

STAFF REPORT

City Council Consent Item

DATE: February 18, 2025

TO: Honorable Mayor and Council Members

FROM: Brendan Byrd, Public Works Director/City Engineer

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

STAFF RECOMMENDATION:

Receive report as an informational item.

EXECUTIVE SUMMARY:

Public Works Director/City Engineer

Monday Club Chimney

Reconstruction of the Chimney at the Monday Club is substantially complete, with only some minor punchlist items remaining. As reported in previous monthly reports, staff were anticipating a credit on the contract due to the fact that the interior masonry work did not have to be demolished and reconstructed. That credit amount is approximately \$11,000. Before closeout of the contract, staff are asking the contractor for pricing to paint the south side of the building, which is currently the side in the worst condition and is in need of painting. Should the price from the contractor come back within budget, staff would recommend moving forward and getting the painting work completed.

Main Street Gateway Project

Over the past month, the majority of the remaining work has been completed at the Main Street Gateway project, including landscaping, striping, and paving (see photo inset right). Currently the only remaining items include the installation of the sign itself, and a few minor punchlist items. Staff anticipate that the sign will be completed and installed by the end of January, and currently staff are planning for a ribbon cutting with Caltrans shortly after.



Great Redwood Trail/John Campbell Memorial Greenway Grant Opportunity

Staff have recently been made aware of an opportunity for grant funding through the State Coastal Conservancy that could fund the planning/engineering phases of the Great Redwood Trail through Fortuna. Additionally, the grant may be able to cover planning and design work for the City's Strongs Creek Trail. Both trails are planned to be class I facilities, meaning they are 10-12-foot wide paved trails made to accommodate non-motorized users. Staff plan to bring to the Council a discussion item in February that would present the possibility of applying for these funds, and the possibility that City staff could take on the early phase development of the Great Redwood Trail through Fortuna.

Wastewater Treatment Plant Anaerobic Digester – Earthquake Damage

During the earthquake in December, the City's anaerobic digester at the wastewater treatment plant was damaged. In short, one of the six (6) guide rails that is part of the floating lid systems deflected and cracked the concrete near the anchor bolts. Immediately following the earthquake, staff engaged an engineer to assess the damage, and it has been determined that there is not issue with safety or function at this time, but the damaged area does need to be repaired to keep it functioning correctly in the long-term. With that in mind, staff are working on contracting with Jacobs Engineering to develop a repair design, and hope to have the repair completed after the winter rains.

NPDES Compliance Project

Over the past several months staff have been working to advance the City's NPDES compliance project, which is the wastewater upgrade project that will address the City's current Compliance Schedule and Time Schedule Order with the Regional Water Quality Control Board. A few of the main items are highlighted below, and staff anticipate presenting a detailed project status update and contract change order with Jacobs Engineering to the Council in February.

- **Triennial Review of the Northcoast Basin Plan** – The City is under a Time Schedule Order with the Regional Board which is requiring the City to move the discharge location for treated effluent during the summer months (May 15 – September 30). After being issued the order in 2017, the City began advancing a project that would have installed a new treated effluent discharge field on the western-side of the Eel River. After exploring this design alternative further in between 2021-2023, it was determined that this project alternative was unlikely to address all of the Basin Plan requirements, and therefore this project alternative was eliminated from near-term consideration. Over the past 12-18 months, staff have been working with the Regional Board to enter the Triennial Review process, which could provide for an amendment that would allow the City to continue to use the historic summertime discharge location, the City's current percolation ponds. The City was officially put on the Triennial Review list in August of 2024, and over the past several months staff have made several preliminary submittals to the Regional Board. The City should know more about the status of the Basin Plan amendment request in the spring of 2025.

- **Application for Clean Water State Revolving Fund Grant Funding-** The City updated a grant application through the Clean Water State Revolving Fund (CWSRF) in 2023, and the City’s funding request is currently under review by the Financial Processing Unit at the State Board. Currently the State Board anticipates that the City could be working towards a funding agreement for the City’s compliance project by the summer of 2025. The minimum grant amount historically provided to disadvantaged communities is \$6 Million, however, there have been some informal discussions with State Board staff that have indicated the grant award amount could be higher.
- **Finalization of the project definition and design direction** – In December, Jacobs Engineering finalized the final project design report, which analyzed the City’s alternatives to meet the various current and future compliance targets for treatment of the City’s wastewater effluent. Staff are currently recommending a project to advance that includes a new nitrogen removal system, a rebuild of the communication and computer automation system, and the establishment of an automatic flow equalization system so that the plant can better handle higher influent flows during the winter month. The City’s consultant Jacobs has begun the design process for this project with the budget available from the original design contract, signed in 2020. Given the number of years that have passed since the original contract, and the amount of work and budget the City has had to have Jacobs complete during that time to navigate the regulatory uncertainty, a contract change order to complete the current engineering design work will be required. Staff are currently working with Jacobs to finalize an amendment to the scope and fee for the project, which as noted above will be presented to the Council in February.
- **Update on project schedule** – The original compliance schedules required that the City construct the improvements by December 31, 2024. Given the uncertainty that the project has experienced over the past few years, the Regional Board has informally extended the compliance timeline to December 31, 2027. The Regional Board has indicated that these updated timelines will be issued in the City’s upcoming wastewater permit update, which is currently anticipated to be finalized in the summer of 2025.

Utilities Division

Water Distribution System

- The utilities crew read meters, changed out 39 dead meters, and completed the meter worksheet.
- The crew has continued testing backflow prevention devices for annual certification.
- The utilities crew installed no new services this month.
- The utilities crew replaced three bad angle valves.
- The utilities crew completed 39 shutoffs for nonpayment.
- The utilities crew repaired three water leaks, the following table shows the details:

Date	Location	Pipe Information	Estimated Leak Rate (Gallons per Minute)	Leak Duration	Total Estimate Leak Volume (Gallons)
12/4/2024	2420 Acacia Drive	¾" CTS	11	8 hours	5,280
12/12/2024	Home Avenue	6" AC	5,258	2 hours	630,960
12/26/2024	Lawndale Drive	¾" Saddle on 6" AC	1,321	2 hours	158,520
TOTAL:					794,760

Wastewater Collection System

- There were zero sewer plugs.
- There was a Sanitary Sewer Overflow (SSO) event at the Rohnerville Lift Station, caused by storm water inflow during heavy rain, which resulted in approx. 3,800 gallons which overflowed from the lift station. Utility crews removed approximately 9,000 gallons from the lift station with the Vac-con truck, preventing 9,000 additional gallons from being spilled. The cause of the storm water inflow was identified and corrected.
- The utilities crew cleaned 5,500 feet of sewer lines.
- APS Environmental continues to perform their sewer line inspection contract work.

Service Call Summary

- The utilities division completed a total of 86 Service calls. Figure 1 shows the breakdown by type.

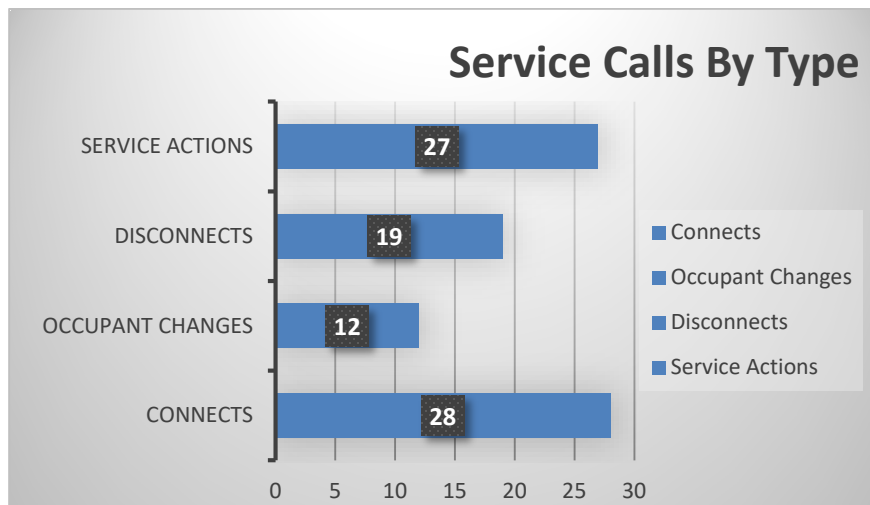


Figure 1: Service call breakdown for December.

- Underground Service Alert (USA): There were zero miss-marked USAs.

Miscellaneous Tasks

- Andy White has been registered for his Water Treatment Grade 2 exam.
- The Utilities Superintendent (Jason Johnson) continues to attend a local leadership academy. These sessions are held monthly through February (Bay Cities Leadership Academy).
- The Utilities department continues to work on updating our GIS maps for water distribution and sewer collection systems on Diamond Maps.

Water Treatment/Wastewater Division- Chief Plant Operator

Wastewater Treatment

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

Year	2020	2021	2022	2023	2024
Total Monthly Flow, MG	31.116	48.950	50.700	48.590	57.330
Maximum Daily Flow, MGD	1.218	3.260	3.510	3.410	3.380
Average Monthly Flow, MGD	1.004	1.579	1.635	1.476	1.849

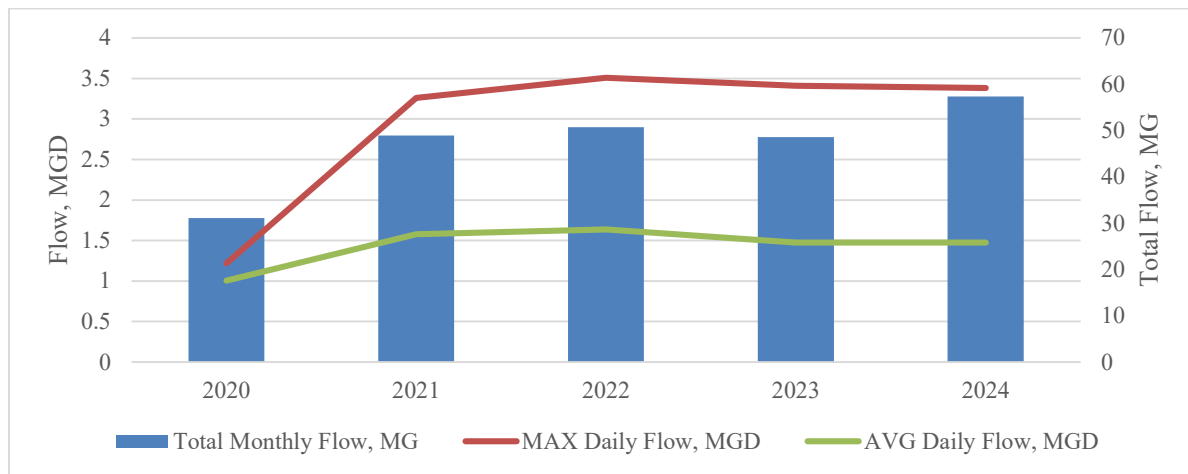


Figure 2. December wastewater plant effluent flows for the past five years in Million Gallons (MG) and Million Gallons per Day (MGD).

Wastewater Events & Maintenance Tasks Completed

- Staff cleaned contact basins and secondary clarifier weirs.
- Staff replaced the fixed end bearing on the lower belt alignment roll on the belt filter press and lubricated the entire machine (see photo inset right).
- Staff replaced the thermostat on the number one thickened sludge pump on the Gravity Belt Thickener.
- Staff rebuilt seals on the chlorine analyzer on the effluent.
- Staff changed out pump and piping at Rundell lift station also redid all electrical connections.



Water Treatment

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

Year	2020	2021	2022	2023	2024
Total Production, MG	29.846	39.374	30.689	27.472	26.411
Maximum Daily, MG	1.547	1.21	1.894	1.090	1.192
Average Daily, MG	0.962	0.947	0.989	0.886	0.851

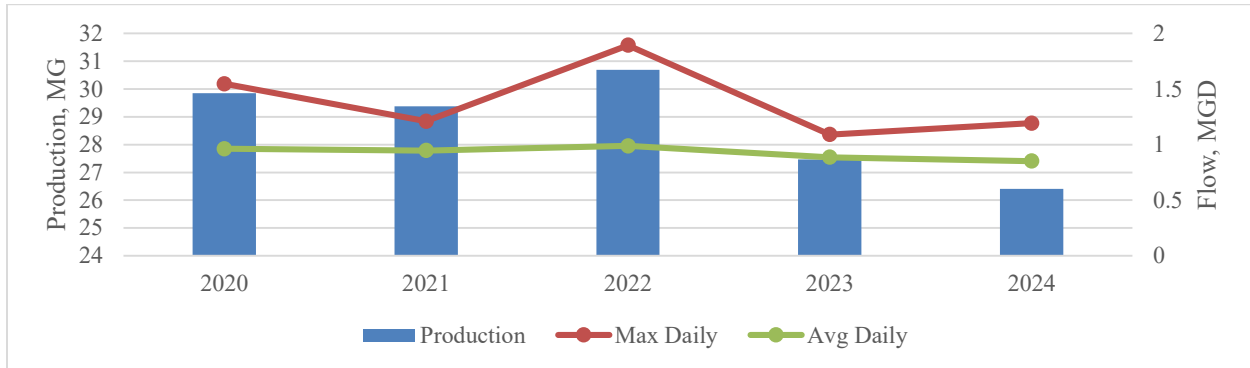
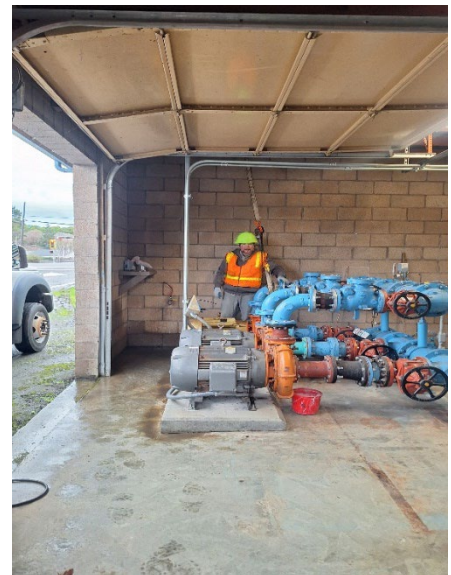


Figure 3. December potable water production for the past five years in Million Gallons (MG).

Water Events & Maintenance Tasks Completed

- Staff replaced check valve on booster pump # 2 at Drakehill Pump station.
- Staff replaced spring check and 2 inch union on pump #2 at Underhill Pump station.
- Staff removed Booster Pump #1 at Kenmar Pump station and replaced both motor bearings and pump seal. The pump was cleaned and inspected and reinstalled (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 December:

- Staff continues to paint the interior of City Hall. Back offices are completed.
- Staff investigated any damage to City facilities and infrastructure from a large magnitude earthquake.
- Staff replaced a failing wood built railing on Main Street near Park Street.
- Staff cut and chipped low hanging trees and brush in the city easement.
- Staff assembled desk and finish preparing office space for occupancy in finance department.
- Staff assisted in setup and take down of the traffic control for the Al Gray Lighted parade.
- Staff maintenance drainage inlets and ditches in preparation of continued inclement weather. Staff was on storm patrol and continue to fill potholes from the heavy rains.

- The annual concrete contractor finished the sidewalk on Main Street. Staff restored the asphalt along the sidewalk to complete the project. Staff also repaired a temporary cold mix patch from a water main break on Rohnerville Road near David Way.
- Staff assisted the Utility Crew with a water main break on Home Avenue.
- Staff replaced a failed hot water heater in City Hall.
- 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.

STAFF REPORT

City Council Consent Item

DATE: February 18, 2025

TO: Honorable Mayor and Council Members

FROM: Brendan Byrd, Public Works Director/City Engineer

SUBJECT: Public Works/Engineering Department Monthly Report - January

STAFF RECOMMENDATION:

Receive report as an informational item.

EXECUTIVE SUMMARY:

Public Works Director/City Engineer

Monday Club Chimney

Per the previous monthly report, the chimney at the Monday Club has been completed. Using contract savings and the available construction contingency, staff worked with the City's contractor to change order in paint restoration for the building. The painting limits include the entry way stairs and covered porch, the entire front of the building, and the west side up to the first dormer (see photo inset right). With this the areas of the building in most-need of painting have been addressed, and City staff can plan to finish repainting the west and north sides of the building in the coming years.



Main Street Gateway Project

The project has been substantially completed and the ribbon cutting was held on February 10th. Following the ribbon cutting, the first of the decorative art pieces, a fish, was completed by Mad Metals (see photo below). There are several others currently being made, including an apple, a car, a Christmas tree, and a rodeo emblem. Similar to the



sign at Kenmar, these pieces will be interchangeable and staff can place them on the sign at the appropriate time of year. The only item left to complete in the contract is replacement plantings, as many of the initial plantings did not take. Staff are working with the contractor to get these plantings replaced.

Kenmar and 12th Street Interchange Projects

Over the past month staff participated in project kickoff meetings with Caltrans and the City's engineering consultant, GHD, to begin the engineering design phase of work for the Kenmar Interchange project. Design work on the project has begun, and staff anticipate this effort to be completed in late 2026.

Also in the last month, staff worked with Caltrans to submit a grant application to the BUILD program that would fund the remainder of Preliminary and Final Design for the 12th Street Interchange project. The funding request was for \$4.2 million, and should the City be successful in obtaining these funds the 12th Street Interchange Project would be funded through the same work phases as Kenmar.

Sanitary Sewer CCTV Project

The project was substantially completed in late January, approximately 1-week before the contract performance date. The project came back within the allocated budget. Staff are currently reviewing the deliverables from the contractor, including the inspection reports and the GIS layers. Once the City has verified performance, the project will be closed out.

Stormdrain Lining Project

As the weather has allowed the City's contractor, Miksis Services, has been making progress on the Stormdrain Lining Project. This project includes stormdrain pipe restoration for corrugated metal pipes at 3rd Street, Elizabeth Barcus, and Rohnerville Road. Recently the contractor was able to complete the final prep work, which includes repairing the failed pipes with new concrete bottoms (see photo inset right). In the short term, the prep work will keep the pipes in correct working order. After the rains subside some, and a weather window allows, the contractor will come back and install the PVC liners.



Utilities Division

Water Distribution System

- The utilities crew read meters, changed out 13 dead meters, and completed the meter worksheet.
- Backflow testing is ongoing.

- The utilities division is starting a radio upgrade program to begin replacing older, outdated meter radios (M520R) with the current model (Flexnet 2W). There is currently a mix of both radios in our system, the goal is to ultimately replace all older models with the current model. The Flexnet 2W not only reads from much farther away, it also stores usage data for 35 days.
- The utilities crew installed two new services this month.
- The utilities crew replaced one bad angle valve.
- The utilities crew completed 36 shutoffs for nonpayment.
- The utilities crew repaired two water leaks, the following table shows the details:

Date	Location	Pipe Information	Estimated Leak Rate (Gallons per Minute)	Leak Duration	Total Estimate Leak Volume (Gallons)
1/23/25	East College	4" PVC	76	1H	4,560
1/29/25	Meadow Lane	1" thin black poly	0.68	7D	6,853
TOTAL:					11,413

Table 1: Water leaks for January 2025.

Photo Inset Below: Leak on East College Ave



Wastewater Collection System

- There were zero sewer plugs.
- There were zero SSO's.
- The utilities crew cleaned 5,500ft of sewer lines.
- The utilities division is re-implementing its Fats Oils and Grease (FOG) inspection of Food Service Establishments (FSEs) as recommended by the State Water Board.
- APS Environmental crew has completed their CCTV inspection contract.
- The utilities crew "potholed" 3 sewer lines to obtain depths for the upcoming Mill Creek project.

Service Call Summary

- Underground Service Alert (USA): There were zero miss-marked USA’s
- The utilities division completed a total of 93 service calls. Figure 1 shows the breakdown by type.

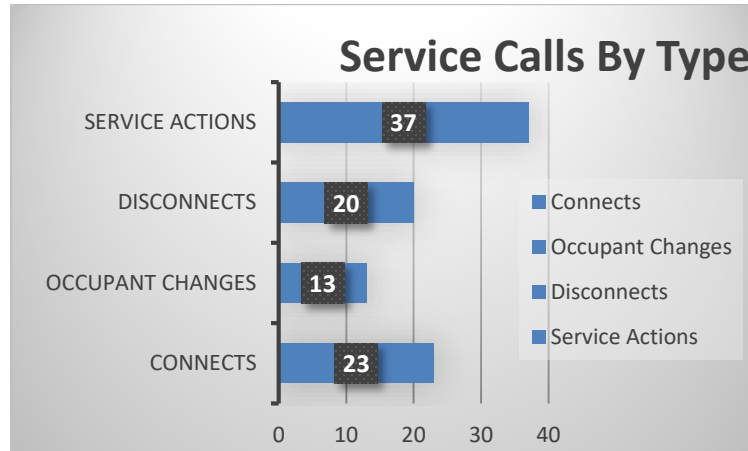


Figure 1: Service call breakdown for January.

Miscellaneous Tasks

- The utilities Superintendent (Jason Johnson) continues to attend a local leadership academy. These sessions are held monthly through February (Bay Cities Leadership Academy).
- The Utilities division continues to work on updating our GIS maps for water distribution and sewer collection systems on Diamond Maps.

Water Treatment/Wastewater Division- Chief Plant Operator

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	2021	2022	2023	2024	2025
Total Monthly Flow, MG	47.066	39.600	79.540	81.230	44.630
Maximum Daily Flow, MGD	3.167	2.300	4.380	4.140	3.770
Average Monthly Flow, MGD	1.518	1.277	2.566	2.620	1.440

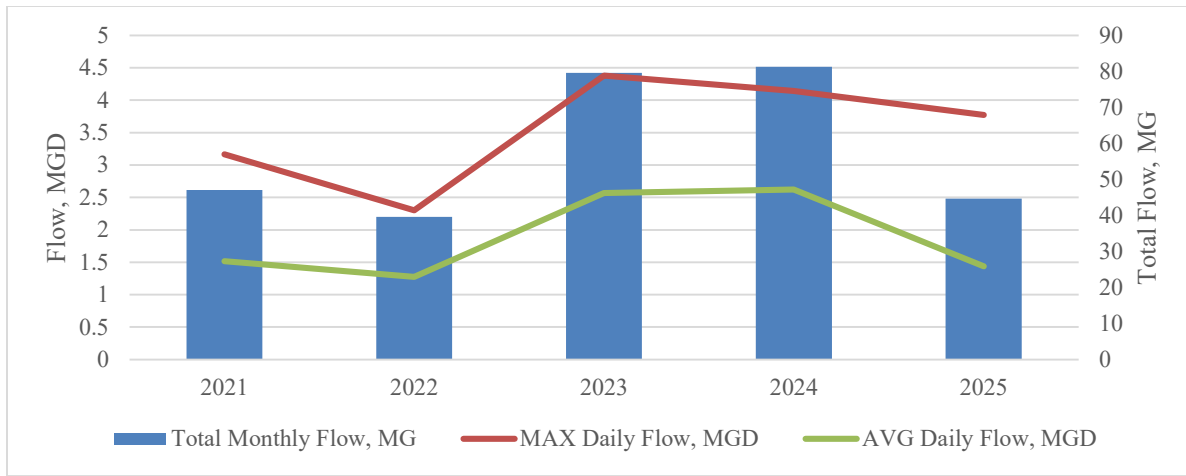


Figure 2. January wastewater plant effluent flows for the past five years in Million Gallons (MG) and Million Gallons per Day (MGD).

Wastewater Events & Maintenance Tasks Completed:

- Staff assisted engineering with the last of the sampling for the basin study.
- Staff replaced failed motor for the boiler firebox blower.
- Staff replaced 3” expansion joint at boiler loop pump 743.
- Staff adjusted cutter head gaps on both heat exchanger pumps.
- Staff replaced polymer feed pump motor on the gravity belt thickener.
- Staff greased main drag bearings and inspected wear shoes on Grit chain.
- Staff investigated noise on Vulcan stair screen and found worn out idler sprockets. They were replaced with used ones and the noise went away. New parts have been ordered.
- Staff completed and submitted the Annual Bio solids report to the EPA.
- Staff returned 1.2 million gallons of storm flow through the plant.

Water Treatment

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

Year	2021	2022	2023	2024	2025
Total Production, MG	29.017	29.982	28.436	27.925	26.250
Maximum Daily, MG	1.257	1.294	1.180	1.243	1.154
Average Daily, MG	0.936	0.967	0.917	0.900	0.846

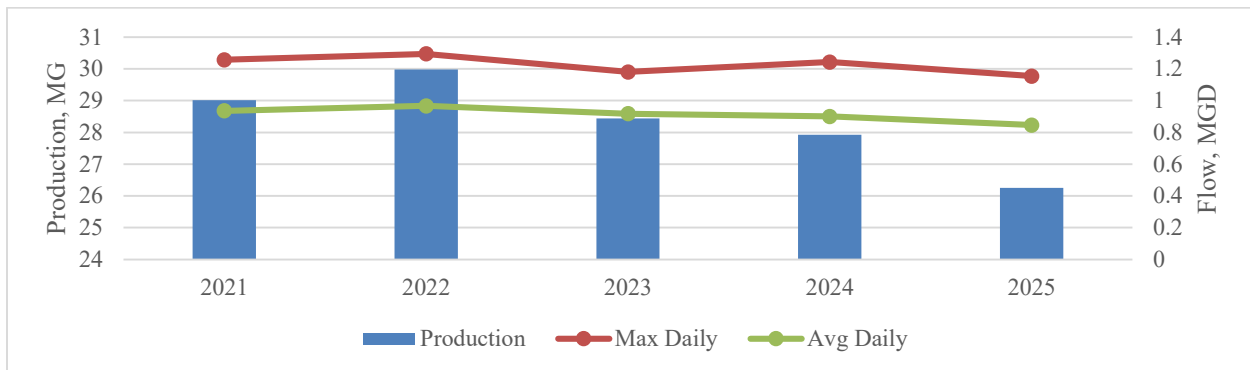


Figure 3. January potable water production for the past five years in Million Gallons (MG).

Water Events & Maintenance Tasks Completed:

- Staff replaced bearings, seals, and gaskets on Kenmar Booster pump # 1 (photo inset right).
- Staff replaced motor starter on pump #1 at Vancil reservoir.

General Services and Streets - General Services Superintendent

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

- Staff replaced batteries for a solar light on Twelfth Street. Staff built a concrete box for access.
- Staff cut and chipped low hanging limbs and vegetation on Christian Ridge, Barney, and Vista Drive. Staff removed brush along Dinsmore Drive, and near Strongs Creek Lift Station.
- Staff finished painting in the common area of City Hall. Staff continues to assist in building or moving office furniture or filing cabinets. Staff painted the breakroom area in the Community Development Department. Staff assisted hanging miscellaneous items at the Police Department.
- Staff removed a large cover on a culvert vault for a culvert lining project.
- Staff assisted in traffic control for a paving operation on P Street and Lawndale Avenue.
- Staff replaced street signs, post, and post anchors that were struck by vehicles. Police staff took reports of the traffic collision.
- Staff rod storm drains and culverts. Staff watched and acted upon any storm related issues.
- Staff replaced a burnt out LED lamp on the traffic signal at Redwood Way and Fortuna Boulevard. Staff replaced burnt out bulbs on the decorative street lights on Main Street.
- Staff mowed city owned lots on Spring Street and Penn Avenue prior to inclement weather.
- 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.