	0 %	Green	$3,225,278	$3,225,278	$0	0 %	Q2 2022
1136471	WTC DECOMISSION SP FUEL CELPP	Green	Red	3/11/2022	352	752	400	113 %	Yellow	$1,323,892	$1,519,024	$195,133	14 %	Q2 2022
1137181	WTC RCH B PS MCC & SWITCH REPL	Green	Red	1/3/2023	769	1,001	232	30 %	Green	$6,492,547	$4,635,300	($1,857,247)	-28 %	Q2 2022
1137329	WTC CARKEEK CSO DECHOLR MOD	Green	Red	1/23/2024	745	1,204	459	61 %	Red	$1,953,306	$3,485,875	$1,532,568	78 %	Q2 2022
1137640	Small Generators Replacement - Group 1	Green	Green	4/4/2025	1,305	1,305	0	0 %	Yellow	$5,401,119	$5,974,833	$573,714	10 %	Q2 2022
1137750	Pacific PS Generator Fuel Storage Upgrade	Green	Red	8/11/2022	98	149	51	52 %	Green	$1,370,750	$1,370,750	$0	0 %	Q2 2022
1137751	SP Essential Services Standby Generator Replacement	Green	Red	2/27/2024	616	1,260	644	104 %	Red	$2,211,228	$2,709,475	$498,247	22 %	Q2 2022
1138085	WP Warning System Upgrade	Green	Green	10/2/2023	468	468	0	0 %	Green	$2,446,898	$2,446,898	$0	0 %	Q2 2022
1138496	Denny Way Regulator Erosion Control	Green	Red	12/7/2022	456	646	190	41 %	Green	$1,106,000	$1,106,000	$0	0 %	Q2 2022
1138543	WTC SYS-WIDE ARCH FLASH ASSMT	Green	Green	2/19/2025	1,256	1,133	-123	-9 %	Yellow	$2,490,193	$2,640,161	$149,968	6 %	Q2 2022
1138777	WTC BW INFLUNT STRUT WASH-DOWN	Green	Red	9/30/2023	367	662	295	80 %	Yellow	$935,206	$1,043,842	$108,636	11 %	Q2 2022
1139037	WTC LAKELAND HILLS INSTALL GEN	Yellow	Red	8/2/2023	859	1,398	539	62 %	Red	$5,386,868	$6,342,068	$955,200	17 %	Q2 2022
1139038	WTC MEDINA PS MCC & GEN REPL	Green	Red	9/13/2023	727	1,079	352	48 %	Green	$6,099,315	$6,099,314	($1)	0 %	Q2 2022
1139041	WTC BW STORAGE TANK SPRAY SYST	Green	Red	1/7/2022	470	752	282	60 %	Green	$3,114,882	$3,054,885	($59,997)	-1 %	Q2 2022
1139044	WTC SP BIOSOLIDS COMPOST PILOT	Green	Red	6/27/2023	657	1,288	631	96 %	Red	$3,325,570	$5,074,056	$1,748,486	52 %	Q2 2022
1139045	WTC SP ODOR CONTROL MODS P,S&D	Green	Red	1/6/2022	639	842	203	31 %	Green	$2,655,637	$2,387,234	($268,403)	-10 %	Q2 2022
1139673	York FM Cathodic Protection	Green	Green	6/30/2023	437	437	0	0 %	Green	$1,410,210	$1,410,210	$0	0 %	Q2 2022
1139969	Environmental Lab Roof Replacement	Green	Red	12/9/2021	310	373	63	20 %	Green	$1,750,729	$1,730,782	($19,946)	-1 %	Q2 2022
1140479	WP IPS Pump #1 Refurbishment	Green	Green	10/14/2022	264	247	-17	-6 %	Green	$2,567,490	$2,567,490	$0	0 %	Q2 2022
1140668	Matthews Park Pump Station Fence Upgrade	Green	Red	5/17/2022	45	336	291	646 %	Red	$857,639	$1,110,227	$252,588	29 %	Q2 2022
1141030	WTC WEST POINT POWER QUALITY IMPROVEMENT	Green	Green	7/5/2024	1,142	892	-250	-21 %	Green	$159,066,642	$155,097,643	($3,968,999)	-2 %	Q2 2022

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Q2 2022 Baseline Report

Agency: Wastewater Treatment, Fund:All, Year: 2022, Qtr: 2nd 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														
1141537	WTC VALLEY CREEK INTERCEPTOR REHABILITATION			2/16/2022	196	183	-13	-6 %		$1,767,165	$860,345	($906,820)	-51 %	Q2 2022
1142898	WTC MEDINA PS PUMP ROOM HEADER REPLACEMENT			8/18/2023	423	423	0	0 %		$2,605,131	$2,605,131	$0	0 %	Q2 2022

Scope requires significant changes.
The Project Substantial Completion has a variance of greater than 15%.
Budget is over by more 15%.

Scope changes may be needed.
The Project Substantial Completion has a variance of less than 15%.
Budget is over by up to 15%.

Scope is consistent with baseline.
The Project Substantial Completion is on track or ahead.
Budget on track or under.

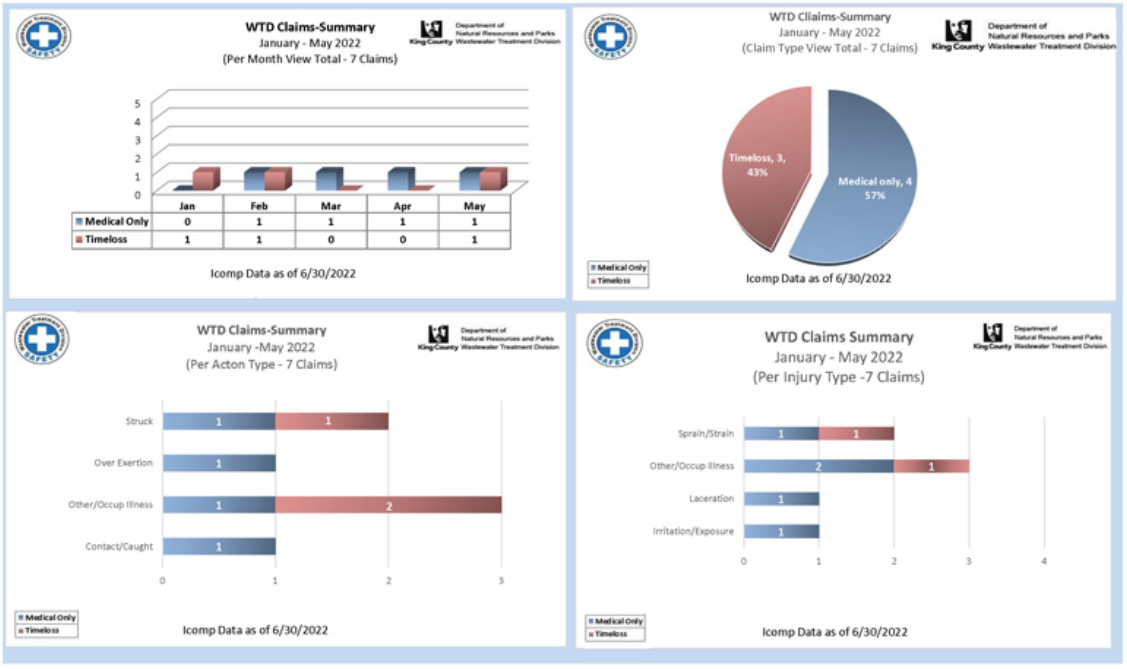
Safety performance (June 2022)

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 .

2022 +

- May 2022
- April 2022
- March 2022
- February 2022
- January 2022

2021 +

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

King Street Center
201 S. Jackson St., KSC-NR-5500
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Get directions

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WTD Division Directory

website.wtd@kingcounty.gov

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