



PUBLIC WORKS

FY21 Budget Presentation

July 22, 2020



**Public
Works
Director**

Streets

Admin.

Cemetery

Utilities

**Streets
Maint.**

Comm.

**Storm
Water**

**Signals,
Street Lights
& Comm.
Shop**

Safety

**Waste
Water**

**Traffic
Services**

Water

FY20 Accomplishments

- Strengthened relationships between Public Works divisions around a common mission
- Collaborated with other departments to improve delivery of service
- Secured a \$13M BUILD Grant to help accommodate future growth in Missoula
- Responded to a global pandemic with professionalism and creativity
- Provided responsive customer service, fiscal responsibility, and a commitment to employee safety and public health



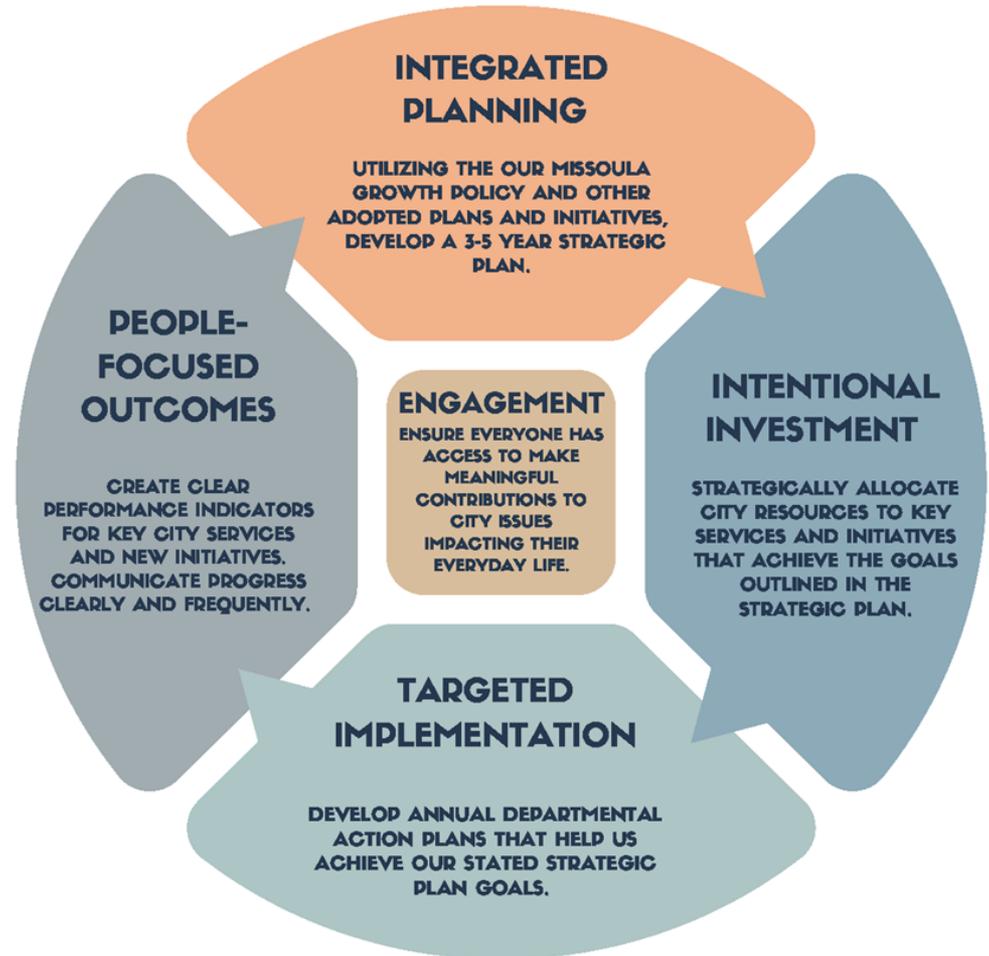
FY20 Accomplishments

- Updated our Customer Information System (CIS) to allow combined billing of all utilities (water and storm water completed in 2020, wastewater in 2021)
- Started the process for a Public Works Facility Plan to address operational and maintenance space needs
- Created a Public Works Manual to improve predictability and process (now out in draft form)
- Worked on transition planning, recruitment, and retention of key staff



FY21 Goals

- Value for our customers (Missoula Residents)
- System maintenance
- Essential services
- Customer service
- Recruit and retain talent
- Strategic investment
- Transportation safety & mobility
- Organizational excellence
- Reliability and resiliency
- Equity and sustainability





ROAD DISTRICT #1

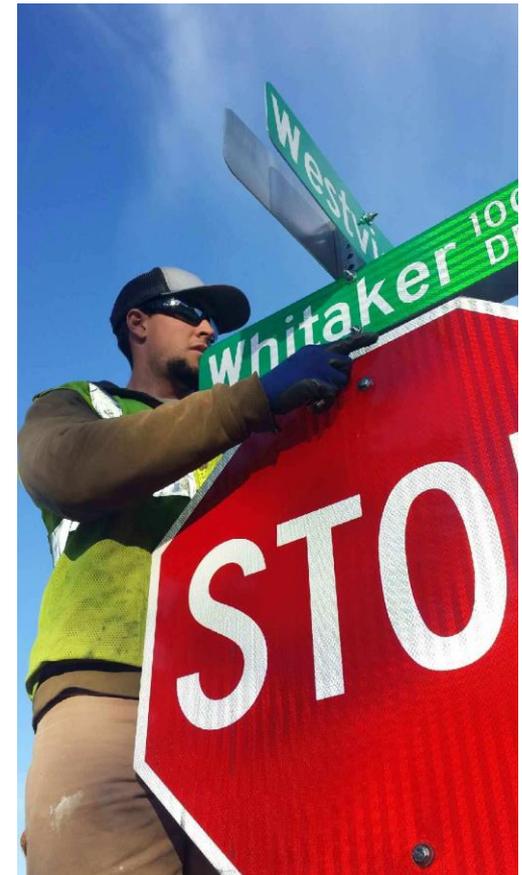


TRAFFIC SERVICES

Fabricates, repairs, and replaces various street signs and provides striping and other pavement marking services on Missoula streets.

FY20 Accomplishments

- Received zero complaints due to improved snow and ice removal procedures
- Completed the Central Business District sidewalk grinding with no FY20 claims
- Updated approx. \$15K of old regulatory signs to bring them to current standards
- Secured new modernized equipment and additional personnel
- Installed additional square feet of durable markings throughout the City and MDT routes
- Applied approx. 4,000 gallons of highway paint throughout the City, including approx. 6.5 miles of bike lanes and new pedestrian features further implementing the Complete Streets Policy
- Added 13 ADA parking spots in the Central Business District completing a 4-year agreement in 3-years which brought the City up to Public Rights-of-Way Accessibility Guidelines standards



FY21 Goals

- Implement low-cost methods for functional and safe multi-modal transportation
- Develop and implement the Traffic Control Administrative Rule to reduce crashes at uncontrolled intersections
- Expand snow responsibilities on shared use paths and bike lanes
- Install durable marking sharrows on bike routes for clarify and safety
- Paint yellow curb in problematic high-density neighborhoods



FY21 Goals

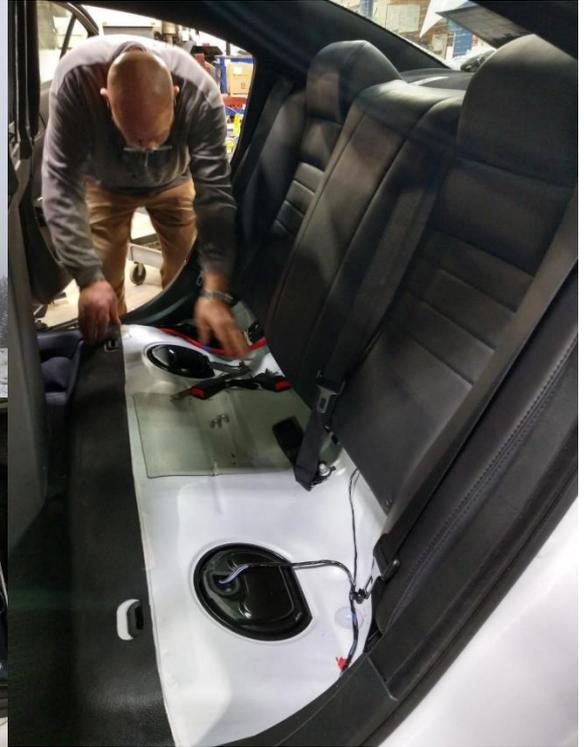
- Add additional miles of bike lanes to comply with the Complete Streets Policy
- Elevate our traffic data collection operations to recognize traffic pattern issues
- Provide excellent customer service
- Establish recruitment and retention processes
- Continue to adhere to fiscally responsible standards



FY20 Greenway & Complete Streets

- England, Great Northern, Expressway, Scott Street, Mount Avenue Bike Lanes
 - Paint materials - \$23,086
- Franklin Greenway
 - Paint, signs, delineator materials - \$3,500
 - Flower pots - \$720
- 5th & 6th Bike Lanes
 - Paint and initial striping - \$5,968
 - Radar detection signals - \$27,286
 - Striping revisions - \$4,263
 - Spring striping refresh - \$2,000
- Broadway & Owen
 - RRFB's and trailer fabrication - \$5,341





SIGNALS & COMM. SHOP

Maintains traffic signals and City-owned streets lights and installs and vehicle communication systems for other City departments.

FY20 Accomplishments

- Upgraded 70 City-owned street lights from high-pressure sodium to LED lighting
- Installed new PD equipment to utilize three Missoula County communication sites with Emergency CIP funding
- Stripped and installed new equipment in eight new police cars and three patrol motorcycles
- Installed two-way radios in new streets and water division vehicles, as well as new meter reading equipment
- Installed RRFBs at 3rd & Hiberta and Broadway & Owen to address pedestrian safety concerns
- Installed two radar feedback signs to slow speeds
- Installed radar detection at multiple City traffic signals
- Upgraded the wireless traffic signal communication system to improve reliability



FY21 Goals

- Maintain and test 11 city-owned traffic signals
- Maintain and test 62 MDT-owned traffic signals
- Program, maintain, and test 29 school flashers (multi-jurisdiction)
- Strip and install six police patrol cars
- Strip and install three police motorcycles
- Strip and install five detective vehicles
- Install temporary RRFBs on Russell St. at the YMCA to improve pedestrian safety



FY21 Goals

- Upgrade 74 City-owned HID street lighting to LEDs
- Hire and train additional FTE (approved in FY20)
- Continue upgrading detection at City-owned traffic signals to radar detection (for multi-modal users)
- Install 3 additional RRFBs
- Provide excellent customer service
- Establish recruitment and retention processes
- Continue to adhere to fiscally responsible standards



Capital Improvement Project

Public Safety & Public Works Communications Infrastructure Replacement - \$275,000

- Replace:
 - Two existing microwave hops
 - Ageless oscillators
 - Four microwave muxes
- Install 48vdc power systems
- Failure would result in loss of police, fire, and public works communications
- Strategic Goal:
 - Replace aging DOS-based equipment with modern, resilient equipment to ensure future maintainability and reliability





STREETS

Provides snow removal, pothole and other roadway repairs, and leaf collection services.

FY20 Accomplishments

- Chip-sealed 172 blocks of City streets
- Patched 8,424 potholes
- Implemented new residential neighborhood snow plowing procedures utilizing the additional equipment and FTEs; positive feedback from citizens
- Increased winter street sweeping due to mild winter conditions to maintain compliance with local and federal air quality regulations
- Milled and paved over 168 blocks of City streets; including N. Higgins, Ryman, Woody, and South Ave. during COVID
- Upgraded 35 ADA ramps
- Completed the pavement condition survey



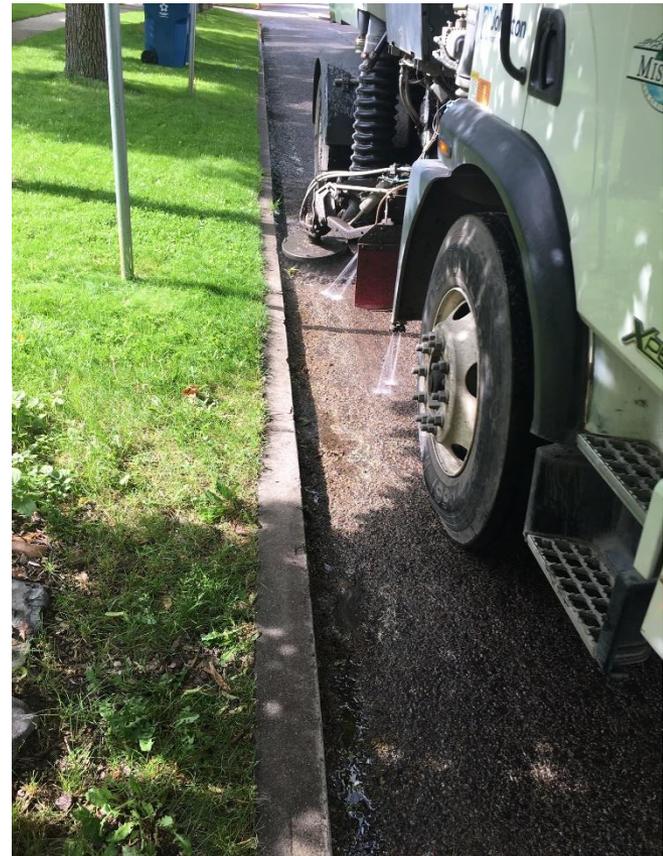
FY20 Accomplishments

- Upgraded and implemented new vehicle GPS tracking software
- Improved street sweeping disposal process
- Constructed a new secondary containment around deicer tanks at a much lower cost than the conventional method
- Upgraded the pavement condition and ADA ramps to meet MDT standards on 5th and 6th streets to qualify for the \$1.2 million pavement preservation project
- Coordinated with the water division on South Ave and S. 3rd Street
- Worked with the Storm Water Utility to clean over 600 sumps and 324 storm drain inlets, and installed 12 new sumps and re-dug 18 existing sumps



FY20 Accomplishments

- Collected 1,136 loads of leaves during the annual leaf collection; taken to Garden City Compost
- Collaborated with the Public Works Communications Specialist and GIS to improve the website with updated reports and street project mapping
- Involved with planning the new Public Works facility
- Maintained exceptional levels of public service with prompt response to all emails and phone calls



FY21 Goals

- Implement and maintain the Pavement Management System
 - Expand chip-seal program
- Increase efficiencies with other depts. involved with snow operations
- Review residential snow plowing procedures and look for improvements
- Coordinate the GIS to utilize vehicle GPS tracking and automate field data collection
- Continue coordinating with utility divisions on projects



FY21 Goals

- Continue to work with Communications Specialist to maintain website and provide public communications
- Collaborate with the Transportation and Engineering divisions to increase multi-modal transportation routes in the City outlined in the CIPs
- Assist in planning the Public Works Facility
- Utilize CMAQ funding for street sweepers
- Provide excellent customer service with prompt responses to all public inquiries
- Establish recruitment and retention processes
- Continue to adhere to fiscally responsible standards



FY21 Goals

- Continue to meet performance measures related to storm water maintenance
 - Service 10% of system in FY21, by inspecting/cleaning 650 dry wells
 - 71 dry wells are due for replacement in FY21, we will aim to replace 35
- Utilize the local option gas tax revenue to increase levels of service
- Reduce pothole numbers by increasing crack-sealing and mastic application



New Request

Sweeper Lease - \$63,000/year

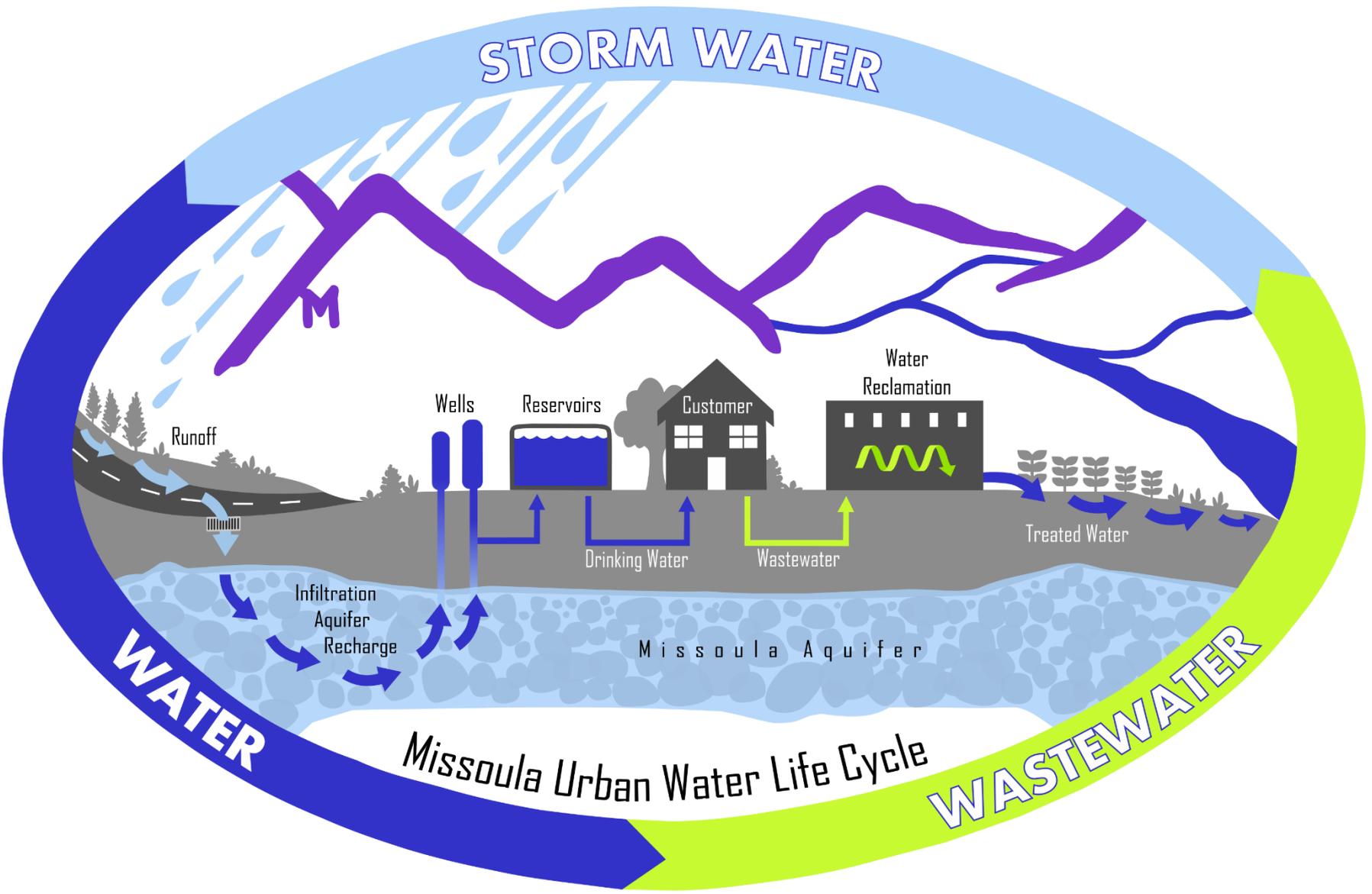
- Lease four new street sweepers for a five-year term
- CMAQ Funds:
 - Match requirement is 14%
 - MDT administrative fee is 10%
- Current fleet consists of nine sweepers ranging in age of 6-14 years
- Strategic Goal:
 - Increase loads of debris removed by 35%
 - Keep current fleet updated to meet standards
 - Maintain MS4 permit requirements



Road District #1 Budget Overview

	FY18 Adopted Budget	FY19 Adopted Budget	FY20 Adopted Budget	FY21 Proposed Budget	Percent Change
Personnel Services	---	3,487,599	4,352,478	4,681,494	7.5%
Supplies	191,361	838,801	945,099	940,809	(.05%)
Purchased Services	133,800	218,170	324,880	249,880	(30%)
Fixed Charges	101,949	40,500	51,368	51,368	0%
Debt Service	651,410	629,060	525,898	564,723	7.3%
Miscellaneous	---	(75,000)	---	---	---
Building Materials	651,410	363,464	613,464	613,464	0%
Total	\$1,729,930	\$5,502,594	\$6,813,187	\$7,101,738	7.5%

*Allocated from the general fund



Your City of Missoula Utilities - Working Together to Serve You.



STORM WATER

Provides for and maintains infrastructure for both surface and underground movement of water from rain, snow melt, and other weather events and ensures compliance with state, federal, and local laws.

FY20 Accomplishments

- Approved the new rate and transitioned onto the water bill
- Completed the Levee V vegetative maintenance
- Obtained cost-share assistance from AmeriCorps & Montana Conservation Corp. for two full-time fellows
- Verified the infrastructure in the Development Park on Expressway using GPS
- Initiated a MS4 compliant water sampling plan
- Identified and inspected all 60 outfalls in the City
- Completed City SWPPP inspections
- Improved response and multi-division coordination for infrastructure maintenance



FY21 Goals

- Complete the Upper Gharrett Drainage Project
- Begin Phase II of the Caras Park Outfall Pretreatment Retrofit Project
- Maintain vegetation on accredited levees
- Perform proactive system maintenance
- Increase encouragement for Low Impact Development (LID) and green infrastructure in our community
- Implement new construction and post-construction inspection protocols
- Provide excellent customer service
- Establish recruitment and retention processes
- Continue to adhere to fiscally responsible standards



New Request

Storm Water Repair & Maintenance - \$128,000

- Allows:
 - Increase in maintaining infrastructure
 - Increase water quality protection and compliance
 - Increase protection of public and private properties
- Strategic Goal:
 - Service 10% of system in FY21, by inspecting/cleaning 650 dry wells
 - 71 dry wells are due for replacement in FY21, we will aim to replace 35



Capital Improvement Projects

Water Quality Improvements - \$462,851

- Upper Gharrett Drainage Improvement
- South Hills Drainage Improvement
- Caras Park Outfall Pretreatment Retrofit Project – Phase II
- Pattee Creek Storm Water Drainage Improvements
- Bitterroot Swale Maintenance & Green Infrastructure Improvements
- Madeline Spring Drainage Improvements & Green Infrastructure
- S. 4th Street Missoulian Storm Water Quality Improvements



Five-year plan



Capital Improvement Projects

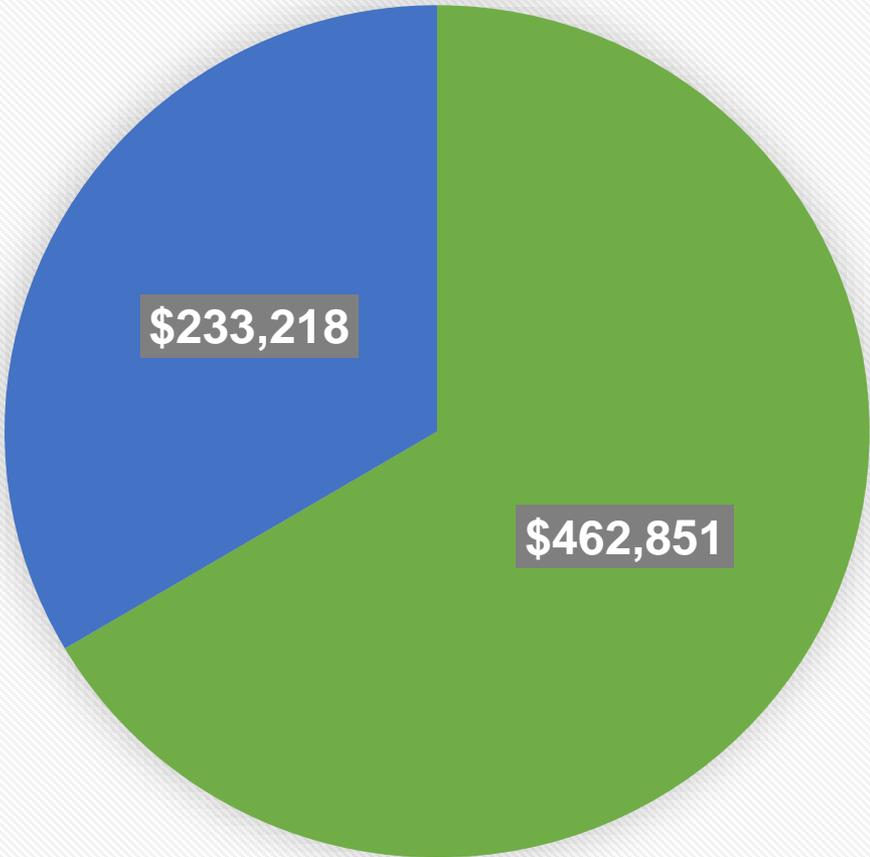
Levee Maintenance & Certification - \$233,218

- Clark Fork Area III
 - Clark Fork Area V
 - Grant Creek
 - Pattee Creek
- Five-year plan
- Protects over \$14 billion in property assets and 240 structures (affects insurance rates)
 - Maintenance:
 - Removing large trees, non-native trees and shrubs
 - Addressing other issues identified by the USACE
 - Required to retain accreditation



FY21 Storm Water CIP

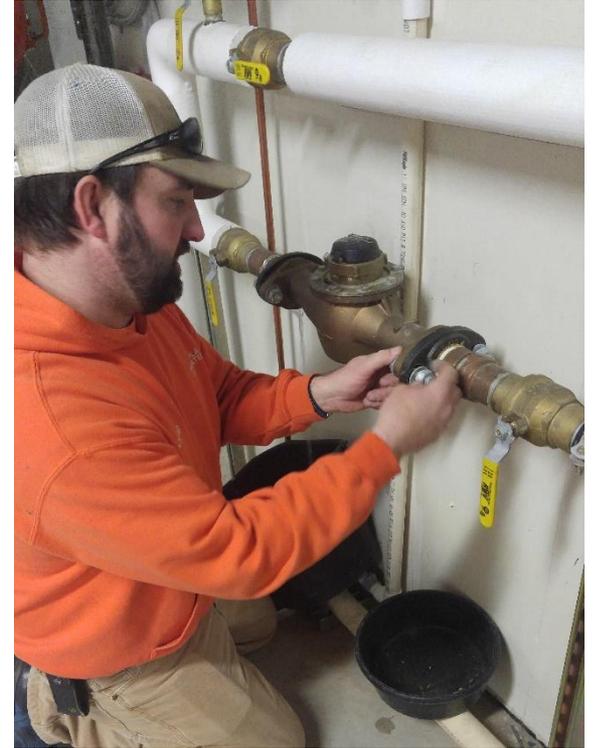
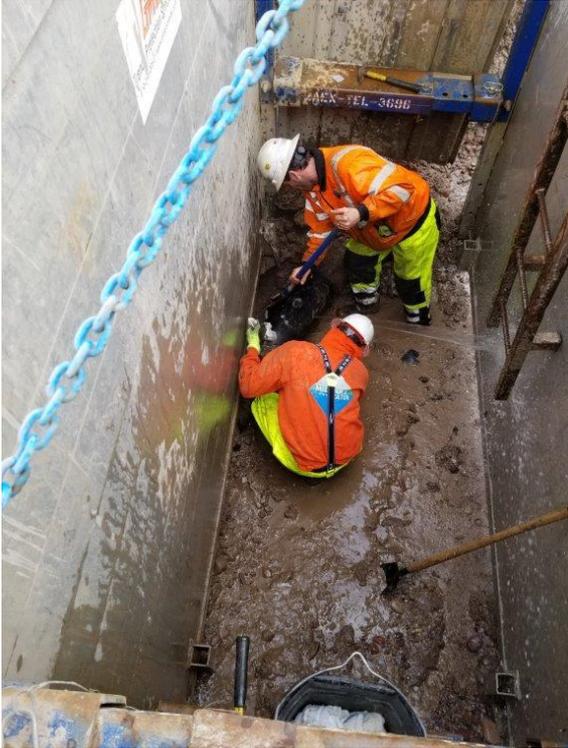
Total: \$696,069



- Water Quality Improvements
- Levee Maintenance & Certification

Storm Water Budget Overview

	FY18 Adopted Budget	FY19 Adopted Budget	FY20 Adopted Budget	FY21 Proposed Budget	Percent Change
Personnel Services	216,317	258,472	347,458	504,058	45.1%
Supplies	34,546	34,546	42,489	42,489	0%
Purchased Services	27,563	27,563	358,734	174,970	(105%)
Fixed Charges	---	3,144	36,358	18,358	(98%)
Debt Service	53,772	53,772	10,092	5,046	(100%)
Miscellaneous	26,988	---	139,700	180,700	29.3%
Grants & Cont.	---	---	---	---	---
Capital	213,630	26,498	964,800	696,069	(38.6%)
Total	\$572,816	\$403,995	\$1,899,631	\$1,621,690	(17.1%)



MISSOULA WATER

Provides clean, safe water throughout the city and maintains the water system infrastructure.

FY20 Accomplishments

- Reduced system leakage by 263K gallons for a total of 1.3 million gallons per day by replacing old mains and fixing leaks
- Installed 2,500 meters; less than expected because of COVID-19
- Installed two of the Advanced Meter Infrastructure (AMI) collectors and antennas
- Hired four new distribution employees
- Finished the South Avenue 250hp well replacement
- Abandoned and removed the Lower Farviews Tanks
- Integrated the storm water rate onto the water bill while also doing a system clean-up
- Implemented the Water Line Loan Program



FY20 Accomplishments

- Started:
 - Rattlesnake Dam Removal
 - 3rd Street Water Main Replacement
 - Cooper Street Service Line Swaps
 - Worden/Howell Water Main Replacement
 - E. Pine Water Main Replacement
 - W. Pine Water Main Replacement
 - Zip Beverage Service Relocation
- Completed:
 - Water Facilities Master Plan
 - South Avenue Well
 - Alder Street Service Line Swaps
- Designed:
 - Upper and Lower Lincoln Hills Tanks
 - Cemetery Road Water Main Extension
 - Upper Prospect Reservoir



FY20 Accomplishments

Mains Replaced	Project	Linear Feet	# of New Hydrants
	Grant/Harve	1,880	5
	Spruce	643	1
	South	1,431	2
	Railroad	1,651	3
	S. 3 rd St.	1,687	4
Total	7,292	14	

Mains Extended	Project	Linear Feet	# of New Hydrants
	Wyoming	655	2
Total	655	2	

FY21 Goals

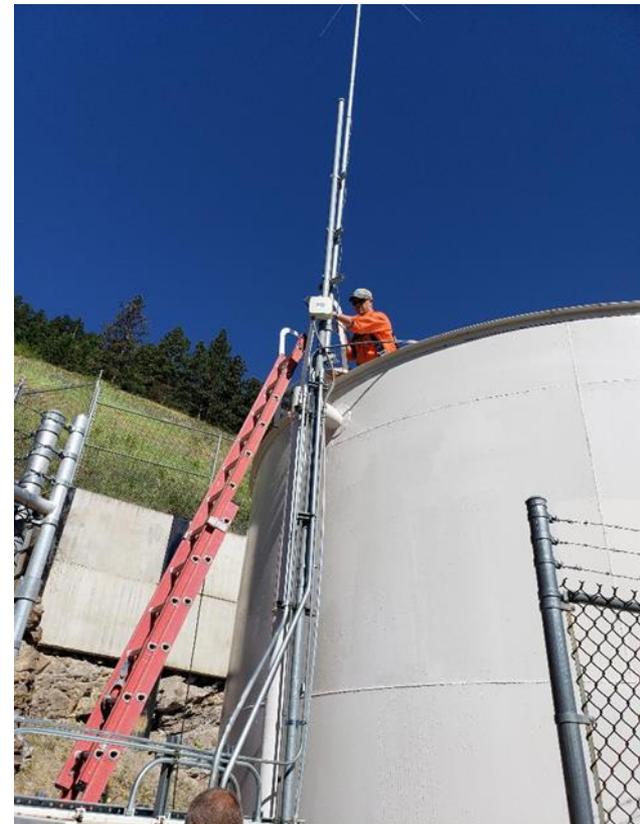
- Continue to reduce system leakage using the hydrant listening devices for data
- Install 4,000 meters by FY22
- Install three AMI collectors and antennas
- Hire a production tech
- Abandon three pieces of old and outdated water system infrastructure
- Build new reservoirs at Upper Prospect, and Upper and Lower Lincoln Hills Tanks
- Continue decommissioning, maintenance, and rehabilitation on the Rattlesnake Lakes



New Request

Production Tech (1 FTE) - \$73,092

- Production Department
- Same FTE level for 10 years
- At least two FTEs will be retiring in 2022
- Tasks:
 - Completing weekly rounds
 - Maintaining chlorine and pump system
 - Monitoring SCADA system
 - Programming communications
 - Performing generator maintenance
- Strategic Goal:
 - Understanding of basic system and infrastructure knowledge by the end of the first year



Capital Improvement Projects

System Improvements - \$2,822,200

- New fire hydrants
- Water main upsizing, extensions, and replacements:
 - Shakespeare Street
 - Cooper Street Alley
 - Mount Avenue
 - N. 2nd Street
 - S. 4th Street W.
 - Cemetery Road



Capital Improvement Projects

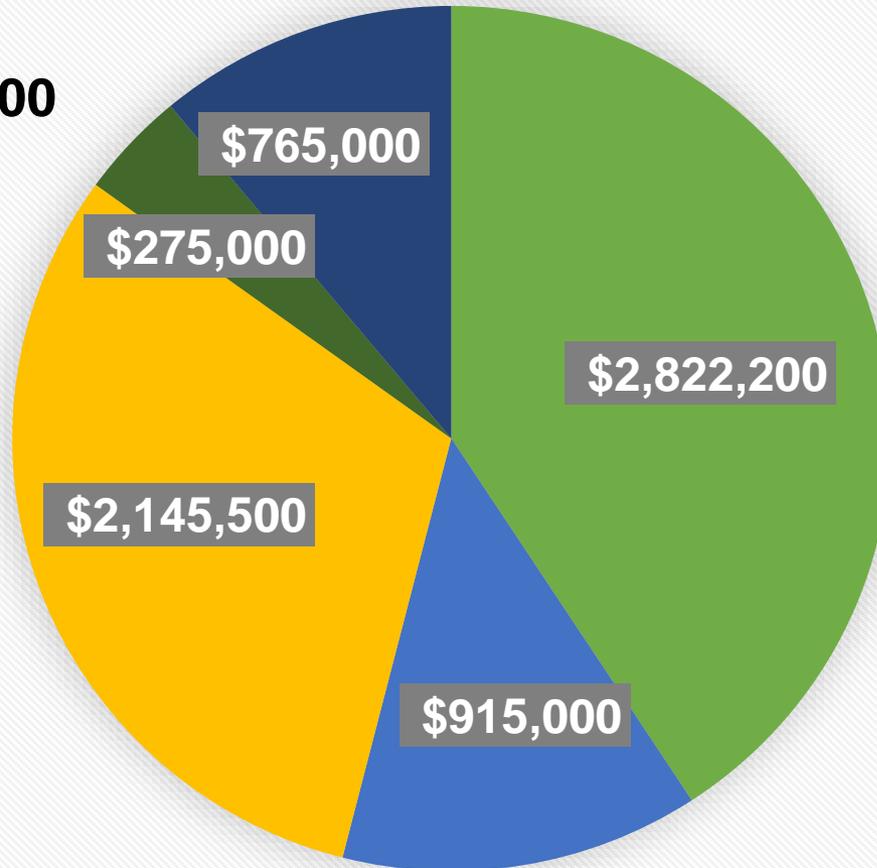
Production Improvements - \$2,145,500

- Design new Upper Prospect Tank
- Replace Lower and Upper Lincoln Hills Tank
- Tie the Stephens Well into the south system
- New Install:
 - Well north of river, west of Reserve
 - Haugen Well
 - Lower Rattlesnake Pressure Reducing Valve (PRV)
 - Additional generator



FY21 Water CIP

Total: \$6,922,700



- System Improvements
- Production Improvements
- Property
- Meters
- Vehicles

Water Budget Overview

	FY18 Adopted Budget	FY19 Adopted Budget	FY20 Adopted Budget	FY21 Proposed Budget	Percent Change
Personnel Services	4,099,202	3,802,211	3,660,848	3,771,362	3%
Supplies	341,760	451,760	464,235	603,537	30%
Purchased Services	2,342,415	2,600,615	2,864,784	2,635,328	(8.7%)
Fixed Charges	1,357,474	3,526,109	2,994,314	2,435,156	(22.9%)
Debt Service	4,481,960	4,442,404	4,607,119	5,717,036	24%
Miscellaneous	428,733	208,148	---	---	---
Grants & Cont.	---	---	---	12,000	---
Capital	6,585,000	5,265,000	6,244,624	6,922,700	10.8%
Total	\$19,636,544	\$20,296,247	\$20,835,924	\$22,097,119	6.1%



WASTEWATER

Provides safe and environmentally conscientious management and disposal of sewage at the collections and resource recovery facilities.



SEWER COLLECTIONS

FY20 Accomplishments

- Started:
 - W. Broadway/Maple Street Sewer Main Extension
 - University Force Sewer Main Replacement
- Completed:
 - Reserve Street Lift Station
 - Mount Sentinel Communication Site
 - Owen Street Sewer Main Replacement/Upgrade
- Designed:
 - Grant Creek Lift Station
 - Southpointe STEP Decommissioning
 - N. Russell Sewer Main Extension



FY20 Accomplishments

Mains Replaced	Project	Linear Feet
	Owen St.	480
	UM Force	812
	Total	1,292

Mains Extended	Project	Linear Feet
	Broadway/Maple	977
	Total	977

FY21 Goals

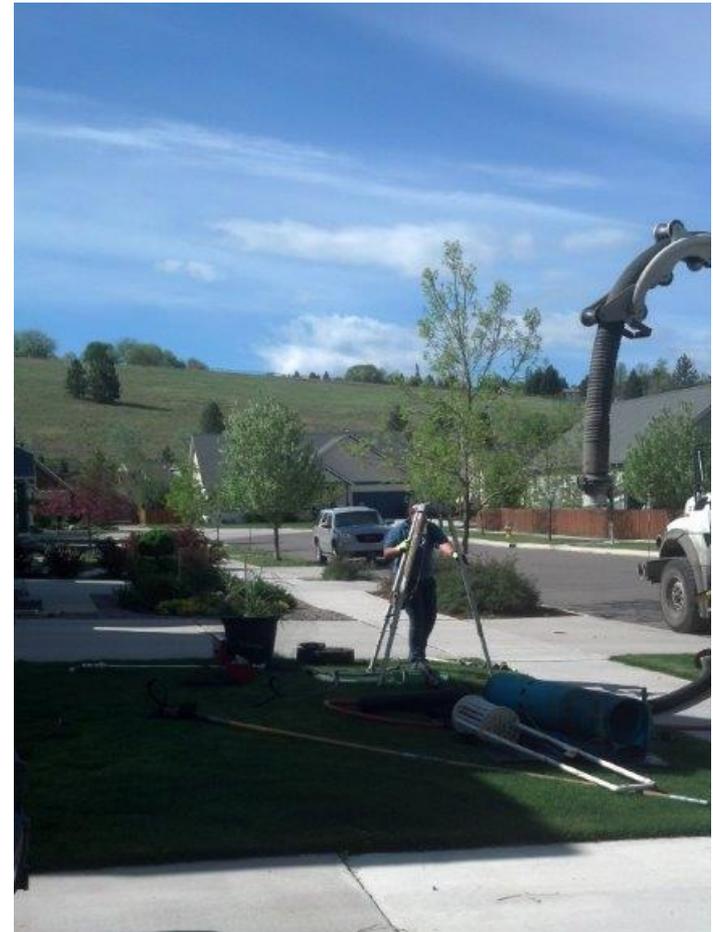
- Provide excellent customer service
- Establish recruitment and retention processes
- Continue to adhere to fiscally responsible standards
- Maintain employee safety and public health
- Perform system maintenance to prevent sewer backups and overflows on:
 - Lift stations
 - STEP systems(residential and commercial)
 - Air relief valves
 - Telemetry
 - Gravity Lines



Capital Improvement Projects

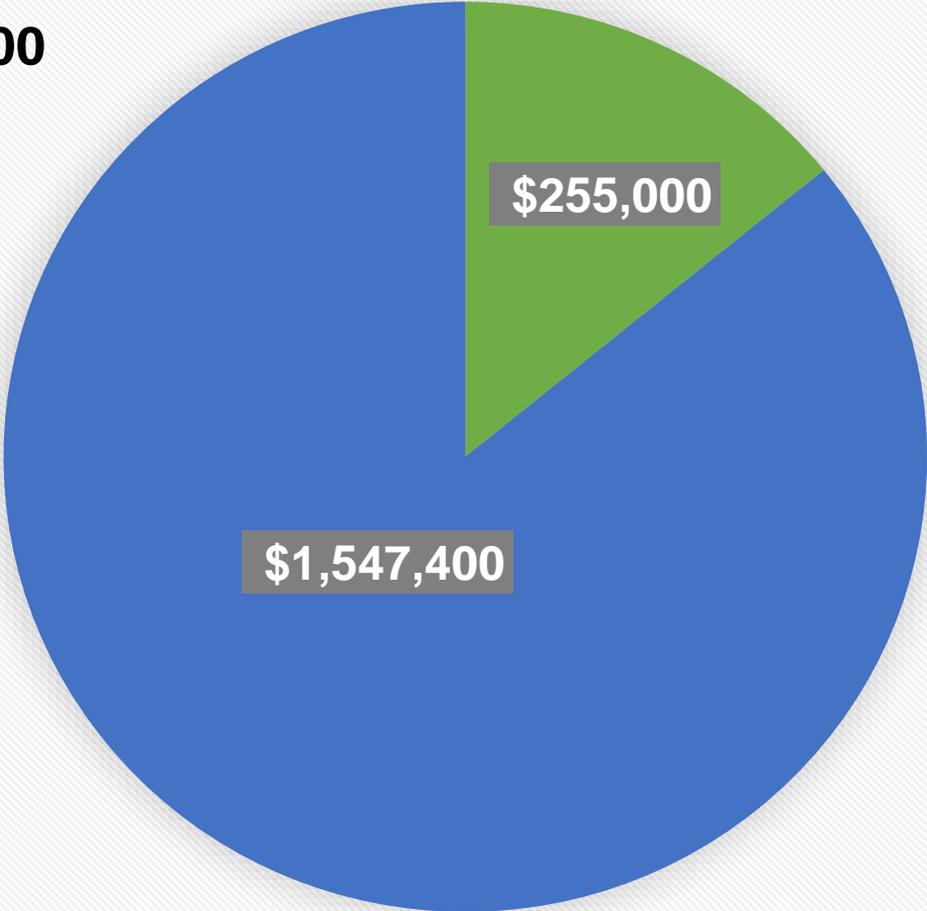
Collections - \$1,802,400

- Momont #2 Lift Station Replacement
- N. Russell Sewer Main Replacement
- Grant Creek Lift Station Improvements
- Kelly Island Lift Station Improvements
- Mullan Road Lift Station Improvements



FY21 Collections CIP Funding

Total: \$1,802,400



■ Wastewater Rates ■ Wastewater Development



RESOURCE RECOVERY FACILITY

FY20 Accomplishments

- Provided advanced treatment for 2.5 billion gallons of wastewater, which produced...
 - Approx. 23K cubic yards of Class A Exceptional Quality Compost
 - Over one million kWh of onsite electricity
 - Four hundred million gallons of treated water to irrigate 72K poplar trees
 - A measurable improvement in the Clark Fork's water quality
- Invested in:
 - Laboratory expansion
 - Compost screen replacement
 - Compost front end loader replacement
 - Major equipment upgrades
 - Two FTEs (SCADA and Mechanic)



FY21 Goals

- Continue COVID-19 community testing in cooperation with the U of M and MCCHD
- Continue to collaborate with the County to develop the Household Hazardous Waste Facility
- Engage in resource recovery through:
 - Composting and diverting green waste from the landfill
 - Generating on-site electricity
 - Land application to poplar trees
- Support Resource Recovery opportunities with other organizations:
 - Food waste
 - Glass
 - Other items



FY21 Goals

- Protect public health and safety
- Enhance worksite safety culture
- Meet or exceed all regulatory requirements protecting the Clark Fork River
- Make a measurable improvement in the Clark Fork's water quality
- Complete a DEQ Storm Water Permit Application
- Provide excellent customer service
- Establish recruitment and retention processes
- Continue to adhere to fiscally responsible standards



Capital Improvement Projects

Resource Recovery Facility - \$677,000

- Influent Pump & Atlas Copco Compressor Replacements
- UV Lamp and SCADA Upgrades
- Primary Effluent Overflow Basin Adjustable Weir Additions
- Drum to Volute Press and Gas Scrubber Regeneration Improvements

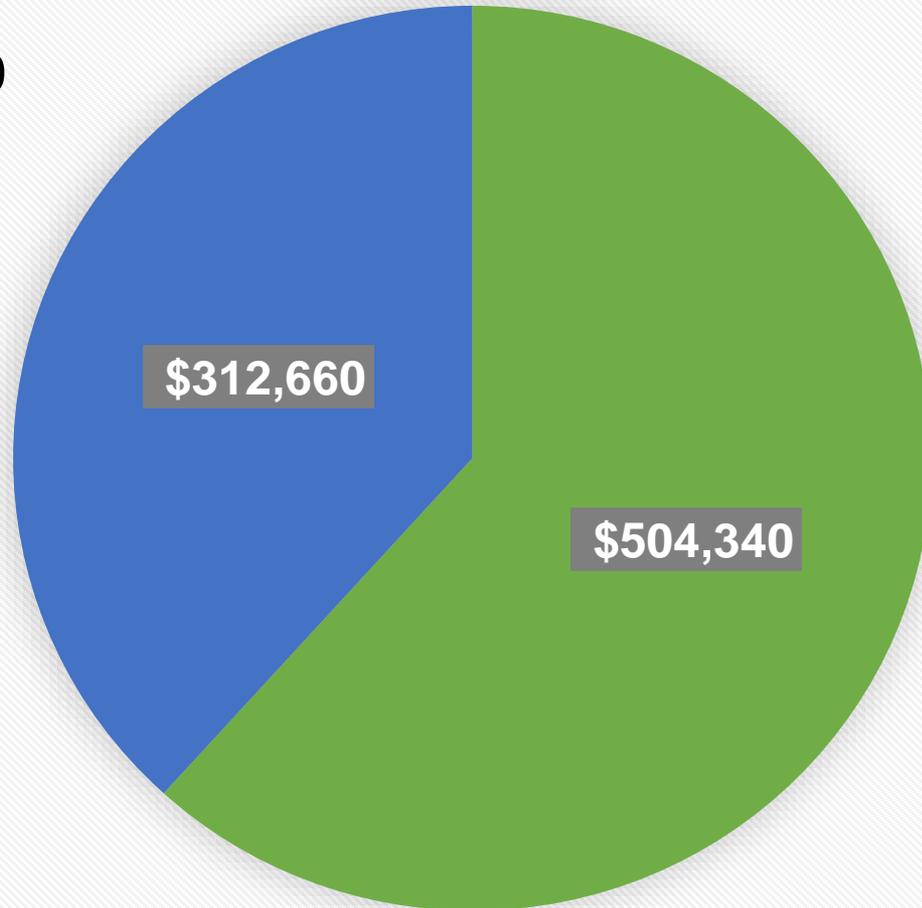
Compost - \$140,000

- Stackers Conveyor, Mixer Water System, and Rock Separator Purchases
- Air System Automation



FY21 Resource Recovery CIP Funding

Total: \$817,000

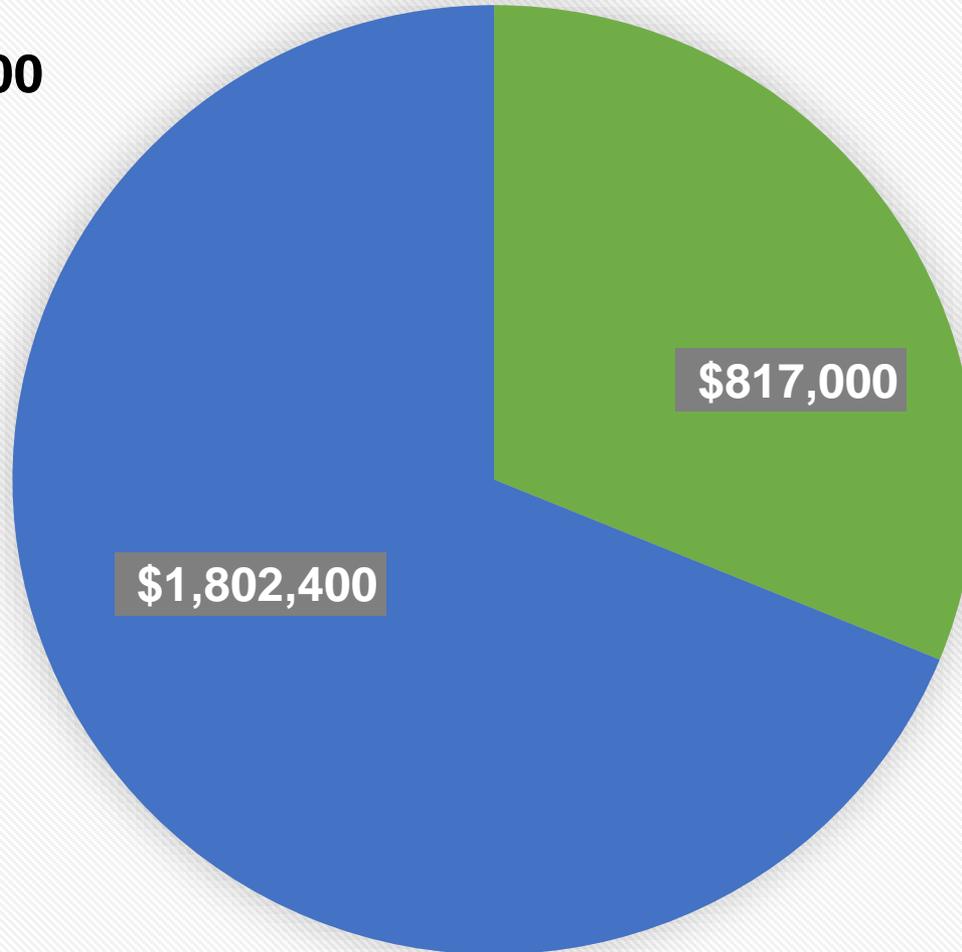


■ Wastewater Rates

■ Wastewater Development

FY21 Wastewater CIP

Total: \$2,619,400



■ Resource Recovery Facility

■ Collection System

Wastewater Budget Overview

	FY18 Adopted Budget	FY19 Adopted Budget	FY20 Adopted Budget	FY21 Proposed Budget	Percent Change
Personnel Services	2,344,260	2,588,217	3,185,760	3,257,741	2.3%
Supplies	902,620	860,370	722,670	757,958	4.9%
Purchased Services	2,381,756	1,831,966	1,507,456	1,583,642	5.1%
Fixed Charges	1,460,940	1,528,767	1,744,786	1,647,504	(5.9%)
Debt Service	2,744,309	2,540,564	2,453,716	1,983,322	(23.7%)
Miscellaneous	---	119,596	---	---	---
Grants & Cont.	5,134	1,500	20,050	18,050	(11.1%)
Capital	1,694,223	1,292,823	5,344,142	2,619,400	(104%)
Total	\$11,533,242	\$10,763,803	\$14,978,580	\$11,867,617	(26.2%)



CEMETERY

Provides tranquil interments for loved-ones with compassion and respect while also highlighting the historical significance of the cemetery for future generations.

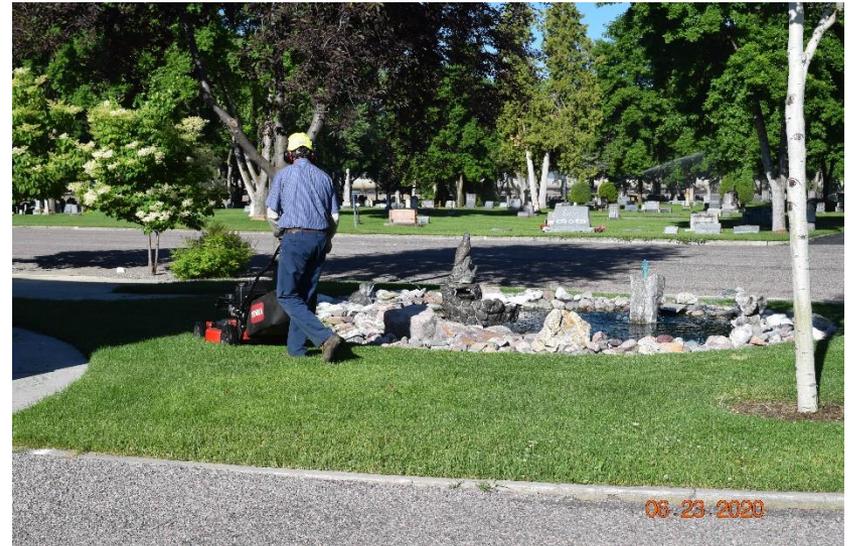
FY20 Accomplishments

- Added a niche wall to the Columbarium Plaza
- Added six historical signs throughout the grounds
- Performed a chip-seal on several streets to protect and maintain the street infrastructure
- Completed a draft of the strategic plan
- Gained successes with the annual Stores and Stones event
- Continued turning leaves and grass into compost for refilling graves



FY21 Goals

- Review and update current ordinances to install the Pet Wall
- Finish street chip-sealing projects
- Install new street signs
- Plant additional trees
- Complete the strategic plan
- Provide excellent customer service
- Establish recruitment and retention processes
- Continue to adhere to fiscally responsible standards



New Request

One-Ton Dump Truck with Plow - \$70,000

- Purpose:
 - Plow all year to maintain roads
 - Haul branches, leaves, and dirt from grave removal
- Replacing 2001 dump truck; currently, not on the replacement schedule
- Board approved purchase from capital reserve fund
- Strategic Goal:
 - Needed for service reliability



Cemetery Budget Overview

	FY18 Adopted Budget	FY19 Adopted Budget	FY20 Adopted Budget	FY21 Proposed Budget	Percent Change
Personnel Services	603,024	577,361	563,710	600,397	6.5%
Supplies	78,090	78,090	78,090	86,275	10.5%
Purchased Services	38,510	90,691*	38,510	41,361	7.4%
Fixed Charges	500	500	500	500	0%
Debt Service	---	---	---	---	---
Miscellaneous	8,185	8,185	8,185	---	(100%)
Grants & Cont.	---	---	---	---	---
Total	\$728,309	\$754,827	\$688,995	\$728,533	5.7%

* One-time cost for hiring a consultant to create the strategic plan

Questions