



# NEWSLETTER

## ADVISORY COMMITTEE MEMBER—*Board of Directors*

Communities succeed because of the leadership and farsighted contributions of their citizens.

Oak Lodge and the Oak Lodge Water Services District lost such a citizen July 29<sup>th</sup> when Margaret Pritchard passed away.

Margaret was a key member of the Sanitary Sewer Master Planning Community Advisory Committee which critically influenced the renovation of the District’s Water Reclamation Plant and helped educate the community about the need for the project.

As the District moves into the future, new challenges will arise, and the insights and wisdom of our citizens will be needed to address these new challenges, likely through Citizens Committees.

We hope you will consider joining us by monitoring the District’s website for future advisory committee opportunities.

## EXCITING TIMES—*Jason Rice, Interim General Manager*

Consolidation efforts are in full swing and the District is continuing to see the benefits of a combined staff. The two once separate Field and Administrative Staffs are being cross-trained for coverage and more efficient customer service response.

Processes are being refined to be as clear and simplistic as possible so that we can spend less time on "paperwork" and more time with you on important issues facing our new District. We hope that you as our valued customers continue to notice our efforts in serving you to the best of our abilities while keeping low rates in mind.

## AWARD ANNOUNCEMENT

The National Association of Clean Water Agencies has announced that Oak Lodge Water Services has officially completed 4 years without any permit violations at the Water Reclamation Facility. We’ve received the Gold Award for year’s 2013-2016! Congratulations to our customers for helping to create an award-winning district!

### IMPORTANT MEETING DATES

| 2017 SEPTEMBER |     |     |     |     |     |     |
|----------------|-----|-----|-----|-----|-----|-----|
| SUN            | MON | TUE | WED | THU | FRI | SAT |
|                |     |     |     |     | 1   | 2   |
| 3              | 4   | 5   | 6   | 7   | 8   | 9   |
| 10             | 11  | 12  | 13  | 14  | 15  | 16  |
| 17             | 18  | 19  | 20  | 21  | 22  | 23  |
| 24             | 25  | 26  | 27  | 28  | 29  | 30  |

| 2017 OCTOBER |     |     |     |     |     |     |
|--------------|-----|-----|-----|-----|-----|-----|
| SUN          | MON | TUE | WED | THU | FRI | SAT |
| 1            | 2   | 3   | 4   | 5   | 6   | 7   |
| 8            | 9   | 10  | 11  | 12  | 13  | 14  |
| 15           | 16  | 17  | 18  | 19  | 20  | 21  |
| 22           | 23  | 24  | 25  | 26  | 27  | 28  |
| 29           | 30  | 31  |     |     |     |     |

### SEPTEMBER 19:

**Oak Lodge Water Services Board Meeting at 6pm**

### OCTOBER 17:

**Oak Lodge Water Services Board Meeting at 6pm**

All Board Meetings to be held at Oak Lodge Water Services Building:

14496 SE River Rd.,  
Milwaukie, OR 97267

Public is welcome to attend these meetings.

## 5 TIPS FOR MAXIMIZING WATER AND PLANTS!



We are into the heart of the dry season, next winter still seems remote. At Oak Lodge Water Services, we encourage our customers to help their plants through seasonal drought with these tips:

- Water early in the morning to allow maximum absorption and to minimize evaporation, between 4 – 10 a.m.
- Avoid overwatering. Water about once per week for clay soils and every 3 days for sandy soils. Watering less frequently trains plant roots to grow deeper which helps maintain plants through droughts.
- Water long enough to soak 6 inches down into the soil – the top layer will dry out leaving moisture deeper.
- If you are using a sprinkler, choose a pulsating one, not oscillating – to help soils absorb the water.
- Consider adding mulch, installing drip irrigation and putting on a timer – this maximizes efficiency.

## OAK LODGE WATER SERVICES WATER RECLAMATION FACILITY—UP CLOSE!

Have you ever wondered what happens at your Water Reclamation Facility (WRF)? The WRF collects all the used water in the District from building sinks, toilets and floor drains and removes contaminants before returning the water to the water cycle via the Willamette River. The processes are somewhat complex, but the goal of this article is to describe the basics so they're understandable.

The first step at the WRF is the influent wetwell where all the drains come together to be pumped through the rest of the process. The wetwell is a big concrete tank that the sewer pipes pour into. Large pumps move everything up to the Headworks where the next steps in the treatment process happen, screening and grit removal. The screening happens with a vertical set of steel bars that the water flows through. Anything in the water that doesn't fit through the 1/4" gaps between the bars gets scraped off and put in a dumpster. Then the water flows into cyclone separators that remove grit and other heavy solid material using centrifugal force. The grit and solids go into the same dumpster.

After grit is separated the liquids, called "Mixed Liquor" because they are a mix of small solids and water, go into an aeration basin where air is added to accelerate the biodegradation that normally happens in nature. Bacteria break down the waste materials and the added air maximizes their destructive potential. These "good bugs" are recycled to the beginning of the basins like a sourdough start to ensure there are more "good bugs" than "bad bugs" in the balance.

After the biological process of aeration, the liquid goes into the secondary clarifiers that allow the remaining solids, called sludge, to settle out. Some of this sludge is sent back to the aeration basins and is the source of those "good bugs" mentioned earlier. Its called "Return Activated Sludge" because we return it to the aeration basins. The rest of the sludge that isn't returned to the basins, called "Waste Activated Sludge" is wasted to the digester where it is broken down further. After some time being mixed and aerated in the digesters the sludge is dewatered and pressed into high quality Biosolids cake which is applied to permitted farms as fertiliz-



er. The mostly clear water that comes off the clarifiers still has some microbes in it, so it's sent to the disinfection process where it is zapped with ultraviolet (UV) radiation removing the bacteria's ability to reproduce. After disinfection, the water is all clear to flow into the Willamette.

District employees run laboratory tests to ensure that our water is clean enough to go into the Willamette River. We find that most of the time our treated water is cleaner than the river. We also monitor the quality of our biosolids to ensure we are putting quality fertilizer on the fields. The treatment plant operators are constantly monitoring and adjusting flow rates, return rates, digester levels, and solids production to keep things balanced with the variables conditions coming into the plant. As you can imagine, we get more flow in the mornings and evenings than in the middle of the night. Plus, when the rains come, we tend to see a considerable increase in our hydraulic flow.

We hope this explanation was easy to understand. If you would like a tour of the facilities, go to our webpage at <http://www.oaklodgewaterservices.org/> and under the Customer Service tab, there's a 'how do I' section that has information on getting a tour.