

# CITY OF WINLOCK

## REPORT FOR CITY COUNCIL

Water/Sewer Department

Rodney Cecil

2019-2020

First, I want to welcome all the new council members to the job I am looking forward to working with you over these next 4 years. I want to compile a list of things that we have done and that are still in the works. You can always call me if you have any questions or concerns

### PAST PROJECTS

#### **Treatment Plant upgrade:**

This project was completed in early 2019. We were allotted a grant of around 5.5 Million to upgrade the plant and address some I&I projects in the community. Some of the treatment plant upgrades: The north side of the plant had new membranes installed, new actuators, flow meters, sensors, new computer upgrades and pumps. We also addressed the way the wastewater flows into the membrane unit to allow for maximum efficiency. We can now process up to 1,500 GPM in the winter months. We swap back over to our old membranes from April-September. Late Note: we had a heavy rain in Dec and the plant processed 1.5 million gallons of water. The new membranes performed perfect during this time. Flows were as high as 1300 GPM

We also addressed our membrane thickening system and added some new diffusers and pumps to make this process run smoother. As of this writing we are still having some issues with our crane but those are being addressed.

#### **Sewer I&I projects**

This project was also concluded in early 2019. This project replaced many side sewers lines in the community and some of the collection system piping. This is important as it reduces the amount of storm water that infiltrates into our collection system. The Winlock treatment plant treats about 80,000 to 100,000 gpd per day and in the winter months we have been known to have 2.5 MGD come through the plant. When this happens, we have to release some of our product straight out to the creek before it has been treated. This I&I project has lowered the amount of I&I we get in our system.



## PRESENT PROJECTS

### **New Well Project:**

This is through Cardinal Glass and their requirement to return approximately 157-acre feet back into our infrastructure. This new well will get us approximately 72-acre feet returned into the system. Some of this came from a transfer of water rights from the Michelson farm. The well has been drilled and tested and we will now be entering the drawing phase in order to build out the well itself. This should be starting in early 2020. I will keep you updated as the project progresses.

### **Increase of water rights:**

Attorneys are working on possible actions to make some of our old claims valid and increase our allotted acre feet per year. We also have a 1.2 CFS allotment from the Cowlitz basin that we could tap into at a later date. Right Now, we have around 448-acre feet allotted per year, but according to our new water plan that number will jump to about 528-acre feet. See The city of Winlock Water System plan for more information. As of this writing we are approved for 645 connections. We have use approximately 639 connections. Department of Health is waiting on a rewrite of a couple of chapters in our water plan and then we should be approved at that time for an additional 200-225 connections. That would put us at 870 connections. When the well is complete, we will petition for more connections and when the well is put out at the Benaroya site we will petition for more connections.

### **Benaroya Project:**

The water line to the freeway has been completed. This includes hydrants. The road to the Michelson parkway is supposed to be constructed and completed in 2020, and the next phase of the project will be the sewer line and the lift stations. This is an ongoing process. I will get you updated information as I get more information.

### **Galvanized Replacement Project: Part 1**

This project is underway. They will be replacing service lines down SE 1<sup>st</sup> St, Rice St, Canyon St, Allegra Villa, and Arden St. This will hopefully bring our water loss in our system down the required 10% per year required by DOH. Right now, we are at around 39% This project is expected to last about 60-90 days depending on conditions. This was from a 750,000 grant.

### **Galvanized Replacement project: Part 2**

The City received another \$ 750,000 grant to complete the remainder of the galvanized projects that were not able to be covered in part 1 of the project. This should be scheduled to start in mid-2020. Once part 1 and part 2 are complete we should have addressed about 75% of our galvanized pipes in our system. If we get our water loss down to less, then 10% that will mean we can hook more people up to the system

I try to stay as informed as I can when it comes to my department and if I don't have the information, I will work hard to get it to you.

### Internal projects and updates

#### **Treatment Plant:**

1. We are out of compliance with our copper limit per our NPDES permit. We are working on a pilot project using magnesium hydroxide as a way to raise our PH in our treatment zones. This will hopefully deal with the copper issue. If we have to buy our own equipment, we will incur an initial cost of around \$ 5,000 to cover the equipment and then about \$ 5,000-7,000 per year to run the process. As of this writing we have conducted 3 tests on our copper. Sept we were at 9.5 ug/l which is still above our 8.6 ug/l permitted amount. However, October and November of 2019 we were at 6.0 and 7.0 below our permit level, and our last test in December was 8.4 Ug/l. So, it would appear that the process is working. We will still be conducting some copper testing to see how it does when we stop the process for the winter. We will run this process from May-Oct at a cost of about 5,000-7,000 per year.


#### **Water System:**

1. PRV maintenance. 80% complete. Campbell, Benton and Walnut still need to be addressed. We will be addressing this after the galvanized project is complete. These PRV are working as they should at this point in time.

### PROGRAMS

The Following Programs and procedures have been initiated:

1. **Cross Connection Program:** This program is 100%. We are fully compliant with the cross-connection's requirement under **WAC 246-290-490**.
2. **Valve exercise Program:** This program is about 25% complete. The valves have not been exercised in so long that when we do exercise them the valve stems are breaking. We will need to get some valve inventory on hand so we can replace when they break.
3. **Valve Replacement Program:** Will replace as funds allow.
4. **Meter replacement program:** Starting in 2020 we will be moving setters and replace meters. I have budgeted around 5,000 per year for this program. This will assist us in getting accurate water usage from our customers.
5. **Hydrant Maintenance program:** this program is about 95% complete. We are still working to get all these projects done. We have several hydrants that still operate but need some maintenance.

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6. **System Flushing and Pressure Checks:** Will be implemented in 2020. We will flush the Distribution System every year and do pressure checks. We did do some partial flushing this year but will develop a plan in conjunction with the fire department.
  7. **Leak Maintenance and water loss:** We check all high meter reads to identify leaks on the customer side of the meter. We monitor our wells usage—vs—Consumption to gage our water loss. We are down from 45% to around 39%. We aggressively try to repair all known leaks as soon as possible. We did fix two major leaks this year. (2019) so we should see some improvement in our water loss numbers) This year closed out high on water leaks and hopefully after the galvanized project we will see better numbers.
  8. **Consumer education program:** We have started a customer education program on how to conserve water and avoid cross connections issues. These will be done via mailings.
  9. **Preventive maintenance Programs:** We have implemented a record keeping database and a preventive maintenance schedule for all equipment in the water and sewer department. We do maintenance every year and sometime 2x per year. The goal is to extend the life of all our equipment. I also have a full inventory of all our equipment. We will start an equipment upgrade program. This will retire out some of our older equipment for new equipment. I have requested 15,000 per year to accomplish this.
  10. **Water and Sewer Training Program:** This is our 3<sup>rd</sup> year of Volunteer training at the water and sewer department. Both graduates have received there WWTP0 and WDM 1. We are presently training our 3<sup>rd</sup> volunteer. Once the volunteer finishes there 1 year of volunteer work the city can use them for extra help during the summer and for projects that required more people to complete.
  11. **Evaluations:** I also do yearly job evaluations on the persons that I supervise. Right now, that would be Marty and Susan.

### **Pending Projects:**

1. Want to loop the water line on SE Front street., and SW front St will need a Grant. This will make it, so the water lines quit running through other residents' private property.

Thank you for your time

Rodney Cecil

Water/Sewer Superintendent

