

STAFF REPORT

City Council Consent Item

DATE: December 19, 2022

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

Water Tank Coating Project

Staff worked with our engineering consultants to finalize the project bid package for recoating Campton Heights and Hillside steel water tanks. The project was formally put out to bid on December 12th, and the bid opening is late January. Staff anticipate bringing the project to Council for award in early February.

Police Facility Remodel Project

The final design drawings were completed in October and the project was put out to bid on October 31st. On November 16th, staff conducted a mandatory pre-bid meeting at the future police facility site to provide contractors the opportunity to see the site and familiarize themselves with the requirements of the contract. The meeting was attended by 15 contractors, and staff feel confident that many local building contractors are interested in submitting bids for the project.

The initial bid opening date was December 1st, however, due to the number of questions that have been submitted by contractors staff have extended the bid period to December 21st at 2 pm. Over the past month, staff, with assistance from the City's engineering consultants, have issued five bid addendums addressing over 75 questions received from contractors.

In November, staff submitted an application for electrical service upgrades to PG&E for the project. This is an item that is commonly completed by the General Contractor, however, in this case staff are hoping that an application submitted sooner will help to ensure PG&E engagement earlier on in the project. At this time PG&E has not indicated that there will be significant hurdles in the service connection upgrade for this project, but staff will continue to track that closely with PG&E staff.

If the bid opening date does not require further extension, staff anticipate bringing the project and the bid results to the Council in January.

Vancil Reservoir Rehabilitation Project

To date, all trees have been fallen and removed from the site, and there has been sufficient windows of good weather to complete operations onsite. The City's General Services and Wastewater crews worked hard during the logging operation to keep the access roads and drainage systems functioning to expedite the contractors logging operation. Remaining items of work onsite include cleanup, chipping, and contractor demobilization.

Kenmar Interchange Improvement Project

The final draft initial study and mitigated negative declaration (CEQA document) for the Kenmar Interchange Improvement project has been completed and was circulated in early December. The document will be available for public comment through the beginning of January. Staff anticipate bringing the document to the Council for approval in early February.

Sanitary Sewer Master Plan and Stormwater Infrastructure Vulnerability Assessment

Currently the City has a consultant working on Stormdrain and Sanitary Sewer Master Plans, to help guide and inform the City's capital improvement program in the coming years. In the last month, the City's consultant has worked to develop the engineering models used to assess the system for overall performance, and City staff participated in workshops to inform the design team of operation and maintenance considerations our public works crews are aware of. These master plan projects will be ongoing efforts throughout most of 2023.

Rohner Park Basketball Court Project

The Council approved the award of a construction contract to Mercer Fraser at the December 5th meeting. Since that time, staff have been working on contracting with Mercer Fraser. Staff anticipate having an update on the project construction schedule in January.

Corporation Yard Roofing Project

Staff have been working on developing a project bid package to replace the metal roof at the City's corporation yard at 190 Dinsmore Drive. The project bid package was finalized and posted on December 12th, and staff anticipate bringing the project to the Council in early February for an award recommendation. Staff anticipate this project going to construction in late spring or early summer.

Corporation Yard Stationary Generator Project

Earlier this year the City received a USDA grant to add a stationary emergency generator and automatic transfer switch at the City's corporation yard. Currently, the facility has no backup power during outages, and staff manually connect a small portable generator to keep the phone and internet systems active at the site during a power outage. The USDA grant will cover approximately 50% of the total project cost. In November, staff worked to develop a bid package, and the project was put out to bid in early December. The bid opening is in January, and staff anticipate bringing this item to the Council for contract award in January or February.

Utilities Division- Utility Lead

Service Call Summary

- In November the utilities division completed 86 service calls by operators. Figure 1 below shows the distribution of service calls by type.
- The division completed 36 Underground Service Alert (USA) mark and locates with zero miss-marks, resulting in zero broken utilities.

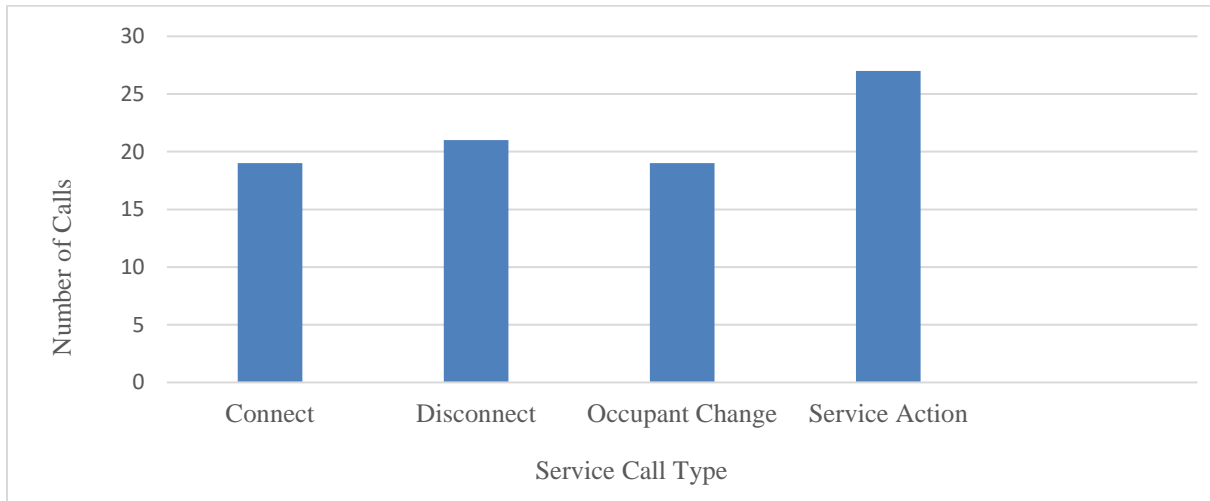


Figure 1. Utility division service calls by type in November.

Water Distribution System

- Read water meters and completed meter worksheet.
- The utilities team installed one new service to the system in the month of November.
- In November there were no water leaks, but had one hydrant hit resulting in an estimated 24,000 gallons of water lost.
- In the month of November the utilities team changed out eight dead water meters.
- Continued to check service lines for lead in accordance with EPA requirements.
- Backflow Testing.
- The City has had a difficult time getting water meters so the utilities crew has been rebuilding meters in-house and testing the rebuilt meters afterwards to confirm accuracy. We have had an 87% success rate rebuilding meters for reuse, and each rebuilt meter saves cost for the City and our ratepayers.

Wastewater Collections System

- The utilities team didn't televise any sewer mains this month as we are short staffed. We now have almost a full crew and will be continuing this effort next month.

- The utilities team had no sewer plugs in the month of November with no overflows.
- Utilities cleaned 15,000 feet of sewer main. With no leaks this month we spent a lot of time on sewer maintenance. Being proactive on this helped with having no backups.
- Installed one new sewer connection at 508 12th St. that was about 70 feet long (see photo inset right).



Miscellaneous Tasks

- The utilities division performed monthly maintenance on the division’s heavy equipment, including greasing and checking all fluids.

Water Treatment/Wastewater Division- Chief Plant Operator

Wastewater Treatment

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

Year	2018	2019	2020	2021	2022
Total Monthly Flow, MG	31.312	28.337	27.671	33.150	31.620
Maximum Daily Flow, MGD	1.660	1.337	1.079	1.440	1.520
Average Monthly Flow, MGD	1.044	0.945	0.922	1.105	1.054

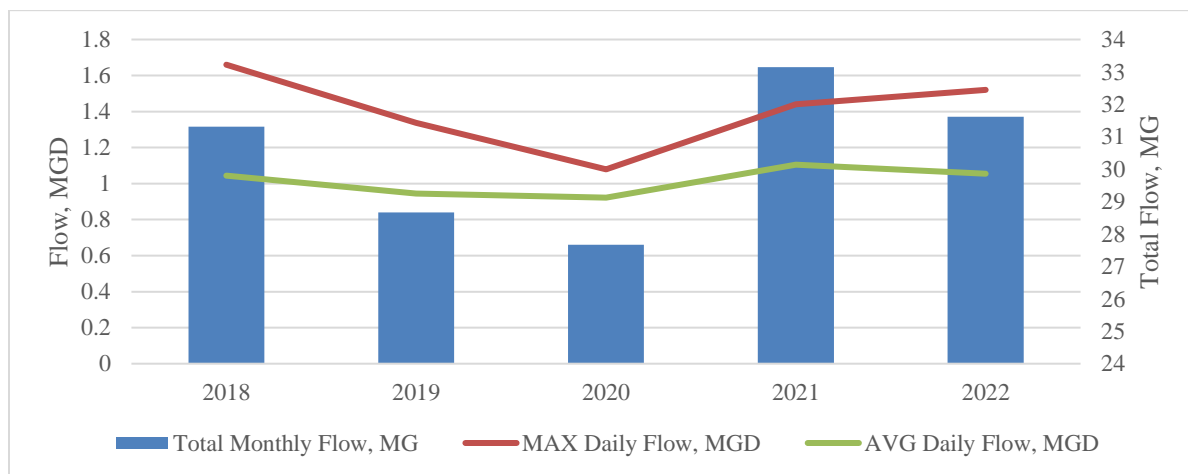


Figure 2. November wastewater plant effluent flows for the past five years in Million Gallons (MG) and Million Gallons per Day (MGD).

Wastewater Events & Maintenance Tasks Completed:

- The plant hosted a sludge dewatering demonstration trailer from Process Wastewater Technologies, Inc. Outside operators and engineers visited the plant to witness the unit’s potential.
- A contractor installed a new gate at the Laurelwood sewer lift station. This will provide access to the rear of the station for servicing storm drain piping.
- Staff removed a fallen tree near the Administration Building at the wastewater plant.
- A contractor replaced some badly corroded gas piping and fittings on the wastewater treatment plant boiler. (See photo inset right).
- Staff rebuilt various wastewater plant pumps, including a return activated sludge pump and a heat exchanger recirculation pump.
- Staff used a VacCon truck to pump out numerous City sewer lift station wet-wells of grease and sediment, including rags and “flushable” wet-wipes.
- A contractor conducted the annual service and maintenance on all chemical gas feed and leak detection equipment (including at the water wells Corrosion Control Facility). Staff also replaced some key process solution valves at the same time.
- Staff placed the third primary clarifier online as seasonal rains began. Winter-time flows are higher and require more plant volume for proper treatment. As flows continue to increase, staff will bring more standby basins online to meet demand.
- Staff cleaned out the headworks bio filter of old wood-chip media in preparation to replace the media and rehabilitate the unit.



Water Treatment

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

Year	2018	2019	2020	2021	2022
Total Production, MG	30.878	32.049	32.665	29.718	26.141
Maximum Daily, MG	1.346	1.998	1.764	1.292	1.107
Average Daily, MG	1.029	1.068	1.089	0.991	0.871

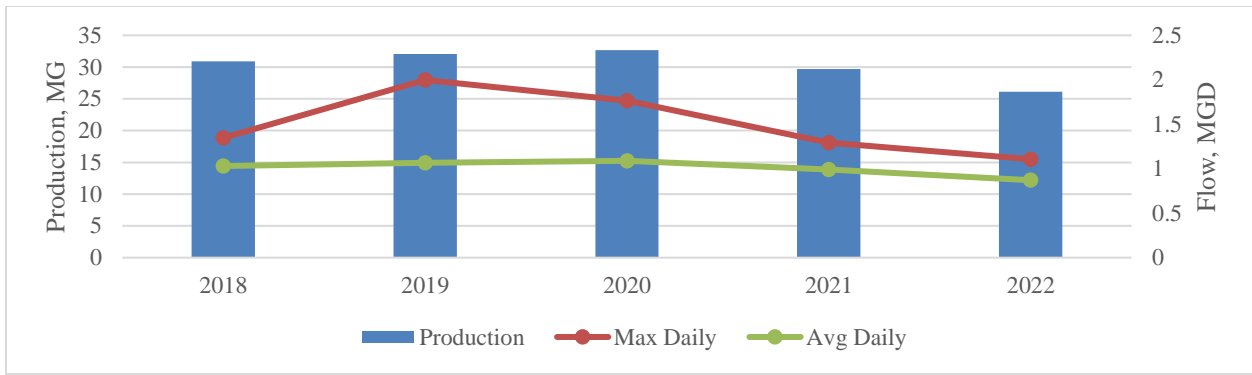


Figure 3. November potable water production for the past five years in Million Gallons (MG).

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

Year	2018	2019	2020	2021	2022
Well #1	30	28.7	29.6	26.5	30.3
Well #2	27.1	25.8	26.6	23.5	27.3
Well #4	32.6	19.6	32.1	29	32.9
Well #5	33.4	32	33.9	31.4	34.6

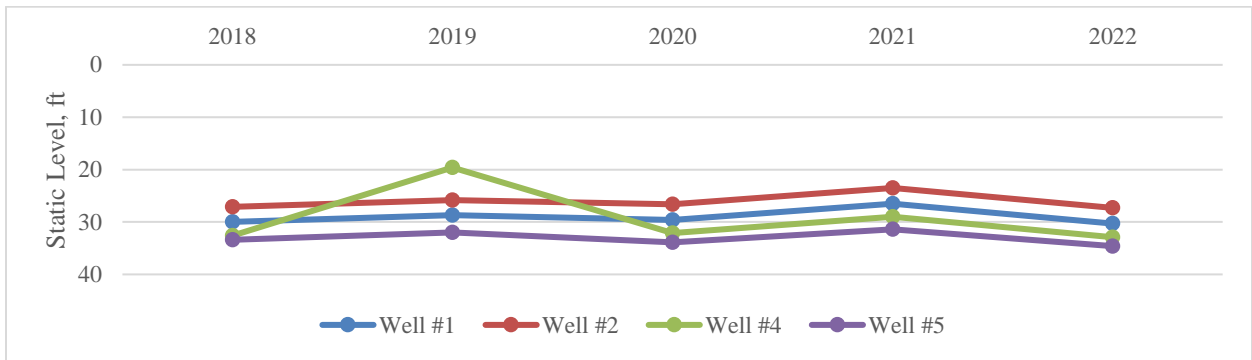


Figure 4. Average November depth-to-groundwater static levels in the City’s active wells for the past five years in feet.

Water Events & Maintenance Tasks Completed:

- Staff worked with consultant engineers on planning for the tank-coating projects at Hillside and Campton Heights tanks. The tanks will have to be removed from service to re-coat the aged interior and exterior paint.

- Staff worked with Tesla personnel at the water wells site to commission the battery-power system there. The unit worked as designed. The next step is for PG&E to give permission to operate before the batteries are officially placed in service.
- Staff worked with General Services staff to build a road around Vancil Reservoir. This will enable the logging contractors to access their operations.
- Staff applied a coating sealant on the bottom of one of the two aeration towers at the water wells site. This will protect the recently installed stainless steel there from future pitting and subsequent leaks. Then staff re-installed all of the interior angle pieces and returned the unit to service. (See photo inset right).



General Services and Streets - General Services Superintendent

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

- In preparation for the logging operation, staff hauled rock material, graded, and compacted the road for access (See photo inset right).



- Staff replaced photocells on street lights. Pacific Gas and Electric was requested to restore power to fixtures due to faulty connections.
- Staff installed 25 Mile per Hour signs on Strawberry Lane and Hilltop Drive. The signs were requested and sent to the Traffic Safety Committee. The request was granted by the City Engineer.
- Staff replaced a failing wooden bench at the River Lodge Conference Center. Staff repaired a wooden bench on Main Street and Eleventh Street.
- Staff checked the inventory for winter emergencies. A load of sand and sandbags are available to the public. The sand pile is located behind Rohner Park Office.
- Staff assisted Park staff in removing material from a softball field located in Newburg Park. A buildup of red rock material has caused a hump on the edge of the grass line.

- Staff adjusted the time on the Centennial Clock. Time adjustments also occurred on the flashing lights in the school zones.
- Staff replaced Fall banners with Winter banners. Staff placed candy cane decorations on the street lights. A Santa and his mail box was placed on Main and Eleventh Street. The Al Gray Light Parade is scheduled for December 9th. Fortuna Volunteer Fire Department placed Christmas cutouts on the center median of Fortuna Boulevard, and the lights on the Monday Club facility.
- Staff dug and removed material from drainage ditches. Staff cleared debris from storm drain culverts with the rodding trailer and vacuum truck.
- Staff trimmed large hedges on Fortuna Boulevard and Sunrise Court for pedestrian safety.
- Staff was notified of a large dead snag on Hillside Drive. The snag was broken and hanging above the road and the utility lines and was caused for safety concern. Staff worked with the vegetation management crew with PG&E to remove the snag and resolve the issue.
- Four staff members completed the Driver's Theory Training to obtain their commercial driver's license. Two of the four have completed their Department of Motor Vehicle physical.
- Staff repaired the front entry door to City Hall. A faulty mechanism failed that did not allow the automatic swinging door to function.

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.