

**DEPARTMENT OF PUBLIC WORKS**

2017 Annual Report

**I. OVERVIEW**

In 2017, the Public Works Department prepared 112 City Council agenda items and staff attended meetings related to the Palouse Basin Aquifer Committee (PBAC), and Palouse Regional Transportation Planning Organization (PRTPO), as well as continued to track the Total Maximum Daily Load (TMDL) development process for the South Fork of the Palouse River.

**II. DIVISIONAL ACTIVITIES**

A. Engineering Division

In 2017, engineering services were provided for the construction of the following major projects:

<u>Project:</u>	<u>Valuation:</u>
Arterial Streets Resurfacing 2017 .....	\$ 1,485,726.37
Fuel Island Relocation .....	\$ 965,677.03
N. Grand Water Line Replacement.....	\$ 852,498.65
Accelerated Streets Resurfacing 2017 .....	\$ 785,106.28
WWTP Air Gap Pump Station (ongoing).....	\$ 315,944.15
WWTP Influent Pump Replacement (ongoing).....	\$ 302,594.60
Sanitary Sewer & Stormwater Improvements 2017 .....	\$ 246,424.06
City Hall Boiler Replacement.....	\$ 179,569.00
Sidewalks 2017 .....	\$ 123,223.80
Pullman M&O Roofing Replacement 2017.....	\$ 115,287.00
City Hall Masonry & Garage Level Painting .....	\$ 108,105.00
Pavement Repair 2017 .....	\$ 63,236.15
	<u>\$ 5,543,392.09</u>

Inspection of the construction of the public works improvements for the following developments:

- Bestebreur Tri-Plex (ongoing) – SE Barnes Court
- Birch Hills Apartments Ph. 2 – Westwood Drive
- Bishop Professional Building – Bishop Blvd.
- Cougar Ridge Apartments waterline
- Coulter Hanger
- Courtyard by Marriott (completed) – NE North Fairway Drive
- Evolve on Main – Main Street
- Golden Hills Apartments West (ongoing) – SE Golden Hills Drive
- Hospital Parking Lots
- Kamiak Elementary School – Terre View Drive

Pullman High School remodel (completed) – NW Greyhound Way  
Pullman Moscow Regional Airport parking lot  
Riverwalk Residences (completed) – NE Maple Street  
SEL Industrial Building (ongoing) – 2454 NE Andrus Dr.  
SEL zBeta Building (ongoing) – 1830 NE Schweitzer Drive  
Starbucks (completed) – NE Stadium Way  
Sundance South Early Grading (subd.)  
The Flats Apartments (ongoing) – NE Terre View Drive  
Valley Road Apartments  
Barclay Estate No. 3 (subd.) – Sunnyside Hill  
Paradise Hills No. 8 (subd.) – Military Hill  
Sunnyside Heights No. 10 (subd.) – Sunnyside Hill  
Walmart Retaining Wall Repairs  
Whispering Hills West 2.0 No. 2 (subd.) – Sunnyside Hill

Other significant activities include:

- Citywide Traffic Signal Safety Study
- Coordination with WSDOT on SR270 resurfacing and ADA Ramps
- Design of Accelerated Streets Resurfacing 2018
- Design of Autumn Summer Waterline Replacement
- Design of Bishop Boulevard Bridges Deck Resurfacing
- Design of Grand Avenue/Center Street Traffic Signal
- Design of M&O Break Building Roof Replacement
- Design of M&O yard expansion
- Design of Pullman Pedestrian Signal Improvements
- Design of Sanitary Sewer Rehab 2018
- Design of Sidewalks 2018
- Design of Stormwater Improvements 2018
- Design of Sunnyside ADA Improvements
- Design of Welcome Wayside
- Design of WWTP Headworks
- Design of WWTP UV Disinfection & Misc. Improvements
- Negotiation for land for a water tank and booster pump station in conjunction with Trinitas student housing developer.
- RFP development and selection of electronic permit software

## B. Protective Inspections Division

Activity in the Protective Inspections division was mixed:

- Inspections were down in 2017 with 3,509 inspections made compared to 3,673 in 2016, a decrease of roughly 4.4%.
- The number of permits issued in 2017 was up slightly from 686 permits in 2016 and 701 permits issued in 2017, an increase of approximately 2.2%. However, the overall valuation of work permitted decreased from

\$170,774,463 and \$1,321,142 in fees collected in 2016 compared to \$128,245,042 in valuation and \$878,216 in fees collected in 2017, a 24.9% reduction in valuation and 33.5% reduction in fees collected.

- The total valuation of work permitted for WSU in 2016 was \$63,243,014, which accounted for 37.0% of the total valuation for the year. In 2017, we saw a decrease in WSU building, with an increase in private building throughout the City. The total valuation for WSU projects in 2017 was \$10,705,411, which accounted for 8.3% of the total permitted work.
- 15 housing life/safety complaints were received; 7 resolved, 7 in progress, 1 closed for non-responsive complainant.

Major building activity included the following:

- WSU Building Permits (plan review and inspections), including:
  - 700 NE Thatuna Street - Chinook Student Center (completion)
  - 1600 NE Wilson Road - WSU Museum of Art (completion)
  - 850 NE D Street – WSU Soccer Fields (renovations) (completion)
  - 405 SE Spokane Street - Elson S. Floyd Multicultural Center (completion)
  - 1270 SE Washington Street - Digital Classroom (completion)
  - 1470 E College Avenue – Troy Hall Renovation (completion)
  - 2035 NE Ferdinand Lane - Ferdinand’s Remodel (completion)
  - WSU Annual Permit
- Pullman High School - (completion)
- Pullman-Moscow Regional Airport runway re-alignment grading - ongoing
- SEL Z beta building – 1830 NE Schweitzer Drive (ongoing)
- SEL Industrial Building – 2454 NE Andrus Drive (ongoing)
- Courtyard by Marriott – 1295 NE North Fairway Drive (completion)
- Whispering Hills Apartments West - 635 SW Golden Hills Drive (completion)
- Birch Hills Apartments Phase II – 2200 NE Westwood Drive
- Kamiak Elementary School – 1400 NW Terre View Drive
- Evolve on Main – 405-465 E Main Street
- Delta Gamma Sorority addition – 715 NE Linden Street
- Medical Office Building – 650 SE Bishop Boulevard
- Walmart Retaining Wall – 1690 SE Harvest Drive
- Permits were issued for:
  - 52 new single family homes
  - 5 townhouse building
  - 1 duplex
  - 14 multi-unit apartment buildings, for 158 new units
  - 11 commercial structures
  - 1 new school
  - 257 building remodels and additions
  - 159 for mechanical/plumbing work
  - 19 signs

- 14 demolitions
- 19 WSU
- 149 other

### C. Stormwater Services Division

2017 saw successful implementation of the City's Stormwater Management Program. Notable activities included:

#### **General Program Administration (including S5.A. and S9)**

- Updated the City's Stormwater Management Program (SWMP) Plan by March 31.
- Completed Phase II Municipal Stormwater Permit Annual Report by March 31.
- Represented Pullman at the *Stormwater Management Manual for Eastern Washington* (SWMMEW) update meetings (5/22, 7/24, 8/17, 9/28, 10/05, 10/11, 11/16, 12/05, 12/12).
- Represented Pullman at the Eastern Washington Stormwater Group (EWSWG) regional coordination meetings (3/10, 5/16, 7/20, 8/24, 10/19, 11/30).
- Coordination w/ Ecology (Permit Implementation) – On going.
  - Ecology permit manager site visit (9/7).
- Coordination w/ WSU (Secondary Permittee) – On going.
- Coordinated City Employee Goal Setting for 2017.
- Staff Training:
  - Municipal SW Permit (5/05)
  - Inspector Liability & Risk Management (11/15)

#### **Public Education & Outreach (S5.B.1.)**

- Pursued education and outreach efforts via website, news media, radio PSAs and personal interaction with customers.
- Whitman County Realtor's Association meeting on 3/7 (30 adults).
- Delivered SW LID presentation at MuniCon on 5/17 (200 adults).
- Negotiated and executed three contracts with PCEI for Stormwater Education (5<sup>th</sup> & 8<sup>th</sup> Grade), Adopt-a-Stream and Annual Stream Clean-up.
- Negotiated and executed two contracts with Palouse Conservation District for Stormwater Education (3<sup>rd</sup> Grade Water-on-Wheels & Drain Rangers program development).
- Stormwater K-12 Education:
  - Partnered with Pullman School District and private schools to integrate stormwater concepts into the 3<sup>rd</sup>, 5<sup>th</sup> and 8<sup>th</sup> grade science curriculum, totaling 43 lessons delivered to 1,063 students.
    - 2/9 - 8<sup>th</sup> Grade (7 lessons, 172 students)
    - 5/18, 5/24, 5/25 – 5<sup>th</sup> Grade (9 lessons, 222 students)

- Fall 2017 – 3<sup>rd</sup> Grade Water on Wheels (27 lessons, 669 students)
  - Sponsored one Pullman High School Senior intern (Spring/Summer 2017).
  - 2/15 – Pullman High School Career Day (46 students)
  - 6/8 – 3<sup>rd</sup> Grade Jefferson Elementary (76 students)
  - Drain Ranger program development (Fall 2017)
- Jefferson Elementary Green Team support (Fall 2017)Stormwater Post-Secondary Education:
  - 2/28 - UI CNR (10 students)
  - Mentored 1 WSU Senior Engineering Design project (Fall 2017)
  - Sponsored WSU Landscape Architecture Class Project (Fall 2017)
    - DFC Awareness (14 students)
  - Coordinated Missouri Flat Creek Riparian Restoration: WSU College of Agricultural, Human and Natural Resource Sciences (400 students).
- Successfully implemented the Pullman Adopt-A-Stream Program. Stream Stewards were active on 13 of the 16 available segments. Stewards collectively participated in a total of 35 clean-up events throughout the year and planted 130 native riparian plants. Stormwater Services staff responded to 11 Steward requests for trash removal.
- Sponsored the 13<sup>th</sup> Annual Pullman Stream Clean-up event on April 22<sup>nd</sup>. Over 500 volunteers spent more than 1,500 hours cleaning Pullman streams by removing an estimated 6 cubic yards of litter and recyclables from 4.4 miles of stream.

#### **Public Involvement (S5.B.2.)**

- Posted updated Stormwater Management Program (SWMP) Plan on city website.
- Posted Phase II Municipal SW Permit 2015 Annual Report on city website.
- Prepared Council meeting materials for various items
- Responded to Public Records Requests.

#### **Illicit Discharge Detection & Elimination (S5.B.3. & G3)**

- Responded to, investigated, resolved and reported to DOE two formal IDDE complaints.
- Responded to, investigated and resolved multiple other, non-IDDE-related complaints including pet waste, solid waste, drainage, etc.

#### **Construction Site Runoff Control (S5.B.4.)**

- May 2<sup>nd</sup> & 3<sup>rd</sup> – Sponsored CESCL certification class for staff (8) and local construction industry professionals (14). Invitations sent to 89 local construction industry professionals.
- Issued 97 City of Pullman Stormwater Permits for new and re-development projects.

- Reviewed 34 Site Plans and Stormwater Pollution Prevention Plans (SWPPPs) for large grading and new construction projects.
- Reviewed 83 Erosion and Sediment Control (ESC) plans for projects of duplex size or smaller (mostly single-family residential homes).
- Conducted 140 documented construction-related erosion control inspections.
- Continued monitoring of an Inter-Agency agreement with WSU for regulation of Construction and Post-Construction activities.
- Code Enforcement Actions: 12 Total

**Post-Construction Stormwater Management (S5.B.5.)**

- Reviewed 26 drainage reports and civil drawings of post-construction stormwater BMPs included in site plans for newly proposed development.
- Inspected 28 post-construction BMPs at 10 sites, during installation.
- Inspected 7 post-construction BMPs after project completion (within 5 years).
- Code Enforcement Action: 3 Total
  - Technical assistance also provided in addition to formal action.
- Received three stormwater facility O&M plans.
- Coordinated stormwater treatment BMP training for local design professionals (1/17).

**Municipal Operations and Maintenance (S5.B.6.)**

- Number of City Stormwater Facilities Inspected (excluding catch basins) – 102
  - Detention Ponds – 88
  - Treatment – 14
- Spent 390 hours performing maintenance on 41 City detention ponds and stormwater treatment facilities (Leland Contract).

**Compliance with TMDLs (S7)**

- Coordinated with Ecology’s TMDL Lead on TMDL implementation including but not limited to the following:
  - Submitted written IDDE focus area plan to Ecology.
  - Submitted Four Year Action Plan to Ecology for outfalls that have not achieved 40% reduction toward the WLA targets.
  - Completed Ecology-approved QAPP for MFC & SFPR FCB TMDL WLA Outfall Monitoring.
- Coordinated with WSU-EHS on TMDL implementation.
- Continued implementation of pet waste management program, including:
  - Pet waste education/outreach radio PSAs.
  - Inspected and performed maintenance on 90 pet waste stations and 25 waste receptacles.

- Continued Dry Fork Creek (DFC) Fecal Coliform Bacteria monitoring to assess progress toward TMDL waste load allocation reduction targets (One sample taken at each of three sites, twice per month).
- Began TMDL WLA outfall monitoring on five outfalls on both SFPR (3) and MFC (2).
- Repaired and/or replaced 1,737 lineal feet of public sanitary sewer lines and six manholes (suspected fecal coliform bacteria sources) in three locations. Total cost: \$276,930.
- Amount of sanitary sewer pipe repaired/replaced by drainage basin:
  - Dry Fork Creek - 1,737 LF

**Monitoring and Assessment (S8)**

- Represented Pullman at Effectiveness Monitoring meetings.

**D. Transit Division**

In response to a long-standing community request, Pullman Transit initiated Sunday service in August of 2017. This service expansion was grant-funded, and includes both fixed routes and Dial-A-Ride vans operating from 10:00am to 5:30pm.

Prepared request for proposals and selected vendor for AVL/GPS Upgrade on Transit vehicles.

**Fixed-Route:**

Total ridership on the Fixed-Route was 1,348,276. This is an increase of 28,495, or 2.16%, from 2016.

Fixed-Route ridership for 2017 compared to 2016 is as follows:

	<b>Jan – May</b>	<b>June – Aug</b>	<b>Sept – Dec</b>	<b>TOTAL</b>
<b>2016</b>	630,238	118,526	571,017	1,319,781
<b>2017</b>	619,419	145,419	583,338	1,348,276

**Dial-A-Ride:**

Ridership for Dial-A-Ride service was 20,419. This is a decrease of 1,842 from 2016, but still our third consecutive year carrying over 20,000 riders.

Dial-A-Ride ridership for 2017 compared to 2016 is as follows:

	<b>Jan - May</b>	<b>June – Aug</b>	<b>Sept – Dec</b>	<b>TOTAL</b>
<b>2016</b>	9,116	5,056	7,107	21,279
<b>2017</b>	8,847	5,057	6,515	20,419

Transit – Operating Statistics:

Population .....	32,650
Fixed-Route	
Passenger Service Hours .....	29,816
Passenger Service Miles .....	354,149
Passenger Trips .....	1,348,276
Employees (FTEs) .....	24.3
Passenger Trips/Service Hour .....	45.2
Passenger Trips/Service Mile .....	3.8
Service Hours/Employee .....	1,226
Demand-Response (Dial-A-Ride)	
Passenger Service Hours .....	7,548
Passenger Service Miles .....	64,846
Passenger Trips .....	20,419
Employees (FTEs) .....	6.1
Passenger Trips/Service Hour .....	2.7
Passenger Trips/Service Mile .....	0.31
Service Hours/Employee .....	1,237
Fixed-Route	
Operating Cost .....	\$ 3,321,420
Operating Cost/Vehicle Service Hour .....	\$ 111.39
Operating Cost/Passenger Trip .....	\$ 2.46
Farebox Revenues .....	\$ 2,334,723
Farebox Recovery Ratio .....	70%
Demand-Response (Dial-A-Ride)	
Operating Cost .....	\$ 830,355
Operating Cost/Vehicle Service Hour .....	\$ 110.00
Operating Cost/Passenger Trip .....	\$ 40.66
Farebox Revenues .....	\$ 6,362
Farebox Recovery Ratio .....	0.01%

Fixed route recovery ratio includes WSU, Spokane Falls Community College (SFCC) and Pullman School District (PSD) contracts.

E. Maintenance & Operations Division

Stormwater:

- Crews spent 1,165 hours sweeping city streets.
- Labor hours expended on storm drain maintenance: 1,168.75.



Streets:

- 1,432 labor hours were spent painting and/or maintaining the paint on street centerlines, fog lines, curbs, crosswalks and bike lines.
- Crews spent 1,537.50 labor hours grading alleys as well as identifying and filling potholes in city streets.
- Snow and ice control operations involved 3,105.25 labor hours.
- Crews spent 147 hours inventorying street lights, maintaining traffic signals and providing traffic control. An additional 174 hours were spent completing the LED street light conversion project.
- 116 sign work orders were completed for new installations, vandalism and/or damage repairs. Labor hours related to sign work totaled 1,050.50.

Water:

- M&O crews spent 3,347.25 labor hours completing a total of 995 work orders for water-related assets.
- The water asset related work order summary follows:

	# of work orders	
	2016	2017
○ Backflow Assemblies		
▪ Repair	12	4
○ Hydrant Meters		
▪ Tracking hydrant meter water use	35	36
○ Operations Facilities		
▪ Booster stations, wells, and reservoirs miscellaneous and preventive maintenance	314	286
○ Water Meters		
▪ New installations	80	70
▪ Age related meter & register replacements	257	278
▪ Register replacements only	6	0
▪ Replace radio read transmitters	56	63
▪ Large meter tests	133	108
▪ Miscellaneous activities	75	68
○ Water Service Lines		
▪ Repairs	23	4
▪ Replacements	19	3
▪ Stub ins	6	39
▪ Removed	1	0
○ Fire Hydrants		
▪ Repairs	23	3
▪ Replacement	1	3
▪ Storz fitting installations	0	5
▪ General maintenance	0	0
○ Water Mains		
▪ Repaired broken mains (details below)	8	6
▪ General maintenance and/or replaced	0	1

- Flush water mains 45 19

<u>MAIN BREAK VICINITY</u>	<u>PIPE SIZE &amp; TYPE</u>	<u>DATE</u>
400 SE Dilke Street	6" cast iron	01/18/17
1195 NE Hickman Court	12" PVC	03/20/17
100 SW Center Street	6" cast iron	04/03/17
200 SE Daniel Street	2" PVC	08/01/17
212 NW Sunrise Drive	6" DIP	08/14/17
345 NW Robert Street	6" cast iron	10/05/17

- 206.25 hours were spent maintaining city backflow assemblies, testing city assemblies, and new installations.
- 892 hours were spent implementing Pullman's cross-connection control program.
- As part of the on-going backflow testing program, 1,983 backflow tests were performed on city, commercial, and private residential devices. City personnel performed 196 tests while outside contractors performed the other 1,787 tests.
- Crews spent 4,782 labor hours maintaining city water tanks, wells, reservoirs, booster stations, and their grounds.
- The number of routine water samples taken was 469. There were 46 new construction samples taken, and 37 investigation samples taken. 342.75 labor hours were spent taking routine, new construction, and investigative samples.
- M&O staff performed 160 initial and 90 final toilet replacement inspections. Customers received a total of \$9,825 in low-flow toilet rebates.
- M&O staff performed 6 irrigated lawn removal initial inspections and 3 final inspections for a total of \$450 in rebate checks disbursed to customers.
- The existing 108.56 miles of water mains were increased by 1.47 miles to 110.03 miles.

Water Operations Statistics:

Water pumped.....	930,455,000 gallons
Water metered (sold).....	896,147,000 gallons
Water accounted for (not sold) .....	7,011,737 gallons
Total accounted for .....	903,158,737 gallons
Percentage of water accounted for .....	97.07%
Daily average .....	2,549,000 gallons
Average daily usage per capita (based on 27,476 population)	92.8 gallons
High day usage – August 11 .....	5,931,000 gallons
Low day usage – December 25 .....	1,082,000 gallons
Total number of active services .....	5,403 (+50)

Number of services by user code:

01 Single-Family.....	3,773
02 Duplex .....	501
03 Multi-Family .....	443
04 Business/Commercial .....	388
05 Group .....	41
06 Schools.....	13
07 Irrigation .....	200

08 Mobile Home Parks ..... 44

Total chlorine used.....	116,500 pounds (salt)
Chlorine cost.....	\$22,694
Total hydrofluosilicic acid used.....	14,850 pounds
Fluoride cost.....	\$12,464
Total chemical cost.....	\$35,157
	\$0.0378/kgal
Electrical consumption cost.....	\$244,117
	\$0.262/kgal

Sewer System:

- Crews spent 2,793.75 labor hours completing 676 sewer asset-related work orders. Maintenance was performed on just over 106,872 lineal feet of sewer main lines. 99 field inspection tests were performed on sewer lift stations.
- Sewer dye tests were performed on 50 new or altered connections to sewer main lines.
- The existing 95.60 miles of sewer main lines was increased by 0.26 miles to 95.86 miles.

Emergency Call outs:

- 1,116 underground utility locate requests were completed, which consumed 1,476.75 labor hours, compared to 1,140 locate requests and 1,620.25 labor hours in 2016.
- Twelve M&O employees participated in the Weekend/Holiday On-Call Program for a total of 3,701 on-call hours.
- 73 of the 254 total call outs were handled by on-call personnel. 67 call outs were not handled by on-call personnel as the call outs occurred when no one was scheduled to be on call; that is typically 7:30 am Monday thru 4:00 pm Friday. Nine call outs were a result of on-call personnel calling out other maintenance personnel for additional assistance. The other 105 call outs were during on-call times, but were handled by personnel not on call.
- On-call maintenance personnel responded to 26 of 98 street related emergency call outs which included traffic signal issues, snow and ice related problems, or signage issues. Two call outs resulted from on call personnel calling for additional assistance. 51 call outs were handled during on-call times, but were handled by personnel not on call. The other 19 call outs occurred during the work week when no one is scheduled to be on call.
- On-call maintenance personnel responded to 24 of the 34 water-related emergency call outs which included problems such as water main breaks, service line leaks, and water meter related issues. Three call outs occurred during the work week when no one is scheduled to be on call. Two call outs resulted from on call personnel calling for additional assistance. Five call outs were handled during on-call times, but were handled by personnel not on call.
- On-call maintenance personnel responded to nine of the 34 waste water and sanitary sewer-related emergency call outs. 13 call outs occurred during the work week when no one is scheduled to be on call. Four call outs resulted from on-call personnel calling

for additional assistance. Eight call outs were handled during an on-call time, but were handled by personnel not on call.

- The auto-dialer telemetry system requires response from specifically trained personnel. The system called out 77 times outside of normal working hours. On call personnel handled 14 of those calls; 27 calls occurred when no one was on call, 35 were during on-call times, but were handled by personnel not on call. One call out resulted from on-call personnel calling for additional assistance.
- There were 11 stormwater-related call outs. Five call outs occurred during the work week when no one is scheduled to be on call. Six call outs were handled during an on-call time, but were handled by personnel not on call.

Equipment Rental:

- Performed preventive maintenance (service, inspections and repairs) on:
  - Ambulance - 6 Total
  - Dial-A-Ride Vans - 6 Total
  - Fire Trailers - 2 Total
  - Fire Trucks - 6 Total
  - Light Vehicles - 54 Total
  - Mini Buses - 3 Total
  - Police Cars - 14 Total
  - Trailers and Attachments - 35 Total
  - Transit Buses - 22 Total
  - Trucks 1-Ton and Over - 22 Total
  - Various Equipment - 28 Total
- Processed 2,716 equipment work orders for vehicle service and repairs.
- The following vehicles were compared to bid specifications and prepared for service; including installation of safety equipment, emblems, and radio equipment:
  - 16-045 2016 Jeep Patriot La Wagon - Protective Inspections
  - 16-452 2016 Spartan Fire Truck - Fire
  - 17-223 2017 Kubota MX5200HST Tractor With Loader - Public Services/Parks
  - 17-315 2017 Gillig Bus - Transit
  - 17-316 2017 Gillig Bus - Transit
  - 17-403 2017 Ford C-Max - Maintenance & Operations
  - 18-138 2018 Ford Edge - Utility/Stormwater

Wastewater Treatment Plant

Wastewater Statistics:

Total flow treated (effluent).....	1,021.9 million gallons
Maximum daily flow – Feb. 10.....	9.6 million gallons
Minimum daily flow – Nov. 28 .....	1.5 million gallons
Maximum monthly flow – February.....	139.50 million gallons
Minimum monthly flow – July .....	59.9 million gallons

Average daily flow.....	2.79 million gallons
Average summer flow (May-August).....	2.17 million gallons per day (mgd)
Average winter flow (September-April).....	3.16 mgd
Design flow.....	4.3 mgd
Hydraulic capacity .....	13.0 mgd
Plant capacity .....	8.6 mgd/winter peak

- Removed 97.6% of the total suspended solids and 96.5% of the organic contaminants before discharge to the South Fork Palouse River. The City’s NPDES permit requires 85% removal of these pollutants.
- The amount of Class B bio-solids produced and applied on local farm ground was 459.0 dry tons versus 445.0 dry tons in 2016.
- Three groups have participated in plant tours, versus four groups in 2016.

Major Projects Completed:

- Drained and cleaned one aeration basin, two secondary clarifiers, and one primary clarifier.
- Whole Effluent Toxicity and Priority Pollutant sampling and analysis.
- Sampled and analyzed PCBs from the plant influent and effluent.

Major Operating Expenses:

- Electricity and natural gas: \$280,839  
(up \$10,594 from \$270,245 in 2016)
- Nine tons of chlorine used in disinfection process: \$8,046
- Five tons of sulfur dioxide used in the disinfection process: \$6,360
- 179 bags (55#/bag) of polymer used in solids processing: \$23,153

Discharge Permit Violations:

- January
  - Dichlorobromomethane (DCBM) (mg/L) Exceeded Monthly Average.
- February
  - DCBM (mg/L) Daily Maximum and Monthly Average.
  - Influent Flow exceeded the design limit for the plant.
- March
  - By-pass pumping of the effluent for flooding concerns.
  - pH exceeded the lower limit for the effluent.
  - DCBM (mg/L) Exceeded Monthly Average.
  - Influent Flow exceeded the design limit for the plant.
- May
  - DCBM (mg/L) Exceeded Monthly Average.
- July
  - DCBM (mg/L) Daily Maximum and Monthly Average.
  - Exceeded Weekly mean for Fecal Coliform.
- August
  - DCBM (mg/L) Daily Maximum and Monthly Average.

- September
  - DCBM (mg/L) Daily Maximum and Monthly Average.
- October
  - PCB Exceeded the Daily Maximum Concentration
- December
  - Exceed DL for Daily Influent Flow.

Special Projects

- Maintenance and Operations crews help with or perform multiple special projects each year.
  - 83 labor hours were spent assisting with Lentil Festival.
  - 566.75 labor hours were spent conducting the annual leaf collection program during November.
  - Each year M&O crews assist the Wastewater Treatment plant personnel with the Biosolids removal project, 331.25 labor hours were spent completing this task.

F. Government Buildings

Significant activities performed by Government Buildings in addition to ongoing custodial and routine maintenance include:

- Fire Station 1 – ceiling bay painting
- Police Department – new stair treads
- Fire Station #2 – FRP installed on bay walls
- City Hall – HVAC duct cleaning
- Pioneer Center – replaced rotting fascia
- Aquatic Center – replaced door closers for ADA improvements
- Library – installed new HVAC control system
- City Hall – new boilers installed