

# STAFF REPORT

## *City Council Consent Item*

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**DATE:** December 18, 2023

**TO:** Honorable Mayor and Council Members

**FROM:** Brendan Byrd, Public Works Director/City Engineer

**SUBJECT: Public Works/Engineering Department Monthly Report**

**STAFF RECOMMENDATION:**

Receive report as an informational item.

**EXECUTIVE SUMMARY:**

**Public Works Director/City Engineer**

Police Facility Remodel Project

The project continues to progress on schedule, and weather permitting, the project is anticipated to be completed in March of 2024. Over the past two months, the contractor has continued to complete outside work, including installing most of the new concrete, installing the gas line, and installing the pad, panels, and conduit for the new power service. Staff anticipates the power service being installed and active sometime in January. On the inside of the building, drywall, texture, and painting have been completed, in addition to the rough in electric, plumbing, and HVAC. The next orders of work on the inside include acoustic ceiling, doors, and casework.

12<sup>th</sup> Street Stormwater Project

The project has been substantially completed, with paving having taken place in mid-November. The final remaining item of work is the striping, which is currently scheduled for December 13<sup>th</sup> or 14<sup>th</sup> (weather permitting). Since the return of the rains, staff have worked through several issues identified in the original project design, most notably at the northeast corner of 12<sup>th</sup> and K Street, in front of Bob's Footlong. The initial project design did not appropriately manage the amount of storm-drain runoff entering the basin, and on several occasions, there was localized flooding at the intersection. Staff worked with the contractor to add drainage inlet in the area which has since been able to manage the drainage demand. Another issue was the mulch used in the basins. As noted below in the General Services staff report, the initial placement of redwood mulch was found to be problematic under high-runoff conditions, and therefore staff substituted rock for all basins along 12<sup>th</sup> Street. These two modifications have notably improved the performance of the basins, and staff believe that the project is now operating consistently with the intent of the design.

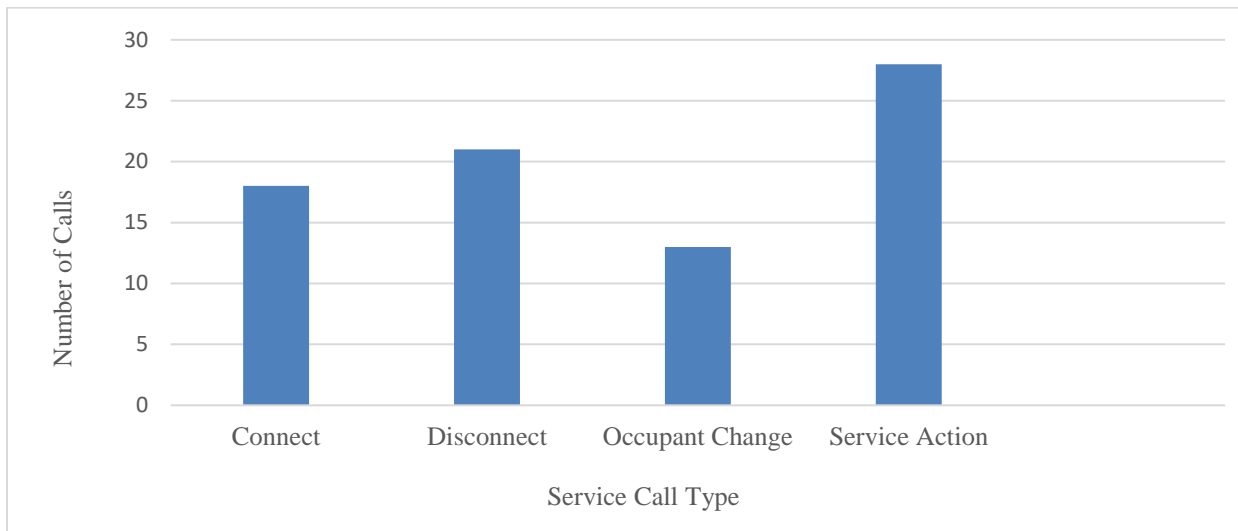
Chief Plant Operator Resignation

As the Council was made aware at the December 4<sup>th</sup> meeting Chris Christianson, the City's Chief Wastewater Plant Operator (CPO), has accepted a position with the Shelter Cove Resort Improvement District. The City is currently recruiting for a new CPO and in the interim Andy Bowles, the shift supervisor, will be serving as interim CPO.

## Utilities Division- Utility Lead (October 2023)

### Service Call Summary

- In the month of October the utilities division completed 80 service calls by operators. Figure 1 below shows the distribution of service calls by type.
- Underground Service Alert (USA) has changed their format and the utilities crew can no longer track how many mark and locates have been completed. There were zero miss-marked lines, resulting in zero broken utilities.



**Figure 1.** Utility division service calls by type in October.

### Water Distribution System

- Read water meters and completed meter worksheet.
- Tested backflow prevention devices.
- Performed 28 water shut off for non-payments.
- The utilities team installed three new services to the system in the month of October.
- In the month of October the utilities team changed out 15 dead water meters.
- Continued to check service lines for lead. Staff have completed about 25% of the total citywide service line inventory.
- In October there was two water leaks. This led to an estimated water loss of 5,700 gallons.
- Replaced two failed angle valves.
- Performed a safety water shut down on 12<sup>th</sup> Street for Wendt construction working on a stormdrain pipe.

- Upgraded a ¾” service line to a 1” line on Drake Hill.
- Upgraded a ¾” service line to a 1” on Thomas St.
- Worked several days this month on the coast central credit water line with Hooven construction.

**Table 1.** Water leak rate and water loss estimates for 2023.

Date	Location	Pipe Information	Estimated Leak Rate (Gallons per Minute)	Leak Duration	Total Estimate Leak Volume (Gallons)
10/13/2023	2411 Rohnerville Rd	2” PVC	20	3 Hours	3,600
10/16/23	Coast Central Credit Union	6” Coupler	70	30 Minutes	2,100

Wastewater Collections System

- Utilities cleaned 10,000 feet of sewer main.
- We had one sewer plug in the month of October that spilled approximately 50 gallons of sewer into a field. The cause of this SSO was due to a large amount of roots grown into a manhole and the surrounding pipe, and a large amount of baby wipes.
- Dug up a suspected sink hole over the sewer line at 1505 Main St, found no issues with the pipe or connections.

Miscellaneous Tasks

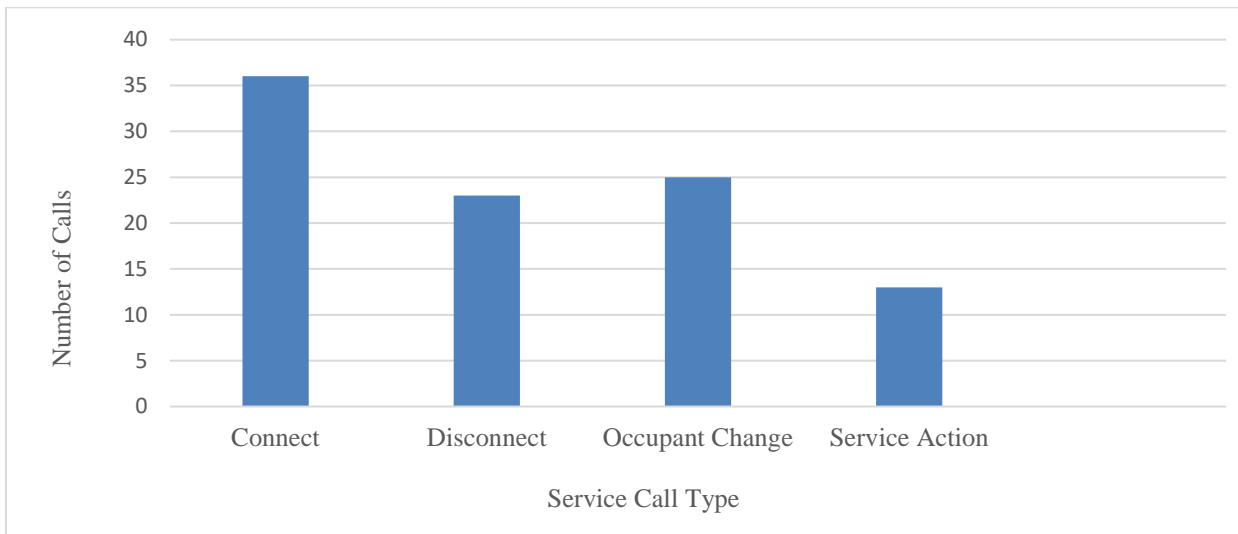
- The utilities division performed monthly maintenance on the division’s heavy equipment, including greasing and checking all fluids.
- Wrapped more A.C. pipe for disposal and took a load of A.C. water pipe to Willits to be disposed of.
- Andy White obtained his Class B driver’s license.
- Daniel Rockholt started with utilities as a new employee.

**Utilities Division- Utility Lead (November 2023)**

Service Call Summary

- In the month of November the utilities division completed 97 service calls by operators. Figure 1 below shows the distribution of service calls by type.

- Underground Service Alert (USA) has changed their format and the utilities crew can no longer track how many mark and locates have been completed. There were zero miss-marked line, resulting in zero broken utilities.



**Figure 1.** Utility division service calls by type in November.

#### Water Distribution System

- Read water meters and completed meter worksheet.
- The utilities crew have spent most of their time working on testing backflow prevention devices
- Performed 21 water shut off for non-payments.
- The utilities team installed one new two-inch service to the system in the month of November.
- In the month of November the utilities team changed out 21 dead water meters.
- Continued to check service lines for lead.
- In November there was two water leaks. The estimated water loss of these leaks was 115,200 gallons.
- Replaced three failing angle valves.
- Fixed leaks on Ronald Avenue and Acacia Drive.
- Broke down over 100 old, dead water meters for recycling.

**Table 2.** Water leak rate and water loss estimates for 2023.

Date	Location	Pipe Information	Estimated Leak Rate (Gallons per Minute)	Leak Duration	Total Estimate Leak Volume (Gallons)
11/17/2023	Ronald Ave	1" Thin Black Plastic	15	2 Days	43,200
11/17/2023	Acacia Drive	¾" Thin Black Plastic	50	1 Day	72,000

### Wastewater Collections System

- Utilities cleaned 18,000 feet of sewer main.
- The utilities team spent a lot of time cleaning the line from south 15<sup>th</sup> street towards Forbusco. There seems to be a very large grease issue going on in this section.
- There was one sewer plug in the month of November resulting in no spills or overflows.
- Replaced a broken A.C. sewer lateral on Spring St.
- Televised a sewer line on 12<sup>th</sup> Street prior to finishing paving for the stormdrain project.

### Miscellaneous Tasks

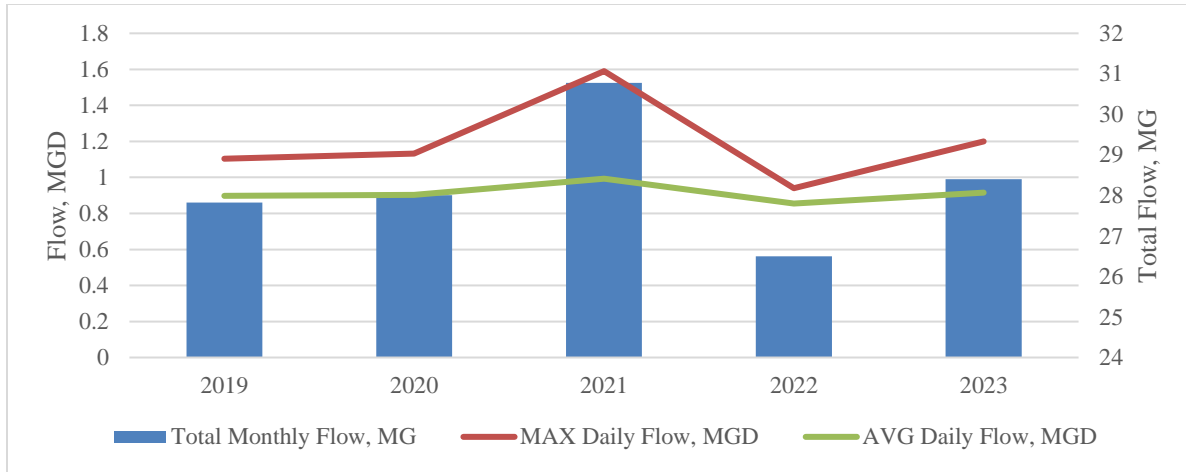
- The utilities division performed monthly maintenance on the division's heavy equipment, including greasing and checking all fluids.
- Utilities crew assisted with traffic control operations for the power service upgrade at the police facility project.
- Repaired a section of bad sidewalk around meter boxes on Wood Street.

### Water Treatment/Wastewater Division- Chief Plant Operator (October 2023)

#### Wastewater Treatment

**Table 2.** October wastewater plant effluent flows for the past five years in Million Gallons (MG) and Million Gallons per Day (MGD).

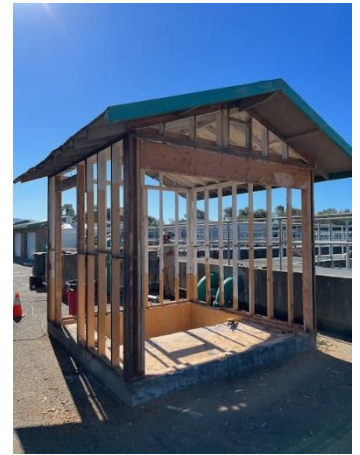
Year	2019	2020	2021	2022	2023
<b>Total Monthly Flow, MG</b>	27.824	28.002	30.780	26.500	28.400
<b>Maximum Daily Flow, MGD</b>	1.103	1.132	1.590	0.940	1.200
<b>Average Monthly Flow, MGD</b>	0.898	0.903	0.993	0.855	0.916



**Figure 2.** October wastewater plant effluent flows for the past five years in Million Gallons (MG) and Million Gallons per Day (MGD).

Wastewater Events & Maintenance Tasks Completed:

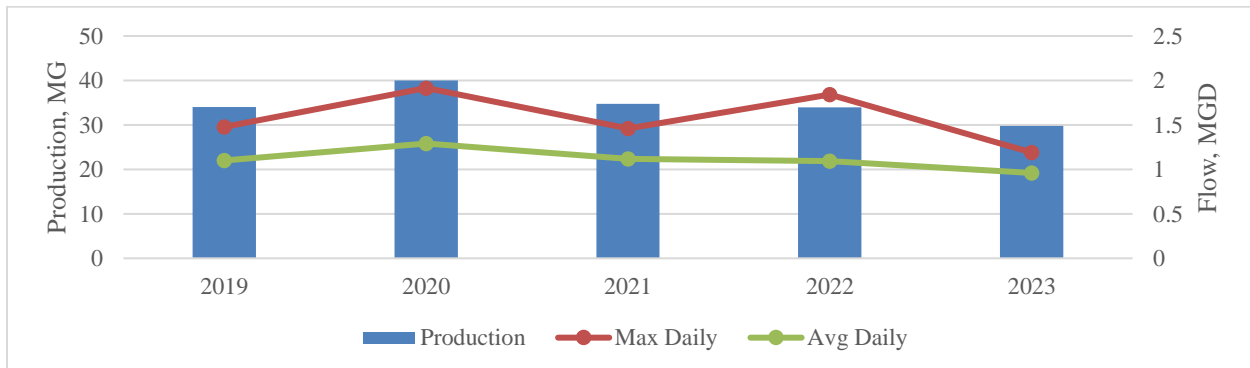
- Staff worked on removing the old caustic soda feed-shed at the wastewater treatment plant (WWTP) (see photo inset right). The recent purchase of the magnesium hydroxide tank and feed-system will replace caustic soda system.
- Staff replaced a computer-control module at the North Main sewer lift station after the existing unit malfunctioned, sending out a false, tripped pump signal.



Water Treatment

**Table 3.** October potable water production for the past five years in Million Gallons (MG).

Year	2019	2020	2021	2022	2023
<b>Total Production, MG</b>	34.055	40.025	34.726	33.925	29.764
<b>Maximum Daily, MG</b>	1.478	1.915	1.460	1.842	1.190
<b>Average Daily, MG</b>	1.099	1.291	1.120	1.094	0.960



**Figure 3.** October potable water production for the past five years in Million Gallons (MG).

### Water Events & Maintenance Tasks Completed:

- Contractors completed rehabilitation work on Well #2 at the water wells site. They pulled the well pump's 8" drop pipe, video-inspected the well casing, and installed new, 8" steel drop pipe, line shaft pipe, and associated bearings and gaskets to improve the well's performance.
- Contractors and engineers completed their work on the new emergency generator at the Kenmar booster pump station. They trained staff on the operation of the unit and then tested and activated it for service. This completes the FEMA grant-funded emergency generator project, which also includes a stationary, emergency generator at the Drake Hill booster pump station.
- Contractors installed a new, updated cathodic protection system unit at the Campton Heights water storage tank (see photo inset right). This important system prevents corrosion of the steel, which is especially important after the recently completed tank re-coating project. The original system was vintage with the tank (circa 1989) and required an update.
- Staff worked on hauling ground-up wood waste from the Vancil reservoir site down to the WWTP to use in compost operations. Logging contractors had left this byproduct material at the site upon completion of their recent operation there.



### General Services and Streets - General Services Superintendent (October 2023)

The following is a list of scheduled assignments completed by the General Services staff in October:

- Staff completed the new culvert installation on Valley View Drive with a new concrete sidewalk along with repairing the trench with asphalt concrete.
- Staff placed traffic control signs and measurements for the Apple Harvest Festival. Staff placed an exit ramp closure on Highway 101 at 12<sup>th</sup> Street. Staffed removed all traffic control at the end of the event.
- Staff placed traffic control signs and measurements for the Trunk-R-Treaters on Main Street.
- Staff mowed the vegetation away from the drainage swale on Barney from the Stewart water tank.



- City staff hired Precision Concrete Cutters to perform sidewalk maintenance for trip hazards with their proprietary cutting technology. The task was performed in Newburg Park (see picture inset above right).
- Staff replaced doors for the dumbwaiter in the storage area above City hall.
- Staff opened the three drainage inlets of the culvert that runs under the rodeo arena.
- Staff replaced an LED green light at the traffic signal at Fortuna Boulevard and Newburg Road.
- Staff placed road closure signs on K Street for a new installation of a culvert. The installation was performed by a contractor. Staff assisted the contractor with the vacuum truck to expose the water main.
- Staff milled a small section of asphalt on Kenmar Road in between the traffic signals and Eel River Drive.
- Staff potholed utilities on Rohnerville Road for the new power service for the new police department.
- Staff was requested to cut vegetation off the sidewalk on First Street in the Rohnerville area.
- Staff located a shorted wire in the parking lot lights at River Lodge. The shorted wire tripped the breaker when it was turned in the on position. Staff also replaced a failed light switch in the Council Chambers.
- Staff performed storm patrol and cleaned drainage inlets into culverts. Staff started to perform winter task in preparation of the coming months.
- Staff cut low hanging trees and vegetation on Kenmar Road to mitigate any potential tree falls with the coming weather.
- Staff assisted with Parks staff on an installation of a field drain at Newburg Park.
- Staff washed and cleaned the outside windows at the Library, City Hall, and the Admin Building.
- Staff conducted interviews for the open Streets II position that was vacated by Corbin Reback. Corbin moved on to work with the local Union, and we wish him the best.

In addition to the special tasks noted above, staff also engaged in the following regular routine maintenance activities including USA's, street sweeping, recycling and trash management, collect batteries at City Hall, road maintenance, Dog Park maintenance, vegetation management including



sniping of curbs, and safety training and inspections. Staff is available for questions, requests, and emergency responses to the community.

## General Services and Streets - General Services Superintendent (November 2023)

The following is a list of scheduled assignments completed by the General Services staff in November:

- Staff assisted the Parks with a new field drain at Newburg Park.

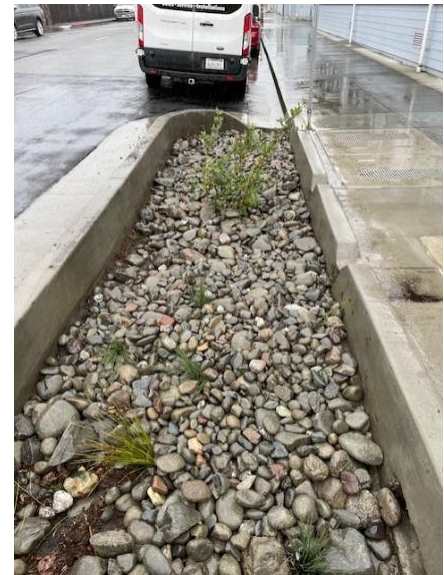
- A capital improvement project was completed by a contractor. The new generator was installed to provide uninterrupted power to the Corp Yard Building (see picture inset top right).



- Staff removed and replaced failing asphalt patches with hot mix asphalt.
- Staff removed large limbs and tree trunks left over from a PG&E vegetation clearing around their infrastructure along the City right of way.

- Staff potholed with a vacuum truck to locate an up in coming storm culvert project.

- Staff cleared tree and other vegetation that was encroaching along city streets and sidewalks at various locations.



- Staff repaired or diagnosed street lights that were not operating. One street light lost power from the main connection. PG&E was notified to correct the issue.

- Staff removed the shredded bark that was placed in the new Low Impact Development (LID) basins on 12<sup>th</sup> Street. The bark became a hindrance and impacted the movement of water into the culvert. Larger rock was put in its place around the newly planted vegetation (see picture inset lower right).

- Staff placed Christmas decorations on the streetlights on Main Street.

- Staff weed eat the heavy vegetation in between Les Schwab to Rohnerville Road along the footpath.

- Staff used high pressure water to unplug a culvert on River Walk Drive.

- Staff assisted the Treatment Plant staff with a water leak at the plant.

- In addition to the special tasks noted above, staff also engaged in the following regular routine maintenance activities including USA's, street sweeping, recycling and trash management, collect batteries at City Hall, road maintenance, Dog Park maintenance, vegetation management including sniping of curbs, and safety training and inspections. Staff is available for questions, requests, and emergency responses to the community.

**RECOMMENDED COUNCIL ACTION:**

Receive Public Works Department Monthly Report. Consent Agenda vote.