

# STAFF REPORT

## *City Council Consent Item*

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**DATE:** February 21, 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 was awarded to Sequoia Construction Specialties at the February 6<sup>th</sup> Council meeting. Since that time, staff have been working on contracting and bonding with Sequoia, and engaging our project design team to finalize construction drawings per the changes to the project that resulted from the bid period addendums. Staff are anticipating that the contractor will mobilize to the site in early March. The police are working on bringing their operations back to City Hall, and they anticipate having the site fully vacated by the end of February.

In early February, staff conducted a meeting with Pacific Gas and Electric (PGE) at the site to determine how to upgrade the electrical service for the new police facility. PGE indicated that power will be available for the project, and currently the timeline to install the required improvements is in line with the proposed project construction schedule. PGE's next step is to begin design for the project.

Staff have also been working with Silke Communications, who will be the dispatch radio upgrade contractor for the project. Staff anticipate finalizing a scope and budget for this portion of the project sometime in February, and plan to bring to the Council in March a Public Interest Finding for a contractor sole source with Silke Communications.

Water Tank Coating Project

In January, the City opened bids for the Hillside and Campton Water Tank Coating project. The City received four bids, with the low bidder being Simpson Sandblasting & Special Coatings out of Fontana. The low bid amount is approximately \$870,000. Staff plan to bring the award recommendation for the contract to the Council, in addition to a Supplemental Budget request to recommend adding the necessary budget for the project, to the first meeting in March.

12<sup>th</sup> Street Low Impact Development (LID) Stormdrain Project

Staff have been working with the City's consultant engineers to finalize the design for the 12<sup>th</sup> Street LID stormdrain project, which will include raingardens and new stormdrain pipe along 12<sup>th</sup>

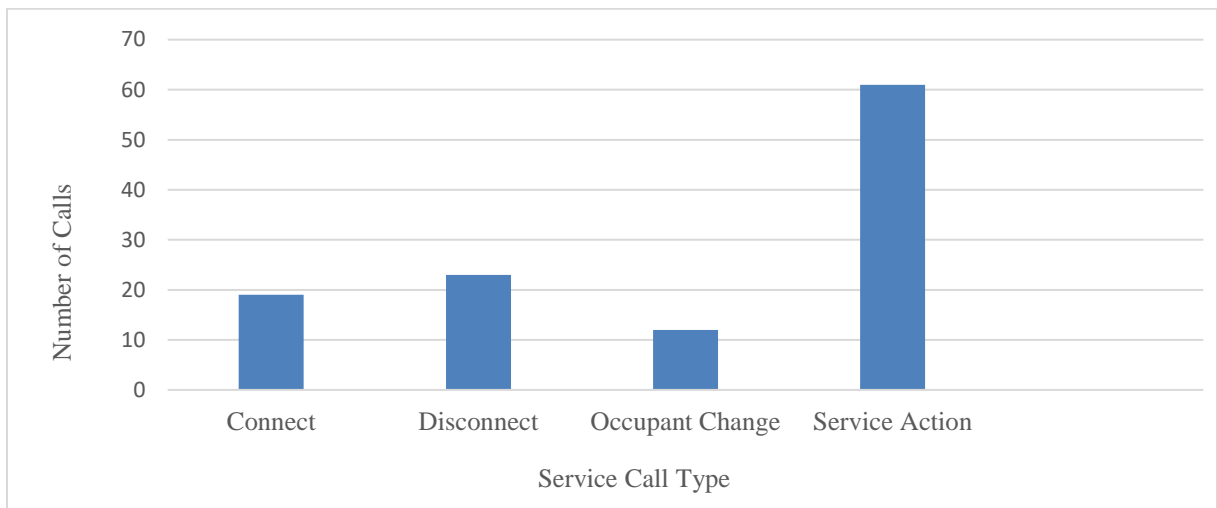
Street in between Loni Drive and K Street. The project is anticipated to be put out for construction bidding in mid-February.

As noted in a previous monthly report, during the design process staff found that portions of the new utility undergrounding project on 12<sup>th</sup> Street were installed in conflict with the proposed stormdrain pipe, specifically near the intersection of 12<sup>th</sup> and K Streets. Staff have been working with the utility providers to correct the conflicts in time for the City's contractor to begin work, which is anticipated to begin in June of this year.

### **Utilities Division- Utility Lead**

#### **Service Call Summary**

- In January the utilities division completed 116 service calls by operators. Figure 1 below shows the distribution of service calls by type.
- Underground Service Alert (USA) has changed their format and it no longer allows for tracking of how many mark and locates have been completed. There were zero miss-marks, resulting in zero broken utilities.



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

#### **Water Distribution System**

- Read water meters and complete meter worksheet.
- In the month of January the utilities team changed out 19 dead water meters.
- Continued to check service lines for lead.
- Performed regulatory water system backflow testing.
- In January, there was one water leak and one hit fire hydrant, see Table 1 below.
- The utilities division is still unable to get water meters due to supply shortages and staff spent five full days rebuilding and testing meters to replace dead meters in the system.

- Changed a broken angle valve on Newell Drive.
- Dug up the eight-inch water main in the Newell ally checking for possible leaks.

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

Date	Location	Pipe Information	Estimated Leak Rate (Gallons per Minute)	Leak Duration	Total Estimate Leak Volume (Gallons)
1/9/2023	Intersection of main and Park Heights Drive	Fire Hydrant	1,000	30 Minutes	30,000
1/11/2023	Newell Drive	2” Cast Iron	5	10 Days	72,000

Wastewater Collections System

- Utilities cleaned 15,000 feet of sewer main.
- There was one sanitary sewer plug on St Joseph Street that backed up multiple times into a business. The utilities division televised the line and found that a communications line had had been installed which broke the sewer line. The utilities division repaired the sewer line and is working on site restoration.

Miscellaneous Tasks

- The utilities division performed monthly maintenance on the division’s heavy equipment, including greasing and checking all fluids.
- Alex Garza started his career with the City of Fortuna on the utilities crew as a Utilities II.

**Water Treatment/Wastewater Division- Chief Plant Operator**

Storm Flow Response: Significant rainfall occurred during the first two weeks of the month. This rapidly increased wastewater flow into the treatment plant in the form of inflow and infiltration (I&I). This I&I flow was also most likely exacerbated by numerous potential sewer main breaks caused by the late December earthquake. Staff managed to operate and maintain the system through various process adjustments, succeeding in treating the increased flow without any effluent violations or sanitary sewer overflows (SSOs).

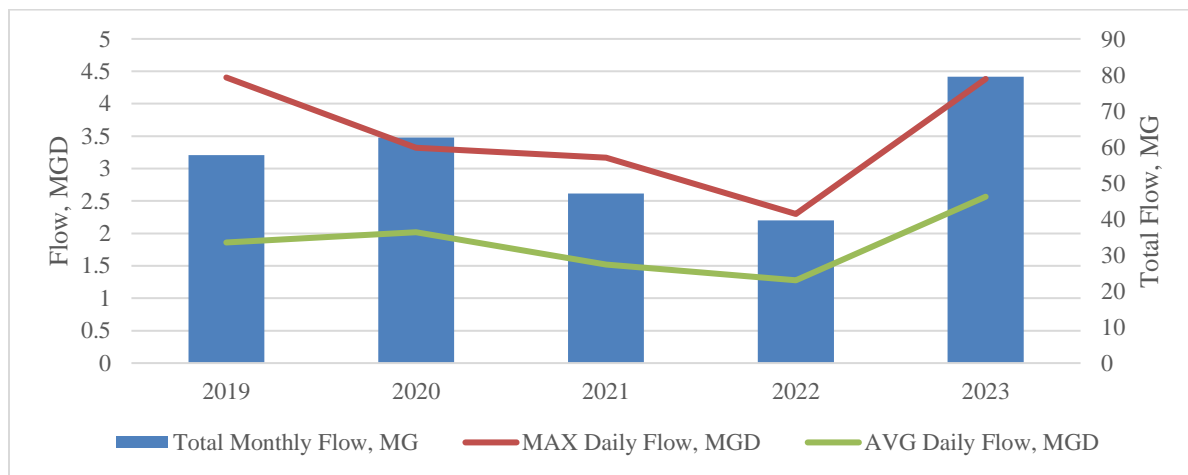
Division Staffing: Senior Wastewater Treatment Plant (WWTP) Division staff conducted interviews this month for a vacant Operator-in-Training position. One of the prospective applicants will be offered the position in early February.

City Projects: This past month saw progress on two, significant WWTP Division projects: City staff hosted the pre-bid walk for the annual percolation ponds rehabilitation project at the WWTP; and the bids were finalized and opened for the Hillside and Campton Heights tanks re-coating project. This latter item will be presented to City Council in March.

## Wastewater Treatment

**Table 2.** January 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>	57.696	62.590	47.066	39.600	79.540
<b>Maximum Daily Flow, MGD</b>	4.405	3.319	3.167	2.300	4.380
<b>Average Monthly Flow, MGD</b>	1.861	2.019	1.518	1.277	2.566



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

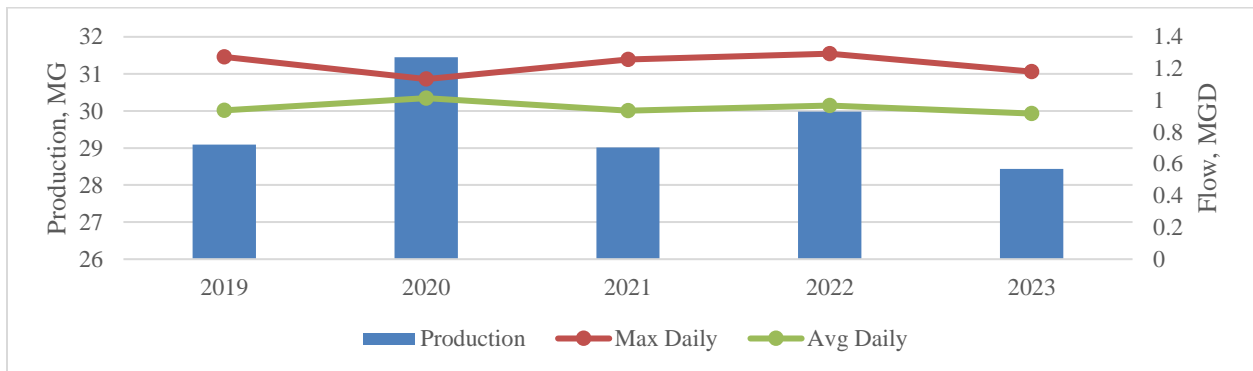
### Wastewater Events & Maintenance Tasks Completed:

- Staff installed a new flowmeter transducer for the Strongs Creek lift station flow that enters the WWTP. The old meter had ceased functioning due to corrosion.
- Staff replaced a broken exterior light fixture at the Laurelwood lift station that was damaged during the late December earthquake.
- Staff spent a great deal of time cleaning and organizing in the WWTP garage building. Decades of clutter were sifted through to free up significant space.
- Staff finalized and submitted major reports to State and Federal agencies this month including the 2022 Annual Wastewater Report, Volumetric report, and the Annual Biosolids report.
- A professional service technician from the manufacturer of the WWTP belt filter press—BDP—visited the plant to assist in troubleshooting this important solids dewatering device. Staff worked alongside the technician for training, and also replaced worn roller bearings and both pressure-side belts.

## Water Treatment

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

Year	2019	2020	2021	2022	2023
<b>Total Production, MG</b>	29.091	31.448	29.017	29.982	28.436
<b>Maximum Daily, MG</b>	1.273	1.134	1.257	1.294	1.180
<b>Average Daily, MG</b>	0.938	1.014	0.936	0.967	0.917



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

**Table 4.** Average January depth-to-groundwater static levels in the City’s active wells for the past five years in feet.

Year	2019	2020	2021	2022	2023
<b>Well #1</b>	20.6	22.9	29.6	21.4	17.0
<b>Well #2</b>	17.7	20.0	26.6	18.6	14.4
<b>Well #4</b>	23.2	25.6	32.1	24.0	19.6
<b>Well #5</b>	25.1	27.4	33.9	26.2	21.9

Water Events & Maintenance Tasks Completed:

- Staff installed new electrical conduit and wiring for an interior light fixture inside the Well #4 pump-house at the water wells site (Corrosion Control Facility).
- Staff replaced a bent radio telemetry antenna at the Underhill booster pump station in the Rohner Park forest.
- Staff assisted the electrical contractors at the Drake Hill and Kenmar booster pump stations. They needed coordination for wiring connections.
- Staff installed new pressure gauges and fittings in the pressure regulating vault at Franklin Ave and Boyden Ln. (see photo inset right). Then staff tested the unit to ensure it operates correctly.



- Wendt construction assisted staff in removing one of the three, large booster pump motors at the Corrosion Control Facility (see photo inset right). This motor short-circuited due to loose wiring. Staff brought the motor to Industrial Electric for repair.



### **General Services and Streets - General Services Superintendent**

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

- Staff continued to assist and repair earthquake damage that occurred the prior month. Staff repaired the flooring in City Hall. Staff adjusted doors in City facilities.
- Staff repaired the broken or cracked decorative street light globes on Main and N Streets.
- Staff assisted the Parks staff with the River Lodge parking lot lights.
- Staff continued to monitor storm drain inlets, fill potholes, remove windblown tree limbs, and walk the creeks for any debris dams during the heavy winter rains.
- Staff removed temporary asphalt mix and replaced with new hot mix asphalt in utility repair trenches.
- Staff completed the replacement of outside eave lights on City Hall and Police Station with LED bulbs.
- Staff graded the gravel parking lot at the Patrol Office Division.

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, road maintenance, vegetation management, 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.