1st Quarter News

CLEARLAKE OAKS COUNTY WATER DISTRICT WATER & SEWER NEWS

WELCOME

Splashing into 2022 with CLOCWD's first newsletter! Are you excited? We sure are! We will be keeping you updated on what has happened and what is to come in our quarterly newsletter.

6 Ways to Reduce Outdoor Water Use This Spring

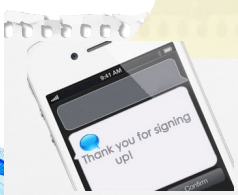
- *Install an irrigation timer*
- *Choose drought-tolerant plants*
- *Water the soil, not the leaves*
- *Recycle indoor water to use on plants*
- *Add a shut-off nozzle to your garden hose*
- *Use a broom to clean driveways & walkways instead of a hose*

HOW COLLECTION WORKS

The Clearlake Oaks Wastewater Plant has a system design known as "Extended Aeration Process". An extended-aeration system includes capabilities for aeration & mixing, settling, return of activated sludge and solids removal. Aeration and mixing is provided by two brush rotors in what is known as an "Oxidation Ditch". This allows for nitrification and de-nitrification cycle to occur. After this cycle, the treated MLSS (mixed liquor suspended solids) enters in what is known as the "Secondary Clarifier" which allows the solids to settle and separate from the water. In this secondary clarifier, a certain amount of activated sludge is returned to the oxidation ditch to maintain an inventory of MLVSS (mixed liquor volatile solids also known as microorganisms) and another amount is removed which is known as WAS (waste activated sludge) which is dewatered and dried for disposal. The secondary effluent (separated water from the clarifier) is sent to the "Chlorine Contact Chamber" where its dosed with 12.5% of Sodium Hypochlorite to achieve disinfection. At this time the process is complete and the effluent can now be recycled.

HOW TREATMENT WORKS

Clearlake Oaks Count Water District is a conventional treatment facility. Raw water with NTUs (Turbidity) from 2 – 100 is pumped from the lake at an average of 650 GPM (gallons per minute) into our ozone tower, ozone (O3) is used as a disinfectant and is generated onsite. After approximately 15 minutes of contact time in the ozone tower. The water then moves thru the flash mixer where chlorine is added for further disinfection, coagulant 9800 is added to begin the flocculation process. From here the water is sent to our two up-flow clarifiers to complete the flocculation process and the settling of solids and floc, the water will spend 3-4 hours in this process, excess sludge is sent to our waste plant facility. Water is then collected through a series of weirs from each clarifier and then pumped at 165 GPM through our mixed media filters for finer removal of NTUs from .03 -.2. Back washing of the filter happens based on head loss, filter run time or NTU of the filter effluent. From here the final step of filtration water is pumped through the G.A.C filter for taste and odor. From here we final chlorinate and the water goes to our clear well, has contact time of 3-4 hours, and is then pumped at 650 GPM to the distribution system and various holding tanks.



Would you like to be informed when there is an urgent resident notification? Or when we need YOUR help? Simply visit www.clocwd.org and sign up for alerts! Its easy!

TALK TO US

(707) 998-3322
Customerservice@clocwd.org
www.clocwd.org
12952 E. Highway 20
P.O. Box 709
Clearlake Oaks, CA 95423
Office Hours M-W
8:00 AM-3:30 PM

NEIGHBOORHOOD WATER WATCH

Don't allow water theft in your neighborhood, this is a crime! Report any attempts of water theft 24/7 to (707) 998-3322

BOARD OF DIRECTORS

- President Margaret Medeiros
- V. President Stanley Archacki
- Director Samuel Boucher
- Director Michael Herman
- Director James Burton

A letter from your General Manager, Dianna Mann

For those I have not had the privilege to meet yet, my name is Dianna Mann, hired by the District in February of 2015 as a grant writer and Secretary to the Board. I worked in that capacity until I was promoted to Administrative Services Manager in 2017 expanding my duties to Human Resources, Financial, and administration, and in 2018, I proudly accepted the appointment of General Manager. The following is a quick re-cap of the last five years:

2017 brought flooding to most of Lake County causing more than $1 million dollars in damages to our waste water system. Fortunately, Lake County was named a disaster area allowing most of the damages to be covered by the Federal Emergency Management Agency (FEMA) and CalOES.

In 2018 the District was approved for a $5,200,000 Federal loan/grant through the USDA to improve the waste water system, which included upgrades that allowed better management for future flooding. The biggest of the projects was replacing the 65,000 gallon clarifier with a 345,000 gallon clarifier. Further improvements included running a force-main pipe from Lift Station 7 down Everglade Blvd. through the wetlands to the waste water plant, in addition, the rebuilding of Lift Station 7, located at the intersection of Keys and Everglade Blvd. along with upgrading multiple lifts stations with new panels and electrical quick connects to allow for back-up power (generators).

Along with floods, we dealt with the hot temperatures that brought wildfires. The Mendocino Complex fire forced Clearlake Oaks to evacuate, though it still required staff to continue to make water for all the fire-fighting efforts around our community.

2019 we faced another flood, however, with the recent upgrades, the damages were not as severe as we faced in 2017, and again, the District worked with FEMA/CalOES to cover damages. Not only did we experience flooding and wildfires, in addition, Lake County experienced multiple Public Safety Power Shutoffs (PSPS). Whenever the water and/or waste water plants are on back-up power, they require staffing 24/7 forcing staff to immediately adjust to shift work. In order to meet the requirements of the PSPS, the District was required to purchase multiple mobile generators to run lift stations, booster pumps, etc. I can say with pride that during all the chaos the Staff had to deal with during the first PSPS, the District never ran out of water or the ability to process sewer. In addition to all this excitement, our District also grew with the annexation of Paradise Valley and the purchase of a new Vac-Con pump truck.

2020 was of course the beginning of COVID-19. Due to Federal and State mandates and lockdowns, the District was faced with much higher water consumption than normal.

2021 the District rolled with the punches of COVID-19 protocols and mandates, structure fires, and a drought. Due to the extreme dusty conditions and the threat of fires, the District purchased a 2500 gallon water truck to assist the staff. The District was approved for an $8,200,000 loan/grant from USDA for much needed water system improvements which included 1,800 new digital meters, 745 back flow devices, new mainline piping, an additional 250,000 gallon holding tank, the replacement of our old leaky water tank located on Cerrito Drive, water plant upgrades, and four new District Metered Area (DMA) meters, which will allow the District to pinpoint water loss.

Currently in 2022, due to the continuing drought, the District applied for and received a grant through the Department of Water Resources (DWR) to extend our water intake pump approximately 1,200 feet further out in the lake. This will help ensure deeper water over our intake pump along with less algae at that depth helping with better raw water quality. The water plant is facing yet another challenging year with continued construction, high water demands, replacing the media in our main #1 filter, all while working the plant on a continuous 24 hour basis.

I cannot say enough about the staff we have here at the Clearlake Oaks County Water District. They work without complaint in horrible conditions. Freezing snow, blazing temperatures, fires, floods, and yes, even pandemics, and it is truly an honor working with them.

If any of this sounds confusing leaving you with questions, or you would like a tour of one of our plants, please call the Administration Office at (707) 998-3322 and we would be more than happy to set up an appointment for you.

Annual Backflow Testing is Required by the State of California!

A reduced pressure zone device typically installed at commercial properties.

A double-check valve device typically installed at residential properties.

CLOCWD would like to remind residents and local business owners that the State of California requires the installation and annual testing of backflow devices. This compliance testing must be performed by a certified backflow tester. The annual deadline for test compliance submission is December 31, 2022.

What is a backflow device? Backflow devices are mechanical doublecheck valves that prevent the water flow from reversing during a loss of water pressure. This loss can be caused by firefighter use or a water main break. These devices must be tested annually to make certain they are functioning properly. Backflow devices protect against potential contamination of the public water supply during times of fluctuating pressure. The District encourages residents to arrange for a AWWA certified backflow tester to conduct their annual backflow test and avoid any penalties for noncompliance. Residents must submit a copy of the backflow report to the District. CLOCWD keeps an up-to-date list of local California licensed backflow testers , which is included in the annual testing reminder. Please contact CLOCWD at (707) 998-3322 with any questions you may have regarding backflow. You are required to have a backflow device should you have: in-ground sprinklers, fire lines, in-ground swimming pool, or a private well that is interconnected with the public water supply.