

Submitted by Janice Kwiatkowski, Board President and Luis Melchor, Operations Manager

Odor Control Measures

Lift Station Maintenance

- Staff completes Lift Station Site checks/inspection on Mondays and Fridays, applying Odor control to all Lift Stations with heavy Odors, and applies degreaser to all station with known grease problems
- Staff is constantly having to change Odor/grease products due to the State of California requirements 3 times in 4 years), these products take a few months before they get established in the system and functioning properly, so its been tuff to get consistency.
- Staff clean 4 Lift Stations a month
 - The District contracts with an outside contractor to clean the Main Hub Stations LS 5, 6 7 and 8 (District equipment is not capable of performing this cleaning)
 - May 18th, 2020 was the first cleaning
 - Sept 21st, 2020 is the next scheduled cleaning
 - Deep cycling of Lift Stations to reduce detention time in the Sewer Force Mains (this reduces the formation of odor causing bacteria)
 - Staff add chlorine tabs to the Lift Stations (this kills and reduces odor causing bacteria and improves the quality of the Wastewater at the treatment plant)

Collections system Maintenance

- Staff completes chemical flushing of multiple gravity lines throughout the District weekly (this helps break down grease and solids in the collection system, helps neutralize odor causing bacteria, and improves the quality of the Wastewater at the Treatment plant)
- Staff completes Hydro Flushing (cleaning) of multiple gravity sewer lines throughout the District (this remove solids/debris from known low spots in the system, grease, roots, and any other unknown obstructions.

Manhole Inspections/Maintenance

- Manhole inspections are completed monthly
- Staff Clean/Flush out known problem MH (this is MH with solid buildup from ruff/ damaged inverts)
- Staff Clean/Flush any MH found with problems during inspection
- Staff Inspect and add Odor control to breakover manholes

Sewer Treatment Plant

- Staff keeps the E-Basin (raw sewage storage) at a lower level to maintain a higher air concentration
- Staff has modified the sludge storage procedure; this has reduced the need to handle stored sludge

Completed Projects

- Wastewater Collection System evaluations for (Groveland, BOF and Pine Mountain Lake) (SWRCB Planning Grant) complete and needed improvements identified **(FUNDED BY \$400,000 STATE GRANT)**
- Downtown Groveland and BOF water Distribution system replacement project, planning, design and permitting completed **(\$400,000 STATE GRANT FUNDED)**
 - This project replaces over 5 ½ miles of failing water mains with adequate carrying capacity to serve Fire Hydrants and provides for 75 new Fire Hydrants
- The Wastewater Treatment Plant (storm water drainage) Flume Project. **(FUNDED BY \$800,000 IN FEMA AND CAL OES GRANT)**
 - This reduces storm water runoff from infiltrating our treated wastewater storage reservoir
- New HVAC Systems for Big Creek Water Treatment Plant, Second Garrote Water Treatment Plant and Tank #2 communication building. **(FUNDED BY WATER RATE INCREASE)**
 - The new units will provide and maintain a control environment for all electrical components.

Projects in progress

- Jones Hill Fuel Break **(\$166,000 STATE GRANT)**
 - This will reduce fuels around the District property and add a shaded fuel break for the Downtown Groveland area.
- Water and Wastewater Master plans **(FUNDED BY WATER AND SEWER RATE INCREASES)**
 - This will help identify deficiency and needs for both the Water and Wastewater systems.

Upcoming Projects

- Big Creek and Second Garrotte Clearwell Rehabilitation Project, construction starts November 2020, completion December 2021 – **(FUNDED BY \$3.4 MILLION GRANT, RESULTING FROM WATER RATE INCREASES)**
 - This project will replace damaged structure members and failed epoxy coating. Structural integrity of the Clearwells and Chlorine Contact Tanks must be maintained to ensure potable water is provided to the GCSD customers.
 - There is no Fiscal impact to the District as the proposed project will be funded entirely from SAFER/Proposition 68 grant funding.
- Butler way Bypass Pump Station **(PART OF ABOVE \$3.4 MILLION GRANT, RESULTING FROM WATER RATE INCREASES)**

- This project completely refurbishes the current pump station, this station gives the District the ability to transfer water between service area if the Big Creek Water Treatment Plant is inoperable.
- Downtown Groveland and BOF water Distribution system replacement project **construction (\$3.2 MILLION PROJECT PLANNED FOR CONSTRUCTION WITH CDBG GRANT FUNDING THROUGH COUNTY/2021, SECOND PHASE STATE GRANT 75%/LOAN 25% FUNDED, ELIGIBLE DUE TO WATER RATE INCREASES).**
- Wastewater Collection System Improvements Construction in Groveland, BOF and Pine Mountain Lake – **(EXPECTED OCTOBER 2020 STATE FUNDING CONTRACT GRANT 75% [\$4384,176]/LOAN 25% [\$1,461,392], ELIGIBLE DUE TO SEWER RATE INCREASES)**
- Tank Mixers **(FUNDED BY WATER RATE INCREASES)**
 - This project will eliminate thermal stratification, rapidly blend, and distribute doses of residual disinfectant, and maintain uniform chemical and temperature condition in our Distribution Tank with longer detention times.
- Tank 2 Project **(FUNDED BY WATER RATES)**
 - The Tank 2 Project will eliminate one standby generator which is currently having mechanical issue and set the other to automatically run this site during any power failure. The asphalt will be repaired, and the current erosion problem will be eliminated
- Headworks Project **(FUNDED LOW INTEREST LOAN, REPAID BY SEWER RATE INCREASES)**
 - This project replaces the current Headworks screening system and refurbishes the current building.
 - The screen are designed to remove solids from the wastewater influent, which improves the treatment process, the current screening system is fed on the outside of the two existing roto drums and has lived passed it expected life expectancy. The new roto drums will be an internally fed system, which will **reduce some Odor** contributed by the Headworks of the Sewer Treatment Plant
- Sludge drying area and Screw Press improvements **(FUNDED BY SEWER RATE INCREASES)**
 - This project will correct all drainage around existing Drying Bed system and eliminate runoff from saturating stored sludge, keep sludge contained on a washable surface, give operators a smooth safe working area, provide an enclosure for the current Screw Press, give Operator's the ability to operate the Press in auto, this will increase employee safety, eliminate multiple equipment starts/stops and protect it from weather elements; The press currently has to be shut down every 15 min by staff to dump the loaded sludge bin. The new system will operate a pump system allowing the Press to run continuously to a selected Drying Bed, eliminating the need to stop the press to dump the Sludge bin. The new enclosure will add needed protected from all-weather elements, rain, snow, and extreme temperatures, which will increase the life expectancy of the equipment. This project will also reduce the need to handle and move sludge **reducing some Odors.**
- Influent Pump Station Upgrade (Sewer Treatment Plant) **(FUNDED BY SEWER RATE INCREASES)**

- Influent Pump Station Upgrade Project will allow Operator's to remotely operate the bypass pump system, reduce the number of pumps needed during bypass pumping operations, and make access for cleaning and maintenance safer.
- Irrigation system upgrade (**FUNDED LOW INTEREST LOAN PAID BY SEWER RATE INCREASES**)
 - This project will give staff the ability to pump treated wastewater to both PML and the District Spray Fields at the same time.
- Lift Station 2 improvement Project (**FUNDED LOW INTEREST LOAN PAID BY SEWER RATE INCREASES**)
 - This project will add a redundant pump and make maintenance easier and safer to complete.
- Manhole Smart Covers (**FUNDED BY SEWER RATE INCREASES**)
 - The new smart covers will give the District the ability to monitor levels, flow, set alarms for above normal levels in strategic areas of the collections system, helping to reduce SSO
- Fuel tank Project
 - The Fuel Tank Project will give the District additional Diesel storage for future PSPS events, give notification on low fuel levels, Management will also be able to pull reports to monitor/track fuel usage and cost.
- Generator upgrades (**LEVERAGED BY SEWER RATE INCREASES**)
 - This will replace older failing generator with new more reliable generators at the Sewer Treatment Plant, big Creek water Treatment Plant (**\$300,000 IRWMP GRANT**) and Tank 4 pneumatic pump station (**\$18,000 COUNTY GRANT**).