

City of Pateros, Public Works & Parks

August 19, 2019 – Report to City Council

By City Administrator/
Public Works Supervisor
Jord L. Wilson, MLA



Public Works Team
Mike Lambert – Wastewater
Doug Kirk – Water
Ryan Sisler - Parks

Administrative

- The State Auditor's office (five separate auditors) have been in and out of the office for the last month. They have reviewed processes and procedures regarding procurement, bidding, reimbursement, and financial conduct. I have been able to supply all documents requested. I do not know the outcome, but I do expect some procedural recommendations. The CDBG grant workshops and the State Auditor training I have attended has been extremely helpful in preparing for the audit.
- I am moving through the steps in finalizing our FEMA grants. The desk review has been completed at Camp Murray by WA EMD, now they are working on the final report.
- I attended the RMSA Operating Committee quarterly meeting on August 14th. The City is a member of the RMSA group-pool. RMSA recently completed appraisals on members' assets, including Pateros. With the new appraisal the City's property exposure went from 3.7 million to 10.5 million (*some of this may have to do with the addition of properties like the new pump station and reservoir*). The change in exposure increased by 183%. RMSA has capped the rate increase to only a 20% to help reduce the impact on its members. The new rates also factor in a liability and experience factor. We can expect our overall rate to increase about 11% or around \$4,500 in 2020. However, we can expect at some point in the next couple of years for our rates to reflect our actual property values. In reality, as other members are subsidizing us during this transition. **Attached FYI is the updated RMSA Standards.** As an operating committee board member, Pateros has a voice at the table when setting rates and these standards.

PUBLIC WORKS

Streets & Equipment

- I have completed my review of speed limits in the City. **See attached speed exhibit.** I will be meeting with the Street and Parks Committee to discuss this further. I plan to propose a speed ordinance at the September council.
- I also reviewed the school zone, signage and speeds. **Attached is the proposed school zone and signage** that meets the MUTC (Manual on Uniform Traffic Control Devices) guidelines. I have asked our engineer to review the proposed signage and will also present it to the Street and Park Committee for review and comment. An ordinance will be proposed at September council.
- Ives/North Street chip seal has been put on hold till spring. The bids came in too high. TIB refused the bids. I will be looking at adding road repairs due to our 2019 water breaks and repairs to that project in the Spring of 2020.
- Doug and Craig have been working on street sign maintenance and installation. The goal of the project is to make sure we have uniform signage throughout the City that meets MUTC standards.



New Lakeshore Drive sign & post.

MUTCD Approved Caution Signs



New Ives Landing Park sign at Commercial and Dawson

New directional sign

Replacement of old street names



PARKS

- 📌 **KUDOS to Ryan for the green grass this summer. Irrigation repairs have been non-stop this year, but the grass has never looked greener in the month of August.**
- 📌 APJ went remarkably well. It was Ryan’s first setup. Even with all the changes and construction, the event was a success. Kerri and I had a debrief meeting with Tracy with APJ. She was very pleased. We swapped out toilet paper dispensers in the new restroom for the large rolls. The small rolls required hourly stocking during APJ and were unsuitable for normal tourist season use.
- 📌 The No Wake exhibit for the Mayor to present to the Okanogan County Commissioners has been updated.

- The crew is working on making access for our equipment onto the beach at Peninsula Park. We have some repairs on the beach, and at some point, the PUD would like to add sand to the beach.

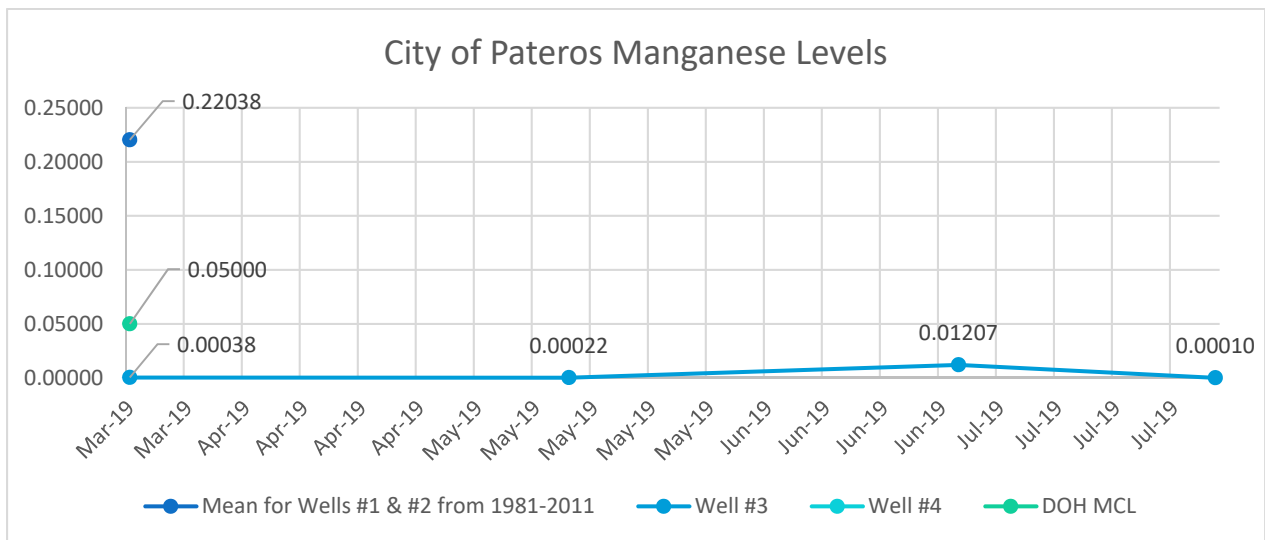
City of Pateros Park & Sewer Fees									
	Ives Landing Park			Ives Landing Dump Station (Sewer Dept)			Memorial Park		
	2017	2018	2019	2017	2018	2019	2017	2018	2019
January	\$ -	\$ -		\$ -	\$ -		\$ -	\$ -	
February	\$ -	\$ -		\$ -	\$ 10.00		\$ -	\$ 25.00	
March	\$ -	\$ -		\$ -	\$ -		\$ -	\$ -	
April	\$ -	\$ -	\$ 85.00	\$ 48.16	\$ 40.00	\$ 21.00	\$ 97.00	\$ 25.00	\$ 75.00
May	\$ -	\$ 175.00	\$ 70.00	\$ 95.85	\$ 85.00		\$ 136.50	\$ 157.00	\$ 15.00
June	\$ -	\$ 894.10	\$ 35.00	\$ 228.00	\$ 240.00	\$ 230.75	\$ 423.00	\$ 333.75	
July	\$ -	\$ 2,296.38	\$ 820.00	\$ 276.00	\$ 285.00	\$ 280.92	\$ 279.00	\$ 570.50	\$ 380.00
August	\$ -	\$ 2,400.00		\$ 305.00	\$ 112.00		\$ 1,195.24	\$ 1,276.00	
September	\$ 200.00	\$ 600.00		\$ 97.00	\$ 143.00		\$ 210.35	\$ 214.00	
October	\$ -	\$ 280.00		\$ 145.50	\$ 164.00		\$ 153.00	\$ 180.00	
November	\$ -	\$ 7.00		\$ 104.75	\$ 53.00		\$ 6.00	\$ 30.00	
December	\$ -	\$ -		\$ -	\$ 83.00		\$ -	\$ -	
Total	\$ 200.00	\$ 6,652.48	\$ 1,010.00	\$ 1,300.26	\$ 1,215.00	\$ 532.67	\$ 2,500.09	\$ 2,811.25	\$ 470.00
7 mo. Total	\$ -	\$ 3,365.48	\$ 1,010.00	\$ 648.01	\$ 660.00	\$ 532.67	\$ 935.50	\$ 1,111.25	\$ 470.00

WATER DEPARTMENT

Doug has been very busy trying to keep up on work orders. July and August are always peak season for water related work requests. We have replaced three lateral lines (lines from resident's meter to the mainline) in the last two months. Two on Pryor Drive, due to poor quality copper used during the development, and one on Warren, due to plunging in an attempt to free the line of manganese.

Manganese:

We are still getting considerable amount of complaints about manganese in the lines. The manganese finding its way to residential taps and toilets is residual manganese breaking loose from over 40 years of build-up. Toilets are the most common place people see it. This is because, manganese settles in the bottom of the tank, and is very noticeable when flushed. Manganese breaking free in the lines, is probably related to our new chlorine system. A change in Department of Health rules required us to increase our chlorine levels. Our target chlorine levels are 0.05-1.5 mg/l. (The state maximum is 4 mg/l.) This assures that we are getting 0.02 ppm chlorine at the furthest points in the water system and that the water is safe from bacteria. We believe the increase in chlorine, our increased water pressures (up 22 psi), and the amount of flow in the lines (19 million gallons in July) is still scouring out the residual manganese.



Another residual effect of manganese is that supply lines from the mainline to the meter are plugged. Staff Under the most severe cases of plugged lines, the staff uses a specialized tool to plunge the supply line. It is a last resort, as frequently it results in a ruptured line. It is assumed that this is what happened on Warren Street. After cleaning the meter, we still had low flow. The line was plunged to try and increase flow. The plunge was unsuccessful, and several days after a leak surfaced on Warren Ave. When successful, a supply-line-plunge saves the expense of replacing the line.

The Water Department considers anything below 12 gallons per minute (gpm) to be unacceptable. If plunging the line proves ineffective in raising the gpm, then the supply line is scheduled to be replaced. However, many times the City is providing flows well-above 12 gpm, but the supply line from the meter to the residence is plugged and this requires the home-owner to replace the line.

Although we are still experiencing manganese issues, water quality in the overall system continues to improve.

Project Update:

- We had a large line break at the Cemetery Pump Station, which the City installed in exchange for the property for the reservoir site. After extensive investigation we determined there is a design flaw that needs fixed. The engineers are working on a plan to fix this. The cemetery was out of water for about a week, during the hottest stretch of July. Water is temporarily back on until we can come up with a permanent solution. Initial costs for emergency repairs were about \$2,000 and were made by O'Connell's, who installed the pump. Permanent repair costs are yet to be determined.
- Related to the leak at the Cemetery booster pump is the power outages we have experienced this summer. As much of an inconvenience the outages have been, it has helped understand how our water system works during a power outage stress at peak demand. I am working with the engineers and contractors to resolve these issues. The way our system is designed, when the power goes out: (1) the backup generator kicks on, (2) a phone call is sent out to staff (and is resent until someone responds), and (3) the pump kicks on to fill the reservoir. In worse case scenario, the pump overfills the reservoir, which would take a minimum of an hour at our normal rate of pumping (550 gmp). The overflow is de-chlorinated and discharged into the river. Under normal circumstances staff has plenty of time to respond to a power outage and monitor the reservoir level. This is very similar how our old system was set up. In the old system, when on manual run, the overflow was in the park, and we would turn the pumps off when we the park started filling with water.
- Pump Station #4 continues to move along. It is still on schedule for final completion October 14th.

City of Pateros Water Department

System ID 66450 C **Total Service Connections** 278
Reservoir Capacity 565,000 gallons **Wells** 1

2019 Water Produced in Gallons							
	2018	2019	% in Change		2018	2019	% in Change
January	1,797,800	2,121,438	18%	July	17,454,000	18,968,280	9%
February	1,552,000	2,056,813	33%	August	14,152,900		
March	1,778,900	2,260,796	27%	September	10,192,700		
April	2,963,400	4,503,629	52%	October	6,663,600		
May	9,611,300	12,892,999	34%	November	2,076,600		
June	13,457,700	16,082,186	20%	December	1,867,529		
Year to Date Total Gallons	2018	2019	% in Change	<i>Consumption is getting closer to 2018 levels.</i>			
	50,129,380	58,886,141	15%				
Water Quality Testing							
Coliform Test	<i>This is an indicator test for total coliform (good and bad). The presence of coliform in a sample indicates the need for further testing</i>						
7/30/2019	1 sample tested		Coliform absent				
Chlorine Monitoring	<i>A target residual of 0.3-0.5 (min. 0.2) used to control microbes *As part of routine monitoring, the chlorine input rate is immediately increased for all chlorine tests results below 0.2 to meet the DOH minimum of 0.2</i>						
7/1/2019-7/31/2019	Daily samples Mon-Fri		Chlorine Levels greater than .02 at furthest point in system. Target levels 0.05 - 1.50 (4.0 State MCL)			Chlorine Ranged 0.13*-0.8	
Upcoming Water Tests: Chlorine, Coliform, Manganese, Gross Alpha, Radium 228, Radium 226							
2019 New Water Services							
20 Brownlee Lane				235 Beach St.			

SEWER DEPARTMENT

City of Pateros Sewer Department							
Permitee: Pateros POTW		Permit #: WA0020559		Operator: Mike Lambert			
2019 Wastewater Processed in Gallons							
	2018	2019	% in Change		2018	2019	% in Change
January	1,390,000	1,267,300	-8.8%	July	1,763,500	1,580,000	-10.4%
February	1,615,500	1,136,000	-29.7%	August	1,499,300		
March	1,451,500	1,284,500	-11.5%	September	1,505,000		
April	1,566,000	1,741,500	11.2%	October	1,545,500		
May	1,496,800	1,427,400	-4.6%	November	1,179,200		
June	1,596,800	1,448,900	-9.3%	December	1,164,200		
Year To Date Totals		2018		2019		% in Change	
Gallons Processed		10,880,100		9,885,600		-9.1%	
Wastewater Effluent Monitoring							
Total BOD 5-day		<i>Organic Loading Rates (Permit Range ≥ 85%)</i>					
Weekly Test	4 - Tests		99% removal				
TSS		<i>Total Suspended Solids, non organics (Permit Range ≥ 85%)</i>					
Weekly Test	4-tests		97.25% removal				
pH		<i>(Daily min/max permit range equal/between pH6 and pH9)</i>					
Weekly minimum	Mon-Fri		7.3				
Weekly Maximum	Mon-Fri		7.5				
Fecal Coliform Bacteria		<i>(Permit Range Weekly ≤ 100; Monthly ≤ 200)</i>					
Weekly geometric mean	4-tests		6.29				
Monthly geometric mean	4-Tests		6.29				
Dissolved Oxygen		<i>Daily – Report Only</i>					
Daily Test	Mon-Fri		3.1 Maximum				
Temperature		<i>Daily – Report Only</i>					
Daily Test	Mon-Fri		21.63 Degrees C Average				
Ammonia		<i>Monthly – Report Only</i>					
	6/27/2019	1 sample		0.07			

June Notes:

Overall flows are down. Biosolids have passed testing, and are scheduled to be hauled to Boulder Park in Mansfield the week of August 19th.