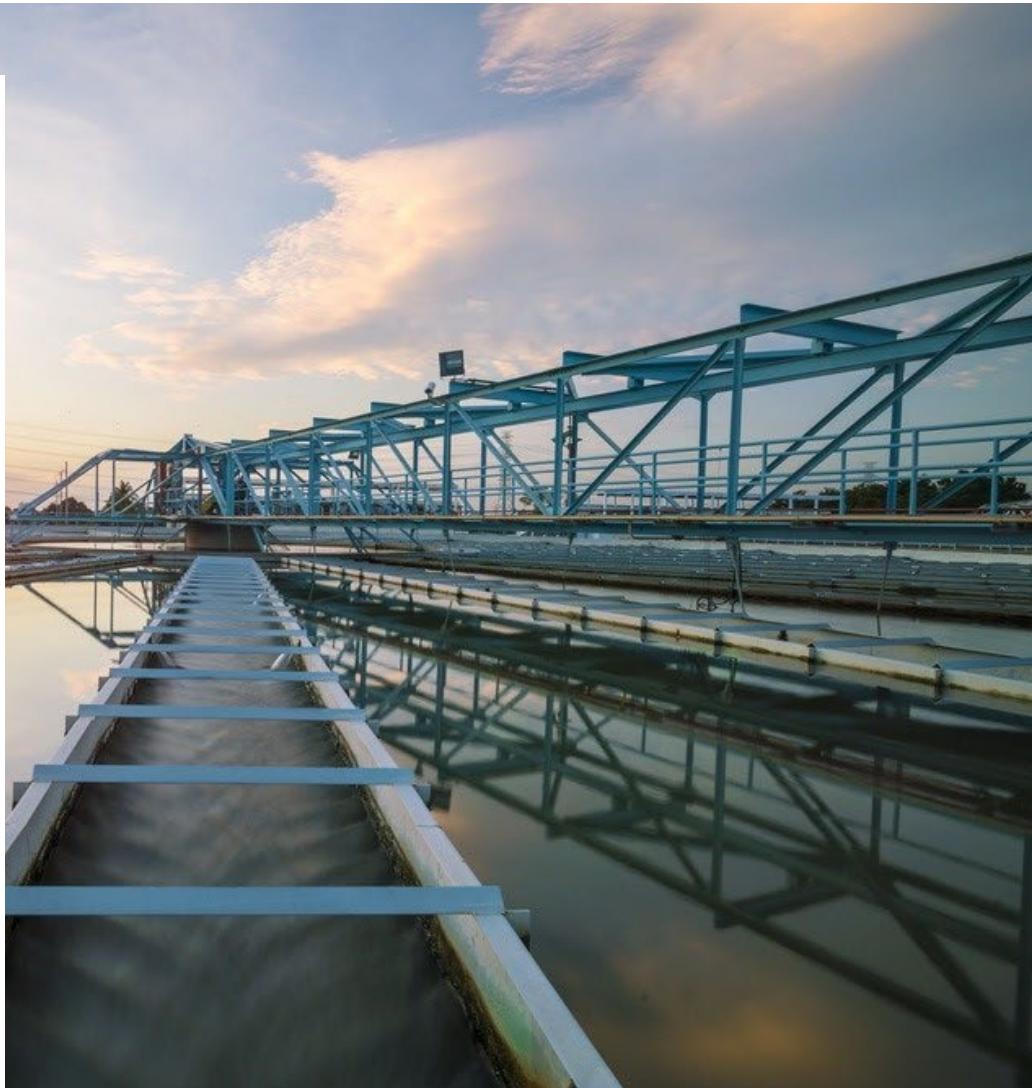


UTILITY REPORT



OCTOBER 2025

**King George County
Service Authority**

**Authored by:
Inboden Environmental
Services, Inc.**



INTRODUCTION

This Utility Report provides information on operations, facility performance, equipment issues, and regulatory compliance for the month prior. Information includes items related to water facility productions and wastewater effluent discharge volumes, laboratory analytical data, operations notes, and compliance auditing.

WATER

Operational Notes

- IES Operations continue to produce safe and reliable water through backwashing and sodium hypochlorite dosing.
- Distributed Lead and Copper letters to each address that results were acquired for.
- Replaced chemical dosing pump at Purkins entry point.
- Replaced the KOP Kit at Hopyard entry point.

Canterbury Subdivision – PWSID 6099085

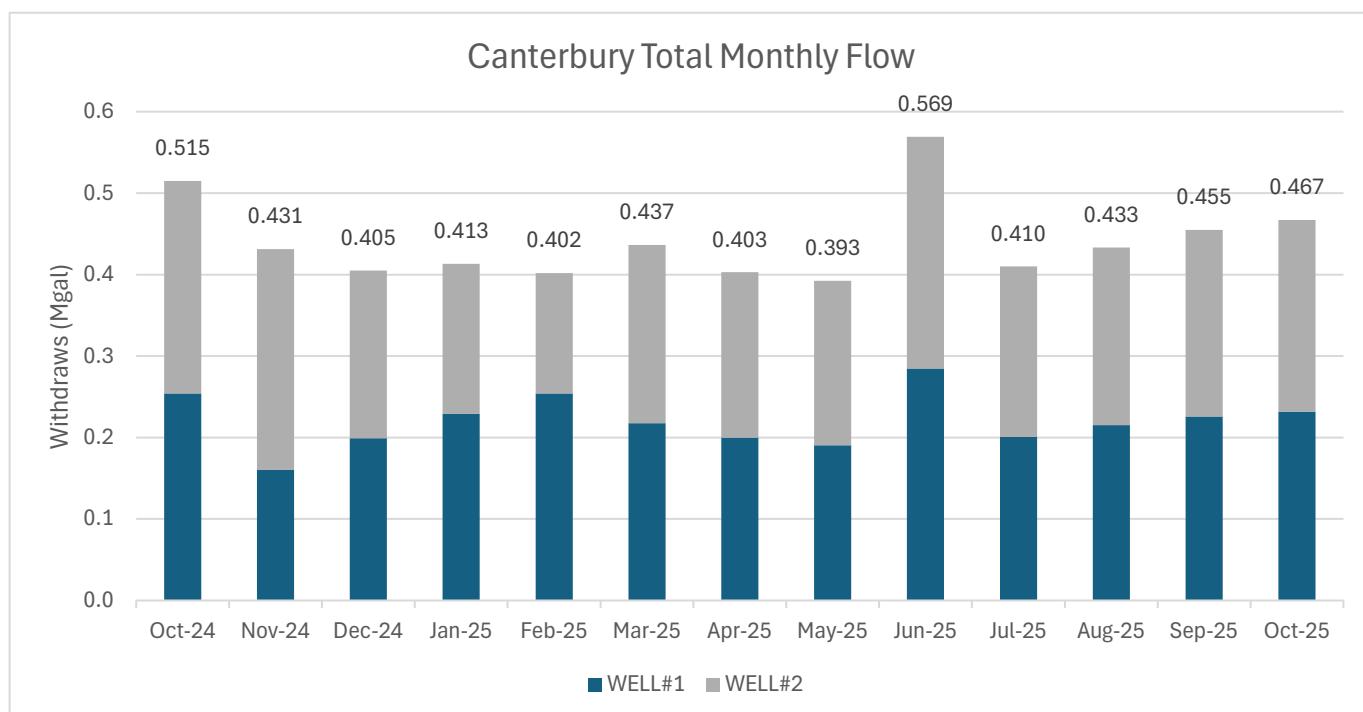
Water Quality:

The Water Treatment facility and distribution system maintained compliance with all required sampling. Routine bacteriological sample results are shown in the table below.

Bacteriological Analysis:

Location Code	Location Address	Date	Result
010	12466 Kent Rd	10/7/2025	Absent

System Production:



Circle – PWSID 6099100

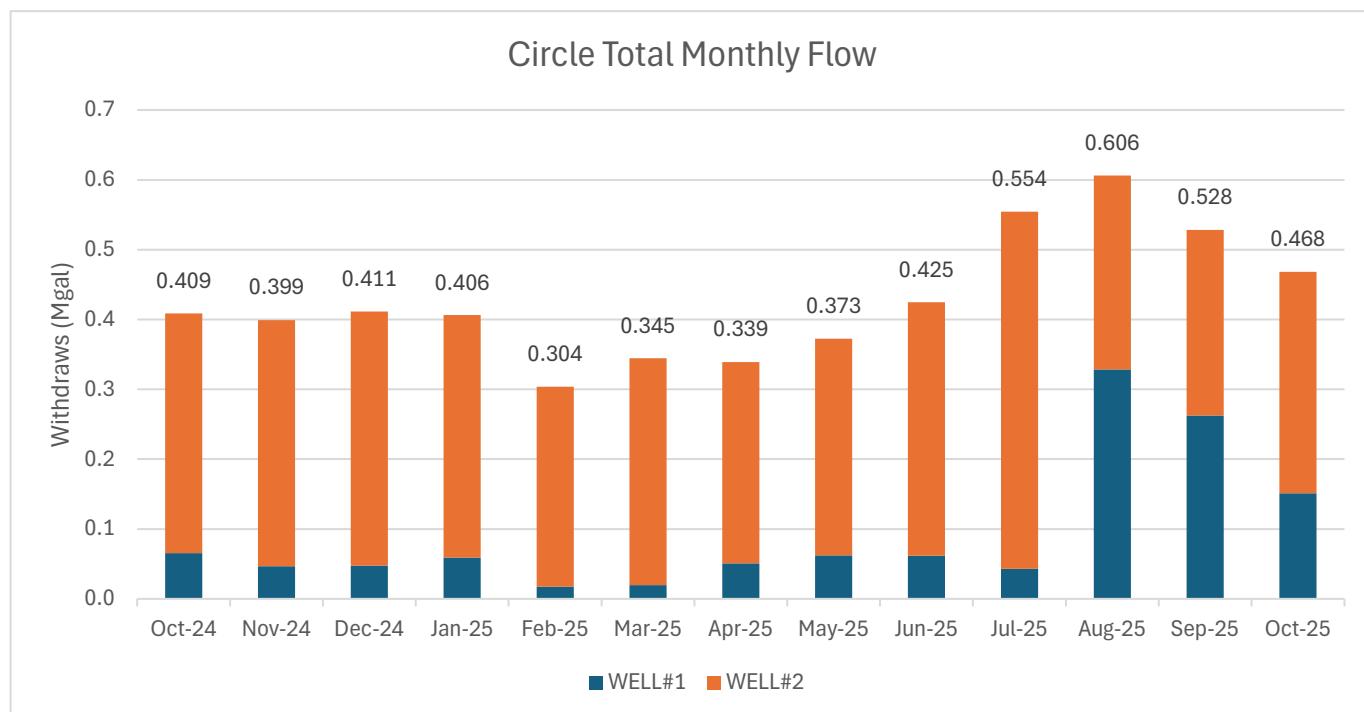
Water Quality:

The Water Treatment facility and distribution system maintained compliance with all required sampling. Routine bacteriological sample results are shown in the table below.

Bacteriological Analysis:

Location Code	Location Address	Date	Result
010	11393 Ridge Road	10/7/2025	Absent

System Production:



KGC Courthouse – PWSID 6099050

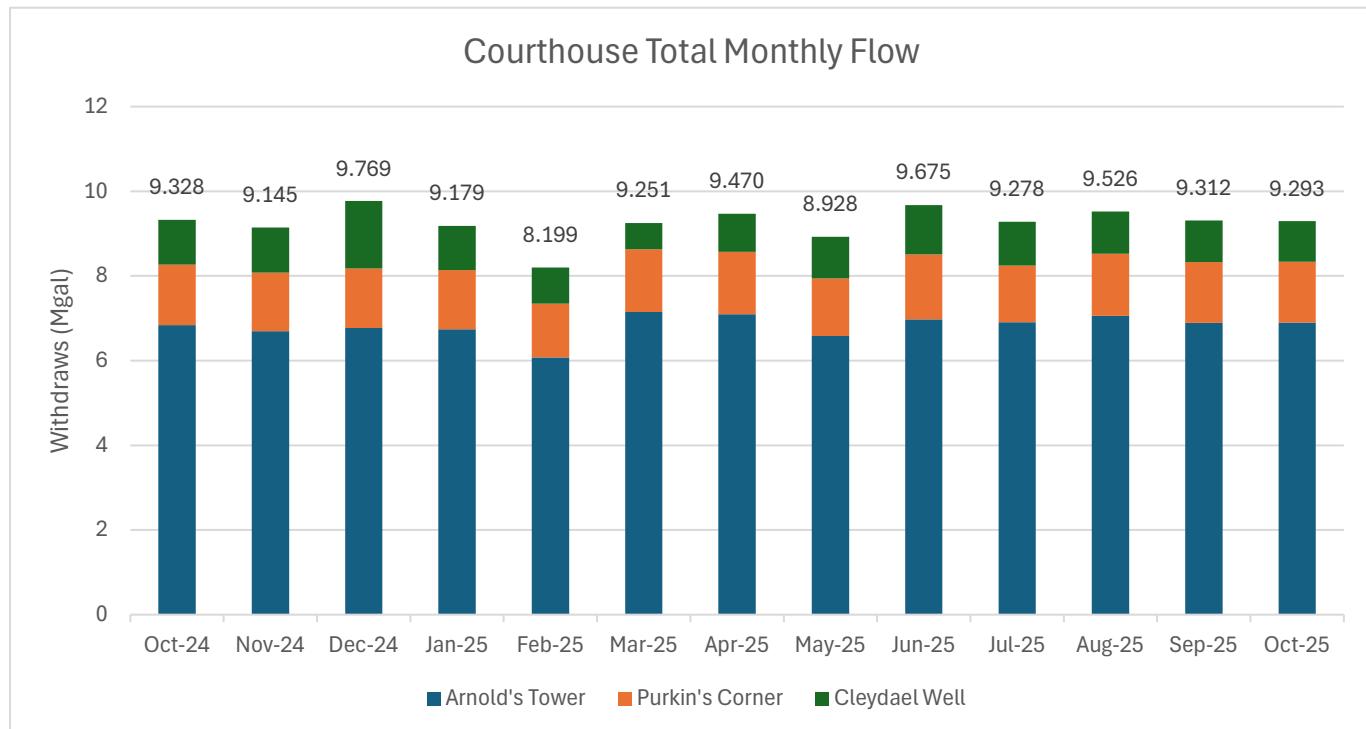
Water Quality:

The Water Treatment facility and distribution system maintained compliance with all required sampling. Routine bacteriological sample results are shown in the table below.

Bacteriological Analysis:

Location Code	Location Address	Date	Result
07	12128 Cleydael Blvd.	10/9/2025	Absent
01	10459 Courthouse Dr.	10/9/2025	Absent
06	12156 Ward Rd	10/9/2025	Absent
04	8428 Eden Dr.	10/9/2025	Absent
02	8181 King's Hwy.	10/9/2025	Absent

System Production:



Dahlgren – PWSID 6099295

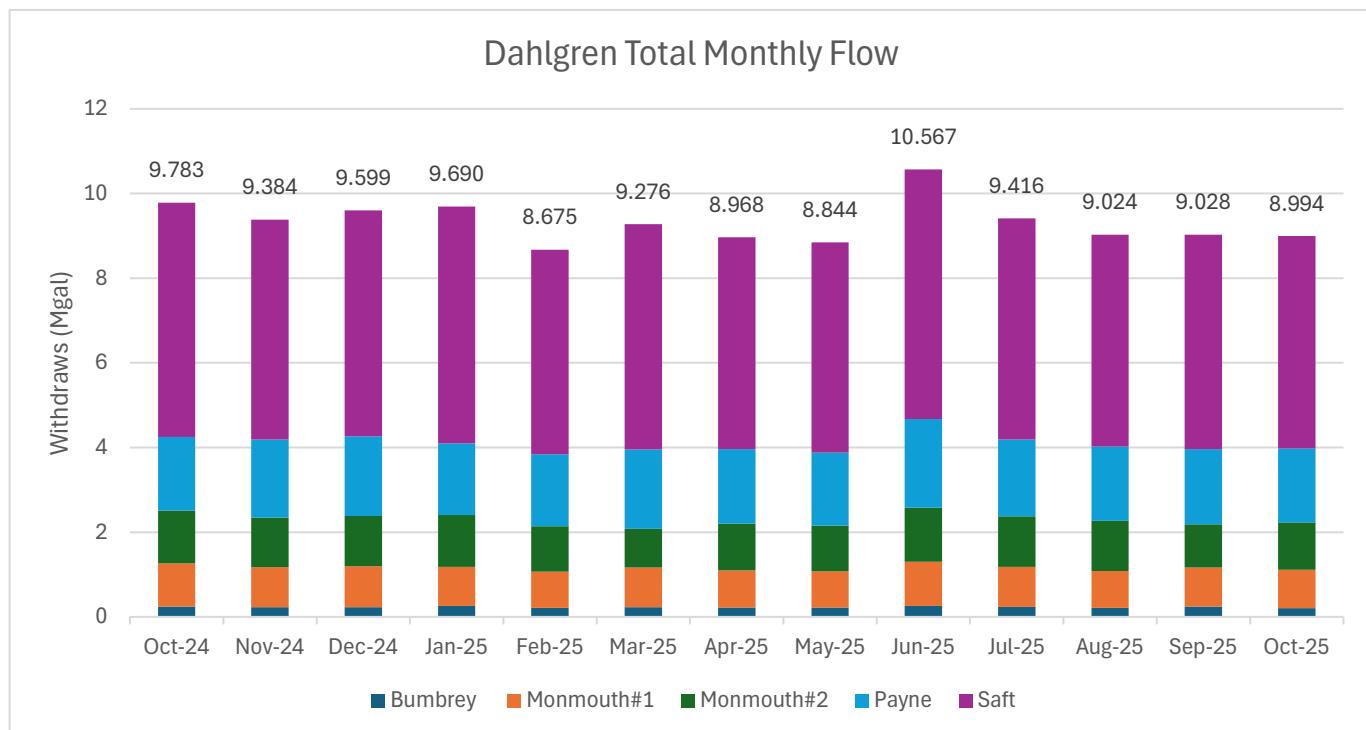
Water Quality:

The Water Treatment facility and distribution system maintained compliance with all required sampling. Routine bacteriological sample results are shown in the table below.

Bacteriological Analysis:

Location Code	Location Address	Date	Result
06	4417 Danube Dr.	10/9/2025	Absent
03	5394 Gordon Dr.	10/9/2025	Absent
07	4378 Savannah St.	10/9/2025	Absent

System Production:



Fairview Beach – PWSID 6099250

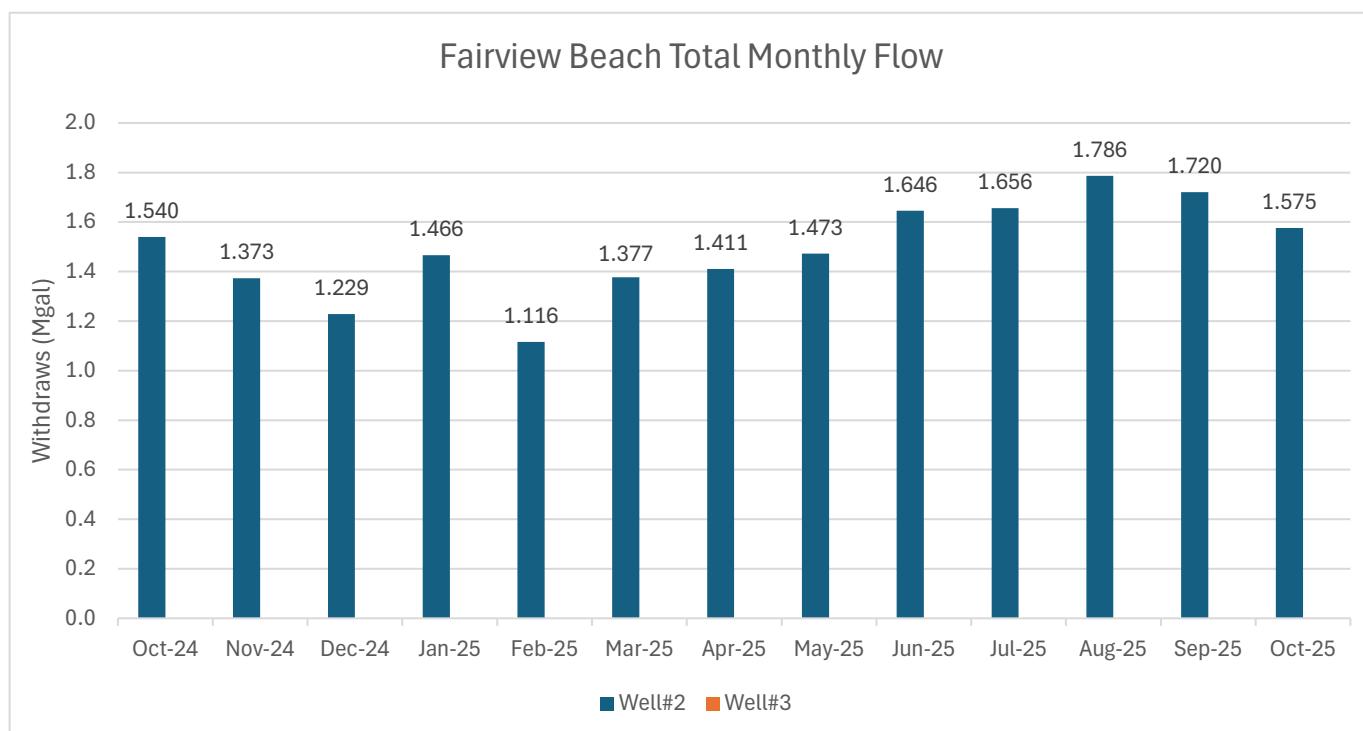
Water Quality:

The Water Treatment facility and distribution system maintained compliance with all required sampling. Routine bacteriological sample results are shown in the table below.

Bacteriological Analysis:

Location Code	Location Address	Date	Result
060	6441 Tides Rd.	10/7/2025	Absent

System Production:



Hopyard Farm – PWSID 6099283

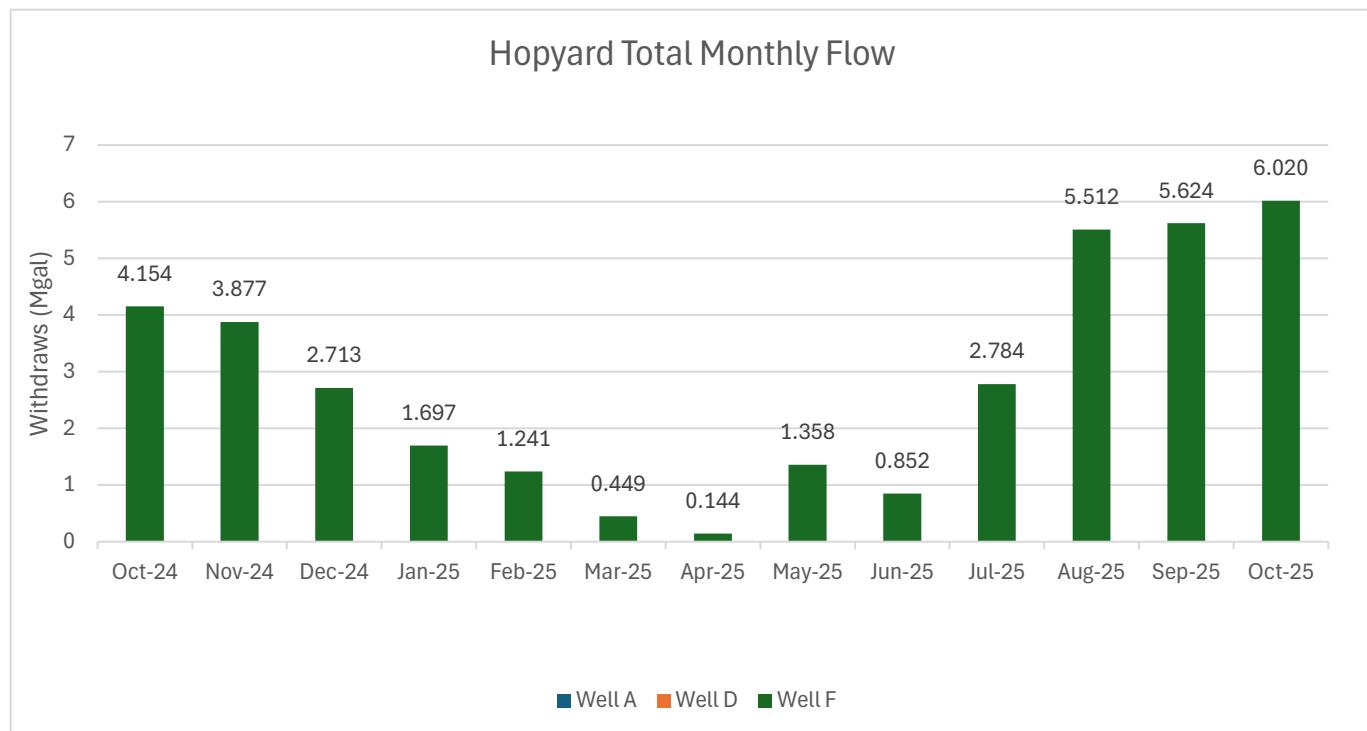
Water Quality:

The Water Treatment facility and distribution system maintained compliance with all required sampling. Routine bacteriological sample results are shown in the table below.

Bacteriological Analysis:

Location Code	Location Address	Date	Result
04	5759 Coakley Dr.	10/7/2025	Absent
01	5964 Parsons Ln.	10/7/2025	Absent

System Production:



KGC School Board Office – PWSID 6099296

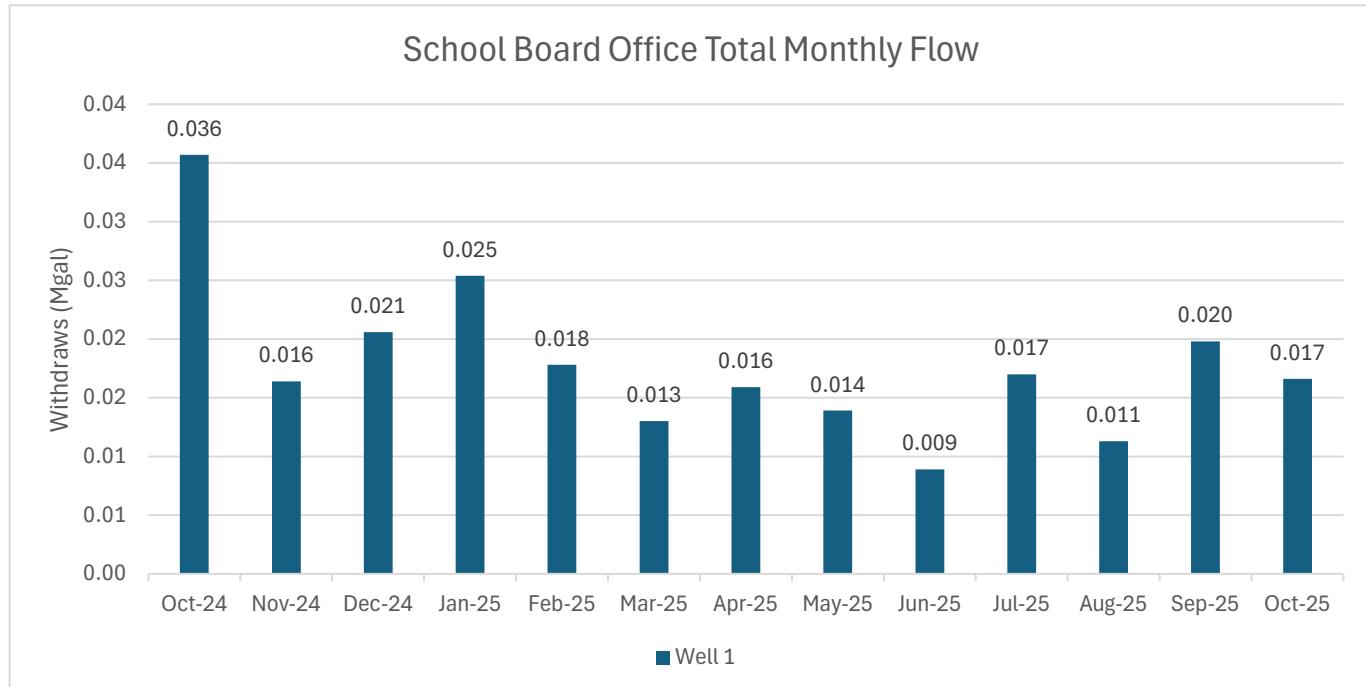
Water Quality:

The Water Treatment facility and distribution system maintained compliance with all required sampling. Routine bacteriological sample results are shown in the table below.

Bacteriological Analysis:

Location Code	Location Address	Date	Result
030	Old Art Room #10	10/9/2025	Absent

System Production:



Ninde's Store – PWSID 6099300

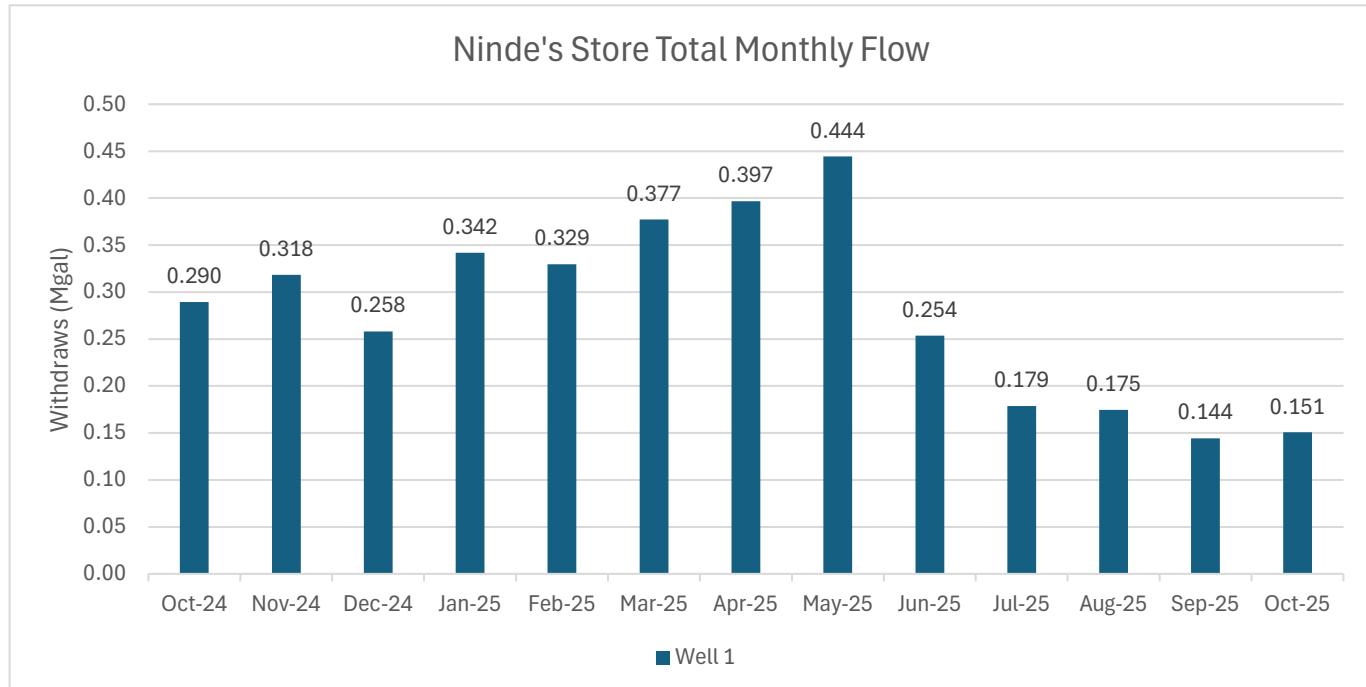
Water Quality:

The Water Treatment facility and distribution system maintained compliance with all required sampling. Routine and repeat bacteriological sample results are shown in the table below.

Bacteriological Analysis:

Location Code	Location Address	Date	Result
020	16156 Ridge Rd.	10/7/2025	Absent

System Production:



Oakland Park – PWSID 6099350

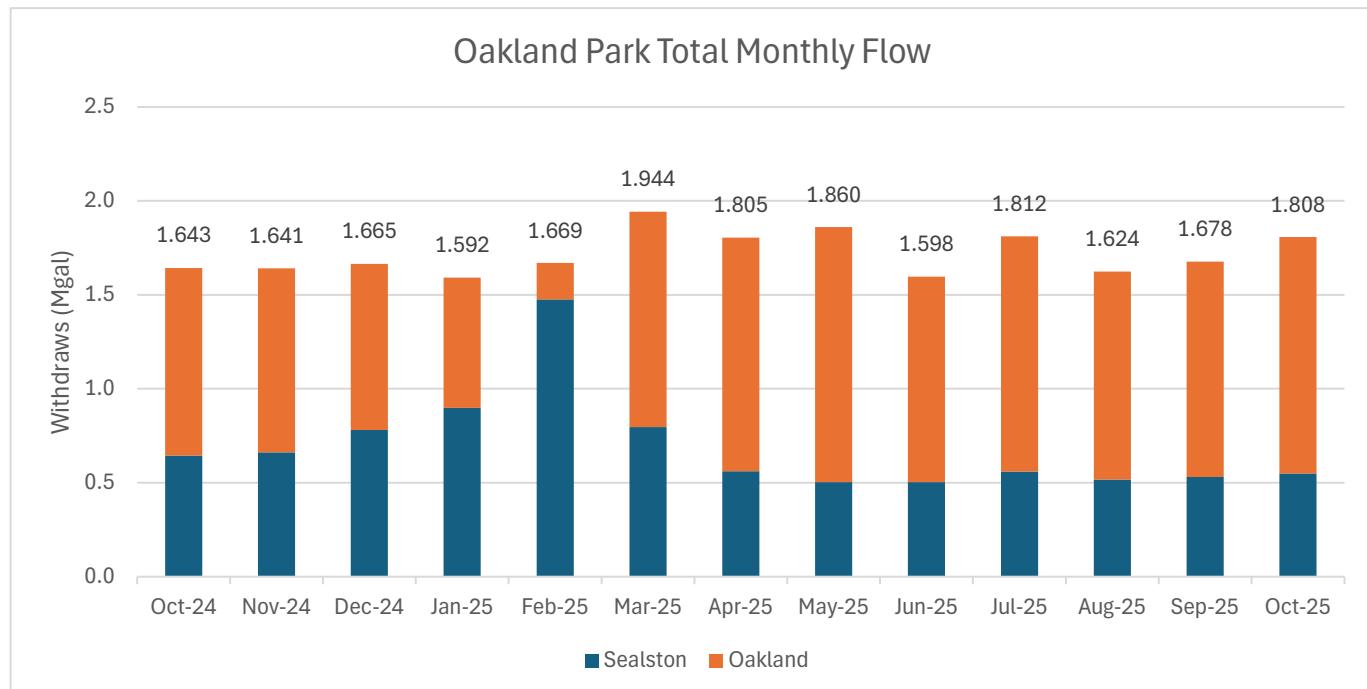
Water Quality:

The Water Treatment facility and distribution system maintained compliance with all required sampling. Routine bacteriological sample results are shown in the table below.

Bacteriological Analysis:

Location Code	Location Address	Date	Result
020	10157 Fletchers Chapel Rd.	10/7/2025	Absent
010	11084 Dennis W. Kerns	10/7/2025	Absent

System Production:



St. Paul's/Owens – PWSID 6099550

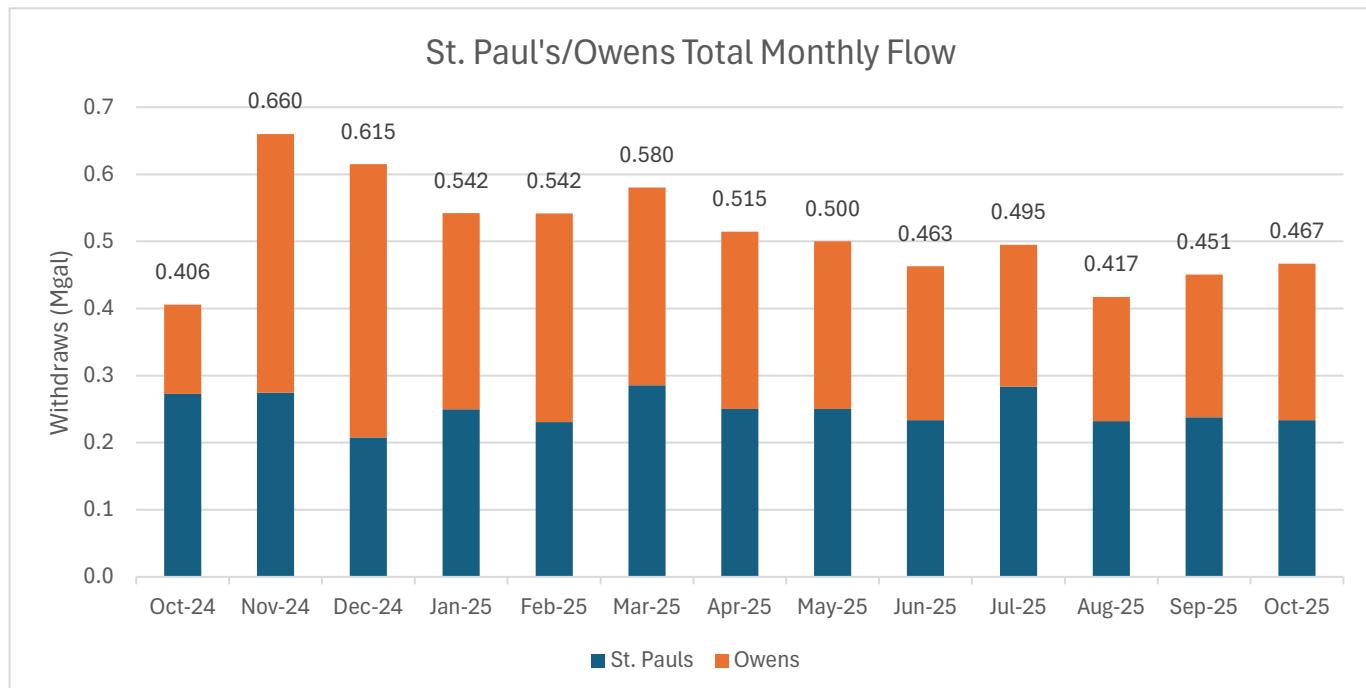
Water Quality:

The Water Treatment facility and distribution system maintained compliance with all required sampling. Routine and repeat bacteriological sample results are shown in the table below.

Bacteriological Analysis:

Location Code	Location Address	Date	Result
030	5109 Rose Ave.	10/7/2025	Absent

System Production:



WASTEWATER

Operational Notes

- Continuing to manage solids throughout all facilities.
- Optimizing treatment on a continuous basis as challenges arise.
- Continuing to perform scheduled preventative maintenance.

Dahlgren WWTP

Effluent Quality:

The wastewater treatment facility maintained compliance with all permit-required sampling.

Wastewater Treatment:

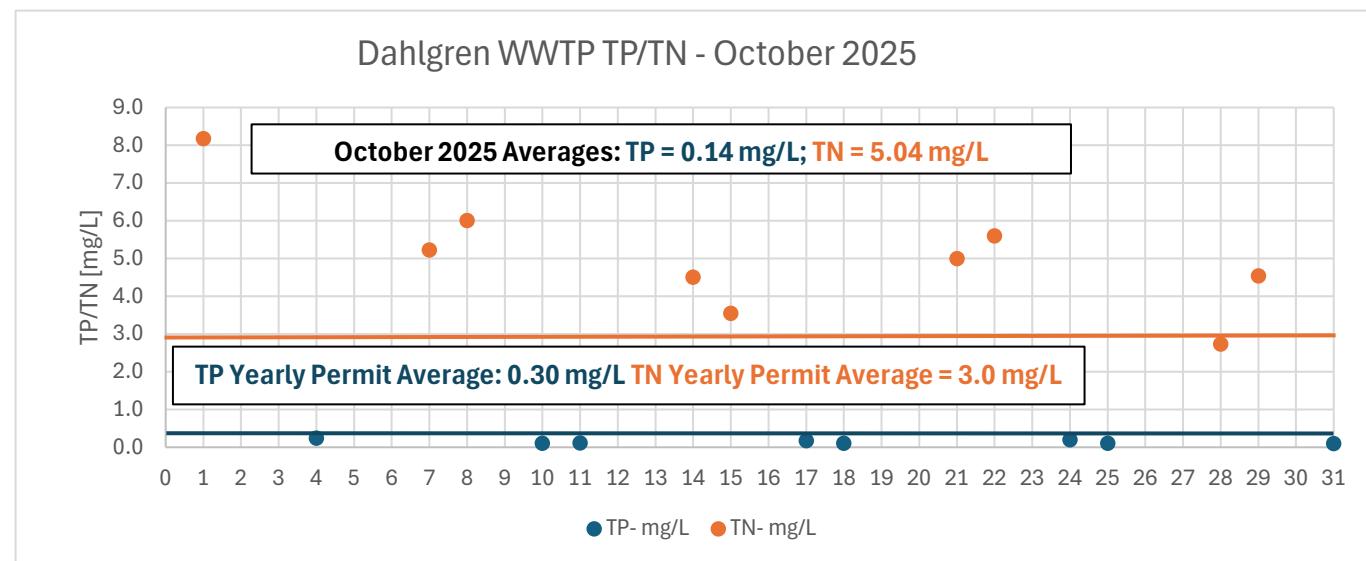
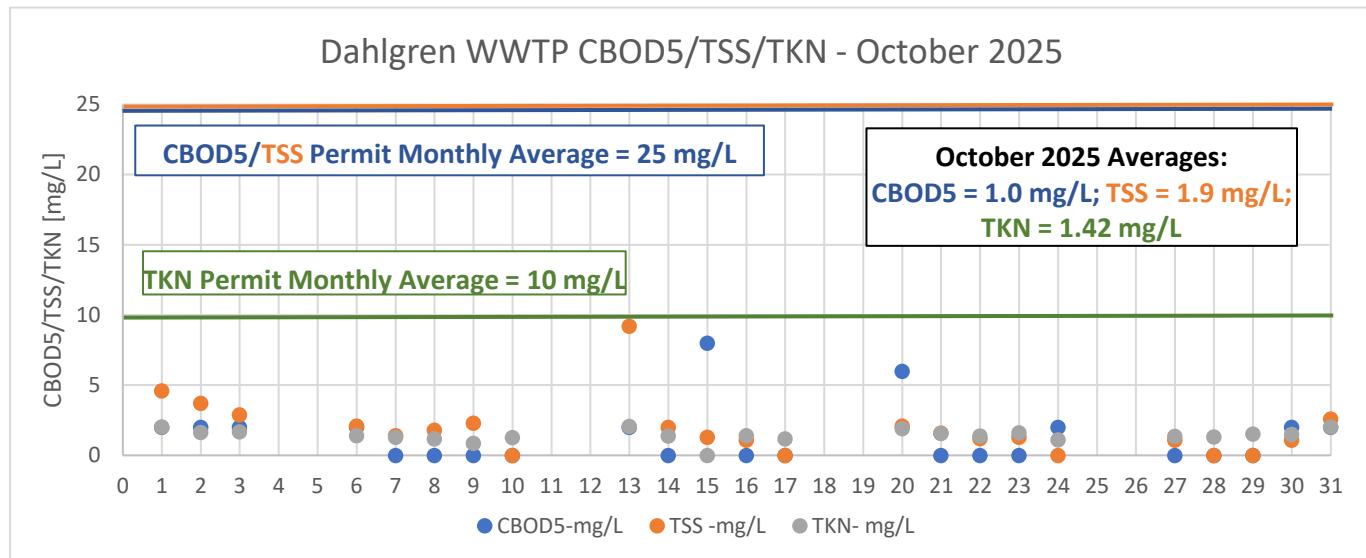
The Dahlgren WWTP met the sewer service area's sanitation demand with an average daily discharge of 0.183 MGD for a total monthly discharge of 5.677 MG.

Operational Notes:

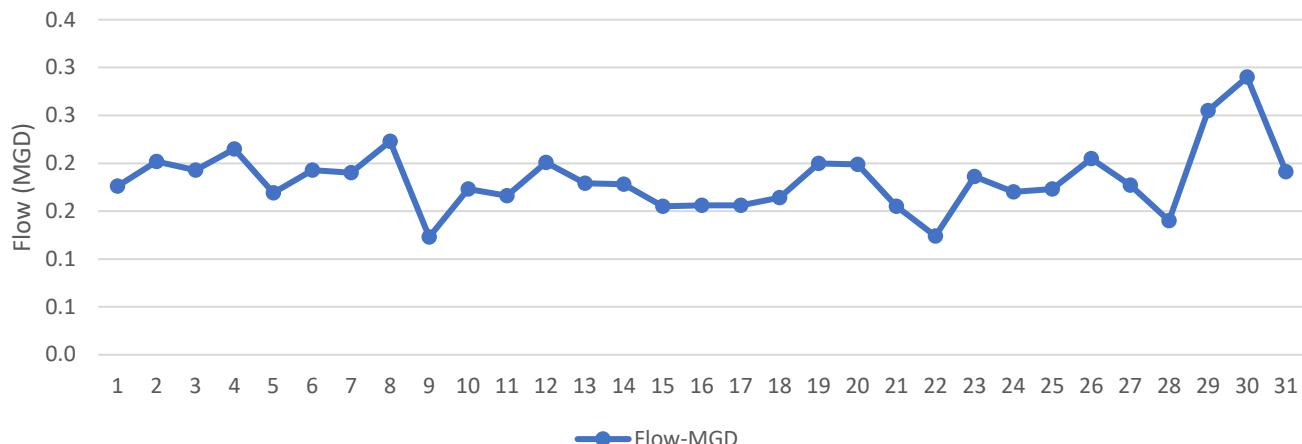
- Maintaining proper Aerobic/Anoxic zones through advanced wastewater operational techniques.
- Collected PCB samples for monitoring requirements.
- Worked with Waste Management to supply TCLP and paint filter test results to renew the permit for KGCSC to continue dumping sludge in the landfill.
- Continuing to rotate clarifiers on and offline to optimize performance in each.
- Since the IFAS system has been taken out of service, there has been a notable increase in the wasting operations to manage the solids successfully. Another effect of the IFAS system being decommissioned is the inability to meet the Nutrient permit of 3.0 on nitrates. Although, the general permit is still being met.

Data Trending:

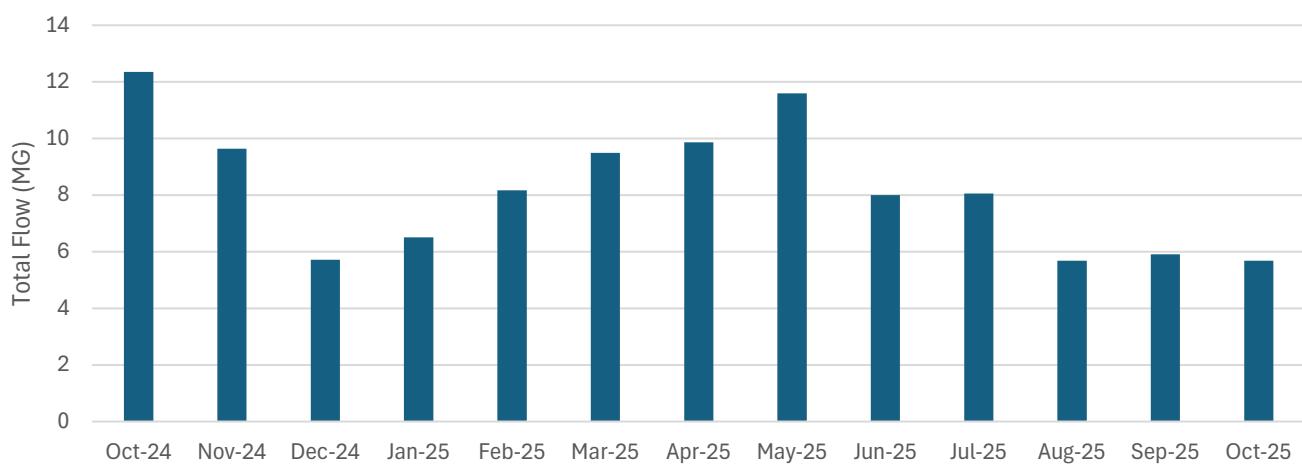
The following charts depict a graphical analysis of effluent quality monitoring and treatment plant daily and total monthly flows.



Dahlgren WWTP Flow - October 2025



Dahlgren Total Monthly Flow MG



Hopyard Farms WWTP

Effluent Quality:

The wastewater treatment facility maintained compliance with all permit-required sampling.

Wastewater Treatment:

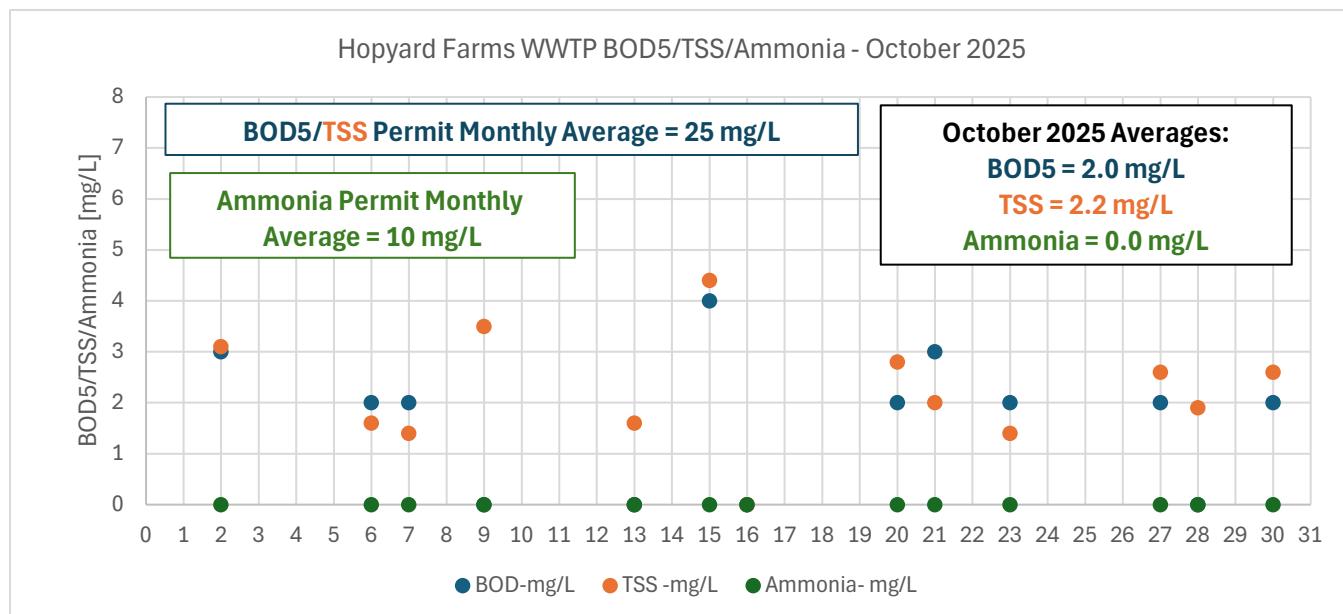
The Hopyard Farms WWTP met the sewer service area's sanitation demand with an average daily discharge of 0.095 MGD for a total monthly discharge of 2.479 MG (26 days with flow).

Operational Notes:

- IES team working in tandem with KGCSA and ACE Construction team to progress the Hopyard upgrade along smoothly.

Data Trending:

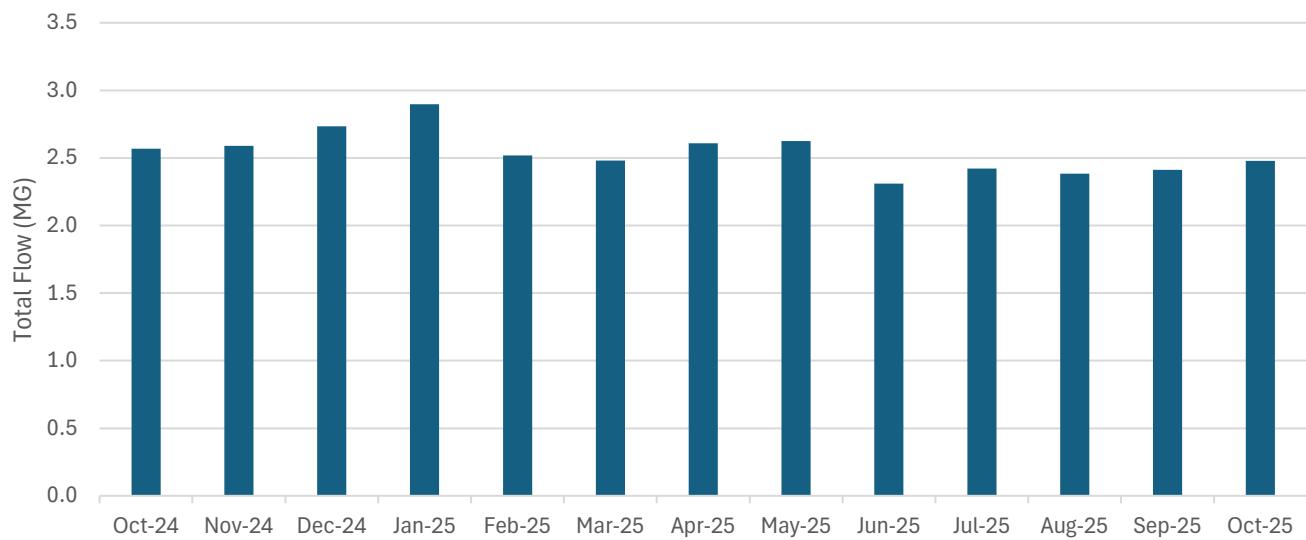
The following charts depict a graphical analysis of effluent quality monitoring and treatment plant daily and total monthly flows.



Hopyard WWTP Flow - October 2025



Hopyard Farms Monthly Flow MG



Purkins Corner WWTP

Effluent Quality:

The wastewater treatment facility maintained compliance with all permit-required sampling.

Wastewater Treatment:

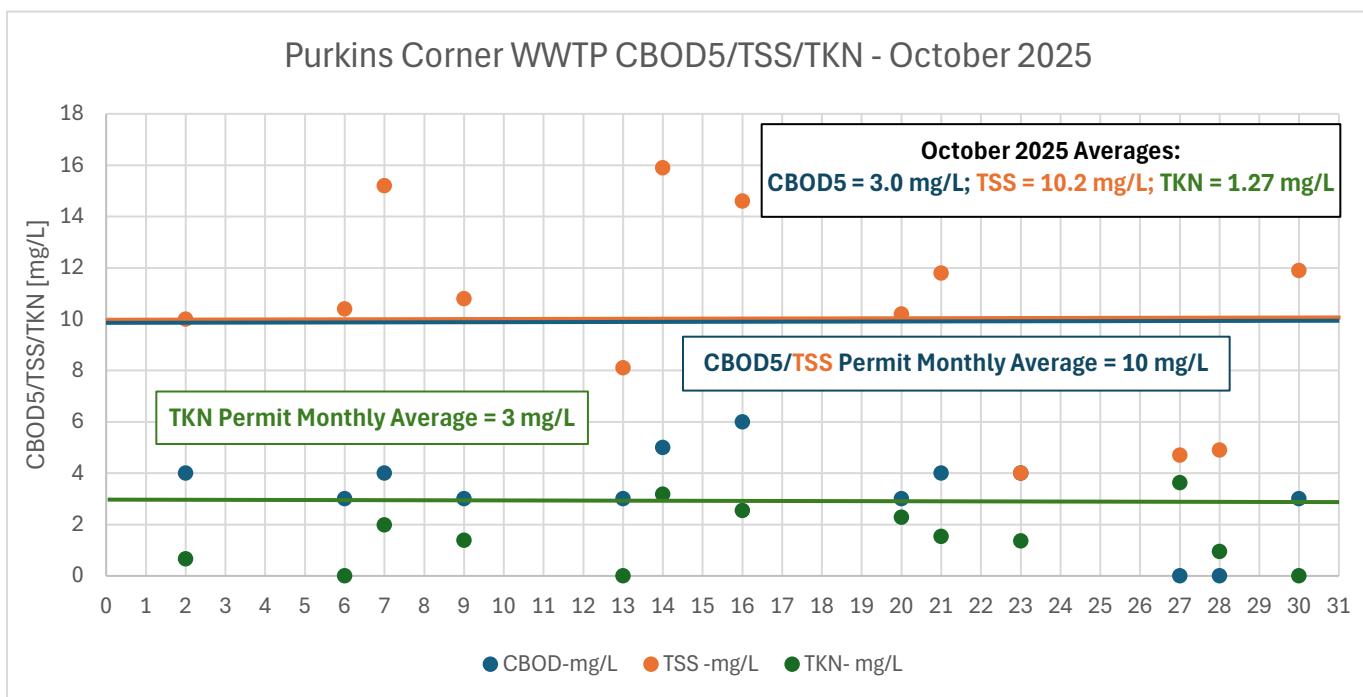
The Purkins Corner WWTP met the sewer service area's sanitation demand with an average daily discharge of 0.058 MGD for a total monthly discharge of 1.811 MG.

Operational Notes:

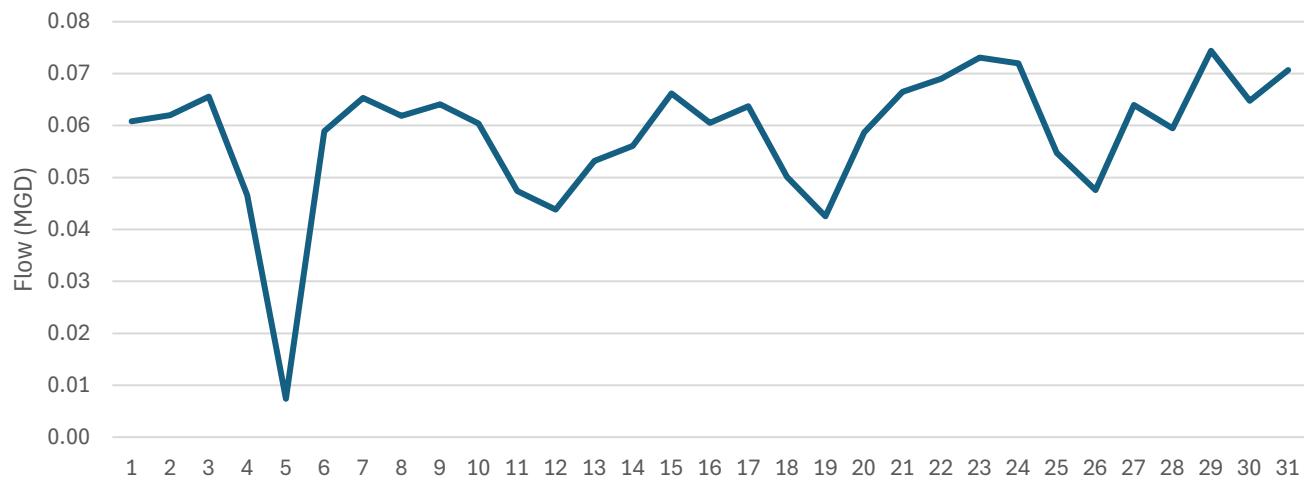
- Disc filter operations modified to increase efficiency of backwash cycles and wasting cycles while preventing hydraulically overloading the plant.
- IES Operations team is still fighting the DO due to inoperable hardware and software.

Data Trending:

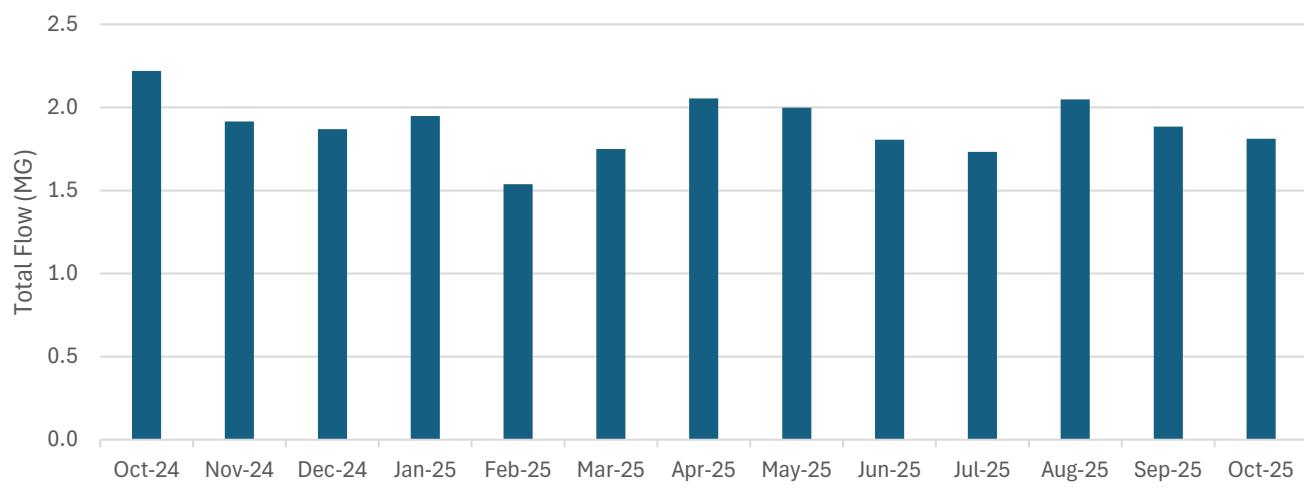
The following charts depict a graphical analysis of effluent quality monitoring and treatment plant daily and total monthly flows.



Purkins Corner WWTP Flow - October 2025



Purkins Corner Monthly Flow MG



Oakland Park WWTP

Effluent Quality:

The wastewater treatment facility maintained compliance with all permit-required sampling.

Wastewater Treatment:

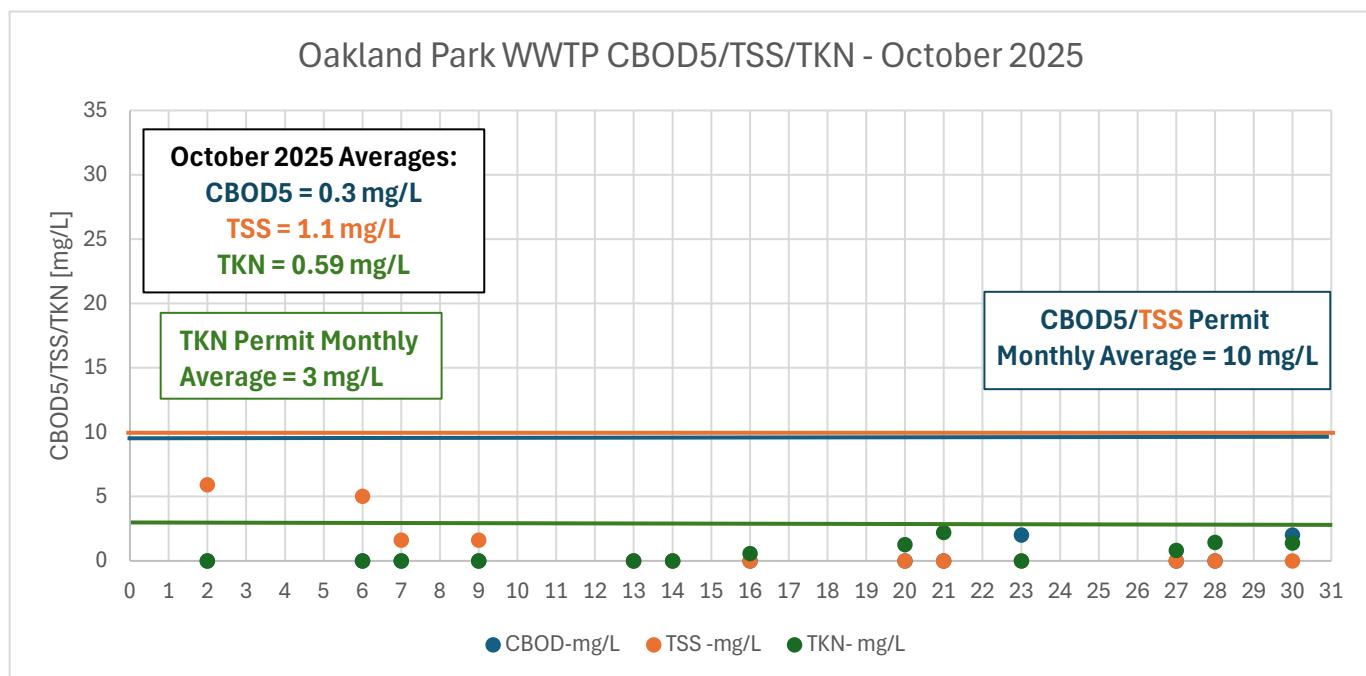
The Oakland Park WWTP met the sewer service area's sanitation demand with an average daily discharge of 0.036 MGD for a total monthly discharge of 1.110 MG.

Operational Notes:

- Both sand Filters online for Plant B. Seems to be working effectively and efficiently. IES Operations developed operating procedure to operate the modified system as it does not function automatically.

Data Trending:

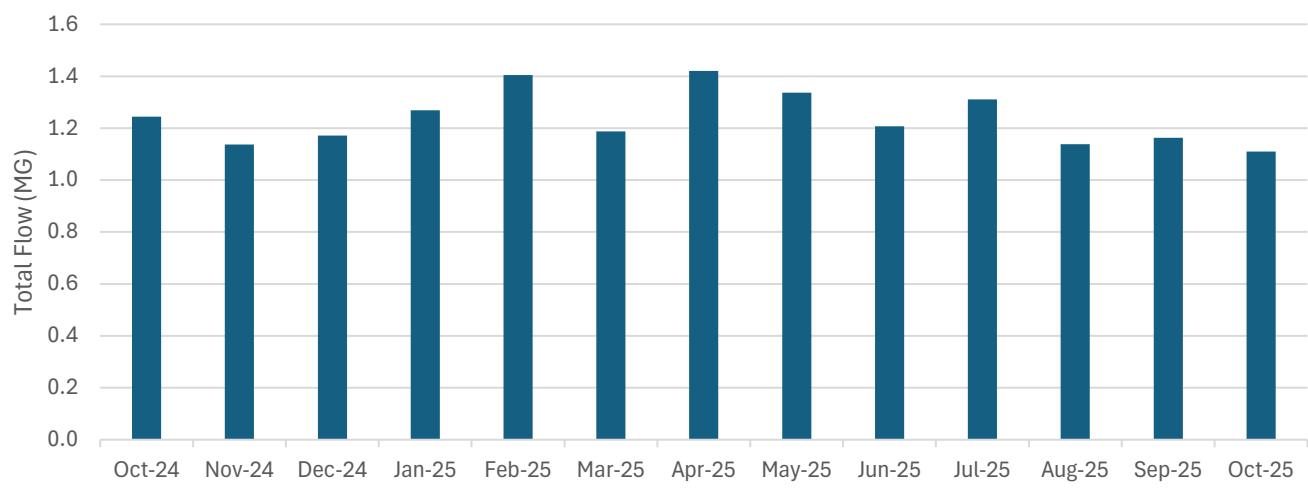
The following charts depict a graphical analysis of effluent quality monitoring and treatment plant daily and total monthly flows.



Oakland Park WWTP - October 2025



Oakland Park Total Monthly Flow MG



Fairview Beach WWTP

Effluent Quality:

The wastewater treatment facility maintained compliance with all permit-required sampling.

Wastewater Treatment:

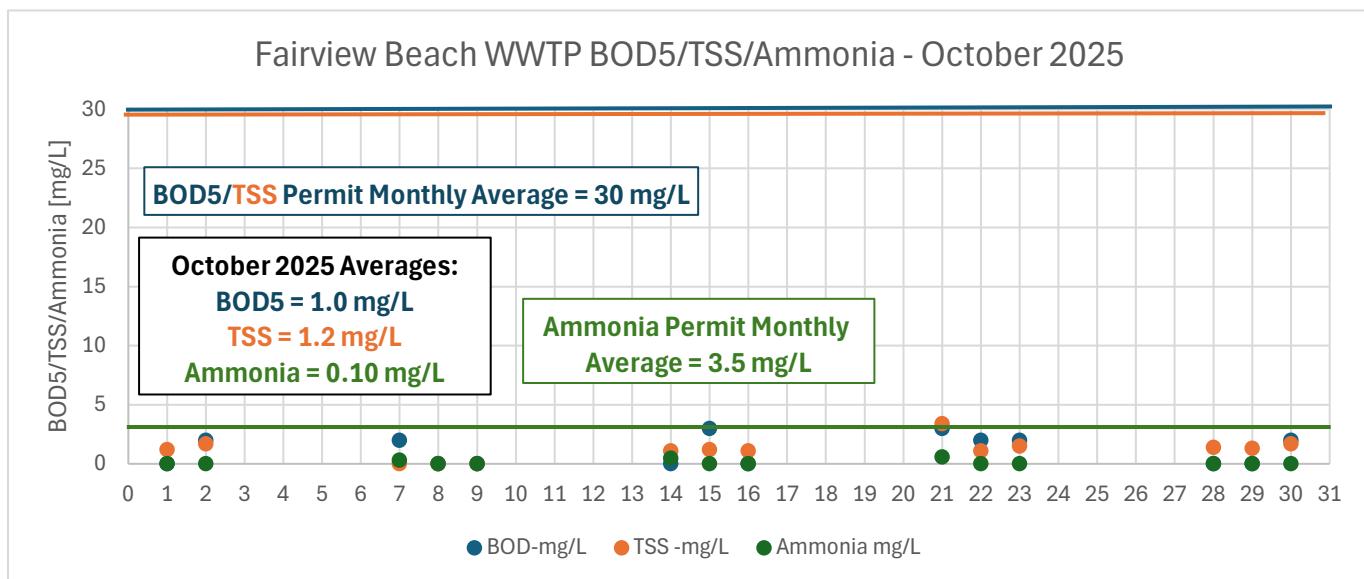
The Fairview Beach WWTP met the sewer service area's sanitation demand with an average daily discharge of 0.042 MGD for a total monthly discharge of 1.141 MG (27 days with flow).

Operational Notes:

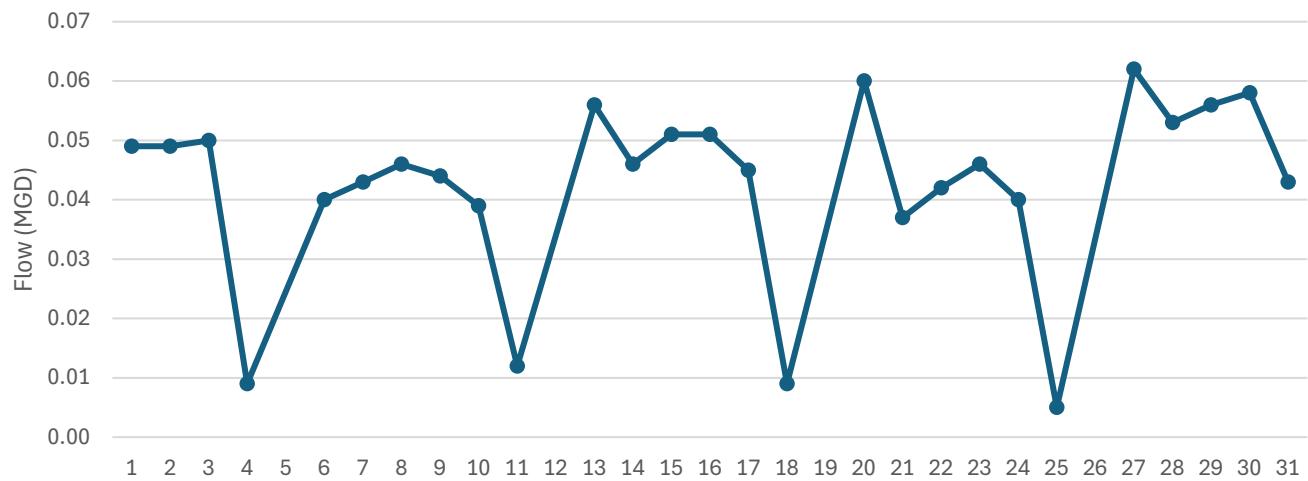
- One power surge caused the plant to lose utility power service, and the generator did not provide backup power. IES alerted KGCSA.

Data Trending:

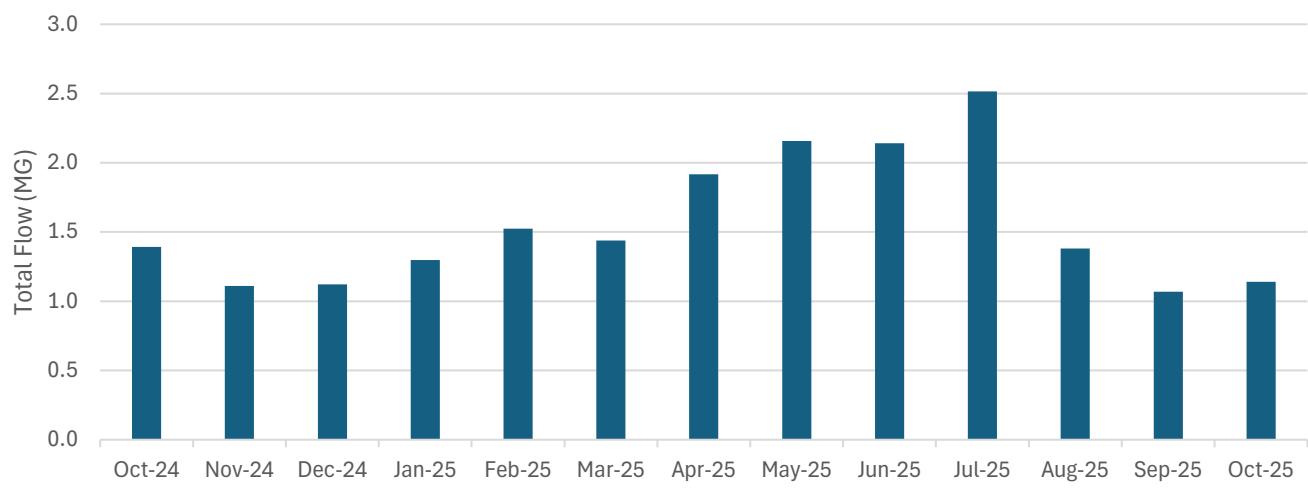
The following charts depict a graphical analysis of effluent quality monitoring and treatment plant daily and total monthly flows.



Fairview Beach WWTP - October 2025



Fairview Beach Total Monthly Flow MG



Glossary

Bacteria	E.coli and/or Total Coliform
BOD5	5-day Biochemical Oxygen Demand
CBOD	Carbonaceous Biochemical Oxygen Demand
cfu	colony forming unit
CIP	Capital Improvement Plan or Cast/cleaned-in-place
Cl	Chloride Ion
Cl2	Chlorine
CMF	Continuous Membrane Filtration?
D.O.	Dissolved Oxygen
F/M ratio	Food to Microorganism ratio
FOG	Fats, Oil and Grease
GST	Ground Storage Tank
HWTP	Harmony Water Treatment Plant
I&I	Infiltration and Inflow
Inorganic Nitrogen	Nitrate + Nitrite
LS	Lift Station
mg/L	Milligrams per Liter
MGD	Million Gallons Per Day
mL	Milliliters
MLSS	Mixed Liquor Suspended Solids
MLVSS	Mixed Liquor Volatile Suspended Solids
MPN	Most Probable Number -bacteriological well sample
MW	Monitoring Well
N/N	Nitrate/Nitrite
Organic Nitrogen	TKN
P/A	Presence/Absence- bacteriological samples for drinking water
PFAS	polyfluoroalkyl substances
PLC	Programmable Logic Controller
POE	Point of Entry
RAS	Return Activated Sludge
SCADA	Supervisory Control and Data Acquisition
STEP	Septic Tank Effluent Pump
TKN	Total Kjeldahl Nitrogen
TN	Total Nitrogen
TP	Total Phosphorous
TR-6	Copper sequestering chemical for wastewater
TSS	Total Suspended Solids
UV	Ultraviolet Light
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant