

City of Pateros, Public Works & Parks

February 2022 –Report to City Council

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



Public Works Team
Mike Lambert – Wastewater
David Hunter – Water/Streets
Ryan Sisler – Parks
Dalton Heller – PW/Parks

ADMINISTRATIVE

January/February has been productive months for public works. The public works shop restroom had a significant leak, and repairs to the room was required and completed. Department vehicles were serviced, larger vehicles will be serviced in the summer, as they won't fit in our shop. With the shuffle in positions this winter, and sit-down with the Mayor, I have also updated the general work week schedule. The crew did get the hydrants and meters thawed out. We had one meter break, due to freezing. January and February we do a lot of planning and coordination for the 2022 projects, including the Winter Barn Project; Pesticide Program; Street Chipseal/Seal Crack Projects; and the Sewer Plan Update with manhole inspections.

| PW GENERAL WEEKLY SCHEDULE | | | | | |
|----------------------------|-----------------------|----------------------|----------------------|----------------------|-----------------------|
| | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY |
| 7:00 | STAND-UP MEETING | CHECK EMAIL/WOs | CHECK EMAIL/WOs | CHECK EMAIL/WOs | STAND-UP MEETING |
| 7:15 | CHECK EMAIL/WOs | START MORNING ROUNDS | START MORNING ROUNDS | START MORNING ROUNDS | CHECK EMAIL/WOs |
| 7:30 | START MORNING ROUNDS | MORNING ROUNDS | MORNING ROUNDS | MORNING ROUNDS | START MORNING ROUNDS |
| 8:00 | DEPARTMENT DETAIL DAY | WEEKLY TEAM MEETING | STAND-UP MEETING | STAND-UP MEETING | DEPARTMENT DETAIL DAY |
| 8:15 | | TEAM PROJECTS | TEAM PROJECTS | TEAM PROJECTS | |
| 8:30 | | TEAM PROJECTS | TEAM PROJECTS | TEAM PROJECTS | |
| 9:00 | | TEAM PROJECTS | TEAM PROJECTS | TEAM PROJECTS | |
| 9:30 | | TEAM PROJECTS | TEAM PROJECTS | TEAM PROJECTS | |
| 10:00 | | TEAM PROJECTS | TEAM PROJECTS | TEAM PROJECTS | |
| 10:30 | | | | | |
| 11:00 | | | | | |
| 11:30 | | | | | |
| 12:00 | LUNCH | LUNCH | LUNCH | LUNCH | LUNCH |
| 12:30 | DEPARTMENT DETAIL DAY | TEAM PROJECTS | TEAM PROJECTS | TEAM PROJECTS | DEPARTMENT DETAIL DAY |
| 1:00 | DEPARTMENT DETAIL DAY | TEAM PROJECTS | TEAM PROJECTS | TEAM PROJECTS | DEPARTMENT DETAIL DAY |
| 1:30 | DEPARTMENT DETAIL DAY | TEAM PROJECTS | TEAM PROJECTS | TEAM PROJECTS | DEPARTMENT DETAIL DAY |
| 2:00 | DEPARTMENT DETAIL DAY | TEAM PROJECTS | TEAM PROJECTS | TEAM PROJECTS | DEPARTMENT DETAIL DAY |
| 2:30 | DEPARTMENT DETAIL DAY | TEAM PROJECTS | TEAM PROJECTS | TEAM PROJECTS | DEPARTMENT DETAIL DAY |
| 3:00 | DEPARTMENT DETAIL DAY | TEAM PROJECTS | TEAM PROJECTS | TEAM PROJECTS | DEPARTMENT DETAIL DAY |
| 3:30 | COOL DOWN | COOL DOWN | COOL DOWN | COOL DOWN | COOL DOWN |

| | |
|------------------------------|---|
| STAND-UP MEETING | 10-15 minute meeting at Public Works to address: heads-up issues; project coordination; & priorities and goals of the day. |
| CHECK EMAIL/WOs | Email and Work Orders (Wos) are to be checked daily. |
| START MORNING ROUNDS | Morning Rounds are to be started each morning between 7:15 and 7:30 |
| MORNING ROUNDS | Tue - Wed morning rounds are to be completed by 8:15 so team projects can get start |
| WEEKLY TEAM MEETING | Weekly team meeting: Weekly tasks, department progress reports, safety meeting, priorities, issues |
| DEPARTMENT DETAIL DAY | Department Detail Days are to: maintain department; catch up from weekend; prepare for weekend; detail department facilities and equipment; & prep for the weeks team projects. |
| LUNCH | Half hour scheduled lunch |
| TEAM PROJECTS | Projects that are more efficient with more than 1 person. Examples: hydrant flushing and testing, street striping, drying bed cleanup & pesticide spraying. |
| COOL DOWN | Wrap up for the day; clean and put away equipment; follow up on email and phone calls; clean and organize vehicle for next work day. |

GRANTS, PLANNING, ECONOMIC DEVELOPMENT & PROJECTS

Water System Improvement (Final Tasks) – Plan to have Scope of Work and Amendment of Varela’s engineering contract ready for March Council.

Welcome Center Project – Presenting outline of project to February Council including (1) aesthetic and stormwater landscape plan for Commercial Avenue, (2) Removal of large panel sign and message center to be replaced by large recreation sign, (3) improvements to breezeway and construction of steel pergola structure, and (4) large kiosk/community board in Mall.

Capital Improvement Plan – The CIP Survey has been closed. Kurt and I will begin drafting plan.

Shoreline Master Plan – Kurt has drafted a Public Participation Plan and Survey. We plan to kick-off the public participation and data gathering part of the plan in April.

General Sewer and Wastewater Facilities Plan (GSWFP) – Dan and Nate, of Varela Engineering, met with the City on 2/9/2022 for about five hours. Kerri and I provided data and discussed strategies for projecting future sewer needs for the city. We also toured all the facilities looking at sewer manholes, lift stations, and the treatment plant. We discussed challenges of our system. The goal is to draft a plan that has realistic projections of our growth and facility needs and how to prioritize those needs.

TIB Warren Street Sidewalk Grant – The City is accepting bids for the project. The bid opening will be virtual at 1:00pm on February 24th. If approved, construction of the project would be in 2022.

This project will provide street and pedestrian facility improvements along Warren Avenue from about Chris Street to the Tennis Courts, including the following:

- Removal of approximately 1670 SY of asphalt pavement.
- Approximately 1,600 LF of new curb & gutter.
- Approximately 580 SY of new sidewalk and 590 SY of cement concrete driveways (separated sidewalk with pedestrian landscape buffer).
- 6 ADA curb ramps and 6 crosswalks
- Approximately 800 SY of bio-infiltration swales.

2022 Chip Seal/Crack Seal Project – The Warren Avenue Seal Coat Project has changed. I’m still waiting on final approval from TIB, but it is expected in 2022 all city streets will be crack sealed and a significant amount chip sealed (see attached plan).

Winter Barn – Met with fabricator for installing side bracing for building. Metal has been ordered. He should be done within the next month to install and weld final bracing. Painting the storage containers will be next.

PUBLIC WORKS

JAN/FEB ACTIVITIES

- ✓ Holiday banners removed
- ✓ Holiday lights removed as snow melts.
- ✓ Thawing meters & hydrants
- ✓ Repair frozen meter
- ✓ Service vehicles and equipment completed for 2022, except large equipment
- ✓ Public Works restroom repair from leaking roof. New sheetrock, paint and sink installed.
- ✓ 2022 project planning
- ✓ First aid cards
- ✓ Purchased steel for Winter Barn
- ✓ Plan for 2022 weed/pest management

FEB/MAR PLANNED ACTIVITIES

- ❖ First Aid Card (David & Ryan)
- ❖ Sign inventory
- ❖ Prune trees in Mall – replace LED bulbs in trees.
- ❖ Install steel bracing on Winter Barn
- ❖ Paint Winter Barn storage containers in preparation for setting roof.
- ❖ Depending on weather start opening restrooms and turning on irrigation.
- ❖ Spring cleanup of landscapes

WATER DEPARTMENT

We had at least one water meter break this winter. With the new system, we were able to alert several homes of leaks during the winter months. Meters actually were read all winter, with only a few instances of failed reads due to snow.

Varela and I met with Ecology regarding water rights. It appears that we have a green light on the requested increase in water rights. We have asked for some relief in fees, and that is being discussed by Ecology as we move forward in the process.

| 1st QUARTER | | | | | | | |
|--|-----|-----|-----|-----|---------|---|---|
| PUBLIC WORKS PERPETUAL CALENDAR | | | | | | % | ✓ |
| JANUARY | WK1 | WK2 | WK3 | WK4 | % | ✓ | |
| Snow Removal | | | | | ONGOING | | |
| Inventory | | | | | | ✓ | |
| Take down holiday lights & banners | | | | | 50 | Waiting for snow | |
| fire extinguisher yearly inspection | | | | | 0 | March | |
| Annual safety review & Update/Safety | | | | | MARCH | | |
| FACILITY MAINTENANCE | | | | | | | |
| City Hall | | | | | | ✓ | |
| Public Works Facilities | | | | | | ✓ | |
| Park Facilities | | | | | | ✓ | |
| Water Facilities | | | | | | ✓ | |
| Sewer Facilities | | | | | | ✓ | |
| SERVICE VEHICLES AND EQUIPMENT | | | | | | | |
| Parks | | | | | | ✓ | |
| Water | | | | | | ✓ | |
| Sewer | | | | | | ✓ | |
| Street | | | | | | ✓ | |
| Schedule Lab Equipment Calibration | | | | | | ✓ | |
| Schedule Lab Accreditation Performance | | | | | | ✓ | |
| FEBRUARY | | | | | | | |
| Snow removal | | | | | ONGOING | | |
| Sign Inspection/Inventory | | | | | 10 | Inventory Started/Inspected on 2023 | |
| Start Pesticide Program | | | | | 25 | Training complete/supplies and product ordered. | |
| Tree Pruning | | | | | 0 | | |
| Playground Safety Inspection | | | | | 0 | Started | |
| Spring Cleanup of landscape beds | | | | | 20 | | |
| FACILITY MAINTENANCE | | | | | | | |
| City Hall | | | | | 0 | | |
| Public Works Facilities | | | | | 0 | | |
| Park Facilities | | | | | 0 | | |
| Water Facilities | | | | | 0 | | |
| Sewer Facilities | | | | | 0 | | |
| SERVICE VEHICLES AND EQUIPMENT | | | | | | | |
| Parks | | | | | 0 | | |
| Water | | | | | 0 | | |
| Sewer | | | | | 0 | | |
| Street | | | | | 0 | | |
| MARCH | | | | | | | |
| Spring Cleanup of landscape beds | | | | | 20 | | |
| Meter Inspection | | | | | 0 | | |
| Street Inspection | | | | | 100 | ✓ | |
| Street Sweeping | | | | | 10 | Ordered Equipment | |
| Manhole Inspection | | | | | 10 | Started | |
| Put Tennis Court Nets Up | | | | | 0 | | |
| Aerate & fertilize lawns | | | | | 0 | | |
| Open park restrooms | | | | | 0 | | |
| Startup irrigation systems | | | | | 0 | | |

| JANUARY | | 2022 WATER PRODUCTION | | | | | | | | | |
|----------------------------|---|-----------------------|--|------------|-----------|---------|-----------------------------|------------|------------|------------|------------------------------|
| | 2018 | 2019 | 2020 | 2021 | 2022 | | 2018 | 2019 | 2020 | 2021 | 2022 |
| Jan | 1,797,800 | 2,121,438 | 2,036,291 | 2,277,596 | 2,673,280 | Jul | 17,454,000 | 18,968,280 | 16,601,532 | 19,584,242 | |
| Feb | 1,552,000 | 2,056,813 | 1,946,743 | 2,057,440 | | Aug | 14,152,900 | 16,600,547 | 16,750,284 | 15,522,640 | |
| Mar | 1,778,900 | 2,260,796 | 2,373,833 | 2,133,860 | | Sep | 10,192,700 | 8,729,598 | 12,227,228 | 11,318,457 | |
| Apr | 2,963,400 | 4,503,629 | 6,608,729 | 6,062,448 | | Oct | 6,663,600 | 4,690,568 | 5,526,800 | 6,718,040 | |
| May | 9,611,300 | 12,892,999 | 10,446,235 | 11,714,756 | | Nov | 2,076,600 | 2,178,552 | 1,961,332 | 2,909,658 | |
| Jun | 13,457,700 | 16,082,186 | 13,249,332 | 15,794,652 | | Dec | 1,867,529 | 1,918,369 | 1,943,276 | 2,196,784 | |
| Year to Date Total Gallons | 2018 | 2019 | 2020 | 2021 | 2022 | | Pump Station #3 | | 2,673,280 | | |
| | 1,797,800 | 2,121,438 | 2,036,291 | 2,277,596 | 2,673,280 | | Pump Station #4 | | - | | |
| Water Quality Testing | | | | | | | | | | | |
| Coliform Test | This is an indicator test for total coliform (good and bad). The presence of coliform in a sample indicates the need for further testing | | | | | | | | | | |
| 12/16/2021 | | 2 Tests | Coliform absent | | | | | | | | |
| Chlorine Monitoring | 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 | | | | | | | | | | |
| 12/1-12/30 | Month Median of 0.27 | Daily samples Mon-Fri | Target Min Chlorine Levels is 0.20 at furthest point in system. Target levels 0.3 - 1.50 (4.0 State MCL) | | | | | | | | |
| Manganese Testing | Historic Highs from old wells 0.2-0.7 & DOH SMCL 0.05 | | | | | | | | | | Next schedule manganese test |
| Location | Date | Most Current | Average | High | Low | Median | Pump station #3 February | | | | |
| Pump Station #3 | 09/10/21 | 0.00010 | 0.00115 | 0.01207 | 0.00010 | 0.00016 | Downtown Pump station - May | | | | |
| Pump Station #4 | 09/10/21 | 0.66800 | 0.12412 | 0.66800 | 0.00037 | 0.09879 | | | | | |

SEWER DEPARTMENT

Lab accreditation and equipment calibration has been scheduled for March. We are surveying manholes for the Sewer Plan and investigating infiltration, especially from transmission mains that are below ground water. The plant has run relatively smoothly this winter.

| City of Pateros Sewer Department | | | | | | | | | |
|---------------------------------------|--|-------------|-----------|------------------------|-------------------------|--|------------------------|-----------|------|
| Permittee: Pateros POTW | | | | | Permit #: WA0020559 | | Operator: Mike Lambert | | |
| 2022 Wastewater Processed in Gallons | | | | | | | | | |
| | 2019 | 2020 | 2021 | 2022 | | 2019 | 2020 | 2021 | 2022 |
| January | 1,267,300 | 1,458,000 | 1,549,650 | 1,619,500 | July | 1,580,000 | 1,663,000 | 1,769,300 | |
| February | 1,136,000 | 1,342,700 | 1,444,200 | | August | 1,415,100 | 1,494,200 | 1,674,400 | |
| March | 1,284,500 | 1,299,500 | 1,202,300 | | September | 1,496,300 | 1,457,100 | 1,498,100 | |
| April | 1,741,500 | 1,239,700 | 1,272,000 | | October | 1,611,290 | 1,419,900 | 1,478,900 | |
| May | 1,427,400 | 1,489,000 | 1,611,900 | | November | 1,442,200 | 1,311,700 | 1,397,500 | |
| June | 1,448,900 | 1,488,700 | 1,771,300 | | December | 1,433,100 | 1,227,900 | 1,627,900 | |
| Year To Date Totals Gallons Processed | | 2019 | 2020 | 2021 | 2022 | % of change YTD compared to 2019 | | 28% | |
| | | 1,267,300 | 1,458,000 | 1,549,650 | 1,619,500 | | | | |
| Wastewater Effluent Monitoring | | | | | | | | | |
| Total BOD 5-day | Organic Loading Rates (Permit Range $\geq 85\%$) | | | | Fecal Coliform Bacteria | (Permit Range Weekly ≤ 100 ; Monthly ≤ 200) | | | |
| Weekly Test | 4 - Tests | 99% removal | | Monthly Geometric Mean | 4-tests | 7.7 | | | |
| TSS | Total Suspended Solids, non organics (Permit Range $\geq 85\%$) | | | | Disolved Oxygen | Daily - Report Only | | | |
| Weekly Test | 4 - Tests | 95% removal | | Daily Test | Mon-Fri | 7.6 Max | | | |
| pH | (Daily min/max permit range equal/between pH 6 and pH 9) | | | | Temperature | Daily - Report Only Average Degree Celcius | | | |
| Weekly Minimum | Mon-Fri | 6.6 | | Daily Test | Mon-Fri | 11 | | | |
| Weekly Maximum | Mon-Fri | 7.3 | | Amonia (Report only) | 1 sample | 1/19/2022 | 0.07 | | |

STREET DEPARTMENT

2022 is shaping up to be a very busy year for the Street Department. Jonathan at TIB has been helping me get the most out of our TIB chip seal funds. We had planned to a very small segment of Warren from Dawson to Watson Draw and Augusta Street this year. However, if we contract with the County, I can get considerably more done, as shown in the map below. It will require a little more work from our crew prepping the roads. We had planned on purchasing a thumb for the backhoe but decided to postpone and purchase a push broom to help us get ready for the planned street projects. We are also purchasing a curb brush to help us keep the street gutters clean.

The Warren Avenue sidewalk project from about Chris Street to the Tennis Courts is also planned for 2022. Bids for the project are due, electronically, on February 24th.



PARKS & RECREATION

🌿 Dalton passed his pesticide license test first time. Excellent job. We have been working on a pesticide plan for this year. The City has over eight acres of parks and miles of right-of-way (ROW). Pesticide-use is just one of the tools we use in maintaining landscapes and ROWs.

Our two main goals:

- Use as few pesticides as possible. *We don't spray on schedule; we spray as required. For example, we only spray for dandelions in the parks when the yellow flowers exceed the green and begin doing damage to the quality of the turf. We don't spray, just to spray.*
- Use the safest pesticides as possible. *We adjust our products yearly. We are required to maintain Continuing Education Credits and keep current on product use. We don't want to expose ourselves, our community, our pets, and our environment to unnecessary products. We always follow mixing and safety instructions.*