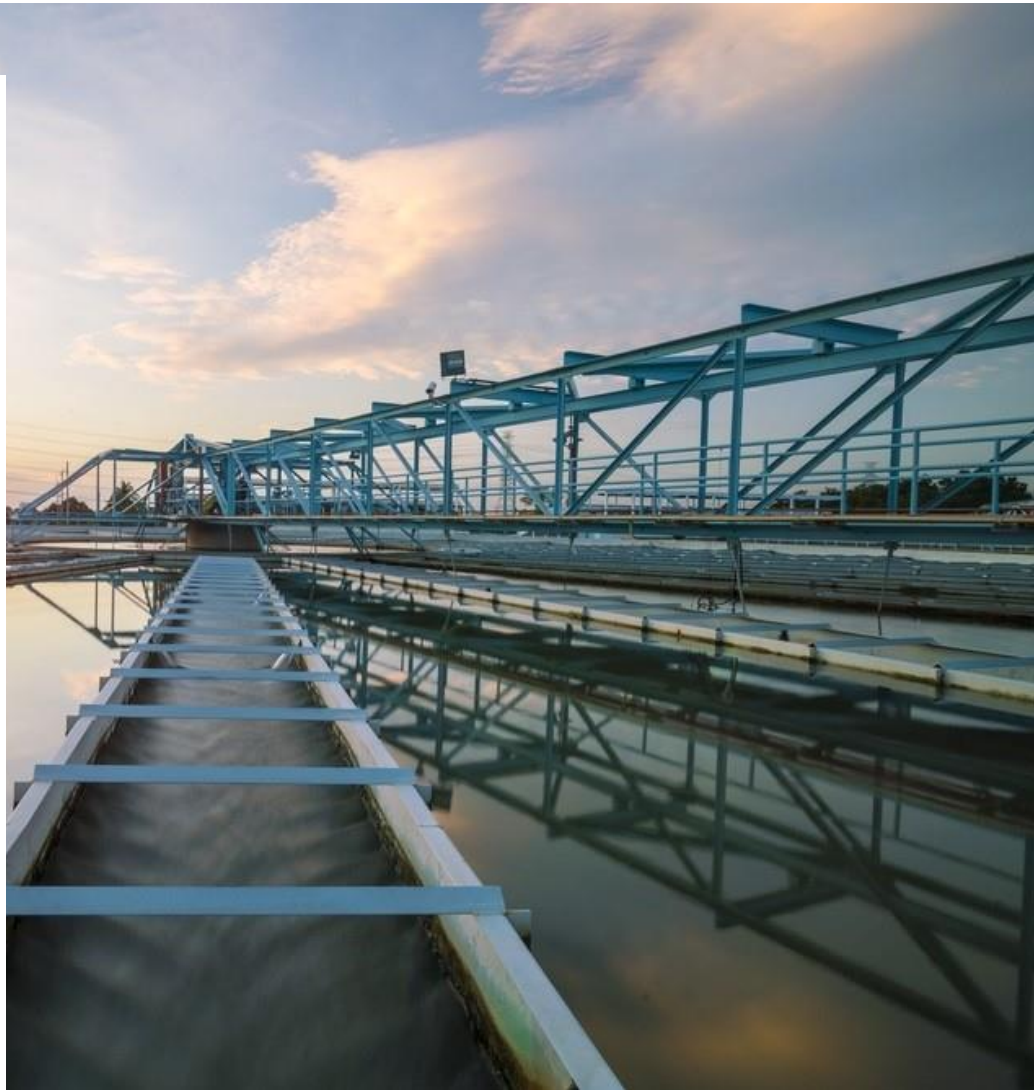


UTILITY REPORT



JULY 2023

**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

Overview:

- Inspected sand filter media at Oakland Park water plant.
- King George maintenance changed injection point, and installed sample spigot at Circle 1 for more effective treatment and monitoring.
- Progressively changing chemical pump heads to accommodate for heat gassing off hypochlorite solutions.
- IES has identified faulty exhaust fans and KG maintenance is repairing/replacing as needed.
- KG maintenance installed mission control monitoring units on Oakland and Sealston systems which has dramatically reduced water loss and improved communications for well operations.

Canterbury Subdivision – PWSID 6099085

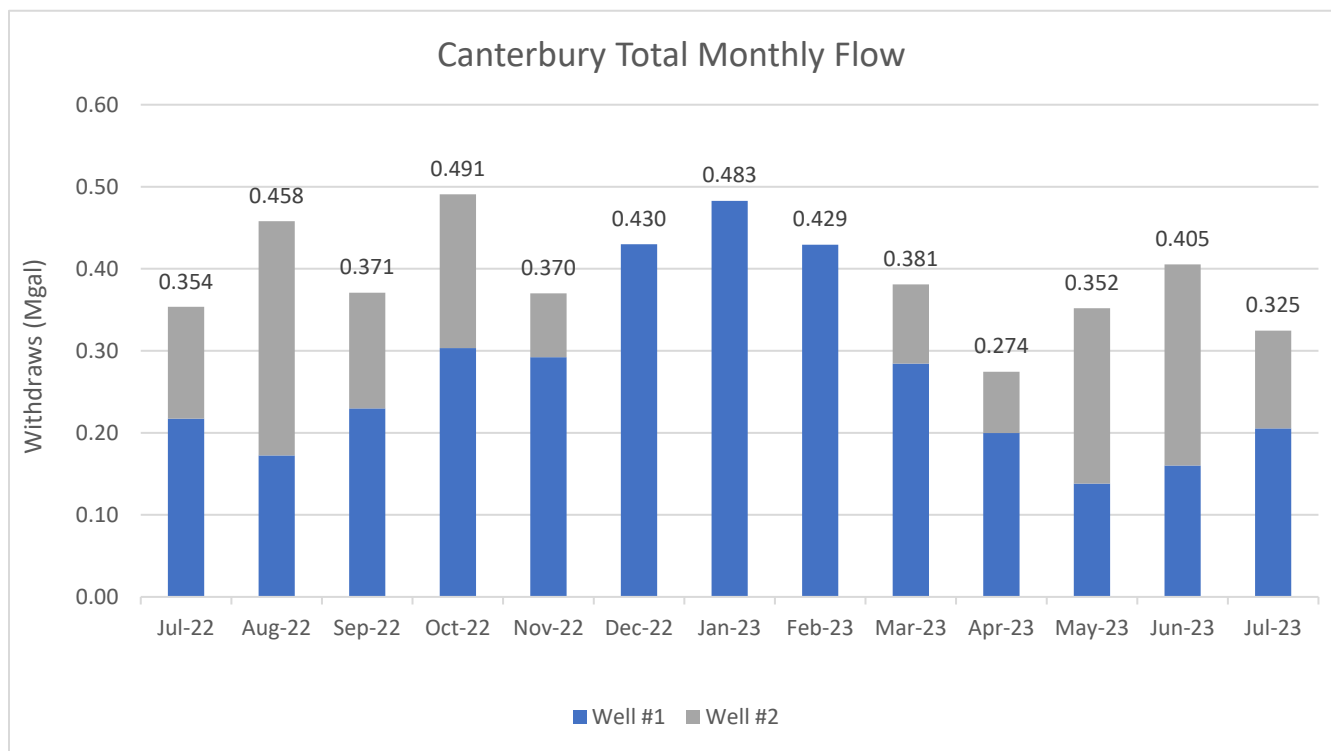
Water Quality

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
020	12343 Kent Road	7/20/2023	Absent

System Production:



Circle – PWSID 6099100

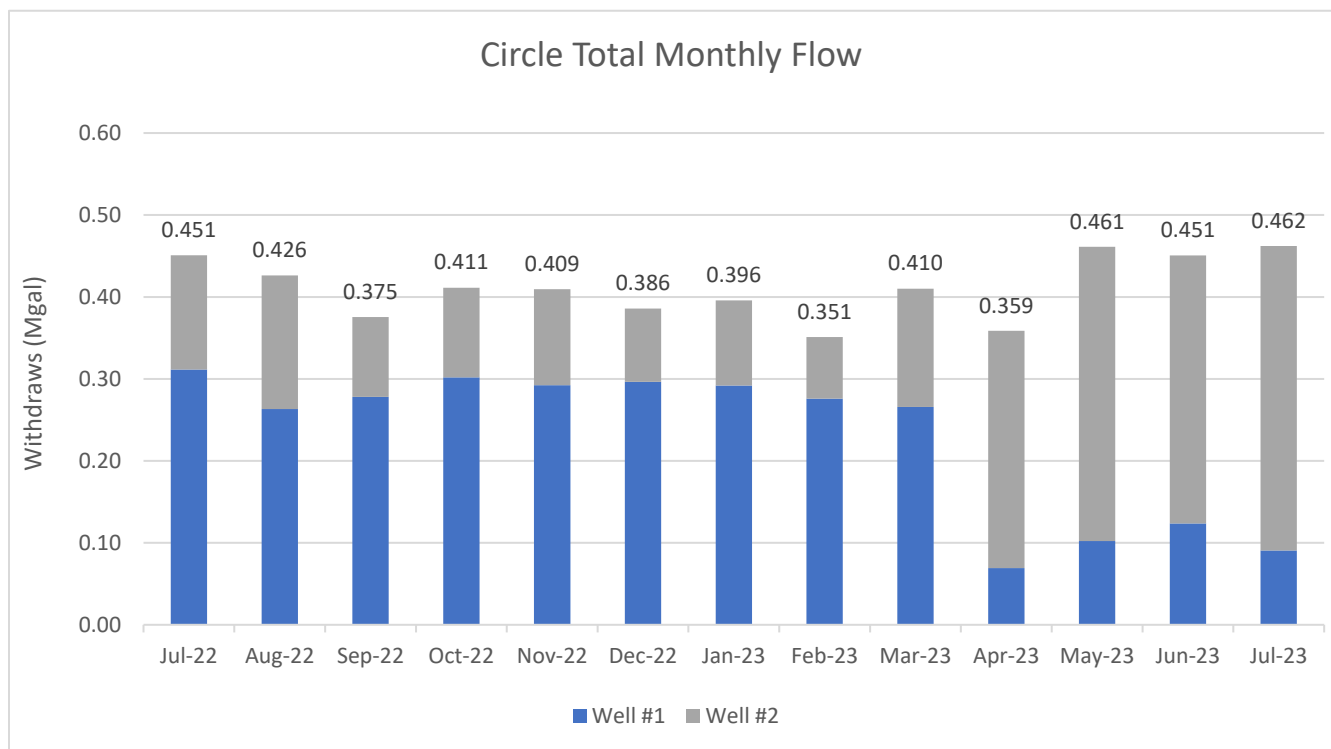
Water Quality

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
020	12013 Ridge Road	7/20/2023	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:

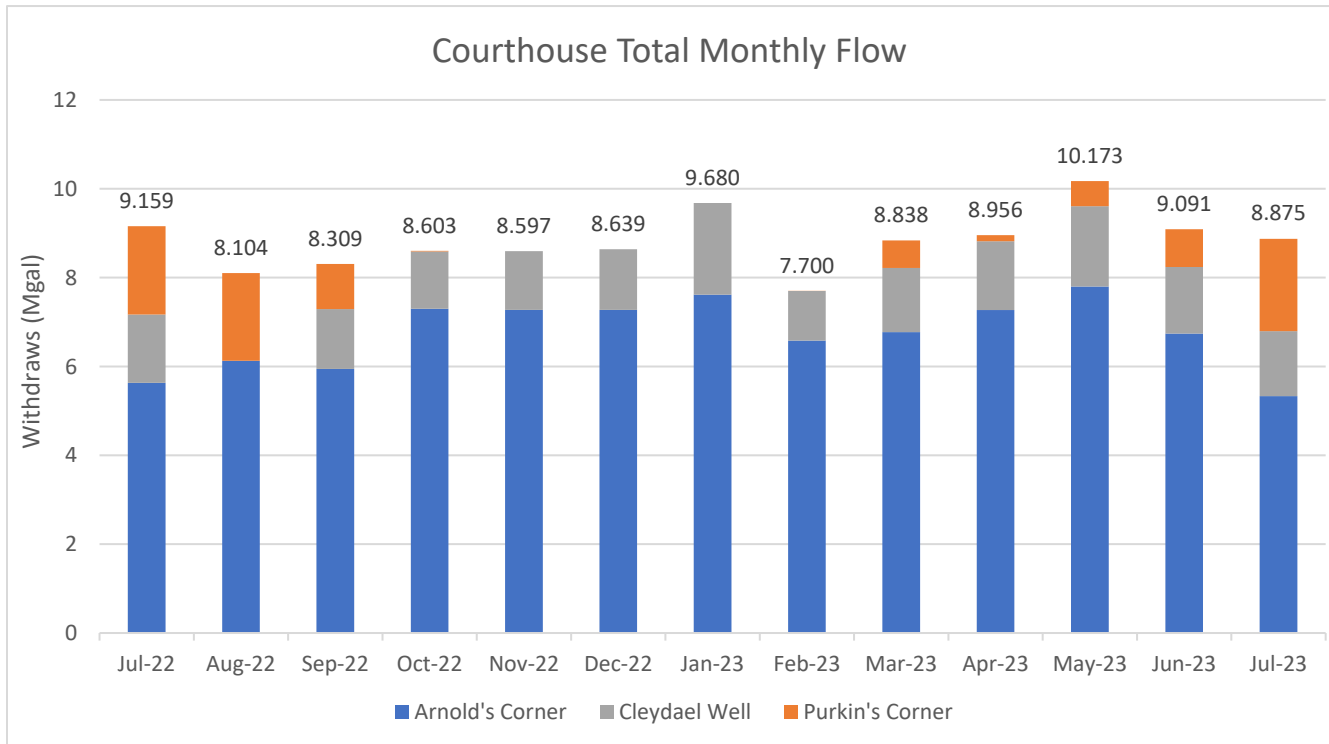
Bacteriological Analysis

Location Code	Location Address	Date	Result
02	8181 Kings Highway	7/17/2023	Absent
03	9237 Kings Highway	7/17/2023	Absent
07	12128 Cleydael Blvd.	7/17/2023	Absent
010	10404 Eisenhower Drive	7/17/2023	Absent
013	8095 Washington Drive	7/17/2023	Absent

Operational Notes:

- 7/5: Arnold's: Change injector
- 7/13: Arnold's: Change head on chem. pump

System Production:



Dahlgren – PWSID 6099295

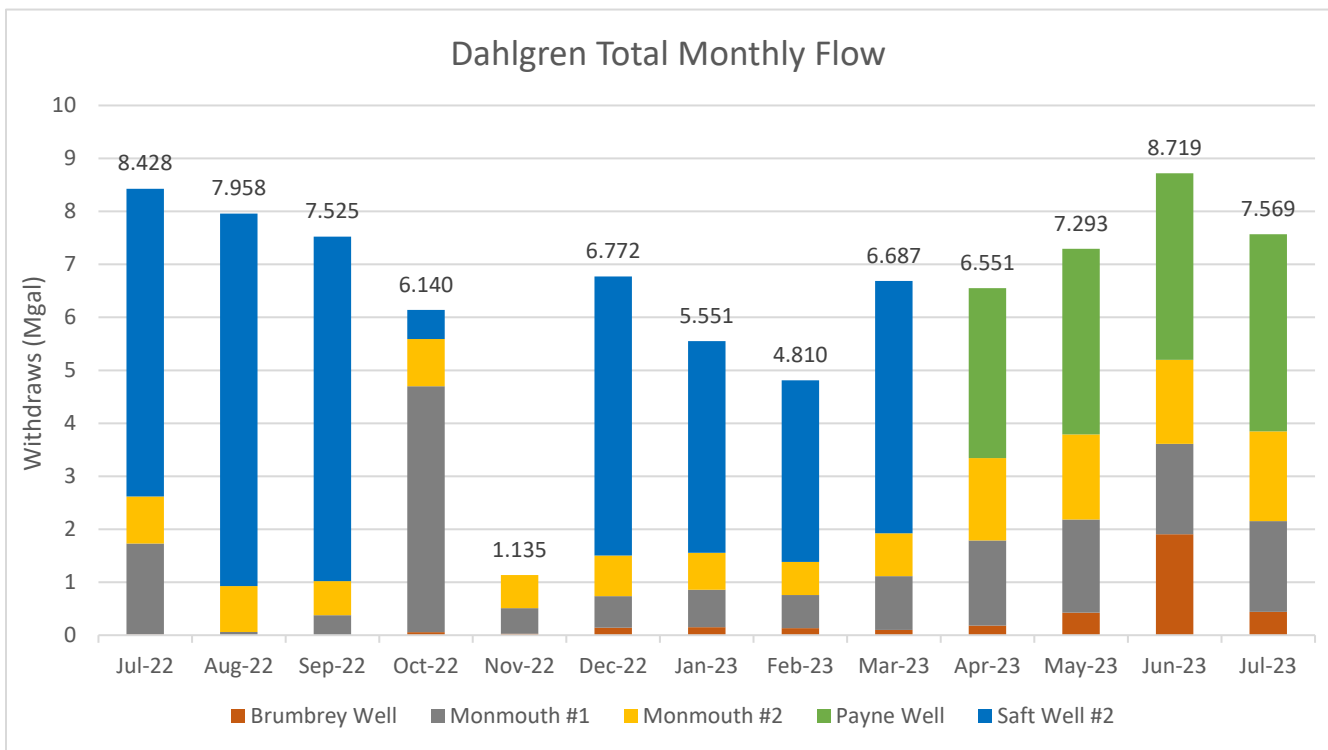
Water Quality

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
01	15375 Dahlgren Road	7/21/2023	Absent
03	5394 Gordon Drive	7/21/2023	Absent
04	17087 Twelfth Street	7/21/2023	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:

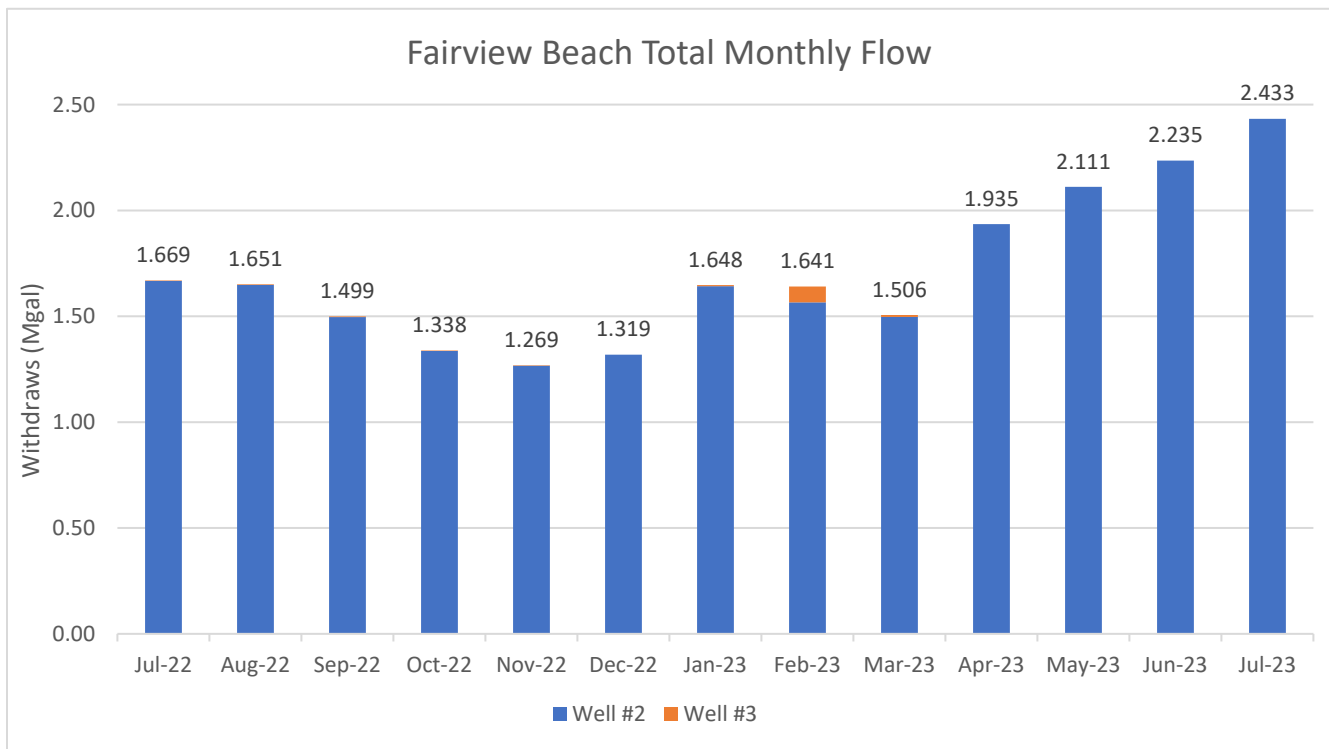
Bacteriological Analysis

Location Code	Location Address	Date	Result
030	6338 Riverview Drive	7/18/2023	Absent
060	6441 Tides Road	7/18/2023	Absent

Operational Notes:

- 7/3, 6, 10, 13, 17, 24, 28, 31: Well 2A: Backwash 1 + 2

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:

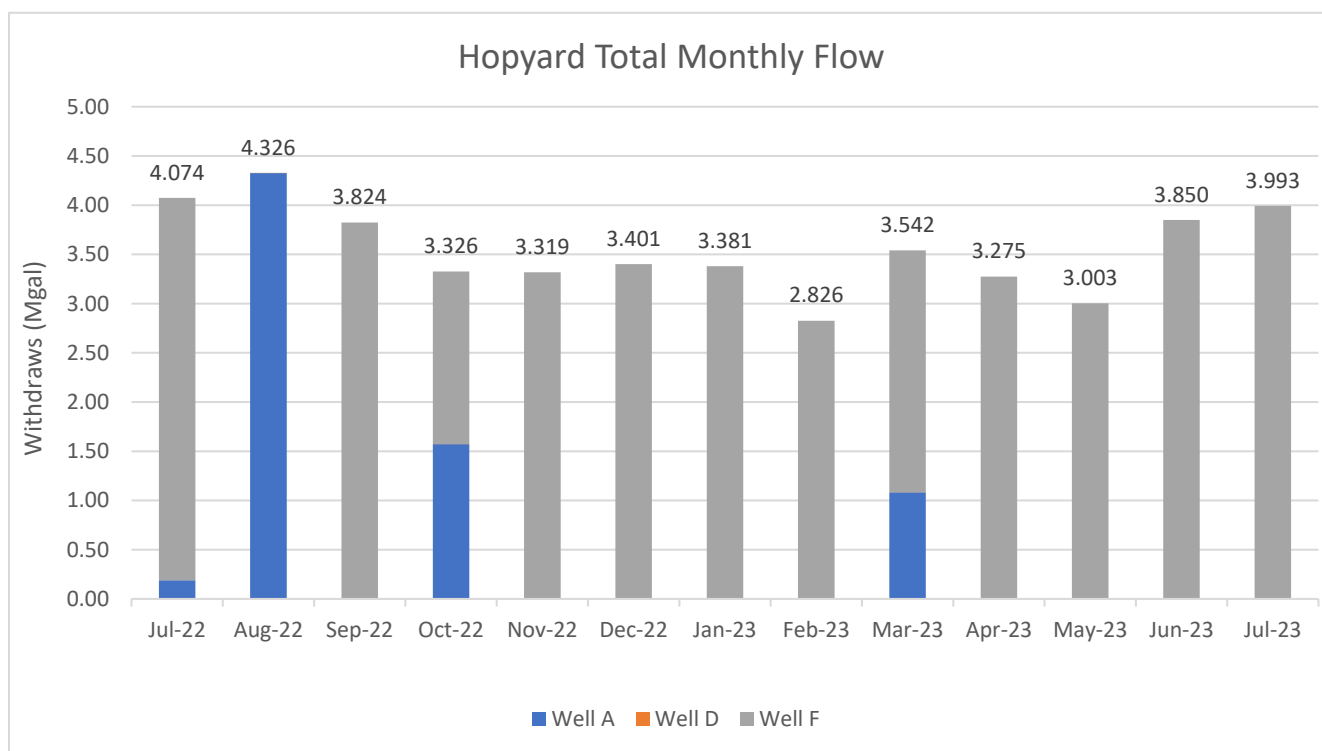
Bacteriological Analysis

Location Code	Location Address	Date	Result
010	5964 Parsons Lane	7/21/2023	Absent
040	5759 Coakley Drive	7/21/2023	Absent

Operational Notes:

- 7/1: Well D and A Offline

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
020	9100 St. Anthony's Road – Teachers Bathroom 2 nd Floor	7/21/2023	Absent

System Production: July meter reading 29479600; 11500 gallons used.

Ninde's Store – PWSID 6099300

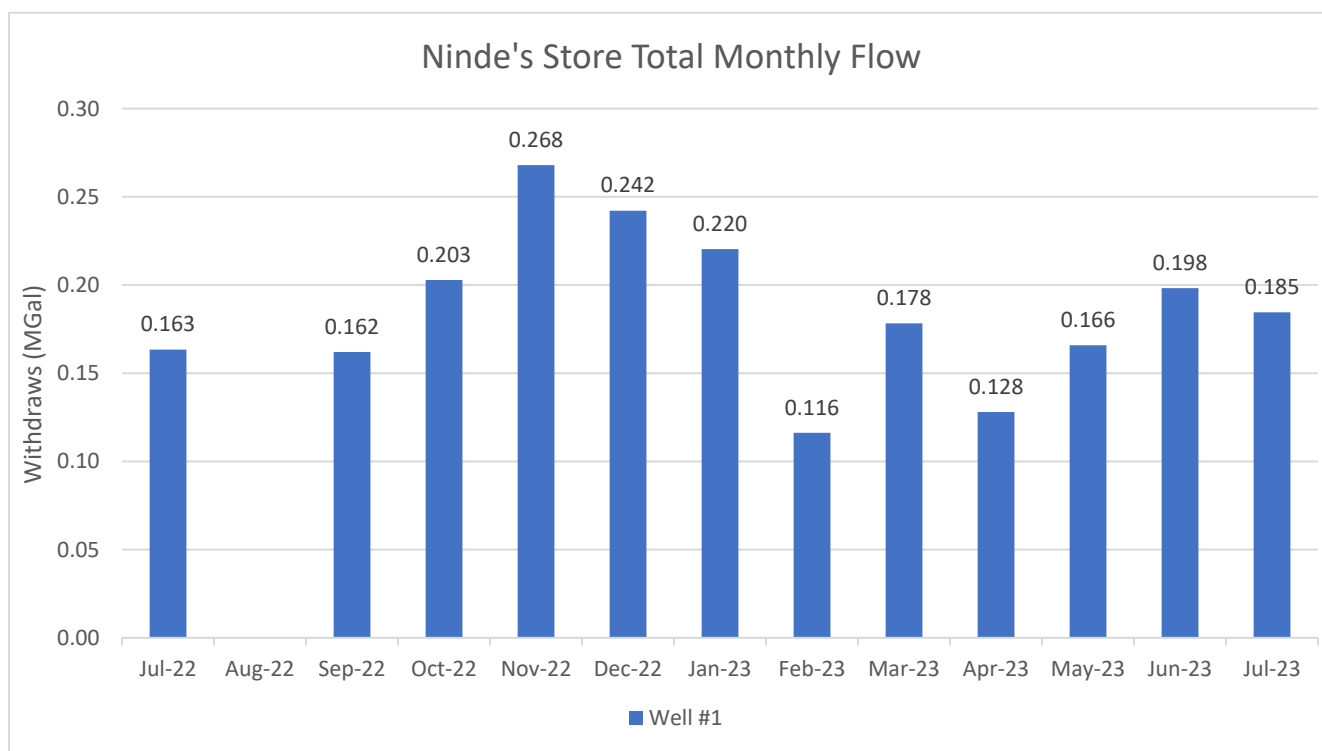
Water Quality

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	16156 Ridge Road	7/20/2023	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:

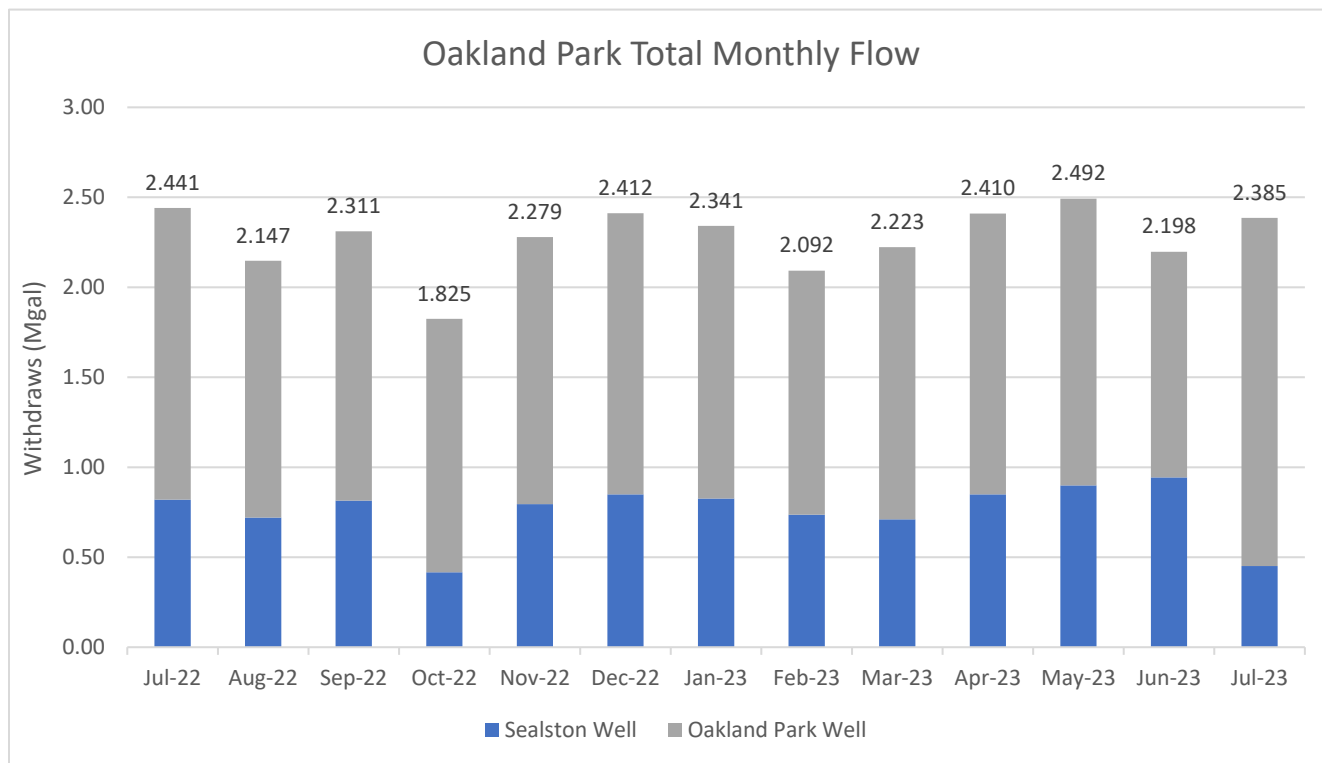
Bacteriological Analysis

Location Code	Location Address	Date	Result
01	11084 Dennis W. Kerns Pkwy	7/17/2023	Absent
03	9121 Covington Street	7/17/2023	Absent

Operational Notes:

- Inspected sand filter media at OP water plant.
- 7/3: Sealston: Backwash 1 + 2
- 7/5: Sealston: Backwash 1 + 2; OP: Backwash
- 7/6: Sealston Well offline
- 7/17: OP: Backwash 1 + 2 + 3

System Production:



St. Paul's/Owens – PWSID 6099550

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:

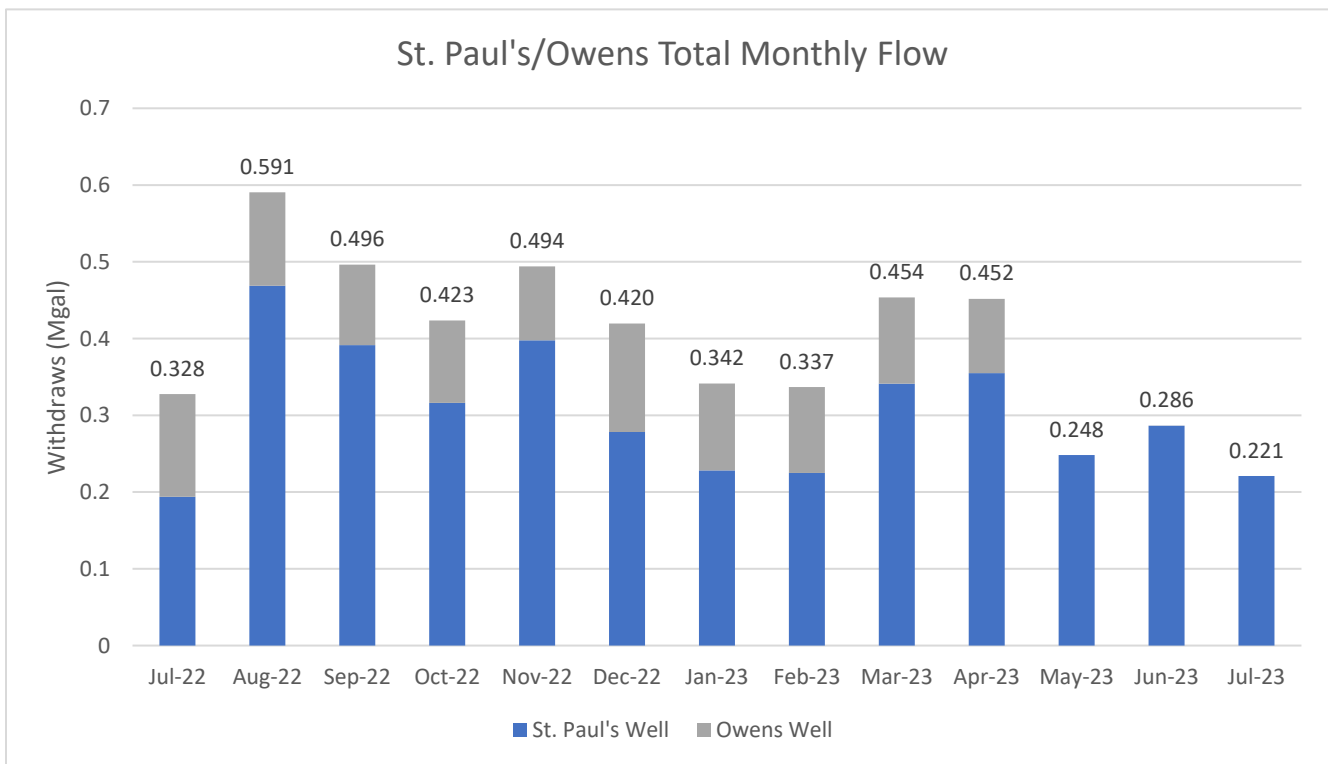
Bacteriological Analysis

Location Code	Location Address	Date	Result
010	5486 St. Paul's Road	7/21/2023	Absent

Operational Notes:

- 7/1: Owens meter: Needs repaired/replaced

System Production:



WASTEWATER

Dahlgren – WWTP

Effluent Quality:

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

Wastewater Treatment:

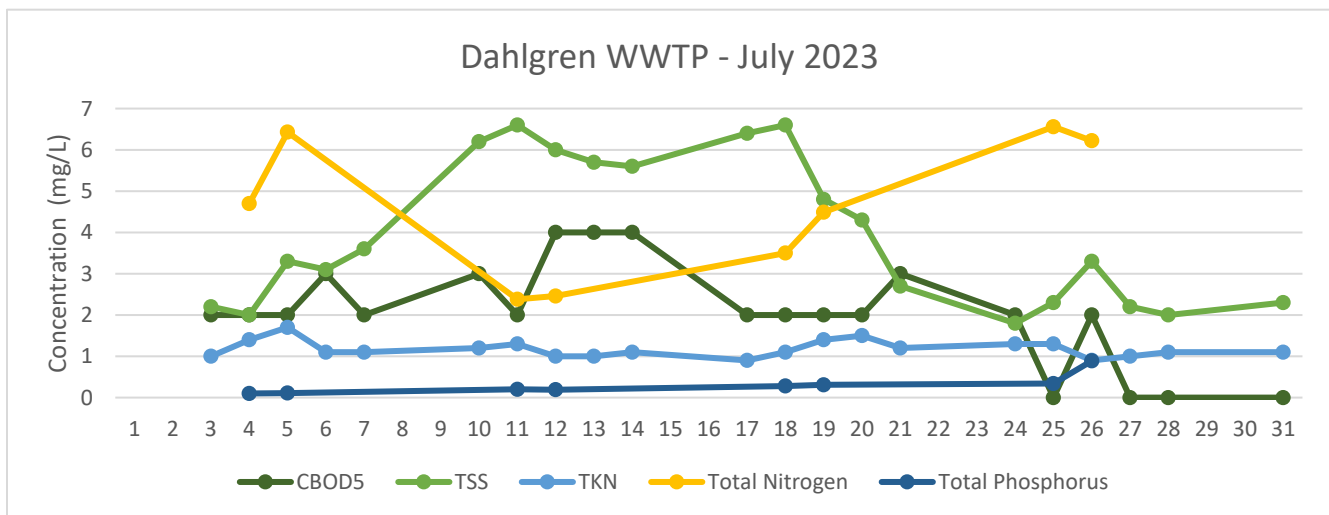
The Dahlgren WWTP met the sewer service area's sanitation demand with an average daily discharge of 0.269 MGD and a total monthly discharge of 8.329 MG.

Operational Notes:

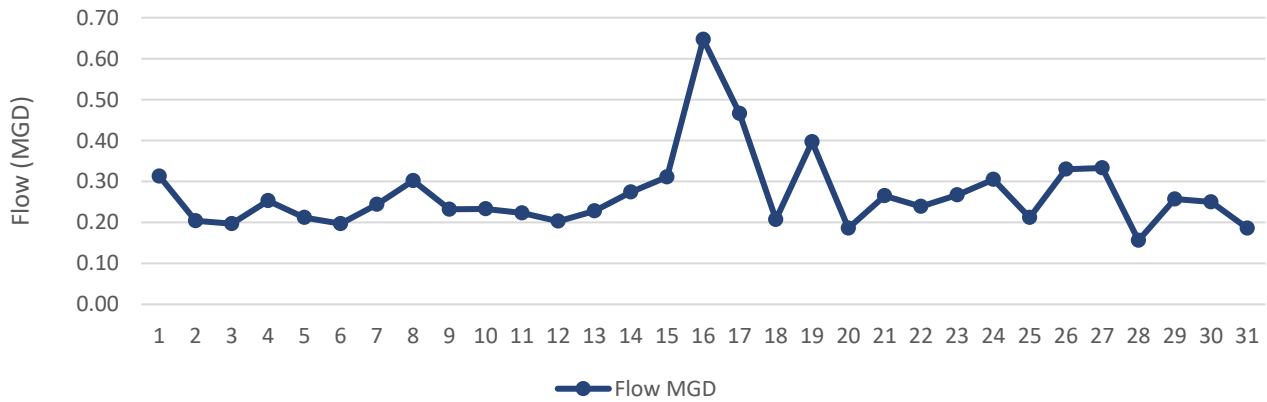
- KG maintenance installed new suction pipe on BioCarb feed system to include a y strainer system and drawdown calibration tube to ensure chemical feed rates.
- Increased chances of thunderstorm systems prompted IES operators to bring second clarifier online.
- Repaired water line at influent screen, which will reduce run time on water reuse pumps. KG maintenance installed a screening unit w/ float due to faulty level sensor.
- KG maintenance replaced hardware on reuse pumps to keep packing from leaking.

Data Trending:

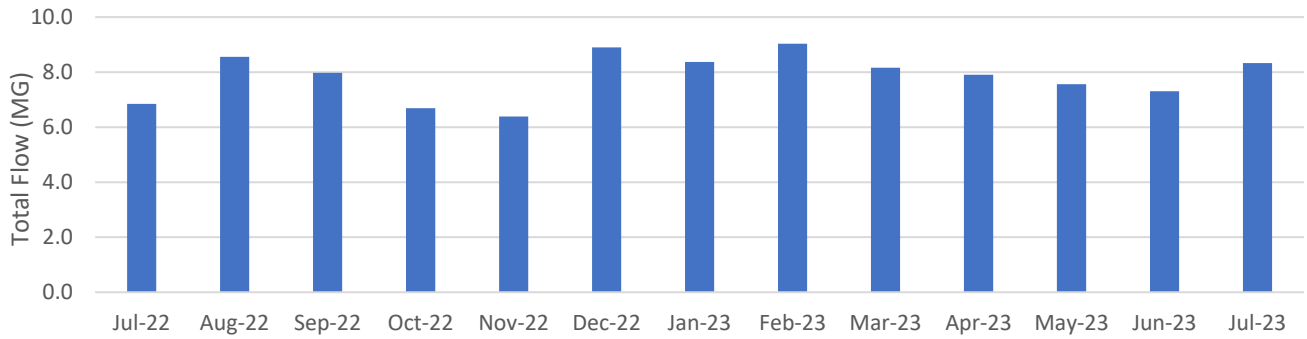
The following charts depict a graphical analysis of effluent quality monitoring and treatment plant daily and total monthly flows.



Dahlgren WWTP - July 2023



Dahlgren Total Monthly Flow MG



Hopyard – WWTP

Effluent Quality:

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

Wastewater Treatment:

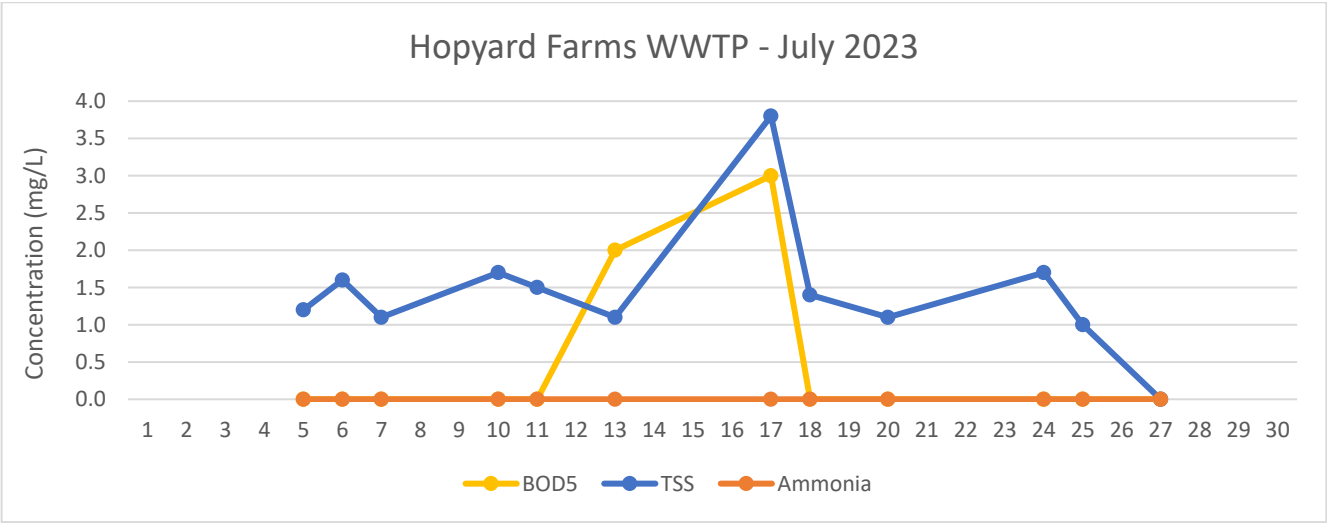
The Hopyard WWTP met the sewer service area’s sanitation demand with an average daily discharge of 0.079 MGD and a total monthly discharge of 2.439 MG.

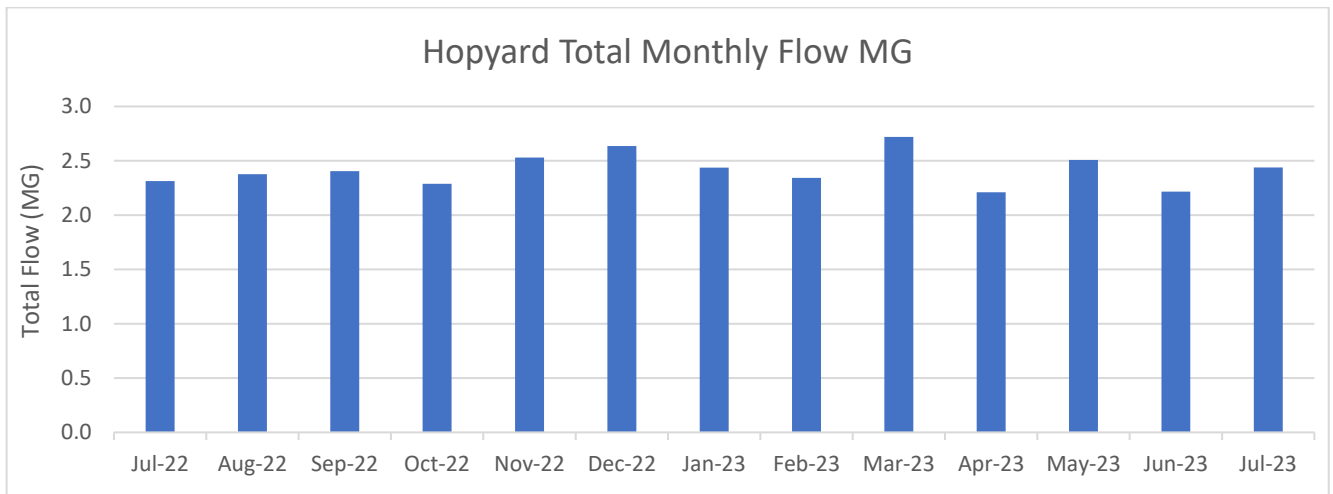
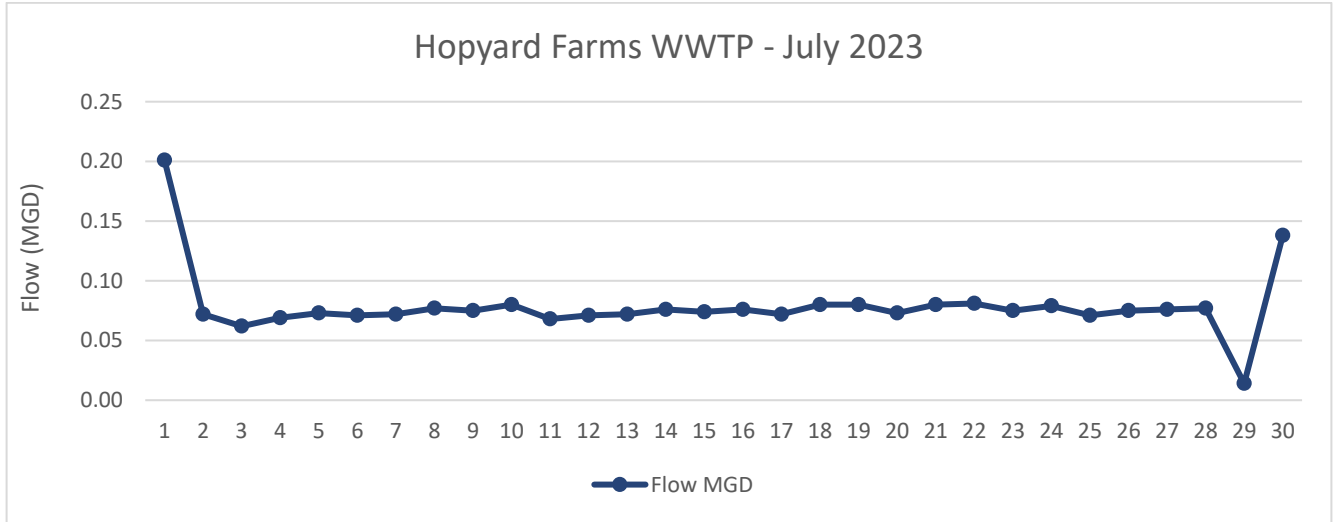
Operational Notes:

- A new mixer motor for SBR-1 has been ordered and received and awaiting installation.
- Operators performed preventative maintenance on blower equipment.
- Continuing efforts to reduce chemical feeds while maintaining final effluent quality.

Data Trending:

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





Purkins Corner – WWTP

Effluent Quality:

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

Wastewater Treatment:

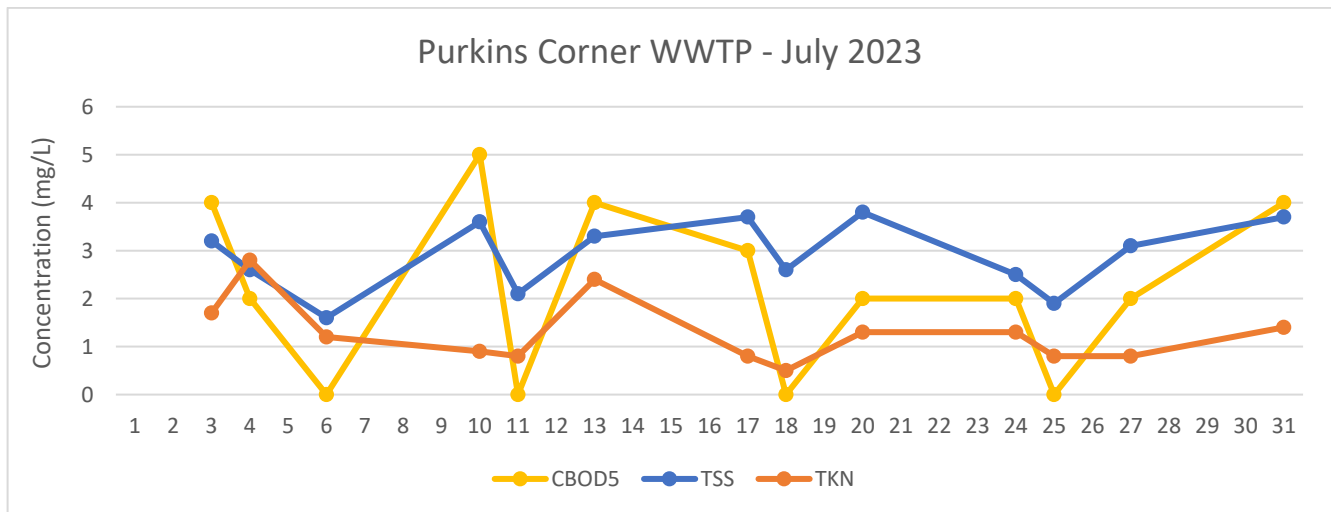
The Purkins Corner WWTP met the sewer service area's sanitation demand with an average daily discharge of 0.065 MGD and a total monthly discharge of 2.011 MG.

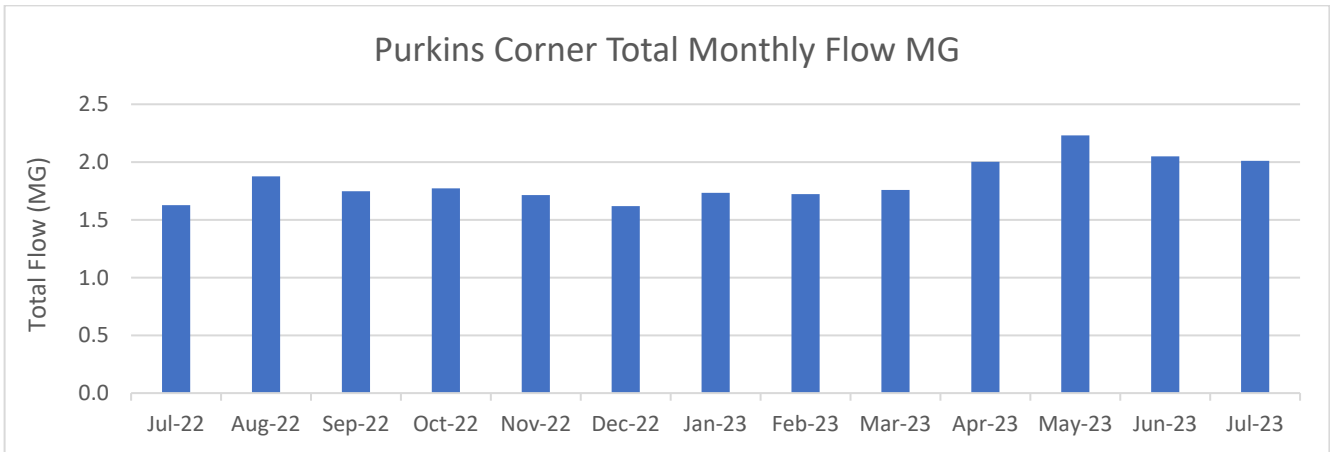
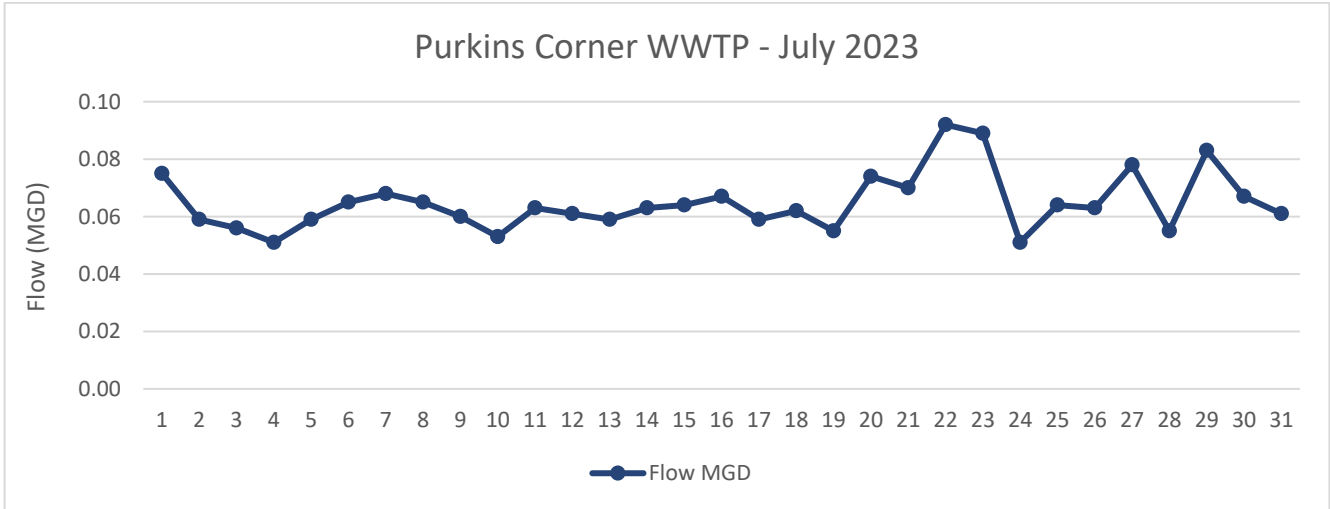
Operational Notes:

- Air leak identified by IES operators and repaired by KG maintenance staff. Which in turn positively affected air efficiency between each basin.
- Preventative maintenance items performed.
- New VPDES Permit was reissued to KG on July 28. The new permit has an effective date of August 1, 2023 with a five year term.

Data Trending:

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





Oakland Park – WWTP

Effluent Quality:

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

Wastewater Treatment:

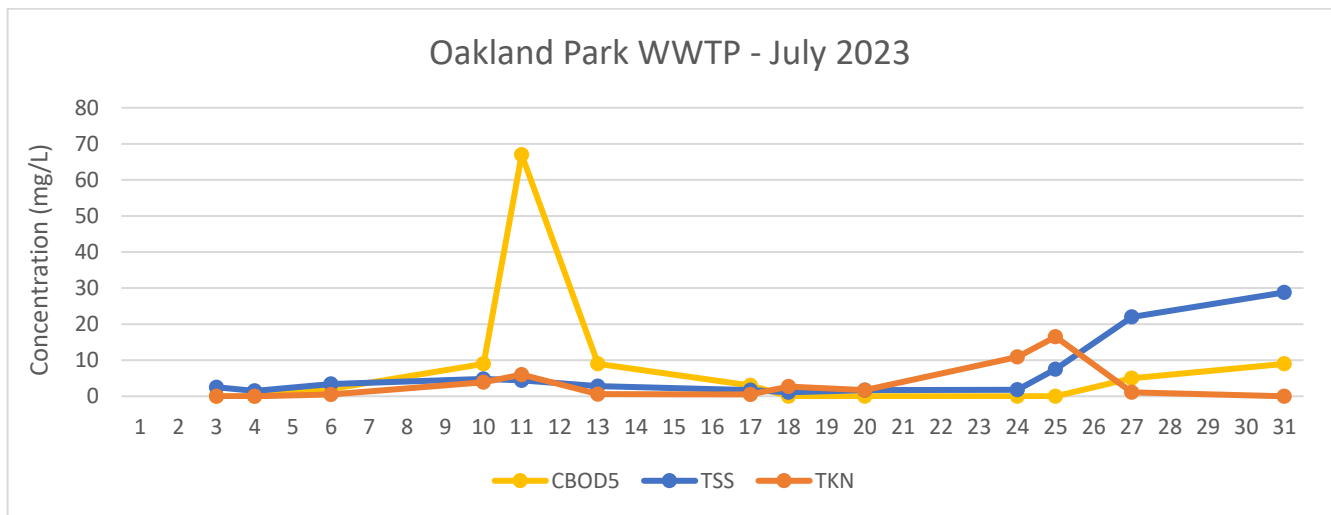
The Oakland Park WWTP met the sewer service area's sanitation demand with an average daily discharge of 0.041 MGD and a total monthly discharge of 1.270 MG.

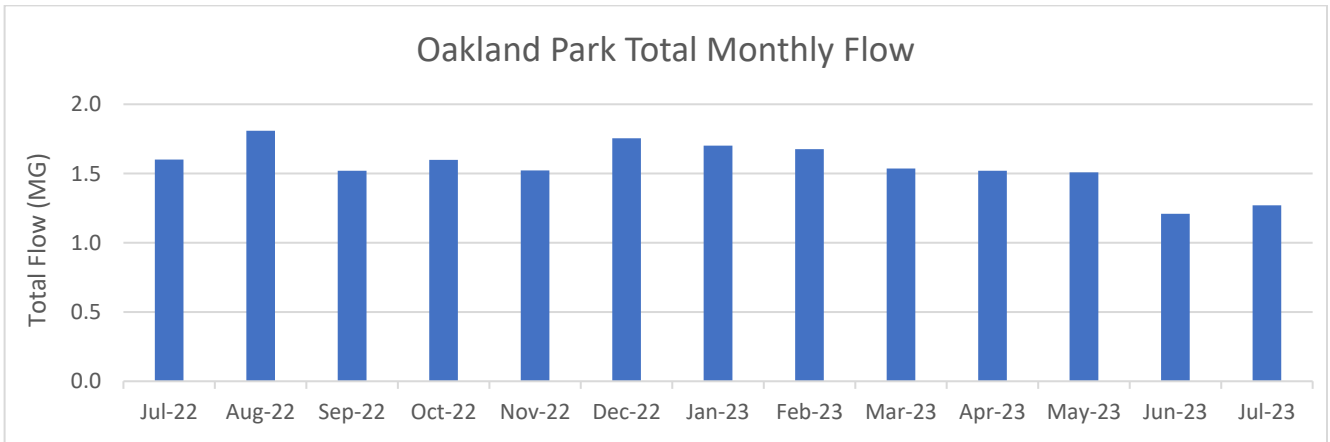
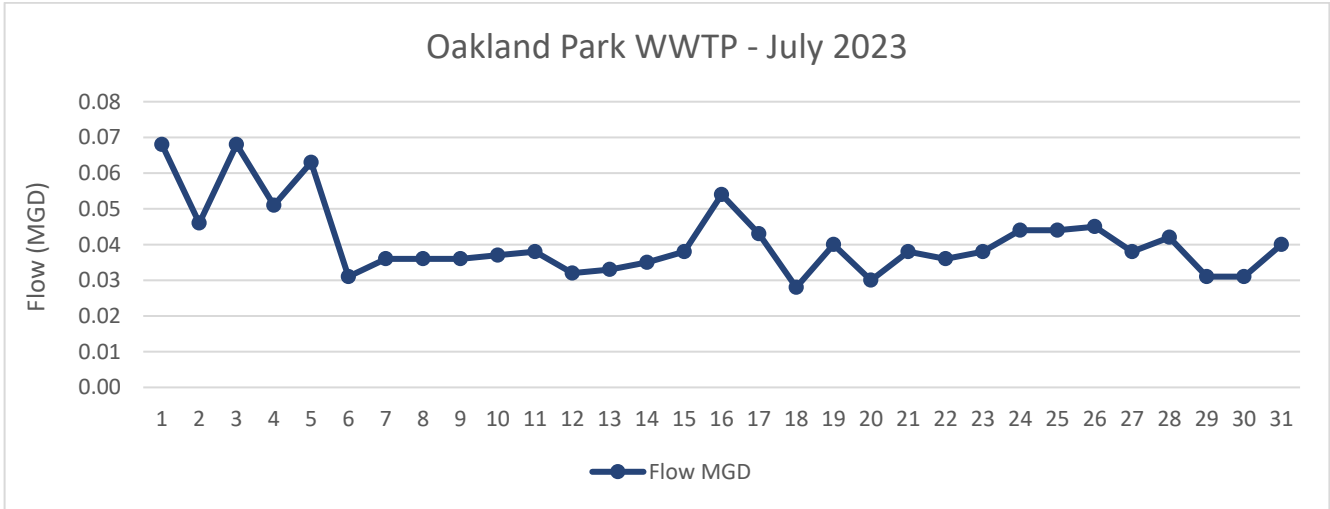
Operational Notes:

- Further investigated flow equalization between both plants. KG maintenance installed solenoid valves to aid in dosing influent to each plant.
- Re-ran Alum feed lines due to clog and successfully replaced with smaller diameter hose to allow for a more fluid movement of chemical.

Data Trending:

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





Fairview Beach – WWTP

Effluent Quality:

The wastewater treatment facility operated well and 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 0.066 MGD and a total monthly discharge of 2.061 MG.

Operational Notes:

- Maintained effective operations of Biological and Chemical treatment to reduce nutrients in final effluent.

Data Trending:

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

