Wastewater Management Department

Department Goals

Clean water is fundamental to life and we strive to protect public health, property, and the environment. We will continue to serve our citizens with pride and professionalism. We will provide service utilizing sound financial and natural resource management practices. The Wastewater Management Department manages comprehensive programs to efficiently and effectively operate the collection system and treatment facility for the benefit of the citizens of Spokane and our Environment. The Wastewater Management Department provides essential services and operates an essential community facility for our community.

Contact Information

Wastewater Treatment Department:

Raylene Gennett, Director, 625-7901, rgennett@spokanecity.org

Integrated Capital Management:

Marcia Davis, Principal Engineer- Interim Director, 625-6398, mdavis@spokanecity.org

Name	Title	Telephone	Email
Chris Peterschmidt	Principal Engineer	625-7803	cpeterschmidt@spokanecity.org
Fred Brown	Principal Engineer	625-6307	fbrown@spokanecity.org
Duane Studer	Principal Engineer	625-7902	dstuder@spokanecity.org
Mike Cannon	RPWRF Plant Manager	625-4642	mcannon@spokanecity.org

Services Provided

The City of Spokane's Wastewater Treatment Facility receives and treats combined sewage from the City's Sewer Collection System, Spokane County, and Fairchild Air Force Base (FAFB), as well as septage from private septic tank servicers. The Department is an enterprise fund, which means it provides goods or services at-cost to the public for a fee and is, therefore, self-supporting. The Department employs 120 full-time staff, with an annual operating budget of approximately $32 million dollars (excluding major capital expenditures).

The City of Spokane Wastewater Collection system consist of 870 miles of sanitary sewer lines, 14 miles of sanitary sewer force mains, 357 miles of stormwater lines and 21895 stormwater inlets, and numerous swales and stormwater detention facilities. The City maintains three types of collection pipes: sanitary sewers only, combined sanitary and stormwater sewers and separated stormwater sewers. We have a comprehensive program to operate these systems for the benefit of the citizens and the environment.

Background

Discharge Permits: The City's Wastewater Management Department complies with several discharge Permits. The Waste Discharge Permit issued by Ecology governs treated flow leaving the Riverside Park Water Reclamation Facility (RPWRF) and management of the City's Combined Sewer Overflow (CSO) system. Municipal separated storm sewer (MS4) discharges and land application of biosolids are managed in compliance with General permits, both issued by Ecology. Air emissions from RPWRF comply with a permit from the Spokane Regional Clean Air Agency. Numerous other regulations apply to various aspects of the collection, conveyance, and treatment of wastewater.

Dissolved Oxygen Total Maximum Daily Load (DO TMDL) Compliance: Washington State law requires the City's effluent meet Water Quality Standards (WQS) for the Spokane River. The current National Pollutant Discharge Elimination System (NPDES) Waste Discharge Permit No. WA-0024473 (Permit) was issued to the City by the Washington State Department of Ecology (Ecology) on June 23, 2011. Ecology has determined the TMDL for nutrients affecting DO in the Spokane River and Lake Spokane. These effluent limits for total phosphorus, ammonia, and carbonaceous biochemical oxygen demand are identified in the current Permit along with interim effluent limitations. Lake Spokane's DO levels do not meet the WQS year-round and, meeting the TMDL requirements from March through October is expected to restore DO to an acceptable level. The renewal Permit currently being developed by Ecology will likely contain additional effluent limitations and requirements, especially regarding polychlorinated biphenyls (PCBs).

Riverside Park Water Reclamation Facility (RPWRF): Effluent discharged to the Spokane River must meet the requirements of RPWRF's Permit. RPWRF treats an average of 30 million gallons a day (MGD) of wastewater, with occasional peak flows over 130 MGD during heavy rain storms. This Permit requires tertiary treatment in addition to the advanced secondary treatment. Just completed an approximately $200MM capital program for the tertiary treatment using membrane filtration which improved the water quality leaving the plant.

Water Quality: The City of Spokane has been working to address Spokane River water quality concerns for decades. From 2000- 2012, the city spent $220 million on clean water improvements, including $175 million in improvements at RPWRF, 4o million to reduce overflows to the river from the combined system and $5 million on stormwater projects. Since then the city has also spent an additional $225 million on the new membrane filtration facility and associated improvements. We also participated in regional efforts to improve DO levels and reduce PCB and Dioxins in the river. We continually meet our National Pollutant Discharge Systems (NPDES) Permits requirements and continually work to improve the water quality within the Spokane River.

Level of Service Standard

The level of service (LOS) for sanitary sewage processing is 100 gallons per capita per day (GPCD). This means RPWRF must plan to accommodate 100 gallons of sanitary sewage per day for every person in its service area. Although individual citizens may generate more or less sanitary sewage, 100 GPCD is an accepted average used for planning purposes.

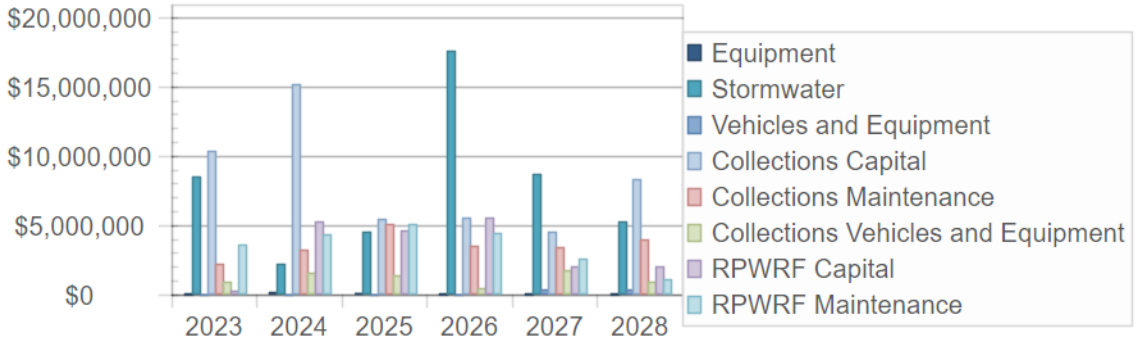
RPWRF has the capacity during dry weather to continually treat 50 million gallons per day (MGD) of regionally generated sanitary sewage. Via Interlocal Agreement, the City has allocated 10 MGD of treatment capacity to Spokane County and about one (1) MGD to FAFB.

We strive to provide excellent customer service 24 hours a day, 7 days a week, 365 days a year

Spending by Project Type Summary

Wastewater Management

Project Type	2023	2024	2025	2026	2027	2028	Total
Equipment	$ 10,000	$ 210,000	$ 120,000	$ 30,000	$ 30,000	$ 30,000	$ 430,000
Stormwater	8,500,000	2,175,000	4,480,000	17,540,000	8,695,000	5,275,000	46,665,000
Vehicles and Equipment	-	-	-	-	385,000	385,000	770,000
Collections Capital	10,380,000	15,200,000	5,415,000	5,537,000	4,520,000	8,340,000	49,392,000
Collections Maintenance	2,250,000	3,195,000	5,055,000	3,550,000	3,450,000	4,000,000	21,500,000
Collections Vehicles and Equipment	900,000	1,555,000	1,400,000	485,000	1,770,000	900,000	7,010,000
RPWRF Capital	250,000	5,264,000	4,570,000	5,500,000	2,000,000	2,000,000	19,584,000
RPWRF Maintenance	3,570,000	4,360,000	5,070,000	4,410,000	2,620,000	1,130,000	21,160,000
RPWRF Vehicles and Equipment	-	445,000	-	-	-	-	445,000
$	**25,860,000**	**$ 32,404,000**	**$ 26,110,000**	**$ 37,052,000**	**$ 23,470,000**	**$ 22,060,000**	**$ 166,956,000**



Funded Projects

Summary of Funded Projects

Wastewater Management

Project Description	2023	2024	2025	2026	2027	2028	6 Year Estimate
WWM-2012-4 - Citywide Ongoing Cure In Place Pipe (CIPP) Project	$ 300,000	$ 300,000	$ 560,000	$ 580,000	$ 600,000	$ 620,000	$ 2,960,000
WWM-2012-11 - Public Sewer Extensions	450,000	460,000	450,000	460,000	470,000	480,000	2,770,000
WWM-2012-13 - Rehabilitation Project Fund	270,000	350,000	270,000	350,000	280,000	290,000	1,810,000
WWM-2012-22 - Bio-Infiltration System Rehabilitation	175,000	175,000	175,000	180,000	190,000	200,000	1,095,000
WWM-2012-276 - Large Line Rehabilitation from Hydrogen Sulfide Damage	300,000	360,000	360,000	370,000	380,000	390,000	2,160,000
WWM-2012-277 - Marion Hay Intertie-Holland St and Everett Ave	1,600,000	2,900,000	1,000,000	-	-	-	5,500,000
WWM-2012-354 - Serpentex Biosolids Conveyor Replacement	400,000	400,000	-	-	-	-	800,000
WWM-2012-400 - Perforated Plate Replacement	-	300,000	-	-	-	300,000	600,000
WWM-2013-138 - Post Street Bridge Rehabilitation	3,100,000	-	-	-	-	-	3,100,000
WWM-2014-33 - Combined Sewer Overflow (CSO) Outfall Repair	-	-	250,000	2,200,000	700,000	-	3,150,000
WWM-2014-96 - Study - Sewer Capital Facility Plan	200,000	300,000	-	-	-	-	500,000
WWM-2014-112 - RPWRF Building Exterior Rehabilitation and Improvements	-	550,000	-	5,500,000	-	-	6,050,000
WWM-2014-113 - Inflow and Infiltration (I/I) Reduction/ Net Enviro. Benefit	300,000	510,000	510,000	520,000	540,000	560,000	2,940,000
WWM-2014-128 - 2 Combination Sewer Cleaner 2024	-	1,300,000	-	-	-	-	1,300,000
WWM-2014-137 - 100 KW Generator 2024	-	100,000	-	-	-	-	100,000
WWM-2015-55 - WSDOT I-90 Stormwater Separation	-	-	20,000	4,000,000	1,000,000	-	5,020,000
WWM-2015-68 - Cochran Basin Stormwater Piping, TJ Meenach-River to NW Blvd	2,900,000	-	-	-	-	-	2,900,000
WWM-2015-83 - TJ Meenach, NW Blvd to Pettet Dr, Sewer Upgrade	500,000	-	-	-	-	-	500,000
WWM-2015-109 - Cochran Basin Treatment Facility-Downriver Boat Launch	400,000	-	-	-	-	-	400,000
WWM-2015-111 - Biosolids Tractor	-	220,000	-	-	-	-	220,000

Summary of Funded Projects

Wastewater Management - Continued

Project Description	2023	2024	2025	2026	2027	2028	6 Year Estimate
WWM-2016-15 - Cochran Basin Treatment Facility-Downriver Disc Golf Course	400,000	-	-	-	-	-	400,000
WWM-2016-37 - Sundance IX Forcemain Replacement	-	40,000	410,000	410,000	-	-	860,000
WWM-2016-41 - Lift Station Repair and Upgrade Fund	275,000	575,000	350,000	360,000	370,000	380,000	2,310,000
WWM-2016-44 - Napa Street, Sprague to 2nd Stormwater	-	-	50,000	500,000	-	-	550,000
WWM-2016-46 - Whistalks Way Stormwater Management	-	-	-	200,000	500,000	1,500,000	2,200,000
WWM-2016-48 - 4th Avenue, Sunset to Maple, Bioretention	-	-	-	40,000	400,000	-	440,000
WWM-2016-58 - Study - Stormwater Capital Facility Plan	350,000	150,000	-	-	-	-	500,000
WWM-2016-111 - Closed Circuit Television Inspection Truck 2023	350,000	-	-	-	-	-	350,000
WWM-2016-119 - ICP (Inductively Coupled Plasma Mass Spectrometry)	-	-	100,000	-	-	-	100,000
WWM-2016-121 - Plant-wide Supply Fan Upgrade/Replacement (Occupied Spaces)	120,000	120,000	120,000	120,000	130,000	130,000	740,000
WWM-2016-122 - Air Handling Units Supply and Exhaust (non-occupied)	150,000	150,000	150,000	150,000	200,000	200,000	1,000,000
WWM-2016-130 - Headworks Building and Grit Chambers Odor Control System	200,000	2,000,000	-	-	-	-	2,200,000
WWM-2016-133 - Study - Northeast Stormwater	50,000	-	-	-	-	-	50,000
WWM-2017-29 - Aubrey L White Parkway Reconstruction	-	1,180,000	1,070,000	-	-	-	2,250,000
WWM-2017-43 - Critical Digester Expansion Joint Replacement	500,000	-	-	-	-	-	500,000
WWM-2017-46 - Study - Water Reuse	-	-	150,000	150,000	-	-	300,000
WWM-2017-50 - Main Avenue Stormwater, Wall to Browne	-	-	-	40,000	120,000	1,200,000	1,360,000
WWM-2017-68 - Heavy Construction Equipment- Loader 2023	250,000	-	-	-	-	-	250,000
WWM-2017-75 - 2 Mechanical Sewer Rodders 2027	-	-	-	-	770,000	-	770,000
WWM-2017-120 - Liquid Disinfection Building Reskinning	-	350,000	3,500,000	-	-	-	3,850,000
WWM-2018-51 - Broadway Avenue, Cedar to Post Street, Sewer Replacement	-	80,000	800,000	-	-	-	880,000

Summary of Funded Projects

Wastewater Management - Continued

Project Description	2023	2024	2025	2026	2027	2028	6 Year Estimate
WWM-2018-52 - Havana Street, Broadway to Sprague Avenue Sewer Upgrades	-	-	-	80,000	800,000	-	880,000
WWM-2018-53 - Spokane Falls Blvd, Post to Division, Sewer Replacement	-	-	-	150,000	500,000	1,000,000	1,650,000
WWM-2018-54 - Mallon Avenue, Monroe to Howard St, Sewer Replacement	-	-	40,000	200,000	200,000	-	440,000
WWM-2018-55 - Thor and Freya, Hartson to Sprague Avenue Sewer Upgrades	720,000	-	-	-	-	-	720,000
WWM-2018-60 - Riverside Ave, Monroe St to Wall St, Sewer Replacement	-	-	50,000	400,000	100,000	-	550,000
WWM-2018-70 - Broadway, Cedar to Post, Stormwater Separation	-	-	150,000	1,000,000	500,000	-	1,650,000
WWM-2018-72 - Washington Basin Stormwater Project (Knox and Montgomery)	5,000	-	-	-	-	-	5,000
WWM-2018-73 - Study - Indian Trail Stormwater	240,000	60,000	-	-	-	-	300,000
WWM-2018-74 - Spokane Falls Blvd, Post to Division	-	60,000	-	200,000	500,000	1,500,000	2,260,000
WWM-2018-75 - Mallon Avenue, Monroe to Howard, Stormwater Management	-	5,000	30,000	30,000	600,000	-	665,000
WWM-2018-79 - Havana Street, Sprague to Broadway Separation	-	-	-	-	25,000	25,000	50,000
WWM-2018-110 - Boiler Burners and Controls	500,000	500,000	500,000	-	-	-	1,500,000
WWM-2018-156 - 4th Avenue, Sunset to Maple St, Sewer Replacement	-	-	-	25,000	250,000	-	275,000
WWM-2019-7 - Rehabilitation of Combined Sewer Overflow (CSO) Facilities	1,100,000	-	-	-	-	-	1,100,000
WWM-2019-9 - NSC Planning - Interstate 90 to Sprague Avenue	5,000	5,000	5,000	5,000	-	-	20,000
WWM-2019-11 - Cochran Basin Lift Station and Control Facility	4,000,000	500,000	-	-	-	-	4,500,000
WWM-2019-20 - Catch Basin Cleaner Trucks	-	-	1,100,000	-	550,000	550,000	2,200,000
WWM-2019-21 - Heavy Construction Equipment- Backhoe 2025	-	-	200,000	-	-	-	200,000

Summary of Funded Projects

Wastewater Management - Continued

Project Description	2023	2024	2025	2026	2027	2028	6 Year Estimate
WWM-2019-25 - Whistalks Way Sewer Upgrades	-	-	-	92,000	820,000	100,000	1,012,000
WWM-2019-29 - NSC Planning - Interstate 90 to Sprague Avenue	10,000	10,000	10,000	10,000	10,000	-	50,000
WWM-2019-31 - Sunset Blvd Bike Path, Deer Heights to Royal	-	40,000	300,000	100,000	-	-	440,000
WWM-2019-42 - Desmet & Superior Sewer Replace Pipe Under R/R & Adj. Lines	90,000	900,000	-	-	-	-	990,000
WWM-2019-44 - Underground Injection Control (UIC) Regulation Compliance	50,000	50,000	50,000	50,000	50,000	50,000	300,000
WWM-2019-46 - NSC Planning - Sprague Avenue to Spokane River	10,000	10,000	10,000	-	-	-	30,000
WWM-2019-56 - Biofilter Media Replacement	-	-	-	140,000	150,000	-	290,000
WWM-2019-67 - Turblex Blower Service	-	-	-	-	140,000	-	140,000
WWM-2019-71 - Silo Digester No. 3 Mixing System	-	450,000	3,000,000	-	-	-	3,450,000
WWM-2020-5 - NSC - Greene Basin Storm Improvements	100,000	-	-	-	-	-	100,000
WWM-2020-9 - NSC - Trent Interchange Storm and Sewer Reroute	260,000	-	-	-	-	-	260,000
WWM-2020-16 - NSC - I-90 Sewer Interceptor Crossings	300,000	4,332,000	150,000	-	-	-	4,782,000
WWM-2020-17 - NSC - 2nd Ave and Trumpet Area Sewer Reroutes	250,000	3,854,000	150,000	-	-	-	4,254,000
WWM-2020-27 - 1 1-Ton Dump Truck 2023	-	105,000	-	-	-	-	105,000
WWM-2020-28 - Skidsteer - 2026	-	-	-	135,000	-	-	135,000
WWM-2020-30 - Heavy Construction Van- 2023	300,000	-	-	-	-	-	300,000
WWM-2020-31 - Heavy Construction Van- 2026	-	-	-	300,000	-	-	300,000
WWM-2020-38 - 12th Avenue - Deer Heights to Flint	-	-	95,000	950,000	-	-	1,045,000
WWM-2020-39 - Sewer Line Replacement	180,000	180,000	180,000	230,000	240,000	250,000	1,260,000
WWM-2020-40 - Northeast Lift Station Forcemain	840,000	-	-	-	-	-	840,000
WWM-2020-44 - Wind River Force Main Replacement	-	130,000	1,250,000	-	-	-	1,380,000
WWM-2020-45 - Combined Sewer Overflow (CSO) 25 Swale Rehabilitation	-	200,000	-	-	-	-	200,000
WWM-2020-46 - Regal - 42nd to 44th Sewer Replacement	-	25,000	230,000	-	-	-	255,000

Summary of Funded Projects

Wastewater Management - Continued

Project Description	2023	2024	2025	2026	2027	2028	6 Year Estimate
WWM-2020-64 - Wind River Lift Station Improvements	50,000	500,000	-	-	-	-	550,000
WWM-2020-65 - Francis and Assembly Lift Station Improvements	-	184,000	-	-	-	-	184,000
WWM-2020-74 - Emergency Overflow Modifications for Digesters 4 and 5	300,000	2,000,000	-	-	-	-	2,300,000
WWM-2020-1523 - Crestline Ct. Forcemain Replacement	-	-	-	-	40,000	250,000	290,000
WWM-2021-11 - Future Development Sewer Upgrades	250,000	250,000	250,000	250,000	250,000	250,000	1,500,000
WWM-2021-15 - West Plains Sewer Lift Station	-	-	-	-	-	6,000,000	6,000,000
WWM-2021-17 - Study - Downtown Stormwater Relief Phase 2	-	-	75,000	75,000	-	-	150,000
WWM-2021-18 - Washington Basin Stormwater Separation	-	225,000	-	300,000	3,000,000	-	3,525,000
WWM-2021-20 - Drywell Rehabilitation in Wellhead Protection Zones	-	250,000	1,000,000	1,000,000	1,000,000	1,000,000	4,250,000
WWM-2021-28 - Closed Circuit Television Inspection Trucks	-	-	-	-	385,000	385,000	770,000
WWM-2021-29 - 10 Yard Dump Trucks	-	-	-	-	350,000	350,000	700,000
WWM-2021-37 - WWC SCADA Equipment Upgrades	10,000	10,000	120,000	30,000	30,000	30,000	230,000
WWM-2021-45 - 8- F150 4x4 2023 - 2027	-	150,000	100,000	50,000	100,000	-	400,000
WWM-2021-46 - Engineer Tech Equipment	-	100,000	-	-	-	-	100,000
WWM-2021-72 - Biosolids Front End Loader	-	225,000	-	-	-	-	225,000
WWM-2021-85 - Maintenance and Warehouse Roof Membrane Replacement	250,000	-	-	-	-	-	250,000
WWM-2021-1524 - CSO 10/12/Cochran Outfall Repair	-	-	-	-	60,000	500,000	560,000
WWM-2021-1539 - Exterior Cladding Replacement for Digester Eggs 4 and 5	-	-	-	4,000,000	-	-	4,000,000
WWM-2022-1479 - Nine Mile Sewer Re-route	-	120,000	1,200,000	150,000	-	-	1,470,000
WWM-2022-1481 - Francis/Assembly/Nine Mile Stormwater Facility	-	130,000	1,300,000	-	-	-	1,430,000
WWM-2022-1482 - Five Mile Regional Infiltration Facility (FMRIF) Improvements	-	-	1,500,000	1,000,000	-	-	2,500,000

Summary of Funded Projects

Wastewater Management - Continued

Project Description	2023	2024	2025	2026	2027	2028	6 Year Estimate
WWM-2022-1484 - Study-Garden Springs Creek Culvert	-	500,000	-	-	-	-	500,000
WWM-2022-1485 - West Plains PDA Stormwater Projects	-	-	-	9,000,000	1,000,000	-	10,000,000
WWM-2022-1486 - Cheney-Spokane Rd Sewer	1,000,000	1,000,000	-	-	-	-	2,000,000
WWM-2022-1497 - North Spokane Corridor - 3rd Ave Sewer Reroute	75,000	577,000	150,000	-	-	-	802,000
WWM-2022-1517 - NW Blvd & Assembly Diversion Modification & PW2 Air Gap	-	30,000	250,000	-	-	-	280,000
WWM-2022-1520 - Shiloh Hills Forcemain replacement	-	-	-	20,000	210,000	-	230,000
WWM-2022-1521 - Manhole Rehab (Cure-in-Place)	-	60,000	60,000	70,000	70,000	80,000	340,000
WWM-2022-1522 - 18th & Perry Sewer Extension	-	42,000	280,000	-	-	-	322,000
WWM-2022-1534 - Soft Starts for Aeration Basins (AB) Blowers	-	-	1,200,000	-	-	-	1,200,000
WWM-2022-1535 - Relocate Plant Water Air Gap	-	-	-	-	2,000,000	-	2,000,000
WWM-2022-1536 - Neutanix Server Replacements	1,000,000	-	-	-	-	-	1,000,000
WWM-2022-1537 - HVAC Improvements for the Belt Filter Press Area	-	440,000	-	-	-	-	440,000
WWM-2022-1538 - BioSolids Storage / Alternate Disposal Study	-	500,000	-	-	-	2,000,000	2,500,000
WWM-2022-1540 - AC Unit for Blower Building	350,000	-	-	-	-	-	350,000
WWM-2022-1541 - Headworks Bypass Automated Trash Rack	-	-	-	-	-	500,000	500,000
WWM-2022-1542 - Silo Digester No. 3 Exterior Cladding	-	-	-	-	2,000,000	-	2,000,000
WWM-2023-1483 - Sewer Collections SCADA System	75,000	825,000	830,000	880,000	890,000	990,000	4,490,000
	$25,860,000	$32,404,000	$26,110,000	$37,052,000	$23,470,000	$22,060,000	$ 166,956,000

5200-700 - Sewer
Citywide Ongoing Cure In Place Pipe (CIPP) Project

Project Number:	WWM-2012-4	**Budget Year:**	2023
Project Type:	Collections Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2012	**Region:**	District 1

Description

Rehabilitation of damaged pipe using a polyester felt liner impregnated with a resin that hardens when heated. This method of pipeline rehabilitation does not need the typical open trench excavation and paving by relining the pipe lines in place and usually is finished within two days per location.

Justification

Many of the City's sewer lines are approaching 75-100 years of age. As deteriorated pipelines are identified by inspecting sewer lines with remote TV inspection cameras the CIPP (cured in place pipe) is a method that rehabilitates these damaged pipe using a polyester felt liner impregnated with a resin that hardens when heated via steam, hot water or UV Curing. Essentially, CIPP constructs a new pipe within a damaged pipe without resorting to excavating. Many of the existing older sewers are made of vitrified clay that is susceptible to cracking and/or infiltration at the joints. Excavation to replace sewer pipes in congested streets is very expensive, so using CIPP is a cost-effective method to rehabilitate these types of pipes. The purpose of this project is to reduce operation and maintenance costs by replacing damaged and leaking pipes.

Comprehensive Plan Goals Met

CFU 1.3 - Capital Facilities and Utilities. CFU 5.4 - Capital Facilities and Utilities Ground Water.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 300,000	$ 300,000	$ 560,000	$ 580,000	$ 600,000	$ 620,000	$ 2,960,000
Total		**$ 300,000**	**$ 300,000**	**$ 560,000**	**$ 580,000**	**$ 600,000**	**$ 620,000**	**$ 2,960,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ 300,000	$ 300,000	$ 560,000	$ 580,000	$ 600,000	$ 620,000	$ 2,960,000
Total		**$ 300,000**	**$ 300,000**	**$ 560,000**	**$ 580,000**	**$ 600,000**	**$ 620,000**	**$ 2,960,000**

5200-700 - Sewer
Public Sewer Extensions

Project Number:	WWM-2012-11	**Budget Year:**	2023
Project Type:	Collections Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2012	**Region:**	District 1

Description

Installation of new public mains in City R/W's increases sewer line capacity in order to eliminate existing private sewers and septic tanks within the City of Spokane's limits.

Justification

Private sewers have been built in many locations in the City, but have not been maintained. Often property owners do not know they are connected to a private sewer line. These sewers present a risk to all City citizens if leakage and failures occur. In some locations, properties are still on septic tank systems. This project would extend new public sewers in order to intercept existing private sewers in Public Right of Ways to be part of the City's public sewer system as directed by the Director of Wastewater. Septic tanks would be eliminated by extending public sewers to areas not yet served by the City's system.

Comprehensive Plan Goals Met

CFU 1 - Adequate Public Facilities. CFU 3 - Coordination. CFU 5 - Environmental Concerns. NE 1 - Water Quality.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 450,000	$ 460,000	$ 450,000	$ 460,000	$ 470,000	$ 480,000	$ 2,770,000
Total		**$ 450,000**	**$ 460,000**	**$ 450,000**	**$ 460,000**	**$ 470,000**	**$ 480,000**	**$ 2,770,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ 450,000	$ 460,000	$ 450,000	$ 460,000	$ 470,000	$ 480,000	$ 2,770,000
Total		**$ 450,000**	**$ 460,000**	**$ 450,000**	**$ 460,000**	**$ 470,000**	**$ 480,000**	**$ 2,770,000**

5200-700 - Sewer Rehabilitation Project Fund

Project Number:	WWM-2012-13	**Budget Year:**	2023
Project Type:	Collections Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2012	**Region:**	District 1

Description

Construction for unscheduled repairs and replacements of existing aged systems to meet demands of ICM projects.

Justification

This project makes funds available for repairs from external or internal damaged pipe or sags within the pipe and to replace existing systems in conjunction with ICM projects.

Comprehensive Plan Goals Met

CFU 1.3 - Capital Facilities and Utilities Maintenance. CFU 5.4 - Capital Facilities and Utilities Groundwater.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 270,000	$ 350,000	$ 270,000	$ 350,000	$ 280,000	$ 290,000	$ 1,810,000
Total		**$ 270,000**	**$ 350,000**	**$ 270,000**	**$ 350,000**	**$ 280,000**	**$ 290,000**	**$ 1,810,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ 270,000	$ 350,000	$ 270,000	$ 350,000	$ 280,000	$ 290,000	$ 1,810,000
Total		**$ 270,000**	**$ 350,000**	**$ 270,000**	**$ 350,000**	**$ 280,000**	**$ 290,000**	**$ 1,810,000**

5200-700 - Sewer
Bio-Infiltration System Rehabilitation

Project Number:	WWM-2012-22	**Budget Year:**	2023
Project Type:	Collections Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2012	**Region:**	District 1

Description

These projects will restore design depth of the on-site treatment systems known as 208 grass swales to provide additional Capacity by replaces soils and vegetation (grass) of the existing bio-infiltration swales restore proper treatment functions as designed.

Justification

'Bio-Infiltration Systems' or grass percolation areas are commonly known as 'grassy swales' or ?208 swales?. The City maintains approximately 10 acres of grass percolation areas along arterial streets that treat and dispose of stormwater. City staff performs regular maintenance in order to maintain the effectiveness of these facilities. Bio-infiltration systems are expected to need rehabilitation about every 20 years. This project provides for this substantial rehabilitation efforts along arterials. The purpose of this project is to restore storage volumes and to additionally restore the stormwater treatment and infiltration capacity.

Comprehensive Plan Goals Met

CFU 1.3 - Capital Facilities and Utilities Maintenance. CFU 5.3 - Capital Facilities and Utilities. CFU 5.3 - Stormwater. NE 1.2 - Natural Environment Stormwater Techniques.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 175,000	$ 175,000	$ 175,000	$ 180,000	$ 190,000	$ 200,000	$ 1,095,000
Total		**$ 175,000**	**$ 175,000**	**$ 175,000**	**$ 180,000**	**$ 190,000**	**$ 200,000**	**$ 1,095,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ 175,000	$ 175,000	$ 175,000	$ 180,000	$ 190,000	$ 200,000	$ 1,095,000
Total		**$ 175,000**	**$ 175,000**	**$ 175,000**	**$ 180,000**	**$ 190,000**	**$ 200,000**	**$ 1,095,000**

5200-700 - Sewer
Large Line Rehabilitation from Hydrogen Sulfide Damage

Project Number:	WWM-2012-276	**Budget Year:**	2023
Project Type:	Collections Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2012	**Region:**	District 1

Description

Line sewer pipes and manholes that have been damaged by hydrogen sulfide and are at risk of failure and must be rehabilitated to prolong their service life. The most cost effective method to date to accomplish this rehabilitation is with the CIPP (cured in place pipe) process.

Justification

Hydrogen sulfide is a gas that is generated by the decomposition of wastewater and its byproduct is Sulfuric Acid which is eroding many of the concrete sewer pipes and manholes within the City. This erosion is occurring to the extent that pipes are collapsing and or being structurally compromised because of it. These pipes which are eroded will be lined with the CIPP method which is an inert material. Other pipes may need to be lined to limit risk due to other project construction, infiltration or severe cracking and identified repairs due to structural holes within the pipes.

Comprehensive Plan Goals Met

CFU 1.3 - Capital Facilities and Utilities Maintenance. CFU 5.4 - Capital Facilities and Utilities Ground Water.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 300,000	$ 360,000	$ 360,000	$ 370,000	$ 380,000	$ 390,000	$ 2,160,000
Total		**$ 300,000**	**$ 360,000**	**$ 360,000**	**$ 370,000**	**$ 380,000**	**$ 390,000**	**$ 2,160,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ 300,000	$ 360,000	$ 360,000	$ 370,000	$ 380,000	$ 390,000	$ 2,160,000
Total		**$ 300,000**	**$ 360,000**	**$ 360,000**	**$ 370,000**	**$ 380,000**	**$ 390,000**	**$ 2,160,000**

5200-700 - Sewer
Marion Hay Intertie-Holland St and Everett Ave

Project Number:	WWM-2012-277	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2012	**Region:**	District 1

Description

This project will construct a gravity sewer pipe from North Pointe lift station to Spokane County's Marion Hay Lift Station.

Justification

The force main from the North Pointe Lift Station produces a large amount of hydrogen sulfide gas when it connects to the sewer system near Nevada St and Lyons Ave. The gas is corrosive and is causing both safety concerns and pipe corrosion. A gravity pipe to Spokane County's Marion Hay Lift Station will eliminate the North Pointe Lift Station.

Comprehensive Plan Goals Met

CFU 1 - Adequate public facilities. CFU 3 - Coordination. CFU 5 - Environmental Concerns. NE 1 - Water Quality.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ 1,600,000	$ 2,900,000	$ 1,000,000	$ -	$ -	$ -	$ 5,500,000
Total		**$ 1,600,000**	**$ 2,900,000**	**$ 1,000,000**	**$ -**	**$ -**	**$ -**	**$ 5,500,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ 1,600,000	$ 2,900,000	$ 1,000,000	$ -	$ -	$ -	$ 5,500,000
Total		**$ 1,600,000**	**$ 2,900,000**	**$ 1,000,000**	**$ -**	**$ -**	**$ -**	**$ 5,500,000**

5200-700 - Sewer
Serpentex Biosolids Conveyor Replacement

Project Number:	WWM-2012-354	**Budget Year:**	2023
Project Type:	RPWRF Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2012	**Region:**	District 3

Description

Replacement of the Serpentex Biosolids Conveyor Systems.

Justification

This conveyor system takes solids that come from the digesters, are processed by the Belt Filter Presses, and moves them to the Biosolids Trucks for transport to the field application sites. Many parts of the equipment wear out over time and through use. A more complete rebuild of the equipment is needed every 10 to 15 years. The conveyors have been rebuilt as much as possible, now the main structure is failing and needs replacement. The replacement of the conveyors is necessary to ensure that Biosolids can be removed, transported from the RPWRF, and compliance with permitting is maintained.

Comprehensive Plan Goals Met

Capital Facilities and Utilities: CFU1 - Adequate Public Facilities and Services. CFU2 - Concurrency. CFU3 - Coordination. CFU4 - Service Provision. CFU5 - Environmental Concerns.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 400,000	$ 400,000	$ -	$ -	$ -	$ -	$ 800,000
Total		**$ 400,000**	**$ 400,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 800,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ 400,000	$ 400,000	$ -	$ -	$ -	$ -	$ 800,000
Total		**$ 400,000**	**$ 400,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 800,000**

5200-700 - Sewer
Perforated Plate Replacement

Project Number:	WWM-2012-400	**Budget Year:**	2023
Project Type:	RPWRF Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2012	**Region:**	District 3

Description

Replacement of perforated plates in the Headworks of the Advanced Wastewater Treatment Plant (AWWTP).

Justification

The perforated plates in the plant headworks rotate through the influent stream and screen out debris that would otherwise be carried into the plant treatment process. These plates used to wear out about every 3 years, but through the recent modification of the guides, the wear on them is much less and is expected to nearly double their useful life, saving hundreds of thousands of dollars over that time.

Comprehensive Plan Goals Met

Capital Facilities and Utilities: CFU1 - Adequate Public Facilities and Services. CFU2 - Concurrency. CFU3 - Coordination. CFU4 - Service Provision. CFU5 - Environmental Concerns.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ 300,000	$ -	$ -	$ -	$ 300,000	$ 600,000
Total		**$ -**	**$ 300,000**	**$ -**	**$ -**	**$ -**	**$ 300,000**	**$ 600,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ -	$ 300,000	$ -	$ -	$ -	$ 300,000	$ 600,000
Total		**$ -**	**$ 300,000**	**$ -**	**$ -**	**$ -**	**$ 300,000**	**$ 600,000**

5200-700 - Sewer
Post Street Bridge Rehabilitation

Project Number:	WWM-2013-138	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2013	**Region:**	Multiple

Description

The old 54-inch steel sewer interceptor will be replaced with 450 feet of 60-inch ductile iron pipe within the Post Street Bridge. Sewer must continue to flow during construction. This is an integrated project.

Justification

The Post Street Bridge, located immediately north of City Hall, carries a 54-inch sewer interceptor that transports sewage from the south side of the river to the north side. The bridge needs a significant rehabilitation. Construction of a new bridge will include the replacement of the 54-inch steel pipe with 60-inch between the river banks. The existing pipe during will be in continuous service during construction.

Comprehensive Plan Goals Met

CFU 1 - Adequate public facilities. The project maintains a critical artery in the City's sewer system. CFU 3 - Coordination. The project is integrated with other City infrastructure needs.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Debt	Integrated Capital Management	$ 3,100,000	$ -	$ -	$ -	$ -	$ -	$ 3,100,000
Total		**$ 3,100,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 3,100,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ 3,100,000	$ -	$ -	$ -	$ -	$ -	$ 3,100,000
Total		**$ 3,100,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 3,100,000**

5200-700 - Sewer
Combined Sewer Overflow (CSO) Outfall Repair

Project Number:	WWM-2014-33	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2014	**Region:**	District 1

Description

Repair the existing CSO outfall pipes for CSO 2, 6, 7, 14, 15, 16, 19 20, 22, 23, 26, 38, 41, and 42.

Justification

Many of the City CSO outfalls to the Spokane River and Latah Creek pipes area made of corrugated steel that have begun to corrode. Other pipes may need to be lined or require other repairs. Repair of outfall pipes has not incorporated into most of the CSO storage projects to expedite construction.

Comprehensive Plan Goals Met

CFU 1.3 - Maintenance.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ -	$ 250,000	$ 2,200,000	$ 700,000	$ -	$ 3,150,000
Total		**$ -**	**$ -**	**$ 250,000**	**$ 2,200,000**	**$ 700,000**	**$ -**	**$ 3,150,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ -	$ -	$ 250,000	$ -	$ -	$ -	$ 250,000
Construction	Integrated Capital Management	-	-	-	2,200,000	700,000	-	2,900,000
Total		**$ -**	**$ -**	**$ 250,000**	**$ 2,200,000**	**$ 700,000**	**$ -**	**$ 3,150,000**

5200-700 - Sewer
Study - Sewer Capital Facility Plan

Project Number:	WWM-2014-96	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2014	**Region:**	District 2

Description

A 20-year capital facility plan for the sanitary system collection system will be developed for LINK Utilities.

Justification

The last 20 year plan for the sanitary collection system was completed in the 1990s, before the CSO program began. With the construction of CSO facilities, the operation of the collection system will change. The plan will identify risks and opportunities for infill development.

Comprehensive Plan Goals Met

CFU 2.2 - Concurrency Management System. Requires a Capital Facilities Program.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ 200,000	$ 300,000	$ -	$ -	$ -	$ -	$ 500,000
Total		**$ 200,000**	**$ 300,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 500,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Planning	Integrated Capital Management	$ 200,000	$ 300,000	$ -	$ -	$ -	$ -	$ 500,000
Total		**$ 200,000**	**$ 300,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 500,000**

5200-700 - Sewer
RPWRF Building Exterior Rehabilitation and Improvements

Project Number:	WWM-2014-112	**Budget Year:**	2023
Project Type:	RPWRF Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2014	**Region:**	District 3

Description

Replace and upgrade the Solids Process Building exterior, and that of a few others, including roofs, windows, insulation, snow canopies, loading docks, and stairways.

Justification

The Solids Process Building exterior is a metal skin over a steel framework and was originally constructed in 1975 through 1977, with a small portion replaced in 2004. It is reaching the end of its service life. Weather-caused water damage has occurred and is a great concern for the building integrity and equipment (Plant control system and solid processing system). In addition, there are chemicals and lab equipment housed in the building that are becoming at risk. A number of associated smaller buildings, of similar age and condition, are also need exterior rehabilitation.

Comprehensive Plan Goals Met

0

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ 550,000	$ -	$ 5,500,000	$ -	$ -	$ 6,050,000
Total		**$ -**	**$ 550,000**	**$ -**	**$ 5,500,000**	**$ -**	**$ -**	**$ 6,050,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ -	$ 550,000	$ -	$ 5,500,000	$ -	$ -	$ 6,050,000
Total		**$ -**	**$ 550,000**	**$ -**	**$ 5,500,000**	**$ -**	**$ -**	**$ 6,050,000**

5200-700 - Sewer
Inflow and Infiltration (I/I) Reduction/ Net Enviro. Benefit

Project Number:	WWM-2014-113	**Budget Year:**	2023
Project Type:	Collections Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2014	**Region:**	District 1

Description

This project will use Cured In Place Pipe (CIPP) techniques to reline pipes throughout the city to reduce infiltration & inflow (I&I) from groundwater and river sources which is required to meet the net environmental benefit requirement for the Next Level Treatment (NLT).

Justification

The City has found by line monitoring that portions of the sewer system have river and groundwater influences which flow through joints and cracks into the City system. This project will use CIPP (cured in place pipe) techniques to reline these pipe sections. Infiltration and Inflow (I&I) must be reduced in combined sewer basins to achieve the Net environmental Benefit (NEB) basis granted by Department of Ecology. NEB allowed Next Level of Treatment (NLT) to be a membrane facility with less capacity than the rest of the treatment plant. Additionally if this water does not enter the system it will not require treatment and thus plant costs are lowered. Initially, excess flows during wet weather and high river periods will not receive NLT. These peak flows must be reduced so that all flow receives NLT, otherwise NLT will need to be expanded at a great expense. To date several million gallons of water per day has been removed from the interceptor system especially during high river flows.

Comprehensive Plan Goals Met

CFU 1.3 - Capital Facilities and Utilities Maintenance. CFU 5.4 - Capital Facilities and Maintenance Ground Water.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 300,000	$ 510,000	$ 510,000	$ 520,000	$ 540,000	$ 560,000	$ 2,940,000
Total		**$ 300,000**	**$ 510,000**	**$ 510,000**	**$ 520,000**	**$ 540,000**	**$ 560,000**	**$ 2,940,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ 300,000	$ 510,000	$ 510,000	$ 520,000	$ 540,000	$ 560,000	$ 2,940,000
Total		**$ 300,000**	**$ 510,000**	**$ 510,000**	**$ 520,000**	**$ 540,000**	**$ 560,000**	**$ 2,940,000**

5200-700 - Sewer
2 Combination Sewer Cleaner 2024

Project Number:	WWM-2014-128	**Budget Year:**	2023
Project Type:	Collections Vehicles and Equipment	**Budget Stage:**	Adopted Budget
Year Identified:	2014	**Region:**	District 1

Description

These trucks are used to clean large sewer lines throughout the city and assist other departments with construction or general pumping requirements.

Justification

To maintain the integrity and the capacity of the Sanitary Sewer System.

Comprehensive Plan Goals Met

CFU 1.3 - Capital Facilities and Utilities Maintenance. CFU 5.4 - Ground Water.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ 1,300,000	$ -	$ -	$ -	$ -	$ 1,300,000
Total		**$ -**	**$ 1,300,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,300,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ -	$ 1,300,000	$ -	$ -	$ -	$ -	$ 1,300,000
Total		**$ -**	**$ 1,300,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,300,000**

5200-700 - Sewer
100 KW Generator 2024

Project Number:	WWM-2014-137	**Budget Year:**	2023
Project Type:	Equipment	**Budget Stage:**	Adopted Budget
Year Identified:	2014	**Region:**	District 1

Description

This generator can be used for both Wastewater and Water Emergencies.

Justification

To maintain the capacity of the sewer pipes and to fill fresh water tanks during periods without power, such as the last wind storm.

Comprehensive Plan Goals Met

CFU 1.2 - Operational Efficiency. CFU 5.4 - Groundwater. CFU 3.4 - Natural and Man-Made disasters.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ 100,000	$ -	$ -	$ -	$ -	$ 100,000
Total		**$ -**	**$ 100,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 100,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ -	$ 100,000	$ -	$ -	$ -	$ -	$ 100,000
Total		**$ -**	**$ 100,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 100,000**

5200-700 - Sewer
WSDOT I-90 Stormwater Separation

Project Number:	WWM-2015-55	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2015	**Region:**	District 1

Description

Stormwater from I90 that currently is conveyed into CSO Basin 34 pipelines will be captured, treated and infiltrated. The 90 percent design for the project was completed in 2021 and was grant funded. This projects includes completing the design and constructing the treatment and infiltration facility at 5th and Ray. The treatment facility will consist of Modular Wetland units.

Justification

Currently at least 30 acres of stormwater from Interstate 90 are carried into the City's combined sewer system. This project will manage this stormwater in WSDOT right of way and remove from the combined sewer.

Comprehensive Plan Goals Met

CFU 5.3 - Stormwater. This project will reduce the impacts of urban runoff.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ -	$ 5,000	$ 1,000,000	$ 250,000	$ -	$ 1,255,000
Grant	Integrated Capital Management	-	-	15,000	3,000,000	750,000	-	3,765,000
Total		**$ -**	**$ -**	**$ 20,000**	**$ 4,000,000**	**$ 1,000,000**	**$ -**	**$ 5,020,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ -	$ -	$ 5,000	$ -	$ -	$ -	$ 5,000
Construction	Integrated Capital Management	-	-	15,000	4,000,000	1,000,000	-	5,015,000
Total		**$ -**	**$ -**	**$ 20,000**	**$ 4,000,000**	**$ 1,000,000**	**$ -**	**$ 5,020,000**

5200-700 - Sewer
Cochran Basin Stormwater Piping, TJ Meenach-River to NW Blvd

Project Number:	WWM-2015-68	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2015	**Region:**	District 3

Description

Stormwater piping will be constructed with the TJ Meenach street project to convey Cochran Basin flows to the Downriver Boat Launch treatment facility. This is an integrated project.

Justification

This project will reduce the direct discharge of stormwater to the Spokane River from the Cochran Basin.

Comprehensive Plan Goals Met

CFU 5.3 - Stormwater. This project will reduce the impacts of urban runoff.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ 1,300,000	$ -	$ -	$ -	$ -	$ -	$ 1,300,000
Grant	Integrated Capital Management	1,200,000	-	-	-	-	-	1,200,000
Debt	Integrated Capital Management	400,000	-	-	-	-	-	400,000
Total		**$ 2,900,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,900,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ 2,900,000	$ -	$ -	$ -	$ -	$ -	$ 2,900,000
Total		**$ 2,900,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,900,000**

5200-700 - Sewer
TJ Meenach, NW Blvd to Pettet Dr, Sewer Upgrade

Project Number:	WWM-2015-83	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2015	**Region:**	District 3

Description

Construct a new siphon pipeline parallel to the existing siphon under TJ Meenach Drive, including upstream and downstream vaults, drain appurtenances, and providing for emergency overflow relief to the river in the event of a major break between this location and the Wastewater Treatment Plant.

Justification

The existing single barrel siphon pipe conveys most of the Cities major interceptor sewer flows to RPWRF. The existing siphon pipe has sharp angles, very steep sections, which makes it impossible to clean and or repair. All siphons are vulnerable to plugging, which can cause backups, structural damage and complete failure. This project will construct a parallel siphon sewer pipe to provide redundancy, and thus the ability to clean and repair either pipeline while still maintaining flow in the redundant pipeline. CSO 10 dry weather connections will be updated to improve operations at this site.

Comprehensive Plan Goals Met

CFU 1.2 - Operational Efficiency. This project improves the operational efficiency by reducing required maintenance. CFU 1.3 - Maintenance. This project rehabilitates an existing capital facility. CFU 3.2 - Utility Installation. This project will be constructed with a street project to reduce cost.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Debt	Integrated Capital Management	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ 500,000
Total		**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 500,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ 500,000
Total		**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 500,000**

5200-700 - Sewer
Cochran Basin Treatment Facility-Downriver Boat Launch

Project Number:	WWM-2015-109	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2015	**Region:**	District 3

Description

This project will construct a stormwater treatment and retention facility to be integrated with the Downriver Boat Launch. Construction will be coordinated with TJ Meenach street reconstruction project.

Justification

This project will reduce the direct discharge of stormwater to the Spokane River from the Cochran Basin. By eliminating the discharge of stormwater from the Cochran Basin, approximately 50% of the City of Spokane?s stormwater discharge to the Spokane River will be removed. Approximately 90% of stormwater from this basin will be treated to meet the water quality requirements from the Department of Ecology.

Comprehensive Plan Goals Met

CFU 5.3 - Stormwater. This project will reduce the impacts of urban runoff.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Grant	Integrated Capital Management	$ 300,000	$ -	$ -	$ -	$ -	$ -	$ 300,000
Debt	Integrated Capital Management	100,000	-	-	-	-	-	100,000
Total		**$ 400,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 400,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ 400,000	$ -	$ -	$ -	$ -	$ -	$ 400,000
Total		**$ 400,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 400,000**

5200-700 - Sewer
Biosolids Tractor

Project Number:	WWM-2015-111	**Budget Year:**	2023
Project Type:	RPWRF Vehicles and Equipment	**Budget Stage:**	Adopted Budget
Year Identified:	2015	**Region:**	District 3

Description

Equipment being replaced is a biosolids Tractor.

Justification

Biosolids generated at the Riverside Park Water Reclamation Facility are applied to private farmland in accordance with Federal and State regulations. Replacement of biosolids application equipment is necessary to maintain the reliability necessary to meet biosolids application regulations. The tractor used to spread the solids in the farm fields is used in rough conditions, and heavily, due to the daily requirements of our permits. The service life of this tractor is anticipated to be around 15 to 20 years before replacement is necessary.

Comprehensive Plan Goals Met

Capital Facilities and Utilities: CFU1 - Adequate Public Facilities and Services. CFU2 - Concurrency. CFU3 - Coordination. CFU4 - Service Provision. CFU5 - Environmental Concerns.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ 220,000	$ -	$ -	$ -	$ -	$ 220,000
Total		**$ -**	**$ 220,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 220,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ -	$ 220,000	$ -	$ -	$ -	$ -	$ 220,000
Total		**$ -**	**$ 220,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 220,000**

5200-700 - Sewer
Cochran Basin Treatment Facility-Downriver Disc Golf Course

Project Number:	WWM-2016-15	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2016	**Region:**	District 3

Description

This project will construct a stormwater treatment and retention facility to be integrated with the Downriver Disc Golf Course. This project will eliminate the direct discharge of stormwater to the Spokane River from the Cochran Basin.

Justification

This project will eliminate the direct discharge of stormwater to the Spokane River from the Cochran Basin. By eliminating the discharge of stormwater from the Cochran Basin, approximately 50% of the City of Spokane?s stormwater discharge to the Spokane River will be removed. Approximately 90% of stormwater from this basin will be treated to meet the water quality requirements from the Department of Ecology.

Comprehensive Plan Goals Met

CFU 5.3 - Stormwater. This project will reduce the impacts of urban runoff.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Grant	Integrated Capital Management	$ 300,000	$ -	$ -	$ -	$ -	$ -	$ 300,000
Debt	Integrated Capital Management	100,000	-	-	-	-	-	100,000
Total		**$ 400,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 400,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ 400,000	$ -	$ -	$ -	$ -	$ -	$ 400,000
Total		**$ 400,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 400,000**

5200-700 - Sewer
Sundance IX Forcemain Replacement

Project Number:	WWM-2016-37	**Budget Year:**	2023
Project Type:	Collections Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2016	**Region:**	District 3

Description

The existing 6-inch Plastic (PVC) forcemain was installed in 1993. This project will replace this PVC pipe with a 6-inch ductile iron pipe. Approximately 1,100-feet of forcemain will be replaced. Pavement patching will occur where necessary in Skagit Ave.

Justification

Older PVC forcemains are prone to splitting and failure. Replacing these pipes with ductile iron, increases the life expectancy of the forcemain and reduces the risk of the pipes failure and sewerage spilling to ground.

Comprehensive Plan Goals Met

CFU 1 - Adequate Public Facilities and Services.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ 40,000	$ 410,000	$ 410,000	$ -	$ -	$ 860,000
Total		**$ -**	**$ 40,000**	**$ 410,000**	**$ 410,000**	**$ -**	**$ -**	**$ 860,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ -	$ 40,000	$ 410,000	$ 410,000	$ -	$ -	$ 860,000
Total		**$ -**	**$ 40,000**	**$ 410,000**	**$ 410,000**	**$ -**	**$ -**	**$ 860,000**

5200-700 - Sewer
Lift Station Repair and Upgrade Fund

Project Number:	WWM-2016-41	**Budget Year:**	2023
Project Type:	Collections Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2016	**Region:**	District 1

Description

Wastewater Management owns, operates and maintains several (29 and counting) lift stations throughout the City. Many of these lift stations are in need of various age related repairs. This fund provides money to make those repairs and upgrades.

Justification

Lift stations are a critical part of the City's wastewater infrastructure. Located at low points, the lift stations are required to 'lift' sanitary sewage to an elevation that it can flow via gravity to the RPWRF. If the lift stations stop functioning, the sewage backs up into Citizens homes and or flows out manholes onto streets and the ground. Upgrading these stations with new pumps, electrical controls and monitors allows the uninterrupted service to those homes and businesses connected to them. These Lift Stations currently identified for will be defined for design and construction based on condition assessments.

Comprehensive Plan Goals Met

CFU 1.3 - Capital Facilities and Utilities Maintenance. CFU 5.4 - Capital Facilities and Utilities Groundwater.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 275,000	$ 575,000	$ 350,000	$ 360,000	$ 370,000	$ 380,000	$ 2,310,000
Total		**$ 275,000**	**$ 575,000**	**$ 350,000**	**$ 360,000**	**$ 370,000**	**$ 380,000**	**$ 2,310,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ 275,000	$ 575,000	$ 350,000	$ 360,000	$ 370,000	$ 380,000	$ 2,310,000
Total		**$ 275,000**	**$ 575,000**	**$ 350,000**	**$ 360,000**	**$ 370,000**	**$ 380,000**	**$ 2,310,000**

5200-700 - Sewer
Napa Street, Sprague to 2nd Stormwater

Project Number:	WWM-2016-44	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2016	**Region:**	District 1

Description

Stormwater will be separated for treatment and infiltration as part of the street project. This is an integrated project.

Justification

Stormwater in this portion of Napa Street flows to the CSO Basin 34. Separating the stormwater from the combined sewer system will improve the quality of the Spokane River by reducing overflows, reduce the volume treated at Riverside Park Water Reclamation Facility, and protect the collection system pipes.

Comprehensive Plan Goals Met

CFU 5.3 - Stormwater. This project will reduce the impacts of urban runoff.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ -	$ 50,000	$ 375,000	$ -	$ -	$ 425,000
Grant	Integrated Capital Management	-	-	-	125,000	-	-	125,000
Total		**$ -**	**$ -**	**$ 50,000**	**$ 500,000**	**$ -**	**$ -**	**$ 550,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ -	$ -	$ 50,000	$ 500,000	$ -	$ -	$ 550,000
Total		**$ -**	**$ -**	**$ 50,000**	**$ 500,000**	**$ -**	**$ -**	**$ 550,000**

5200-700 - Sewer
Whistalks Way Stormwater Management

Project Number:	WWM-2016-46	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2016	**Region:**	District 3

Description

This project will include stormwater bioretention along the length of the street project for Fort George Wright. This is an integrated project.

Justification

This project will eliminate untreated stormwater discharge to the Spokane River from an MS4. During the planning phase, alternative methods of stormwater management will be analyzed to determine the most cost effective solution based on life cycle costs.

Comprehensive Plan Goals Met

CFU 5.3 - Stormwater. This project will reduce the impacts of urban runoff.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ -	$ -	$ 200,000	$ 500,000	$ 1,500,000	$ 2,200,000
Total		**$ -**	**$ -**	**$ -**	**$ 200,000**	**$ 500,000**	**$ 1,500,000**	**$ 2,200,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ -	$ -	$ -	$ 200,000	$ -	$ -	$ 200,000
Construction	Integrated Capital Management	-	-	-	-	500,000	1,500,000	2,000,000
Total		**$ -**	**$ -**	**$ -**	**$ 200,000**	**$ 500,000**	**$ 1,500,000**	**$ 2,200,000**

5200-700 - Sewer
4th Avenue, Sunset to Maple, Bioretention

Project Number:	WWM-2016-48	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2016	**Region:**	District 2

Description

As part of the street project, stormwater will be separated from the Combined Sewer System along both sides of 4th Avenue with bioretention areas between the sidewalks and back of curb. This is an integrated project.

Justification

This project will reduce stormwater flows to the CSO system.

Comprehensive Plan Goals Met

CFU 3.2 - Coordination of utility installations. This project will be constructed with a street project to reduce disruption and protect the infrastructure investment. CFU 5.3 - Stormwater. This project will manage stormwater to return to natural drainage and protect water quality.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ -	$ -	$ 40,000	$ 400,000	$ -	$ 440,000
Total		**$ -**	**$ -**	**$ -**	**$ 40,000**	**$ 400,000**	**$ -**	**$ 440,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ -	$ -	$ -	$ 40,000	$ -	$ -	$ 40,000
Construction	Integrated Capital Management	-	-	-	-	400,000	-	400,000
Total		**$ -**	**$ -**	**$ -**	**$ 40,000**	**$ 400,000**	**$ -**	**$ 440,000**

5200-700 - Sewer
Study - Stormwater Capital Facility Plan

Project Number:	WWM-2016-58	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2016	**Region:**	District 1

Description

A 20 year plan for wet weather systems, including CSO and stormwater, will be developed as part of Link-Utilities. Stormwater basin planning will include computer modeling, collecting flow data for verification, and evaluating alternatives. Most of the study and costs will occur in 2020.

Justification

This project began to use EPA's Integrated Plan framework to leverage stormwater projects with CSO projects. On-going planning will continue for stormwater management of future develop.

Comprehensive Plan Goals Met

CFU 2.2 - Concurrency Management System requires a Capital Facilities Program.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ 350,000	$ 150,000	$ -	$ -	$ -	$ -	$ 500,000
Total		**$ 350,000**	**$ 150,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 500,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Planning	Integrated Capital Management	$ 350,000	$ 150,000	$ -	$ -	$ -	$ -	$ 500,000
Total		**$ 350,000**	**$ 150,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 500,000**

5200-700 - Sewer
Closed Circuit Television Inspection Truck 2023

Project Number:	WWM-2016-111	**Budget Year:**	2023
Project Type:	Collections Vehicles and Equipment	**Budget Stage:**	Adopted Budget
Year Identified:	2016	**Region:**	District 1

Description

This truck is used to inspect all new Storm and Sanitary sewer pipes as well as routine inspection of existing infrastructure for blockages and structural condition.

Justification

To maintain the capacity and integrity of the wastewater collection system.

Comprehensive Plan Goals Met

CFU 1.2 - Operational Efficiency. CFU 5.4 - Groundwater.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 350,000	$ -	$ -	$ -	$ -	$ -	$ 350,000
Total		**$ 350,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 350,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ 350,000	$ -	$ -	$ -	$ -	$ -	$ 350,000
Total		**$ 350,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 350,000**

5200-700 - Sewer
ICP (Inductively Coupled Plasma Mass Spectrometry)

Project Number:	WWM-2016-119	**Budget Year:**	2023
Project Type:	RPWRF Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2016	**Region:**	District 3

Description

Purchase of updated laboratory equipment.

Justification

This analyzer is used to detect metals in the wastewater coming into the plant. This item is for a future replacement which will incorporate improved analytic capabilities by newer technology and will provide better detection limits allowing for better monitoring of permit requirements. This equipment has a useful life of 8-10 years before becoming obsolete, either through age and use or technology improvements which render it no longer useful.

Comprehensive Plan Goals Met

Capital Facilities and Utilities: CFU1 - Adequate Public Facilities and Services. CFU2 - Concurrency. CFU3 - Coordination. CFU4 - Service Provision. CFU5 - Environmental Concerns.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ -	$ 100,000	$ -	$ -	$ -	$ 100,000
Total		**$ -**	**$ -**	**$ 100,000**	**$ -**	**$ -**	**$ -**	**$ 100,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ -	$ -	$ 100,000	$ -	$ -	$ -	$ 100,000
Total		**$ -**	**$ -**	**$ 100,000**	**$ -**	**$ -**	**$ -**	**$ 100,000**

5200-700 - Sewer
Plant-wide Supply Fan Upgrade/Replacement (Occupied Spaces)

Project Number:	WWM-2016-121	**Budget Year:**	2023
Project Type:	RPWRF Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2016	**Region:**	District 3

Description

Upgrading and replacing HVAC supply fans.

Justification

This project will replace HVAC (Heating, Ventilation, and Air Conditioning) fans throughout the treatment plant that supply air to the occupied spaces; where staff work areas are. The existing fans were part of the original plant construction done in the 1970's and are now at or beyond the end of their service lives. They are breaking down, no longer running efficiently, and do not supply the volumes of filtered air needed. Existing fans will be replaced, three or four per year until the failing fans are upgraded.

Comprehensive Plan Goals Met

Capital Facilities and Utilities: CFU1 - Adequate Public Facilities and Services. CFU2 - Concurrency. CFU3 - Coordination. CFU4 - Service Provision. CFU5 - Environmental Concerns.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 130,000	$ 130,000	$ 740,000
Total		**$ 120,000**	**$ 120,000**	**$ 120,000**	**$ 120,000**	**$ 130,000**	**$ 130,000**	**$ 740,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 130,000	$ 130,000	$ 740,000
Total		**$ 120,000**	**$ 120,000**	**$ 120,000**	**$ 120,000**	**$ 130,000**	**$ 130,000**	**$ 740,000**

5200-700 - Sewer
Air Handling Units Supply and Exhaust (non-occupied)

Project Number:	WWM-2016-122	**Budget Year:**	2023
Project Type:	RPWRF Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2016	**Region:**	District 3

Description

Replacement and upgrade of Air Handling Units Supply and Exhaust fans for non-occupied areas.

Justification

These fans supply air and ensure air exchanges, necessary for a safe work environment, to spaces in the plant where staff goes, but is not permanently stationed (non-occupied). The existing fans were installed in the 70's and are at the end of their service life. Several have quit working or are under performing. Units will be prioritized and replaced in sequence of greatest need.

Comprehensive Plan Goals Met

Capital Facilities and Utilities: CFU1 - Adequate Public Facilities and Services. CFU2 - Concurrency. CFU3 - Coordination. CFU4 - Service Provision. CFU5 - Environmental Concerns.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 200,000	$ 200,000	$ 1,000,000
Total		**$ 150,000**	**$ 150,000**	**$ 150,000**	**$ 150,000**	**$ 200,000**	**$ 200,000**	**$ 1,000,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 200,000	$ 200,000	$ 1,000,000
Total		**$ 150,000**	**$ 150,000**	**$ 150,000**	**$ 150,000**	**$ 200,000**	**$ 200,000**	**$ 1,000,000**

5200-700 - Sewer
Headworks Building and Grit Chambers Odor Control System

Project Number:	WWM-2016-130	**Budget Year:**	2023
Project Type:	RPWRF Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2016	**Region:**	District 3

Description

Construction of odor control system for the Headworks Building and the Grit Chambers.

Justification

The Headworks Building is where raw wastewater enters the AWWTP. The wastewater then passes into the grit chambers next. The wastewater has only begun the treatment process at this point and carries with it strong odors. This project will construct air handling systems which will scrub the odors from the air exiting the Headworks and the Grit Chambers. This is one of the last areas of the plant to have odor control installed.

Comprehensive Plan Goals Met

Capital Facilities and Utilities: CFU1 - Adequate Public Facilities and Services. CFU2 - Concurrency. CFU3 - Coordination. CFU4 - Service Provision. CFU5 - Environmental Concerns.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ 200,000	$ 2,000,000	$ -	$ -	$ -	$ -	$ 2,200,000
Total		**$ 200,000**	**$ 2,000,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,200,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ 200,000	$ 2,000,000	$ -	$ -	$ -	$ -	$ 2,200,000
Total		**$ 200,000**	**$ 2,000,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,200,000**

5200-700 - Sewer
Study - Northeast Stormwater

Project Number:	WWM-2016-133	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2016	**Region:**	District 1

Description

This portion of the City has many areas where stormwater infiltration is not working. This study will help inform where those areas are and identify potential solutions to fix them.

Justification

The drywells in this area are performing poorly causing localized flooding.

Comprehensive Plan Goals Met

CFU 5.3 - Stormwater. This project will reduce the impacts of urban runoff.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ 50,000	$ -	$ -	$ -	$ -	$ -	$ 50,000
Total		**$ 50,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 50,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Planning	Integrated Capital Management	$ 50,000	$ -	$ -	$ -	$ -	$ -	$ 50,000
Total		**$ 50,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 50,000**

5200-700 - Sewer
Aubrey L White Parkway Reconstruction

Project Number:	WWM-2017-29	**Budget Year:**	2023
Project Type:	RPWRF Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2017	**Region:**	District 3

Description

Reconstruction of Aubrey L White Parkway from its intersection with Downriver Drive to the Riverside Park Reclamation Facility entrance.

Justification

The existing roadway is in poor condition, and the heavy construction traffic that will use it over the next few years is expected to damage it further. This project will reconstruct the roadway after the plant construction has been completed. The roadway surface will be cross sloped to the northeast to protect the I-02 Interceptor by preventing runoff over the shoulder that has twice threatened the integrity of the critical pipe. Project includes a concrete gutter along the base of an existing historic rock wall to convey runoff and any surface sewage flows safely to RPWRF without undermining the wall or the I-02 Interceptor. Project may also include I-02 bypass vault at Gate 4 and a 'purple pipe' force main for future potential reclaimed water to the Downriver Golf Course. Project further includes fiber-optic cable and conduit to accommodate electrical and/or communication infrastructure for SCADA.

Comprehensive Plan Goals Met

CFU 1 - Adequate Public Facilities and Services. This project will maintain adequate public street to protect and existing facility. CFU 1.3 - Maintenance. This project will rehabilitate an existing capital facility.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ 1,180,000	$ 1,070,000	$ -	$ -	$ -	$ 2,250,000
Total		**$ -**	**$ 1,180,000**	**$ 1,070,000**	**$ -**	**$ -**	**$ -**	**$ 2,250,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ -	$ 1,180,000	$ 1,070,000	$ -	$ -	$ -	$ 2,250,000
Total		**$ -**	**$ 1,180,000**	**$ 1,070,000**	**$ -**	**$ -**	**$ -**	**$ 2,250,000**

5200-700 - Sewer
Critical Digester Expansion Joint Replacement

Project Number:	WWM-2017-43	**Budget Year:**	2023
Project Type:	RPWRF Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2017	**Region:**	District 3

Description

This project will replace expansion joints before they fail and cause major damage/hazards/expense at the treatment facility.

Justification

The piping systems that transport sludge and other liquids between treatment plant facilities have expansion joints to absorb vibrations and small movements such that the piping itself does not fail. These expansion joints need to be replaced before they fail as part of regular maintenance.

Comprehensive Plan Goals Met

Capital Facilities and Utilities: CFU1 - Adequate Public Facilities and Services. CFU2 - Concurrency. CFU3 - Coordination. CFU4 - Service Provision. CFU5 - Environmental Concerns.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ 500,000
Total		**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 500,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ 500,000
Total		**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 500,000**

5200-700 - Sewer
Study - Water Reuse

Project Number:	WWM-2017-46	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2017	**Region:**	District 3

Description

This study will investigate options for cost-effective implementation of treated wastewater.

Justification

Class A effluent will be produced from the Next Level of Treatment. The opportunities and barriers for using the treated wastewater in cost effective applications will be evaluated.

Comprehensive Plan Goals Met

CFU1.2 - Operational Efficiency. Reuse would promote less aquifer pumping and more efficient use of our resources. CFU3.3 - Coordination. Project will require coordination with other utilities and departments. CFU5.2 - Water Conservation. Project will require less aquifer pumping.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ -	$ 150,000	$ 150,000	$ -	$ -	$ 300,000
Total		**$ -**	**$ -**	**$ 150,000**	**$ 150,000**	**$ -**	**$ -**	**$ 300,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Planning	Integrated Capital Management	$ -	$ -	$ 150,000	$ 150,000	$ -	$ -	$ 300,000
Total		**$ -**	**$ -**	**$ 150,000**	**$ 150,000**	**$ -**	**$ -**	**$ 300,000**

5200-700 - Sewer
Main Avenue Stormwater, Wall to Browne

Project Number:	WWM-2017-50	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2017	**Region:**	District 2

Description

Stormwater improvements will be constructed associated with the street project. This is an integrated project.

Justification

The downtown area has a history of rain related backups and surcharging. This project will provide additional capacity for the rain related issues. The planning analysis will target using the Clean Water drain as an alternative for treated stormwater effluent disposal.

Comprehensive Plan Goals Met

CFU 3.2 - Utility Installation. This project will be constructed with a street project to reduce disruption and protect the infrastructure investment. CFU 5.3 - Stormwater. This project will manage stormwater to return to natural drainage and protect water quality.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ -	$ -	$ 40,000	$ 120,000	$ 1,200,000	$ 1,360,000
Total		**$ -**	**$ -**	**$ -**	**$ 40,000**	**$ 120,000**	**$ 1,200,000**	**$ 1,360,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ -	$ -	$ -	$ 40,000	$ 120,000	$ -	$ 160,000
Construction	Integrated Capital Management	-	-	-	-	-	1,200,000	1,200,000
Total		**$ -**	**$ -**	**$ -**	**$ 40,000**	**$ 120,000**	**$ 1,200,000**	**$ 1,360,000**

5200-700 - Sewer
Heavy Construction Equipment- Loader 2023

Project Number:	WWM-2017-68	**Budget Year:**	2023
Project Type:	Collections Vehicles and Equipment	**Budget Stage:**	Adopted Budget
Year Identified:	2017	**Region:**	District 1

Description

This equipment is used to maintain and rehabilitate our existing sanitary sewer and stormwater collection systems. Also used in the citywide snow removal.

Justification

To maintain the capacity of the existing collection systems.

Comprehensive Plan Goals Met

CFU 1.2 - Operational Efficiency. CFU 1.3 - Maintenance. CFU 5.4 - Groundwater.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 250,000	$ -	$ -	$ -	$ -	$ -	$ 250,000
Total		**$ 250,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 250,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ 250,000	$ -	$ -	$ -	$ -	$ -	$ 250,000
Total		**$ 250,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 250,000**

5200-700 - Sewer
2 Mechanical Sewer Rodders 2027

Project Number:	WWM-2017-75	**Budget Year:**	2023
Project Type:	Collections Vehicles and Equipment	**Budget Stage:**	Adopted Budget
Year Identified:	2017	**Region:**	District 1

Description

Replace Equipment working on Storm and Sewer pipes.

Justification

Maintain utilities for our customers.

Comprehensive Plan Goals Met

CFU 1.2 - Operational Efficiency. CFU 5.4 - Groundwater.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ -	$ -	$ -	$ 770,000	$ -	$ 770,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ 770,000**	**$ -**	**$ 770,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ -	$ -	$ -	$ -	$ 770,000	$ -	$ 770,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ 770,000**	**$ -**	**$ 770,000**

5200-700 - Sewer
Liquid Disinfection Building Reskinning

Project Number:	WWM-2017-120	**Budget Year:**	2023
Project Type:	RPWRF Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2017	**Region:**	District 3

Description

This project would reroof and reside the existing Liquid Disinfection Building at the Riverside Park Water Reclamation Facility (RPWRF).

Justification

The Liquid Disinfection Building is experiencing roofing and siding failures, allowing weather and water exposure of critical equipment including electrical controls. Reskinning will preserve critical function of plant equipment as well as improving aesthetics of the facility to match the approved master plan. Reskinning will also allow for modifications to facilitate easier removal and replacement of equipment housed inside. Currently replacement of some equipment is not possible.

Comprehensive Plan Goals Met

Capital Facilities and Utilities; CFU1, Adequate Public Facilities and Services, CFU2, Concurrency, CFU3 Coordination, CFU4,Service Provision, CFU5, Environmental Concerns

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ 350,000	$ 3,500,000	$ -	$ -	$ -	$ 3,850,000
Total		**$ -**	**$ 350,000**	**$ 3,500,000**	**$ -**	**$ -**	**$ -**	**$ 3,850,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ -	$ 350,000	$ 3,500,000	$ -	$ -	$ -	$ 3,850,000
Total		**$ -**	**$ 350,000**	**$ 3,500,000**	**$ -**	**$ -**	**$ -**	**$ 3,850,000**

5200-700 - Sewer

Broadway Avenue, Cedar to Post Street, Sewer Replacement

Project Number:	WWM-2018-51	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2018	**Region:**	District 3

Description

As part of the street reconstruction project, the 8-inch and 10-inch sewer pipe along with the brick manholes will be replaced. This is an integrated project.

Justification

The clay sewer lines in Broadway Avenue were installed in 1897 and 1911. This sewer need to be replaced or improved using Cured in Place Pipe (CIPP). Brick manholes in this section of Broadway Avenue will probably not survive construction and need to be replaced.

Comprehensive Plan Goals Met

CFU 1.3 - Maintenance. This project will rehabilitate an existing sewer. CFU 3.2 - Utility Installation. This project will be constructed with a street project to reduce disruption and protect the infrastructure investment.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ 80,000	$ 800,000	$ -	$ -	$ -	$ 880,000
Total		**$ -**	**$ 80,000**	**$ 800,000**	**$ -**	**$ -**	**$ -**	**$ 880,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ -	$ 80,000	$ -	$ -	$ -	$ -	$ 80,000
Construction	Integrated Capital Management	-	-	800,000	-	-	-	800,000
Total		**$ -**	**$ 80,000**	**$ 800,000**	**$ -**	**$ -**	**$ -**	**$ 880,000**

5200-700 - Sewer

Havana Street, Broadway to Sprague Avenue Sewer Upgrades

Project Number:	WWM-2018-52	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2018	**Region:**	District 1

Description

As part of the street reconstruction project, the existing 8-inch sewer pipe in will be replaced.

Justification

The existing 8-inch clay sewer pipe in Havana will probably need to be reconstructed because of its proximity to the water main when the water main is replaced.

Comprehensive Plan Goals Met

CFU 3.2 - Utility Installation. This should be done in coordination with public street projects.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ -	$ -	$ 80,000	$ 800,000	$ -	$ 880,000
Total		**$ -**	**$ -**	**$ -**	**$ 80,000**	**$ 800,000**	**$ -**	**$ 880,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ -	$ -	$ -	$ 80,000	$ -	$ -	$ 80,000
Construction	Integrated Capital Management	-	-	-	-	800,000	-	800,000
Total		**$ -**	**$ -**	**$ -**	**$ 80,000**	**$ 800,000**	**$ -**	**$ 880,000**

5200-700 - Sewer
Spokane Falls Blvd, Post to Division, Sewer Replacement

Project Number:	WWM-2018-53	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2018	**Region:**	District 2

Description

As part of the street reconstruction project, brick manholes will be replaced. This is an integrated project.

Justification

The clay sewer lines in Spokane Falls Boulevard improved using Cured in Place Pipe (CIPP). Brick manholes in this section of this project will probably not survive construction and need to be replaced.

Comprehensive Plan Goals Met

CFU 1.3 - Maintenance. This project will rehabilitate an existing capital facility.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ -	$ -	$ 150,000	$ 500,000	$ 1,000,000	$ 1,650,000
Total		**$ -**	**$ -**	**$ -**	**$ 150,000**	**$ 500,000**	**$ 1,000,000**	**$ 1,650,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ -	$ -	$ -	$ 150,000	$ -	$ -	$ 150,000
Construction	Integrated Capital Management	-	-	-	-	500,000	1,000,000	1,500,000
Total		**$ -**	**$ -**	**$ -**	**$ 150,000**	**$ 500,000**	**$ 1,000,000**	**$ 1,650,000**

5200-700 - Sewer
Mallon Avenue, Monroe to Howard St, Sewer Replacement

Project Number:	WWM-2018-54	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2018	**Region:**	District 3

Description

As part of the street reconstruction project, the 10-inch sewer pipe and brick manholes will be replaced. This is an integrated project.

Justification

The clay sewer lines in Mallon Avenue were installed in 1917. This sewer need to be replaced or improved using Cured in Place Pipe (CIPP). Brick manholes in this section of Mallon Avenue will probably not survive construction and need to be replaced. Analysis during the planning phase will determine the sewer needs for growth and the most cost effective alternative for construction.

Comprehensive Plan Goals Met

CFU 1.3 - Maintenance. This project will rehabilitate an existing capital facility. CFU 2.1 - Available Public Facilities. Construction of this project will provide adequate infrastructure at the time of development.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ -	$ 40,000	$ 200,000	$ 200,000	$ -	$ 440,000
Total		**$ -**	**$ -**	**$ 40,000**	**$ 200,000**	**$ 200,000**	**$ -**	**$ 440,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ -	$ -	$ 40,000	$ -	$ -	$ -	$ 40,000
Construction	Integrated Capital Management	-	-	-	200,000	200,000	-	400,000
Total		**$ -**	**$ -**	**$ 40,000**	**$ 200,000**	**$ 200,000**	**$ -**	**$ 440,000**

5200-700 - Sewer
Thor and Freya, Hartson to Sprague Avenue Sewer Upgrades

Project Number:	WWM-2018-55	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2018	**Region:**	Multiple

Description

Sewer pipe and manhole upgrades associated with the street project. This is an integrated project.

Justification

The street construction is planned to be concrete for Thor and Freya for this project. Utilities need to be upgraded for the life of the concrete pavement. Upgrades will be in conjunction with the street project.

Comprehensive Plan Goals Met

CFU 3.2 - Utility Installation should be coordination with public street projects.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ 720,000	$ -	$ -	$ -	$ -	$ -	$ 720,000
Total		**$ 720,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 720,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ 720,000	$ -	$ -	$ -	$ -	$ -	$ 720,000
Total		**$ 720,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 720,000**

5200-700 - Sewer
Riverside Ave, Monroe St to Wall St, Sewer Replacement

Project Number:	WWM-2018-60	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2018	**Region:**	District 2

Description

As part of the street reconstruction project, brick manholes and vitrified clay pipe will be replaced and/or lined. This is an integrated project.

Justification

Brick manholes and vitrified clay pipe in this section of Riverside Avenue will probably not survive construction and need to be replaced and/or lined.

Comprehensive Plan Goals Met

CFU 1.3 - Maintenance.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ -	$ 50,000	$ 400,000	$ 100,000	$ -	$ 550,000
Total		**$ -**	**$ -**	**$ 50,000**	**$ 400,000**	**$ 100,000**	**$ -**	**$ 550,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ -	$ -	$ 50,000	$ -	$ -	$ -	$ 50,000
Construction	Integrated Capital Management	-	-	-	400,000	100,000	-	500,000
Total		**$ -**	**$ -**	**$ 50,000**	**$ 400,000**	**$ 100,000**	**$ -**	**$ 550,000**

5200-700 - Sewer
Broadway, Cedar to Post, Stormwater Separation

Project Number:	WWM-2018-70	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2018	**Region:**	District 3

Description

This project will provide stormwater improvements with the street project. The improvements will include separation and treatment from the combined sewer system. Portions of the project are also located within an area served by separated storm pipe. These areas are being evaluated for treatment.

Justification

This project is necessary to reduce sanitary sewer overflows and remove untreated stormwater from the Spokane River and improve water quality.

Comprehensive Plan Goals Met

CFU 5.3 - Stormwater. This project will manage stormwater to return to natural drainage and protect water quality.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ -	$ 150,000	$ 1,000,000	$ 500,000	$ -	$ 1,650,000
Total		**$ -**	**$ -**	**$ 150,000**	**$ 1,000,000**	**$ 500,000**	**$ -**	**$ 1,650,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ -	$ -	$ 150,000	$ -	$ -	$ -	$ 150,000
Construction	Integrated Capital Management	-	-	-	1,000,000	500,000	-	1,500,000
Total		**$ -**	**$ -**	**$ 150,000**	**$ 1,000,000**	**$ 500,000**	**$ -**	**$ 1,650,000**

5200-700 - Sewer
Washington Basin Stormwater Project (Knox and Montgomery)

Project Number:	WWM-2018-72	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2018	**Region:**	District 3

Description

This project provides the stormwater treatment facilities for the Monroe St project completed in 2018. The facilities are proposed to be Modular Wetlands located off of Monroe Street on Knox Avenue between Wall and Howard. Construction will be completed in fall/winter of 2022.

Justification

This project is necessary to remove untreated stormwater from the Spokane River and improve water quality.

Comprehensive Plan Goals Met

CFU 5.3 - Stormwater. This project will reduce the impacts of urban runoff.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Grant	Integrated Capital Management	$ 5,000	$ -	$ -	$ -	$ -	$ -	$ 5,000
Total		**$ 5,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 5,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ 5,000	$ -	$ -	$ -	$ -	$ -	$ 5,000
Total		**$ 5,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 5,000**

5200-700 - Sewer
Study - Indian Trail Stormwater

Project Number:	WWM-2018-73	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2018	**Region:**	District 3

Description

The Indian trail area continues to have flooding issues. This study will include geotechnical investigation as well as evaluating alternatives to both improve water quality and increase infiltration capacity.

Justification

This study is necessary to relieve flooding in the area as well as improve water quality.

Comprehensive Plan Goals Met

CFU 5.3 - Stormwater. This project will propose a management plan for the Indian Trail area.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ 240,000	$ 60,000	$ -	$ -	$ -	$ -	$ 300,000
Total		**$ 240,000**	**$ 60,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 300,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Planning	Integrated Capital Management	$ 240,000	$ 60,000	$ -	$ -	$ -	$ -	$ 300,000
Total		**$ 240,000**	**$ 60,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 300,000**

5200-700 - Sewer
Spokane Falls Blvd, Post to Division

Project Number:	WWM-2018-74	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2018	**Region:**	District 2

Description

This project will provide stormwater treatment and separation along Spokane Falls Blvd as part of the street project. The runoff currently drains to the combined sewer system. This is an integrated project.

Justification

The downtown area has a history of rain related backups and surcharging. This project will provide additional capacity for the rain related issues.

Comprehensive Plan Goals Met

CFU 3.2 Utility Installation. This project will be constructed with a street project to reduce disruption and protect the infrastructure inves NE 1 Water Quality. Protect the Aquifer; CFU 5.3 Stormwater. This project will manage stormwater to return to natural drainage and protect water quality.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ -	$ -	$ 200,000	$ -	$ -	$ 200,000
Grant	Integrated Capital Management	-	60,000	-	-	500,000	1,500,000	2,060,000
Total		**$ -**	**$ 60,000**	**$ -**	**$ 200,000**	**$ 500,000**	**$ 1,500,000**	**$ 2,260,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ -	$ -	$ -	$ 200,000	$ -	$ -	$ 200,000
Construction	Integrated Capital Management	-	60,000	-	-	500,000	1,500,000	2,060,000
Total		**$ -**	**$ 60,000**	**$ -**	**$ 200,000**	**$ 500,000**	**$ 1,500,000**	**$ 2,260,000**

5200-700 - Sewer
Mallon Avenue, Monroe to Howard, Stormwater Management

Project Number:	WWM-2018-75	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2018	**Region:**	District 3

Description

This project will provide treatment and potential retention of stormwater prior to discharging back into the existing separated storm system. This is an integrated project.

Justification

This project will improve the water quality in the Spokane River. Treatment will be provided prior to discharging the runoff. This untreated runoff currently drains through an MS4 to the Spokane River.

Comprehensive Plan Goals Met

CFU 3.2-Utility Installation. This project will be constructed with a street project to reduce disruption and protect the infrastructure investm. NE 1-Water Quality. Protect the Aquifer; CFU 5.3-Stormwater. This project will manage stormwater to return to natural drainage and protect water quality.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Grant	Integrated Capital Management	$ -	$ 5,000	$ 30,000	$ 30,000	$ 600,000	$ -	$ 665,000
Total		**$ -**	**$ 5,000**	**$ 30,000**	**$ 30,000**	**$ 600,000**	**$ -**	**$ 665,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ -	$ 5,000	$ 30,000	$ 30,000	$ 600,000	$ -	$ 665,000
Total		**$ -**	**$ 5,000**	**$ 30,000**	**$ 30,000**	**$ 600,000**	**$ -**	**$ 665,000**

5200-700 - Sewer
Havana Street, Sprague to Broadway Separation

Project Number:	WWM-2018-79	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2018	**Region:**	District 1

Description

The project will provide stormwater improvements along Havana within the street project limits. The stormwater improvements will likely include bioretention outside of the right of way. This is an integrated project.

Justification

This area currently drains into the combined sewer system. Separating stormwater from the combined sewer system will reduce the volume treated at the Riverside Park Water Reclamation Facility and better protect the interceptor.

Comprehensive Plan Goals Met

CFU 3.2 - Utility Installation. This project will be constructed with a street project to reduce disruption and protect the infrastructure investment. CFU 5.3 - Stormwater. This project will manage stormwater to return to natural drainage and protect water quality.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ -	$ -	$ -	$ 25,000	$ 25,000	$ 50,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ 25,000**	**$ 25,000**	**$ 50,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ -	$ -	$ -	$ -	$ 25,000	$ 25,000	$ 50,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ 25,000**	**$ 25,000**	**$ 50,000**

5200-700 - Sewer
Boiler Burners and Controls

Project Number:	WWM-2018-110	**Budget Year:**	2023
Project Type:	RPWRF Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2018	**Region:**	District 3

Description

Plant boilers 1, 2, and 3 need new Burners and Controls to maintain their functionality.

Justification

The existing burner are worn to the point where they no longer function properly and both the existing burners and controls are now old enough that they are obsolete. New repair parts are not available and they can only be kept operational by acquiring used parts. New burners and controls are needed to insure reliability and to meet current emissions and safety standards.

Comprehensive Plan Goals Met

Capital Facilities and Utilities: CFU1 - Adequate Public Facilities and Services. CFU2 - Concurrency. CFU3 - Coordination. CFU4 - Service Provision. CFU5 - Environmental Concerns.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 500,000	$ 500,000	$ 500,000	$ -	$ -	$ -	$ 1,500,000
Total		**$ 500,000**	**$ 500,000**	**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ 1,500,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ 500,000	$ 500,000	$ 500,000	$ -	$ -	$ -	$ 1,500,000
Total		**$ 500,000**	**$ 500,000**	**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ 1,500,000**

5200-700 - Sewer
4th Avenue, Sunset to Maple St, Sewer Replacement

Project Number:	WWM-2018-156	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2018	**Region:**	District 2

Description

As part of the street reconstruction project, 10-inch sewer pipe and brick manholes will be replaced or improved with Cured In Place Pipe (CIPP) This is an integrated project.

Justification

The clay sewer lines in 4th Avenue were installed in 1897. This sewer need to be replaced or improved using Cured in Place Pipe (CIPP). Brick manholes in this section of 4th Avenue will probably not survive construction and need to be replaced.

Comprehensive Plan Goals Met

CFU 1.3 - Maintenance. This project will rehabilitate an existing capital facility.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ -	$ -	$ 25,000	$ 250,000	$ -	$ 275,000
Total		**$ -**	**$ -**	**$ -**	**$ 25,000**	**$ 250,000**	**$ -**	**$ 275,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ -	$ -	$ -	$ 25,000	$ -	$ -	$ 25,000
Construction	Integrated Capital Management	-	-	-	-	250,000	-	250,000
Total		**$ -**	**$ -**	**$ -**	**$ 25,000**	**$ 250,000**	**$ -**	**$ 275,000**

5200-700 - Sewer
Rehabilitation of Combined Sewer Overflow (CSO) Facilities

Project Number:	WWM-2019-7	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2019	**Region:**	Multiple

Description

As the CSO program approaches completion, several of the earlier constructed facilities are not operating as was expected during the design process. CSO 34-3 Ray, 34-2 Underhill, and CSO 10 need rehabilitation.

Justification

CSO 10 Buckeye & Grace needs a PLC to operate the flush gates and the CTI channel to be reshape because of low flow rates. The lid of CSO 34-3 leaks causing corrosion of the rebar. CSO 34-2 needs the CTI reshaped to increase velocity and reduce odors. These facilities require continual and on-going maintenance to operate correctly. Cost estimates will be refined as the project charter is developed.

Comprehensive Plan Goals Met

CFU 1.2 - Operational Efficiency. This project will improve the operational efficiency by reducing required maintenance. CFU 1.3 - Maintenance. This project will rehabilitate an existing capital facility.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ 1,100,000	$ -	$ -	$ -	$ -	$ -	$ 1,100,000
Total		**$ 1,100,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,100,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ 1,100,000	$ -	$ -	$ -	$ -	$ -	$ 1,100,000
Total		**$ 1,100,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,100,000**

5200-700 - Sewer
NSC Planning - Interstate 90 to Sprague Avenue

Project Number:	WWM-2019-9	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2019	**Region:**	District 2

Description

Utility planning for relocation or protection of stormwater facilities impacted by the planned North Spokane Corridor (NSC) construction. Examine opportunities for stormwater separation and treatment.

Justification

To relocate or protect stormwater facilities due to conflicts with planned North Spokane Corridor construction. Separate and treat stormwater.

Comprehensive Plan Goals Met

CFU 1 - Adequate Public Facilities and Services. CFU 3 - Coordination.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Grant	Integrated Capital Management	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ -	$ -	$ 20,000
Total		**$ 5,000**	**$ 5,000**	**$ 5,000**	**$ 5,000**	**$ -**	**$ -**	**$ 20,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Planning	Integrated Capital Management	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ -	$ -	$ 20,000
Total		**$ 5,000**	**$ 5,000**	**$ 5,000**	**$ 5,000**	**$ -**	**$ -**	**$ 20,000**

5200-700 - Sewer
Cochran Basin Lift Station and Control Facility

Project Number:	WWM-2019-11	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2019	**Region:**	District 3

Description

A concrete facility will be constructed to divert flow from Cochran Basin to the bio-retention facilities. A lift station, valves and weir will be included as part of the control strategy.

Justification

By eliminating the discharge of stormwater from the Cochran Basin, approximately 50% of the City of Spokane?s stormwater discharge to the Spokane River will be removed. Approximately 90% of stormwater from this basin will be treated to meet water quality requirements from the Department of Ecology.

Comprehensive Plan Goals Met

CFU 5.3 - Stormwater. This project reduces to impacts of urban runoff.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Grant	Integrated Capital Management	$ 3,000,000	$ 375,000	$ -	$ -	$ -	$ -	$ 3,375,000
Debt	Integrated Capital Management	1,000,000	125,000	-	-	-	-	1,125,000
Total		**$ 4,000,000**	**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 4,500,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ 4,000,000	$ 500,000	$ -	$ -	$ -	$ -	$ 4,500,000
Total		**$ 4,000,000**	**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 4,500,000**

5200-700 - Sewer
Catch Basin Cleaner Trucks

Project Number:	WWM-2019-20	**Budget Year:**	2023
Project Type:	Collections Vehicles and Equipment	**Budget Stage:**	Adopted Budget
Year Identified:	2019	**Region:**	District 1

Description

These trucks are used to clean Storm inlets throughout the city and assist other departments with construction or general pumping requirements.
includes 2- trucks in 2025, 1- 2027, 1 in 2028

Justification

To maintain the integrity and the capacity of the Storm System.

Comprehensive Plan Goals Met

CFU 1.3 - Capital Facilities and Utilities Maintenance. CFU 5.4 - Ground Water.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ -	$ 1,100,000	$ -	$ 550,000	$ 550,000	$ 2,200,000
Total		**$ -**	**$ -**	**$ 1,100,000**	**$ -**	**$ 550,000**	**$ 550,000**	**$ 2,200,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ -	$ -	$ 1,100,000	$ -	$ 550,000	$ 550,000	$ 2,200,000
Total		**$ -**	**$ -**	**$ 1,100,000**	**$ -**	**$ 550,000**	**$ 550,000**	**$ 2,200,000**

5200-700 - Sewer
Heavy Construction Equipment- Backhoe 2025

Project Number:	WWM-2019-21	**Budget Year:**	2023
Project Type:	Collections Vehicles and Equipment	**Budget Stage:**	Adopted Budget
Year Identified:	2019	**Region:**	District 1

Description

This equipment is used to maintain and rehabilitate our existing sanitary and stormwater collection systems.

Justification

To maintain the capacity of the aging wastewater and stormwater collection systems.

Comprehensive Plan Goals Met

CFU 1.2 - Operational Efficiency. CFU 1.3 - Maintenance. CFU 5.4 - Groundwater.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ -	$ 200,000	$ -	$ -	$ -	$ 200,000
Total		**$ -**	**$ -**	**$ 200,000**	**$ -**	**$ -**	**$ -**	**$ 200,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ -	$ -	$ 200,000	$ -	$ -	$ -	$ 200,000
Total		**$ -**	**$ -**	**$ 200,000**	**$ -**	**$ -**	**$ -**	**$ 200,000**

5200-700 - Sewer
Whistalks Way Sewer Upgrades

Project Number:	WWM-2019-25	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2019	**Region:**	District 3

Description

The 8-inch sewer in Fort George Wright and siphon under Spokane River will be upgraded with the streets project.

Justification

The existing 8-inch siphon under the Spokane River is near its capacity. Upgrades to the siphon along with the lift stations have occurred as new developments were constructed in the area over the past 15 years. During the planning phase, a comprehensive analysis of the sewer system in the area will be completed to determine the most cost effective alternative to provide sewer service for growth along Ft. George Wright and may include a new lift station, river crossing (either bridge or boring), and connecting piping.

Comprehensive Plan Goals Met

CFU 1.2 - Operational Efficiency. Operational efficiency will be improved by reducing required maintenance. CFU 2.1 - Available Public Facilities. Provide infrastructure at time of development. CFU 3.2 - Utility Installation. Constructed with a street project.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ -	$ -	$ 92,000	$ 820,000	$ 100,000	$ 1,012,000
Total		**$ -**	**$ -**	**$ -**	**$ 92,000**	**$ 820,000**	**$ 100,000**	**$ 1,012,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ -	$ -	$ -	$ 92,000	$ -	$ -	$ 92,000
Construction	Integrated Capital Management	-	-	-	-	820,000	100,000	920,000
Total		**$ -**	**$ -**	**$ -**	**$ 92,000**	**$ 820,000**	**$ 100,000**	**$ 1,012,000**

5200-700 - Sewer
NSC Planning - Interstate 90 to Sprague Avenue

Project Number:	WWM-2019-29	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2019	**Region:**	District 2

Description

Utility planning for relocation, protection or upgrade of wastewater utility facilities impacted by the planned North Spokane Corridor (NSC).

Justification

To relocate or protect wastewater facilities due to conflicts with planned North Spokane Corridor construction.

Comprehensive Plan Goals Met

CFU 1 - Adequate Public Facilities and Services; CFU 3 - Coordination

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Grant	Integrated Capital Management	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ -	$ 50,000
Total		**$ 10,000**	**$ 10,000**	**$ 10,000**	**$ 10,000**	**$ 10,000**	**$ -**	**$ 50,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ -	$ 50,000
Total		**$ 10,000**	**$ 10,000**	**$ 10,000**	**$ 10,000**	**$ 10,000**	**$ -**	**$ 50,000**

5200-700 - Sewer
Sunset Blvd Bike Path, Deer Heights to Royal

Project Number:	WWM-2019-31	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2019	**Region:**	District 2

Description

The project will include upgrades to the stormwater system associated with the bike path construction. Design will occur in 2019 because of funding constraints. This is an integrated project.

Justification

The stormwater along the length of the project is currently managed in open ditches adjacent to private property. The proposed project will manage stormwater more efficiently and will provide treatment prior to infiltration into the ground.

Comprehensive Plan Goals Met

CFU 5.3 - Stormwater. This project will reduce the impacts of urban runoff.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ 40,000	$ 300,000	$ 100,000	$ -	$ -	$ 440,000
Total		**$ -**	**$ 40,000**	**$ 300,000**	**$ 100,000**	**$ -**	**$ -**	**$ 440,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ -	$ 40,000	$ -	$ -	$ -	$ -	$ 40,000
Construction	Integrated Capital Management	-	-	300,000	100,000	-	-	400,000
Total		**$ -**	**$ 40,000**	**$ 300,000**	**$ 100,000**	**$ -**	**$ -**	**$ 440,000**

5200-700 - Sewer

Desmet & Superior Sewer Replace Pipe Under R/R & Adj. Lines

Project Number:	WWM-2019-42	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2019	**Region:**	District 1

Description

700 feet of 10-inch pipe to be replaced due to settlement and material deterioration by reduction of cement paste by the generation of significant levels of hydrogen sulfide gas and the end product of sulfuric acid.

Justification

This project is necessary because continued deterioration of the pipe will result in collapse and failure including potential overflow of sewage into the Spokane river.

Comprehensive Plan Goals Met

CFU 1.3 - Maintenance. The project repairs existing assets.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 90,000	$ 900,000	$ -	$ -	$ -	$ -	$ 990,000
Total		**$ 90,000**	**$ 900,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 990,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Sewer Fund	$ 90,000	$ -	$ -	$ -	$ -	$ -	$ 90,000
Construction	Sewer Fund	-	900,000	-	-	-	-	900,000
Total		**$ 90,000**	**$ 900,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 990,000**

5200-700 - Sewer
Underground Injection Control (UIC) Regulation Compliance

Project Number:	WWM-2019-44	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2019	**Region:**	District 1

Description

Identification and retrofit of non-compliant UICs (i.e. drywells) throughout the City. The replacement will coordinate with existing construction projects.

Justification

Replacement will be prioritized for the most critical UIC as identified by the UIC registration process, which protects the Spokane Rathdrum Prairie Sole Source Drinking Water Aquifer. Non complying UICs / drywells can impact the aquifer by introducing contaminates below ground without adequate treatment. This program will bring UICs into federal and state compliance.

Comprehensive Plan Goals Met

CFU 5.3 - Stormwater. This project will reduce the impacts of urban runoff.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 300,000
Total		**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 300,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 300,000
Total		**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 300,000**

5200-700 - Sewer
NSC Planning - Sprague Avenue to Spokane River

Project Number:	WWM-2019-46	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2019	**Region:**	District 1

Description

Utility planning for relocation, protection or upgrade of wastewater utility facilities near the planned North Spokane Corridor. This planning work began in 2019 and will continue through 2022.

Justification

To relocate or protect wastewater facilities due to conflicts with planned North Spokane Corridor construction.

Comprehensive Plan Goals Met

CFU 1 - Adequate Public Facilities and Services. CFU 3 - Coordination.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Grant	Integrated Capital Management	$ 10,000	$ 10,000	$ 10,000	$ -	$ -	$ -	$ 30,000
Total		**$ 10,000**	**$ 10,000**	**$ 10,000**	**$ -**	**$ -**	**$ -**	**$ 30,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ 10,000	$ 10,000	$ 10,000	$ -	$ -	$ -	$ 30,000
Total		**$ 10,000**	**$ 10,000**	**$ 10,000**	**$ -**	**$ -**	**$ -**	**$ 30,000**

5200-700 - Sewer
Biofilter Media Replacement

Project Number:	WWM-2019-56	**Budget Year:**	2023
Project Type:	RPWRF Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2019	**Region:**	District 3

Description

The scheduled replacement of the bark media in the odor control Biofilter beds that scrub odors from the air out of the sludge handling building.

Justification

The Biofilter removes the strong odors that come from the sludge processing building. The media used to absorb odors is simply bark, which over time decomposes and loses its ability to continue to scrub the air. Routine replacement of the media is required every few years to maintain proper function of the facility.

Comprehensive Plan Goals Met

Capital Facilities and Utilities: CFU1 - Adequate Public Facilities and Services. CFU2 - Concurrency. CFU3 - Coordination. CFU4 - Service Provision. CFU5 - Environmental Concerns.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ -	$ -	$ 140,000	$ 150,000	$ -	$ 290,000
Total		**$ -**	**$ -**	**$ -**	**$ 140,000**	**$ 150,000**	**$ -**	**$ 290,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ -	$ -	$ -	$ 140,000	$ 150,000	$ -	$ 290,000
Total		**$ -**	**$ -**	**$ -**	**$ 140,000**	**$ 150,000**	**$ -**	**$ 290,000**

5200-700 - Sewer
Turblex Blower Service

Project Number:	WWM-2019-67	**Budget Year:**	2023
Project Type:	RPWRF Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2019	**Region:**	District 3

Description

The project is the in-depth full servicing of the aeration basin (AB) blowers.

Justification

The AB blowers provide the air to maintain dissolved oxygen levels needed for the activated sludge process. They are complex turbo blowers and factory service is required on 5 year intervals on each of the blowers.

Comprehensive Plan Goals Met

Capital Facilities and Utilities: CFU1 - Adequate Public Facilities and Services. CFU2 - Concurrency. CFU3 - Coordination. CFU4 - Service Provision. CFU5 - Environmental Concerns.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ -	$ -	$ -	$ 140,000	$ -	$ 140,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ 140,000**	**$ -**	**$ 140,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ -	$ -	$ -	$ -	$ 140,000	$ -	$ 140,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ 140,000**	**$ -**	**$ 140,000**

5200-700 - Sewer
Silo Digester No. 3 Mixing System

Project Number:	WWM-2019-71	**Budget Year:**	2023
Project Type:	RPWRF Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2019	**Region:**	District 3

Description

This project would add a mixing system to Silo Digester No. 3.

Justification

Silo Digester No. 3 can only be used as a secondary digester (as it has no heating system currently). After the initial running of this digester it was confirmed that without a mixing system that grit and other heavy material settled several feet thick on the bottom and requires difficult, expensive, and potentially dangerous cleaning efforts. A mixing system, similar to the other digesters, will alleviate this problem.

Comprehensive Plan Goals Met

Capital Facilities and Utilities: CFU1 - Adequate Public Facilities and Services. CFU2 - Concurrency. CFU3 - Coordination. CFU4 - Service Provision. CFU5 - Environmental Concerns.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ 450,000	$ 3,000,000	$ -	$ -	$ -	$ 3,450,000
Total		**$ -**	**$ 450,000**	**$ 3,000,000**	**$ -**	**$ -**	**$ -**	**$ 3,450,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ -	$ 450,000	$ 3,000,000	$ -	$ -	$ -	$ 3,450,000
Total		**$ -**	**$ 450,000**	**$ 3,000,000**	**$ -**	**$ -**	**$ -**	**$ 3,450,000**

5200-700 - Sewer
NSC - Greene Basin Storm Improvements

Project Number:	WWM-2020-5	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2020	**Region:**	District 1

Description

Install storm swale at North end of SCC campus near Upriver Drive to reduce flow to Spokane River.

Justification

North Spokane Corridor (NSC) construction will eliminate the current Greene Basin outflow into Spokane River. Construction of a swale required to infiltrate stormwater.

Comprehensive Plan Goals Met

CFU 5.3 - Implement a stormwater management plan to reduce impacts from urban runoff.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Grant	Integrated Capital Management	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ 100,000
Total		**$ 100,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 100,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ 100,000
Total		**$ 100,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 100,000**

5200-700 - Sewer
NSC - Trent Interchange Storm and Sewer Reroute

Project Number:	WWM-2020-9	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2020	**Region:**	District 1

Description

Reroute utilities currently in Trent Ave around new North Spokane Corridor (NSC) Trent Interchange, possibly to include reroutes at Trent/Freya Intersection. The project includes City funds for betterments.

Justification

This project will be completed in support of the NSC.

Comprehensive Plan Goals Met

CFU 1.2 - Operational Efficiency, Require the development of capital improvement projects that either improve the city?s operational efficiency or reduce costs by increasing the capacity, use, and/or life expectancy of existing facilities.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Grant	Integrated Capital Management	$ 260,000	$ -	$ -	$ -	$ -	$ -	$ 260,000
Total		**$ 260,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 260,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ 60,000	$ -	$ -	$ -	$ -	$ -	$ 60,000
Construction	Integrated Capital Management	200,000	-	-	-	-	-	200,000
Total		**$ 260,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 260,000**

5200-700 - Sewer
NSC - I-90 Sewer Interceptor Crossings

Project Number:	WWM-2020-16	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2020	**Region:**	District 1

Description

Realignment and extension of sewer mains in Stone St. (66-inch) and Lee St. (24-inch) to support the North Spokane Corridor (NSC) Trumpet area and 2nd Ave realignment. Manholes to be installed as needed. Casing pipes may also be required for existing I-90 sewer main crossings per WSDOT; additional evaluation is needed to determine feasibility. Cost impacts are expected if casings are required.

Justification

This project will be completed in support of the NSC.

Comprehensive Plan Goals Met

CFU 1.2 - Operational Efficiency, Require the development of capital improvement projects that either improve the city?s operational efficiency or reduce costs by increasing the capacity, use, and/or life expectancy of existing facilities.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Grant	Integrated Capital Management	$ 300,000	$ 4,332,000	$ 150,000	$ -	$ -	$ -	$ 4,782,000
Total		**$ 300,000**	**$ 4,332,000**	**$ 150,000**	**$ -**	**$ -**	**$ -**	**$ 4,782,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Planning	Integrated Capital Management	$ 25,000	$ -	$ -	$ -	$ -	$ -	$ 25,000
Design	Integrated Capital Management	275,000	99,000	-	-	-	-	374,000
Construction	Integrated Capital Management	-	4,233,000	150,000	-	-	-	4,383,000
Total		**$ 300,000**	**$ 4,332,000**	**$ 150,000**	**$ -**	**$ -**	**$ -**	**$ 4,782,000**

5200-700 - Sewer
NSC - 2nd Ave and Trumpet Area Sewer Reroutes

Project Number:	WWM-2020-17	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2020	**Region:**	District 2

Description

Collection system re-routes and abandonments needed on the north side of I-90 to support North Spokane Corridor (NSC) construction. Major elements of work to include installation of new sewer main along 2nd Ave (Freya St. to Stone St.) and abandonment/removal of lines within NSC Trumpet connection footprint. New connections to be provided as needed.

Justification

This project will be completed in support of the NSC Sprague Ave to Spokane River Phase II project.

Comprehensive Plan Goals Met

CFU 1.2 - Operational Efficiency, Require the development of capital improvement projects that either improve the city?s operational efficiency or reduce costs by increasing the capacity, use, and/or life expectancy of existing facilities.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ 700,000	$ -	$ -	$ -	$ -	$ 700,000
Grant	Integrated Capital Management	250,000	3,154,000	150,000	-	-	-	3,554,000
Total		**$ 250,000**	**$ 3,854,000**	**$ 150,000**	**$ -**	**$ -**	**$ -**	**$ 4,254,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Planning	Integrated Capital Management	$ 25,000	$ -	$ -	$ -	$ -	$ -	$ 25,000
Design	Integrated Capital Management	225,000	100,000	-	-	-	-	325,000
Construction	Integrated Capital Management	-	3,754,000	150,000	-	-	-	3,904,000
Total		**$ 250,000**	**$ 3,854,000**	**$ 150,000**	**$ -**	**$ -**	**$ -**	**$ 4,254,000**

5200-700 - Sewer
1 1-Ton Dump Truck 2023

Project Number:	WWM-2020-27	**Budget Year:**	2023
Project Type:	Collections Vehicles and Equipment	**Budget Stage:**	Adopted Budget
Year Identified:	2020	**Region:**	District 1

Description

This truck is used for a variety of small construction projects by multiple crews.

Justification

To maintain, repair and rehabilitate sanitary and stormwater infrastructure.

Comprehensive Plan Goals Met

CFU 1.2 - Operational Efficiency.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ 105,000	$ -	$ -	$ -	$ -	$ 105,000
Total		**$ -**	**$ 105,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 105,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ -	$ 105,000	$ -	$ -	$ -	$ -	$ 105,000
Total		**$ -**	**$ 105,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 105,000**

5200-700 - Sewer
Skidsteer - 2026

Project Number:	WWM-2020-28	**Budget Year:**	2023
Project Type:	Collections Vehicles and Equipment	**Budget Stage:**	Adopted Budget
Year Identified:	2020	**Region:**	District 1

Description

This equipment is used to maintain and rehabilitate our existing sanitary and stormwater collections systems.

Justification

This equipment helps us to maintain the capacity of our aging wastewater and stormwater collections systems.

Comprehensive Plan Goals Met

CFU 1.2 - Operational Efficiency. CFU 1.3 - Maintenance. CFU 5.4 - Groundwater.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ -	$ -	$ 135,000	$ -	$ -	$ 135,000
Total		**$ -**	**$ -**	**$ -**	**$ 135,000**	**$ -**	**$ -**	**$ 135,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ -	$ -	$ -	$ 135,000	$ -	$ -	$ 135,000
Total		**$ -**	**$ -**	**$ -**	**$ 135,000**	**$ -**	**$ -**	**$ 135,000**

5200-700 - Sewer
Heavy Construction Van- 2023

Project Number:	WWM-2020-30	**Budget Year:**	2023
Project Type:	Collections Vehicles and Equipment	**Budget Stage:**	Adopted Budget
Year Identified:	2020	**Region:**	District 1

Description

This Vehicles is used to carry construction equipment, supplies and safety equipment to jobsite for the construction crew to work out of while repairing and rehabilitating our existing sanitary and stormwater collection systems.

Justification

To maintain the capacity of the aging wastewater and stormwater collection systems.

Comprehensive Plan Goals Met

CFU 1.2 - Operational Efficiency. CFU 1.3 - Maintenance. CFU 5.4 - Groundwater.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 300,000	$ -	$ -	$ -	$ -	$ -	$ 300,000
Total		**$ 300,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 300,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ 300,000	$ -	$ -	$ -	$ -	$ -	$ 300,000
Total		**$ 300,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 300,000**

5200-700 - Sewer
Heavy Construction Van- 2026

Project Number:	WWM-2020-31	**Budget Year:**	2023
Project Type:	Collections Vehicles and Equipment	**Budget Stage:**	Adopted Budget
Year Identified:	2020	**Region:**	District 1

Description

This Vehicles is used to carry construction equipment, supplies and safety equipment to jobsite for the construction crew to work out of while repairing and rehabilitating our existing sanitary and stormwater collection systems.

Justification

To maintain the capacity of the aging wastewater and stormwater collection systems.

Comprehensive Plan Goals Met

CFU 1.2 - Operational Efficiency. CFU 1.3 - Maintenance. CFU 5.4 - Groundwater.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ -	$ -	$ 300,000	$ -	$ -	$ 300,000
Total		**$ -**	**$ -**	**$ -**	**$ 300,000**	**$ -**	**$ -**	**$ 300,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ -	$ -	$ -	$ 300,000	$ -	$ -	$ 300,000
Total		**$ -**	**$ -**	**$ -**	**$ 300,000**	**$ -**	**$ -**	**$ 300,000**

5200-700 - Sewer
12th Avenue - Deer Heights to Flint

Project Number:	WWM-2020-38	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2020	**Region:**	District 2

Description

The project will construct a 12-inch sewer line in 12th Avenue between Deer Height and Flint Roads. This is an integrated project.

Justification

This project is necessary to provide sewer service to proposed development on 12th Avenue and future developments north of 12th Avenue.

Comprehensive Plan Goals Met

CFU 3.3 - Utilities Coordination. The project coordinates utility installations with the larger project.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Contribution	Sewer Fund	$ -	$ -	$ 95,000	$ 950,000	$ -	$ -	$ 1,045,000
Total		**$ -**	**$ -**	**$ 95,000**	**$ 950,000**	**$ -**	**$ -**	**$ 1,045,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Sewer Fund	$ -	$ -	$ 95,000	$ -	$ -	$ -	$ 95,000
Construction	Sewer Fund	-	-	-	950,000	-	-	950,000
Total		**$ -**	**$ -**	**$ 95,000**	**$ 950,000**	**$ -**	**$ -**	**$ 1,045,000**

5200-700 - Sewer
Sewer Line Replacement

Project Number:	WWM-2020-39	**Budget Year:**	2023
Project Type:	Collections Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2020	**Region:**	District 1

Description

Sanitary pipes needing to be replaced due to deterioration of pipe and sags within pipe sections throughout the city.

Justification

As sanitary lines are deterioration and have major sags in them causing H2S issues and the need for frequent maintenance to prevent plugging. The increased frequency in cleaning is also causing wear to the pipe.

Comprehensive Plan Goals Met

CFU 1.2 - Operational Efficiency. Operational efficiency will be improved by reducing required maintenance. CFU 1.3 - Maintenance. The project repairs existing assets.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 180,000	$ 180,000	$ 180,000	$ 230,000	$ 240,000	$ 250,000	$ 1,260,000
Total		**$ 180,000**	**$ 180,000**	**$ 180,000**	**$ 230,000**	**$ 240,000**	**$ 250,000**	**$ 1,260,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ 180,000	$ 180,000	$ 180,000	$ 230,000	$ 240,000	$ 250,000	$ 1,260,000
Total		**$ 180,000**	**$ 180,000**	**$ 180,000**	**$ 230,000**	**$ 240,000**	**$ 250,000**	**$ 1,260,000**

5200-700 - Sewer
Northeast Lift Station Forcemain

Project Number:	WWM-2020-40	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2020	**Region:**	District 1

Description

The project constructs 3,300 feet of 8-inch forcemain from the intersection of Myrtle/Rowan to the Northeast lift station. The existing forcemain is too large. This project will provide a more appropriately sized pipe to more efficiently move sewage from the lift station.

Justification

This project is necessary because it reduces stagnant sewage in the system. This reduces Hydrogen sulfide in the forcemain which is a health risk.

Comprehensive Plan Goals Met

CFU 1 - Adequate Public Facilities and Services.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ 840,000	$ -	$ -	$ -	$ -	$ -	$ 840,000
Total		**$ 840,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 840,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ 840,000	$ -	$ -	$ -	$ -	$ -	$ 840,000
Total		**$ 840,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 840,000**

5200-700 - Sewer
Wind River Force Main Replacement

Project Number:	WWM-2020-44	**Budget Year:**	2023
Project Type:	Collections Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2020	**Region:**	District 3

Description

The existing 3200' of 6-inch Plastic (PVC) forcemain and 940' of 4-inch Plastic (PVC) was installed in 1990. This project will replace this PVC pipe with ductile iron pipe. Approximately 4,100-feet of forcemain will be replaced.

Justification

Older PVC forcemains are prone to splitting and failure. Replacing these pipes with ductile iron, increases the life expectancy of the forcemain and reduces the risk of the pipes failure and sewerage spilling to ground.

Comprehensive Plan Goals Met

CFU 1 - Adequate Public Facilities and Services.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ 130,000	$ 1,250,000	$ -	$ -	$ -	$ 1,380,000
Total		**$ -**	**$ 130,000**	**$ 1,250,000**	**$ -**	**$ -**	**$ -**	**$ 1,380,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ -	$ 130,000	$ 1,250,000	$ -	$ -	$ -	$ 1,380,000
Total		**$ -**	**$ 130,000**	**$ 1,250,000**	**$ -**	**$ -**	**$ -**	**$ 1,380,000**

5200-700 - Sewer
Combined Sewer Overflow (CSO) 25 Swale Rehabilitation

Project Number:	WWM-2020-45	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2020	**Region:**	District 3

Description

Construction of the CSO 25 stormwater swales was completed in 2018. The swales have since experienced plugging, resulting in poor infiltration. This project will construct BMPs to manage the sediment loading that is causing the poor infiltration, as well as rehab plugged portions of the swales.

Justification

The project is necessary because standing water creates a health hazard to the public.

Comprehensive Plan Goals Met

CFU 1.3 - Maintenance. CFU 5.3 - Stormwater.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ 200,000	$ -	$ -	$ -	$ -	$ 200,000
Total		**$ -**	**$ 200,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 200,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ -	$ 200,000	$ -	$ -	$ -	$ -	$ 200,000
Total		**$ -**	**$ 200,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 200,000**

5200-700 - Sewer
Regal - 42nd to 44th Sewer Replacement

Project Number:	WWM-2020-46	**Budget Year:**	2023
Project Type:	Collections Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2020	**Region:**	District 2

Description

685' of 8' concrete sewer pipe need to be replaced due to deterioration of pipe and sags within pipe sections. Stormwater Infrastructure may need some upgrades.

Justification

The 8' sanitary lines are deteriorating and have major sags in them causing H2S issues and the need for frequent maintenance to prevent plugging. The increased frequency in cleaning is also causing wear to the pipe.

Comprehensive Plan Goals Met

CFU 1.2 - Operational Efficiency. Operational efficiency will be improved by reducing required maintenance. CFU 1.3 - Maintenance. The project repairs existing assets.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ 25,000	$ 230,000	$ -	$ -	$ -	$ 255,000
Total		**$ -**	**$ 25,000**	**$ 230,000**	**$ -**	**$ -**	**$ -**	**$ 255,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ -	$ 25,000	$ 230,000	$ -	$ -	$ -	$ 255,000
Total		**$ -**	**$ 25,000**	**$ 230,000**	**$ -**	**$ -**	**$ -**	**$ 255,000**

5200-700 - Sewer
Wind River Lift Station Improvements

Project Number:	WWM-2020-64	**Budget Year:**	2023
Project Type:	RPWRF Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2020	**Region:**	District 3

Description

The project will replace existing pumps, motors and MCCs within the existing station.

Justification

The equipment and controls at the lift station are beyond their useful life and need to be replaced.

Comprehensive Plan Goals Met

CFU 1.2 - Operational Efficiency. This project improves the operational efficiency of the sewer system. CFU 1.3 - Maintenance. This project maintains an existing asset.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 50,000	$ 500,000	$ -	$ -	$ -	$ -	$ 550,000
Total		**$ 50,000**	**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 550,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ 50,000	$ 500,000	$ -	$ -	$ -	$ -	$ 550,000
Total		**$ 50,000**	**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 550,000**

5200-700 - Sewer
Francis and Assembly Lift Station Improvements

Project Number:	WWM-2020-65	**Budget Year:**	2023
Project Type:	RPWRF Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2020	**Region:**	District 3

Description

The project will replace existing pumps, motors and MCCs within the existing station.

Justification

The equipment and controls at the lift station are beyond their useful life and need to be replaced.

Comprehensive Plan Goals Met

CFU 1.2 - Operational Efficiency. This project improves the operational efficiency of the sewer system. CFU 1.3 - Maintenance. This project maintains an existing asset.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ 184,000	$ -	$ -	$ -	$ -	$ 184,000
Total		**$ -**	**$ 184,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 184,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ -	$ 184,000	$ -	$ -	$ -	$ -	$ 184,000
Total		**$ -**	**$ 184,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 184,000**

5200-700 - Sewer
Emergency Overflow Modifications for Digesters 4 and 5

Project Number:	WWM-2020-74	**Budget Year:**	2023
Project Type:	RPWRF Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2020	**Region:**	District 3

Description

This project would increase the capacity of the emergency overflow system for Digesters 4 and 5. If this project gets moved out there is a risk that could be taken. The overflows were designed to small and if the digester has a rapid volume expansion it would cause explosion of digester.

Justification

Digesters can experience a rapid volume expansion of the sludge they contain. Without properly sized emergency overflows this can lead to failure of the digester vessel itself. The existing overflow system does not have the capacity to relieve the pressure of a significant expansion event.

Comprehensive Plan Goals Met

Capital Facilities and Utilities: CFU1 - Adequate Public Facilities and Services. CFU2 - Concurrency. CFU3 - Coordination. CFU4 - Service Provision. CFU5 - Environmental Concerns.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 300,000	$ 2,000,000	$ -	$ -	$ -	$ -	$ 2,300,000
Total		**$ 300,000**	**$ 2,000,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,300,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ 300,000	$ 2,000,000	$ -	$ -	$ -	$ -	$ 2,300,000
Total		**$ 300,000**	**$ 2,000,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,300,000**

5200-700 - Sewer
Crestline Ct. Forcemain Replacement

Project Number:	WWM-2020-1523	**Budget Year:**	2023
Project Type:	Collections Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2020	**Region:**	District 2

Description

The existing 8-inch Plastic (PVC) force main was installed in 1984. This project will replace this PVC pipe with a 8-inch ductile iron pipe. The force main is approximately 750-feet long. Pavement patching will occur in the area of Crestline Ct. and Illinois where necessary.

Justification

Older PVC force mains are prone to splitting and failing. Replacing these pipes with ductile iron, increases the life expectancy of the force main and reduces the risk of the pipes failure which prevents sewage from spilling.

Comprehensive Plan Goals Met

CFU 1: Adequate Public Facilities and Services

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Revenue	Sewer Fund	$ -	$ -	$ -	$ -	$ 40,000	$ 250,000	$ 290,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ 40,000**	**$ 250,000**	**$ 290,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ -	$ -	$ -	$ -	$ 40,000	$ 250,000	$ 290,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ 40,000**	**$ 250,000**	**$ 290,000**

5200-700 - Sewer
Future Development Sewer Upgrades

Project Number:	WWM-2021-11	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2021	**Region:**	District 1

Description

Sewer improvement projects in coordination with developer projects.

Justification

It is important to upgrade our sewer system as opportunities become available. Developer projects provide an opportunity and oftentimes costs savings.

Comprehensive Plan Goals Met

CFU 1.3 - Maintenance. CFU 2.1 - Available Public Facilities. CFU 3.3 - Utilities Coordination.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 1,500,000
Total		**$ 250,000**	**$ 250,000**	**$ 250,000**	**$ 250,000**	**$ 250,000**	**$ 250,000**	**$ 1,500,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 1,500,000
Total		**$ 250,000**	**$ 250,000**	**$ 250,000**	**$ 250,000**	**$ 250,000**	**$ 250,000**	**$ 1,500,000**

5200-700 - Sewer
West Plains Sewer Lift Station

Project Number:	WWM-2021-15	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2021	**Region:**	District 2

Description

This project is a new regional sewage lift station to serve the West Plains area. Sewer inverts are too low in this area of the West Plains to convey the sewage east into the City's system. There is an expectation that development and the PDA will fund the project.

Justification

As development continues to the west, the lift station will be required push sewage to the east where it can drain via gravity.

Comprehensive Plan Goals Met

CFU 2.1 - Available Public Facilities. CFU 6.2 - Economic Development.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ -	$ -	$ -	$ -	$ 6,000,000	$ 6,000,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 6,000,000**	**$ 6,000,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ -	$ -	$ -	$ -	$ -	$ 6,000,000	$ 6,000,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 6,000,000**	**$ 6,000,000**

5200-700 - Sewer
Study - Downtown Stormwater Relief Phase 2

Project Number:	WWM-2021-17	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2021	**Region:**	District 1

Description

This project is a study that will analyze potential stormwater separation solutions in the downtown area. These solutions, once implemented, will create additional capacity in the sanitary sewer system. This is the second phase of this study which will focus more on western side of the downtown core south of the river.

Justification

The downtown area generates large amounts of runoff due to the impervious nature of the area. This runoff drains to the combined system and overwhelms the sanitary system during storm events. This project will present solutions to separate runoff from the system and create capacity in the sanitary system.

Comprehensive Plan Goals Met

CFU 5.3 - Stormwater. This project will reduce the impacts of urban runoff.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ -	$ 75,000	$ 75,000	$ -	$ -	$ 150,000
Total		**$ -**	**$ -**	**$ 75,000**	**$ 75,000**	**$ -**	**$ -**	**$ 150,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Planning	Integrated Capital Management	$ -	$ -	$ 75,000	$ 75,000	$ -	$ -	$ 150,000
Total		**$ -**	**$ -**	**$ 75,000**	**$ 75,000**	**$ -**	**$ -**	**$ 150,000**

5200-700 - Sewer
Washington Basin Stormwater Separation

Project Number:	WWM-2021-18	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2021	**Region:**	District 2

Description

This project will construct stormwater facilities throughout the basin to separate stormwater from the Washington outfall, the City's second largest stormwater outfall to the Spokane River. A basin wide study will be performed in 2024 to develop solutions and individual projects.

Justification

This project is necessary to remove untreated stormwater from the Spokane River and improve water quality.

Comprehensive Plan Goals Met

CFU 5.3 - Stormwater. This project will reduce the impacts of urban runoff.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ -	$ -	$ 75,000	$ 750,000	$ -	$ 825,000
Grant	Integrated Capital Management	-	225,000	-	225,000	2,250,000	-	2,700,000
Total		**$ -**	**$ 225,000**	**$ -**	**$ 300,000**	**$ 3,000,000**	**$ -**	**$ 3,525,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Planning	Integrated Capital Management	$ -	$ 225,000	$ -	$ -	$ -	$ -	$ 225,000
Design	Integrated Capital Management	-	-	-	225,000	-	-	225,000
Construction	Integrated Capital Management	-	-	-	75,000	3,000,000	-	3,075,000
Total		**$ -**	**$ 225,000**	**$ -**	**$ 300,000**	**$ 3,000,000**	**$ -**	**$ 3,525,000**

5200-700 - Sewer
Drywell Rehabilitation in Wellhead Protection Zones

Project Number: WWM-2021-20
Budget Year: 2023
Project Type: Stormwater
Budget Stage: Adopted Budget
Year Identified: 2021
Region: District 1

Description

There are drywells located within wellhead protection zones that do not meet current Underground Injection Control (UIC) requirements. This project will rehabilitate or replace those drywells to meet current requirements and help protect the aquifer.

Justification

This project is necessary to protect the aquifer from contamination.

Comprehensive Plan Goals Met

CFU 5.3 - Stormwater: Project will manage impacts of runoff. CFU 5.4 - Groundwater: Project will protect groundwater.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ 62,500	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 1,062,500
Grant	Integrated Capital Management	-	187,500	750,000	750,000	750,000	750,000	3,187,500
Total		**$ -**	**$ 250,000**	**$ 1,000,000**	**$ 1,000,000**	**$ 1,000,000**	**$ 1,000,000**	**$ 4,250,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Planning	Integrated Capital Management	$ -	$ 187,500	$ -	$ -	$ -	$ -	$ 187,500
Construction	Integrated Capital Management	-	62,500	1,000,000	1,000,000	1,000,000	1,000,000	4,062,500
Total		**$ -**	**$ 250,000**	**$ 1,000,000**	**$ 1,000,000**	**$ 1,000,000**	**$ 1,000,000**	**$ 4,250,000**

5200-700 - Sewer
Closed Circuit Television Inspection Trucks

Project Number:	WWM-2021-28	**Budget Year:**	2023
Project Type:	Vehicles and Equipment	**Budget Stage:**	Adopted Budget
Year Identified:	2021	**Region:**	District 1

Description

This truck is used to inspect all new Storm and Sanitary sewer pipes as well as routine inspection of existing infrastructure for blockages and structural condition.

Justification

To maintain the capacity and integrity of the wastewater collection system.

Comprehensive Plan Goals Met

CFU 1.2 - Operational Efficiency. CFU 5.4 - Groundwater.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ -	$ -	$ -	$ 385,000	$ 385,000	$ 770,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ 385,000**	**$ 385,000**	**$ 770,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ -	$ -	$ -	$ -	$ 385,000	$ 385,000	$ 770,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ 385,000**	**$ 385,000**	**$ 770,000**

5200-700 - Sewer
10 Yard Dump Trucks

Project Number:	WWM-2021-29	**Budget Year:**	2023
Project Type:	Collections Vehicles and Equipment	**Budget Stage:**	Adopted Budget
Year Identified:	2021	**Region:**	District 1

Description

These trucks are used in the repair process of sanitary and storm sewer systems throughout the city and assist other departments with construction or snow removal requirements.

Justification

To maintain the integrity and the capacity of the Sanitary Sewer System.

Comprehensive Plan Goals Met

CFU 1.3 - Capital Facility and Utility Maintenance. CFU 1.3 - Maintenance. CFU 5.4 - Ground Water.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ -	$ -	$ -	$ 350,000	$ 350,000	$ 700,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ 350,000**	**$ 350,000**	**$ 700,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ -	$ -	$ -	$ -	$ 350,000	$ 350,000	$ 700,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ 350,000**	**$ 350,000**	**$ 700,000**

5200-700 - Sewer
WWC SCADA Equipment Upgrades

Project Number:	WWM-2021-37	**Budget Year:**	2023
Project Type:	Equipment	**Budget Stage:**	Adopted Budget
Year Identified:	2021	**Region:**	District 3

Description

Replace and upgrade existing SCADA equipment

Justification

Equipment will reach end of support and will need to be replaced and upgraded

Comprehensive Plan Goals Met

CFU-1 Adequate Public Facilities and Services; CFU-5 Environmental Concerns

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 10,000	$ 10,000	$ 120,000	$ 30,000	$ 30,000	$ 30,000	$ 230,000
Total		**$ 10,000**	**$ 10,000**	**$ 120,000**	**$ 30,000**	**$ 30,000**	**$ 30,000**	**$ 230,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ 10,000	$ 10,000	$ 120,000	$ 30,000	$ 30,000	$ 30,000	$ 230,000
Total		**$ 10,000**	**$ 10,000**	**$ 120,000**	**$ 30,000**	**$ 30,000**	**$ 30,000**	**$ 230,000**

5200-700 - Sewer
8- F150 4x4 2023 - 2027

Project Number:	WWM-2021-45	**Budget Year:**	2023
Project Type:	Collections Vehicles and Equipment	**Budget Stage:**	Adopted Budget
Year Identified:	2021	**Region:**	District 1

Description

These trucks is used for a variety of tasks of by multiple crews

Justification

To maintain, repair, rehabilitate sanitary and stormwater infrastructure. Inspection of capital and private projects and snow removal.

Comprehensive Plan Goals Met

CFU 1.2 Operational Efficiency

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ 150,000	$ 100,000	$ 50,000	$ 100,000	$ -	$ 400,000
Total		**$ -**	**$ 150,000**	**$ 100,000**	**$ 50,000**	**$ 100,000**	**$ -**	**$ 400,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ -	$ 150,000	$ 100,000	$ 50,000	$ 100,000	$ -	$ 400,000
Total		**$ -**	**$ 150,000**	**$ 100,000**	**$ 50,000**	**$ 100,000**	**$ -**	**$ 400,000**

5200-700 - Sewer
Engineer Tech Equipment

Project Number:	WWM-2021-46	**Budget Year:**	2023
Project Type:	Equipment	**Budget Stage:**	Adopted Budget
Year Identified:	2021	**Region:**	District 1

Description

Upgrade existing GPS equipment and new LIDAR capability used by Engineer Techs to locate and map assets.

Justification

Engineering Techs need to be able to accurately locate and measure assets for consistent and accurate map of infrastructure.

Comprehensive Plan Goals Met

CFU-1 - Adequate Public Facilities and Services. CFU-5 - Environmental Concerns.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ 100,000	$ -	$ -	$ -	$ -	$ 100,000
Total		**$ -**	**$ 100,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 100,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ -	$ 100,000	$ -	$ -	$ -	$ -	$ 100,000
Total		**$ -**	**$ 100,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 100,000**

5200-700 - Sewer
Biosolids Front End Loader

Project Number:	WWM-2021-72	**Budget Year:**	2023
Project Type:	RPWRF Vehicles and Equipment	**Budget Stage:**	Adopted Budget
Year Identified:	2021	**Region:**	District 3

Description

Equipment being replaced is a Biosolids Front End Loader.

Justification

Biosolids generated at the Riverside Park Water Reclamation Facility are applied to private farmland in accordance with Federal and State regulations. Replacement of Biosolids moving equipment is necessary to maintain the reliability necessary to meet Biosolids application regulations. This project is the purchase of a front end loader to replace the one that has reached the end of its service life. The loader is used in rough conditions; daily use, rough dirt roads and fields. The service life is approximately 5 to 6 years.

Comprehensive Plan Goals Met

Capital Facilities and Utilities: CFU1 - Adequate Public Facilities and Services. CFU2 - Concurrency. CFU3 - Coordination. CFU4 - Service Provision. CFU5 - Environmental Concerns.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ 225,000	$ -	$ -	$ -	$ -	$ 225,000
Total		**$ -**	**$ 225,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 225,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Purchases	Sewer Fund	$ -	$ 225,000	$ -	$ -	$ -	$ -	$ 225,000
Total		**$ -**	**$ 225,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 225,000**

5200-700 - Sewer
Maintenance and Warehouse Roof Membrane Replacement

Project Number:	WWM-2021-85	**Budget Year:**	2023
Project Type:	RPWRF Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2021	**Region:**	District 3

Description

This project would renew the roof membrane for the existing Maintenance and Warehouse building areas at the Riverside Park Water Reclamation Facility (RPWRF).

Justification

The Maintenance and Warehouse Building is experiencing roofing failures, allowing weather and water exposure of critical equipment including electrical controls. Replacing the roof membrane will preserve critical function of plant equipment.

Comprehensive Plan Goals Met

Capital Facilities and Utilities; CFU1, Adequate Public Facilities and Services, CFU2, Concurrency, CFU3 Coordination, CFU4,Service Provision, CFU5, Environmental Concerns

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 250,000	$ -	$ -	$ -	$ -	$ -	$ 250,000
Total		**$ 250,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 250,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Planning	Sewer Fund	$ 250,000	$ -	$ -	$ -	$ -	$ -	$ 250,000
Total		**$ 250,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 250,000**

5200-700 - Sewer
CSO 10/12/Cochran Outfall Repair

Project Number:	WWM-2021-1524	**Budget Year:**	2023
Project Type:	Collections Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2021	**Region:**	District 3

Description

Repair the existing Combined Sewer Overflow (CSO) 10/12/Cochran Stormwater outfall pipes and headwall.

Justification

Outfall pipe and headwall is made of concrete, but not all sections have reinforcing steel and have started to develop severe cracks and settle due to erosion from river morphology. Repair of outfall pipe and headwall has not been incorporated into other CSO and stormwater projects to expedite their construction.

Comprehensive Plan Goals Met

CFU 1.3: Maintenance

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Revenue	Sewer Fund	$ -	$ -	$ -	$ -	$ 60,000	$ 500,000	$ 560,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ 60,000**	**$ 500,000**	**$ 560,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ -	$ -	$ -	$ -	$ 60,000	$ 500,000	$ 560,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ 60,000**	**$ 500,000**	**$ 560,000**

5200-700 - Sewer
Exterior Cladding Replacement for Digester Eggs 4 and 5

Project Number:	WWM-2021-1539	**Budget Year:**	2023
Project Type:	RPWRF Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2021	**Region:**	Multiple

Description

Digester Eggs 4 and 5 have an exterior cladding system that is failing and needs replacement in order to continue operating.

Justification

The exterior of the digester eggs are covered by metal sheeting that is failing and sections are falling off. This creates both a safety hazard and a risk to the facility. Repairs are being worked on, but a system replacement is necessary in order to extend the useful life of the assets.

Comprehensive Plan Goals Met

CFU1: Adequate Public Facilities and Services
CFU2: Concurrency
CFU3: Coordination
CFU4: Service Provision
CFU5: Environmental Concerns

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ -	$ -	$ 4,000,000	$ -	$ -	$ 4,000,000
Total		**$ -**	**$ -**	**$ -**	**$ 4,000,000**	**$ -**	**$ -**	**$ 4,000,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ -	$ -	$ -	$ 4,000,000	$ -	$ -	$ 4,000,000
Total		**$ -**	**$ -**	**$ -**	**$ 4,000,000**	**$ -**	**$ -**	**$ 4,000,000**

5200-700 - Sewer
Nine Mile Sewer Re-route

Project Number:	WWM-2022-1479	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2022	**Region:**	District 3

Description

The project will construct approximately 2,700 feet of 8-inch sewer line from Nine Mile Road to Royal Drive. This project will eliminate the lift station at Francis and Assembly.

Justification

The project eliminates the lift station at Francis and Assembly, creating greater system reliability and reducing maintenance costs.

Comprehensive Plan Goals Met

CFU 1.2: Operational Efficiency
CFU 1.3: Maintenance
CFU 3.2: Utility Installation

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ 120,000	$ 1,200,000	$ 150,000	$ -	$ -	$ 1,470,000
Total		**$ -**	**$ 120,000**	**$ 1,200,000**	**$ 150,000**	**$ -**	**$ -**	**$ 1,470,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ -	$ 120,000	$ -	$ -	$ -	$ -	$ 120,000
Construction	Integrated Capital Management	-	-	1,200,000	150,000	-	-	1,350,000
Total		**$ -**	**$ 120,000**	**$ 1,200,000**	**$ 150,000**	**$ -**	**$ -**	**$ 1,470,000**

5200-700 - Sewer
Francis/Assembly/Nine Mile Stormwater Facility

Project Number:	WWM-2022-1481	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2022	**Region:**	District 3

Description

This project includes construction of a stormwater treatment and infiltration facility at the Francis and Assembly intersection. The project separates stormwater from the current Municipal Separate Storm Sewer Systems (MS4) pipe that discharges directly to the Spokane River.

Justification

The project will improve water quality in the Spokane River.

Comprehensive Plan Goals Met

CFU 5.3: Stormwater

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ 130,000	$ 1,300,000	$ -	$ -	$ -	$ 1,430,000
Total		**$ -**	**$ 130,000**	**$ 1,300,000**	**$ -**	**$ -**	**$ -**	**$ 1,430,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ -	$ 130,000	$ -	$ -	$ -	$ -	$ 130,000
Construction	Integrated Capital Management	-	-	1,300,000	-	-	-	1,300,000
Total		**$ -**	**$ 130,000**	**$ 1,300,000**	**$ -**	**$ -**	**$ -**	**$ 1,430,000**

5200-700 - Sewer
Five Mile Regional Infiltration Facility (FMRIF) Improvements

Project Number:	WWM-2022-1482	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2022	**Region:**	District 3

Description

The project will improve the Five Mile Regional Infiltration Facility (FMRIF) by installing engineered treatment soil for improved water quality. In addition, the project will install a flow splitter upstream of the facility for potential diversion of additional flows to the facility in the future.

Justification

The project will improve water quality in the aquifer.

Comprehensive Plan Goals Met

CFU 5.3: Stormwater
CFU 5.4: Ground Water

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ -	$ 1,500,000	$ 1,000,000	$ -	$ -	$ 2,500,000
Total		**$ -**	**$ -**	**$ 1,500,000**	**$ 1,000,000**	**$ -**	**$ -**	**$ 2,500,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ -	$ -	$ 250,000	$ -	$ -	$ -	$ 250,000
Construction	Integrated Capital Management	-	-	1,250,000	1,000,000	-	-	2,250,000
Total		**$ -**	**$ -**	**$ 1,500,000**	**$ 1,000,000**	**$ -**	**$ -**	**$ 2,500,000**

5200-700 - Sewer
Study-Garden Springs Creek Culvert

Project Number:	WWM-2022-1484	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2022	**Region:**	District 2

Description

This project is a study to evaluate potential solutions to the siltation that occurs in the Garden Springs Creek culvert under I-90. The siltation presents a flooding risk in the area.

Justification

The culvert is an ongoing maintenance issue and presents a flooding risk that needs to be mitigated.

Comprehensive Plan Goals Met

CFU 1.3: Maintenance

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ 500,000	$ -	$ -	$ -	$ -	$ 500,000
Total		**$ -**	**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 500,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Planning	Integrated Capital Management	$ -	$ 500,000	$ -	$ -	$ -	$ -	$ 500,000
Total		**$ -**	**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 500,000**

5200-700 - Sewer
West Plains PDA Stormwater Projects

Project Number:	WWM-2022-1485	**Budget Year:**	2023
Project Type:	Stormwater	**Budget Stage:**	Adopted Budget
Year Identified:	2022	**Region:**	District 2

Description

This project will construct stormwater management facilities in the West Plains within the Public Development Authority (PDA) to manage stormwater for current and future development projects.

Justification

These projects will reduce flooding and improve water quality within the service area.

Comprehensive Plan Goals Met

CFU 5.3: Stormwater
CFU 5.4: Groundwater
NE 1.2: Stormwater Techniques
NE 1.5: Natural Water Drainage

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Revenue	Integrated Capital Management	$ -	$ -	$ -	$ 9,000,000	$ 1,000,000	$ -	$ 10,000,000
Total		**$ -**	**$ -**	**$ -**	**$ 9,000,000**	**$ 1,000,000**	**$ -**	**$ 10,000,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ -	$ -	$ -	$ 1,000,000	$ -	$ -	$ 1,000,000
Construction	Integrated Capital Management	-	-	-	8,000,000	1,000,000	-	9,000,000
Total		**$ -**	**$ -**	**$ -**	**$ 9,000,000**	**$ 1,000,000**	**$ -**	**$ 10,000,000**

5200-700 - Sewer
Cheney-Spokane Rd Sewer

Project Number:	WWM-2022-1486	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2022	**Region:**	District 2

Description

This project will construct approximately 4500 linear feet of 21-inch sewer along Cheney-Spokane Road as part of the Marshall Road water project.

Justification

The project is required for planned future development adjacent to Cheney-Spokane Road.

Comprehensive Plan Goals Met

CFU 1.1: Level of Service
CFU 3.3: Utilities Coordination

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ 1,000,000	$ 1,000,000	$ -	$ -	$ -	$ -	$ 2,000,000
Total		**$ 1,000,000**	**$ 1,000,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,000,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Integrated Capital Management	$ 1,000,000	$ 1,000,000	$ -	$ -	$ -	$ -	$ 2,000,000
Total		**$ 1,000,000**	**$ 1,000,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,000,000**

5200-700 - Sewer
North Spokane Corridor - 3rd Ave Sewer Reroute

Project Number:	WWM-2022-1497	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2022	**Region:**	District 2

Description

This project is a sewer realignment on 3rd Ave to enable future North Spokane Corridor (NSC) connection on the I-90 corridor.

Justification

This is needed for the NSC. The City will work on this project in collaboration with the Washington State Department of Transportation (WSDOT).

Comprehensive Plan Goals Met

CFU 1.1: Level of Service
CFU 3.2: Utility Installations
CFU 3.3: Utilities Coordination
CFU 4.3: Underground Utilities

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ -	$ 577,000	$ 150,000	$ -	$ -	$ -	$ 727,000
Grant	Integrated Capital Management	75,000	-	-	-	-	-	75,000
Total		**$ 75,000**	**$ 577,000**	**$ 150,000**	**$ -**	**$ -**	**$ -**	**$ 802,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ 75,000	$ -	$ -	$ -	$ -	$ -	$ 75,000
Construction	Integrated Capital Management	-	577,000	150,000	-	-	-	727,000
Total		**$ 75,000**	**$ 577,000**	**$ 150,000**	**$ -**	**$ -**	**$ -**	**$ 802,000**

5200-700 - Sewer
NW Blvd & Assembly Diversion Modification & PW2 Air Gap

Project Number:	WWM-2022-1517	**Budget Year:**	2023
Project Type:	Collections Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2022	**Region:**	District 3

Description

This project has two phases; the first is to modify the sewer diversion structure at at NW Blvd & Assembly that was created in the 1980s during the storm separation projects. This improves sewer hydraulics as pipes transition to steep slope down the hill to Aubrey L White.

The second phase will add an air gap with enclosure for source water at the Riverside Park Wastewater Reclamation Facility (RPWRF) in the plant water 2 (PW2) and plant water 3 (PW3) systems. These will be co-located on City property at NW Blvd & Assembly.

Justification

Eliminate potential dry weather overflows and reduce or eliminate daily pumping requirements for PW2 and PW3 RPWRF plant water. This project is necessary to remove untreated relief wastewater from the Spokane River and improve water quality.

Comprehensive Plan Goals Met

CFU 1: Adequate Public Facilities
CFU 3: Coordination
CFU 5: Environmental Concerns
NE 1: Water Quality.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ 30,000	$ 250,000	$ -	$ -	$ -	$ 280,000
Total		**$ -**	**$ 30,000**	**$ 250,000**	**$ -**	**$ -**	**$ -**	**$ 280,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Sewer Fund	$ -	$ 30,000	$ -	$ -	$ -	$ -	$ 30,000
Construction	Sewer Fund	-	-	250,000	-	-	-	250,000
Total		**$ -**	**$ 30,000**	**$ 250,000**	**$ -**	**$ -**	**$ -**	**$ 280,000**

5200-700 - Sewer
Shiloh Hills Forcemain replacement

Project Number:	WWM-2022-1520	**Budget Year:**	2023
Project Type:	Collections Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2022	**Region:**	District 1

Description

The existing 6-inch plastic (PVC) force main in the station at 8115 N. Nevada was installed in 1979. This project will replace this PVC pipe with a 6-inch ductile iron pipe. Approximately 1,000-feet of force main will be replaced. Pavement patching will occur where necessary on Thomas Moore Way.

Justification

Older PVC force mains are prone to splitting and failure, but replacing these pipes with ductile iron increases the life expectancy of the force main and reduces the risk of failure which would result in sewage spilling to ground.

Comprehensive Plan Goals Met

CFU 1: Adequate Public Facilities and Services

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Revenue	Sewer Fund	$ -	$ -	$ -	$ 20,000	$ 210,000	$ -	$ 230,000
Total		**$ -**	**$ -**	**$ -**	**$ 20,000**	**$ 210,000**	**$ -**	**$ 230,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ -	$ -	$ -	$ 20,000	$ 210,000	$ -	$ 230,000
Total		**$ -**	**$ -**	**$ -**	**$ 20,000**	**$ 210,000**	**$ -**	**$ 230,000**

5200-700 - Sewer
Manhole Rehab (Cure-in-Place)

Project Number:	WWM-2022-1521	**Budget Year:**	2023
Project Type:	Collections Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2022	**Region:**	Multiple

Description

This project will use Cured In Place (CIP) techniques to reline manholes with trenchless methods (polyester felt liner impregnated with a resin or spray-on epoxy/mortar) throughout the city to:

1. Reduce infiltration & inflow (I&I) from groundwater and river sources into catch basins or manholes to help meet the net environmental benefit requirement for the Next Level Treatment (NLT), and
2. Shore up manholes or other structures that have been damaged by hydrogen sulfide and are at risk of failure and must be rehabilitated to prolong their service life.
3. Retrofit seeper catch basins (with holes in them) or non-compliant drywells to be sealed and meet regulatory requirements for two-stage pre-settling device and capture street runoff contaminants/oil prior to reaching the subsurface or downstream sewers. These will be used in conjunction with existing or added drywells that are affected downstream.

Justification

Infiltration and Inflow (I&I) must be reduced in combined sewer basins to achieve the Net environmental Benefit basis granted by Department of Ecology, which allowed Next Level of Treatment (NLT) to be a membrane facility with less capacity than the rest of the treatment plant. Additionally if this water does not enter the system it will not require treatment and thus treatment plant costs are lowered. Wet weather peak flows must be reduced to maximize NLT effectiveness. Manholes associated with Cure in Place pipe lining efforts need to be addressed to provide a complete solution to reduce or eliminate sources of infiltration during wet season periods and particularly sewer manholes influenced by high river flows. This same technology is needed for rehabilitating deteriorating manholes in the system where hydrogen sulfide is released, thereby avoiding open-cut removing and replacing asphalt to replace manholes and structures, and will be less disruptive to pedestrian and vehicle traffic during the repair.

Comprehensive Plan Goals Met

CFU 1.3: Capital Facilities and Utilities Maintenance
CFU 5.4: Capital Facilities and Maintenance Ground Water

5200-700 - Sewer
Manhole Rehab (Cure-in-Place) - Continued

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Revenue	Sewer Fund	$ -	$ 60,000	$ 60,000	$ 70,000	$ 70,000	$ 80,000	$ 340,000
Total		**$ -**	**$ 60,000**	**$ 60,000**	**$ 70,000**	**$ 70,000**	**$ 80,000**	**$ 340,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ -	$ 60,000	$ 60,000	$ 70,000	$ 70,000	$ 80,000	$ 340,000
Total		**$ -**	**$ 60,000**	**$ 60,000**	**$ 70,000**	**$ 70,000**	**$ 80,000**	**$ 340,000**

5200-700 - Sewer
18th & Perry Sewer Extension

Project Number:	WWM-2022-1522	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2022	**Region:**	District 2

Description

This project will construct an 8" gravity sewer pipe from 19th Ave to 18th Ave. A pipe stub from 18th is already installed, so impact to the intersection will be minimized.

Justification

There is no public sewer main between 19th and 18th Ave in Perry St., where failing septic tanks and cesspools are being used. In addition, there are private sewers in the public right-of-way that aren't being well maintained, and will be intercepted by this new pipe. The proposed gravity sewer will prevent multiple private sewer lift stations that are being implemented and will prevent environmental and public hazards as each system begins to fail. This street has fairly steep topography that lends itself to potential health impacts and nuisance to downstream neighbors.

Comprehensive Plan Goals Met

CFU 1.2: Operational Efficiency
CFU 2.1: Available Public Facilities
CFU 3.2: Utility Installation

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Revenue	Sewer Fund	$ -	$ 42,000	$ 280,000	$ -	$ -	$ -	$ 322,000
Total		**$ -**	**$ 42,000**	**$ 280,000**	**$ -**	**$ -**	**$ -**	**$ 322,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ -	$ 42,000	$ 280,000	$ -	$ -	$ -	$ 322,000
Total		**$ -**	**$ 42,000**	**$ 280,000**	**$ -**	**$ -**	**$ -**	**$ 322,000**

5200-700 - Sewer
Soft Starts for Aeration Basins (AB) Blowers

Project Number:	WWM-2022-1534	**Budget Year:**	2023
Project Type:	RPWRF Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2022	**Region:**	Multiple

Description

The controllers that start and stop the blowers that provide the air to the bubbler system in the AB have reached the end of their service life. They can no longer be adequately maintained and need to be replaced.

Justification

The aeration basins are critical to the operation of the treatment plant and the treatment of wastewater. Without reliable air supply, the system would fail and the City would violate the conditions of the discharge permit. This equipment will provide operational reliability.

Comprehensive Plan Goals Met

CFU1: Adequate Public Facilities and Services
CFU2: Concurrency
CFU3: Coordination
CFU4: Service Provision
CFU5: Environmental Concerns

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ -	$ 1,200,000	$ -	$ -	$ -	$ 1,200,000
Total		**$ -**	**$ -**	**$ 1,200,000**	**$ -**	**$ -**	**$ -**	**$ 1,200,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Planning	Sewer Fund	$ -	$ -	$ 1,200,000	$ -	$ -	$ -	$ 1,200,000
Total		**$ -**	**$ -**	**$ 1,200,000**	**$ -**	**$ -**	**$ -**	**$ 1,200,000**

5200-700 - Sewer
Relocate Plant Water Air Gap

Project Number:	WWM-2022-1535	**Budget Year:**	2023
Project Type:	RPWRF Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2022	**Region:**	Multiple

Description

To protect the City water supply, processed water used at Riverside Park Water Reclamation Facility (RPWRF) goes through an air gap and is then pressurized by pumping. To reduce the need to pump, the air gap will be relocated above the plant to the service point on NW Blvd. These changes will allow gravity to supply most of the pressure needed while preserving the system safety provided by the air gap.

Justification

To protect the City water supply the current system requires energy to be reduced through a pressure reducing valve. The water is then pressurized again though pumping. Moving the location of the air gap to a higher elevation will allow the system to utilize gravity which will save energy that is wasted in the current system.

Comprehensive Plan Goals Met

CFU1: Adequate Public Facilities and Services
CFU2: Concurrency
CFU3: Coordination
CFU4: Service Provision
CFU5: Environmental Concerns.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ -	$ -	$ -	$ 2,000,000	$ -	$ 2,000,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,000,000**	**$ -**	**$ 2,000,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Planning	Sewer Fund	$ -	$ -	$ -	$ -	$ 2,000,000	$ -	$ 2,000,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,000,000**	**$ -**	**$ 2,000,000**

5200-700 - Sewer
Neutanix Server Replacements

Project Number:	WWM-2022-1536	**Budget Year:**	2023
Project Type:	RPWRF Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2022	**Region:**	Multiple

Description

The Neutanix Servers used at the Riverside Park Wastewater Reclamation Facility (RPWRF) are at the end of their service life and are no longer being supported by their manufacturer. These servers are critical to plant operations, and need to be replaced before they fail.

Justification

The Neutanix Servers are integral to the operation of the wastewater treatment plant. Without them the plant would not be able to run and the City would violate the conditions of the discharge permit.

Comprehensive Plan Goals Met

CFU1: Adequate Public Facilities and Services
CFU2: Concurrency
CFU3: Coordination
CFU4: Service Provision
CFU5: Environmental Concerns

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ 1,000,000	$ -	$ -	$ -	$ -	$ -	$ 1,000,000
Total		**$ 1,000,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,000,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Planning	Sewer Fund	$ 1,000,000	$ -	$ -	$ -	$ -	$ -	$ 1,000,000
Total		**$ 1,000,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,000,000**

5200-700 - Sewer
HVAC Improvements for the Belt Filter Press Area

Project Number:	WWM-2022-1537	**Budget Year:**	2023
Project Type:	RPWRF Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2022	**Region:**	Multiple

Description

The Belt Filter Press Area processes the sludge produced within the wastewater treatment plant processes. The area is enclosed to control gas and odor issues, but the Heating, Ventilation, and Air Conditioning (HVAC) system is inadequate and will be improved to provide a safer work environment.

Justification

The HVAC system is in need of improvement in order to move and filter enough air out of the Belt Filter Press Area to keep the working environment safe.

Comprehensive Plan Goals Met

CFU1: Adequate Public Facilities and Services
CFU2: Concurrency
CFU3: Coordination
CFU4: Service Provision
CFU5: Environmental Concerns

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ 440,000	$ -	$ -	$ -	$ -	$ 440,000
Total		**$ -**	**$ 440,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 440,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Planning	Sewer Fund	$ -	$ 440,000	$ -	$ -	$ -	$ -	$ 440,000
Total		**$ -**	**$ 440,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 440,000**

5200-700 - Sewer
BioSolids Storage / Alternate Disposal Study

Project Number:	WWM-2022-1538	**Budget Year:**	2023
Project Type:	RPWRF Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2022	**Region:**	Multiple

Description

This project will conduct a study to identify locations and methods for storing BioSolids during the winter months when we cannot field apply. The study will also identify environmentally beneficial means and methods of disposing of BioSolids.

Justification

During the winter months BioSolids cannot be field applied and must be stored. A more efficient storage methodology is being sought, as well as alternatives to field application as a means of ultimate disposal.

Comprehensive Plan Goals Met

CFU1: Adequate Public Facilities and Services
CFU2: Concurrency
CFU3: Coordination
CFU4: Service Provision
CFU5: Environmental Concerns

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ 500,000	$ -	$ -	$ -	$ 2,000,000	$ 2,500,000
Total		**$ -**	**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ 2,000,000**	**$ 2,500,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Planning	Sewer Fund	$ -	$ 500,000	$ -	$ -	$ -	$ -	$ 500,000
Construction	Sewer Fund	-	-	-	-	-	2,000,000	2,000,000
Total		**$ -**	**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ 2,000,000**	**$ 2,500,000**

5200-700 - Sewer
AC Unit for Blower Building

Project Number:	WWM-2022-1540	**Budget Year:**	2023
Project Type:	RPWRF Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2022	**Region:**	Multiple

Description

The Air Conditioning (AC) unit for the Blower Building is at the end of its useful life. The unit supplies processed air to the Aeration Basins. The equipment has aged to the point where repairs are no longer economically feasible and must be replaced.

Justification

The blowers in the Blower Building generate the air for the proper function of the Aeration Basins; a critical component in the wastewater treatment system. The blowers also generate a lot of heat during operations. To function properly they need to be cooled. The AC unit on this building needs replacement.

Comprehensive Plan Goals Met

CFU1: Adequate Public Facilities and Services
CFU2: Concurrency
CFU3: Coordination
CFU4: Service Provision
CFU5: Environmental Concerns

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Revenue	Sewer Fund	$ 350,000	$ -	$ -	$ -	$ -	$ -	$ 350,000
Total		**$ 350,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 350,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ 350,000	$ -	$ -	$ -	$ -	$ -	$ 350,000
Total		**$ 350,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 350,000**

5200-700 - Sewer
Headworks Bypass Automated Trash Rack

Project Number:	WWM-2022-1541	**Budget Year:**	2023
Project Type:	RPWRF Maintenance	**Budget Stage:**	Adopted Budget
Year Identified:	2022	**Region:**	Multiple

Description

Wastewater normally flows into the treatment plant through the headworks where debris, rocks, and large items are screened out before the water continues through the treatment processes. There is an emergency bypass should headworks get clogged or go off line. That bypass has a trash rack that can get clogged during a storm when not cleaned. This project would install an automated cleaning system for the emergency bypass.

Justification

The emergency bypass for headworks can get clogged if the trash rack is covered by debris. The bypass is our fail-safe device and needs to operate. This project would ensure operations can continue uninterrupted.

Comprehensive Plan Goals Met

CFU1: Adequate Public Facilities and Services
CFU2: Concurrency
CFU3: Coordination
CFU4: Service Provision
CFU5: Environmental Concerns

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ -	$ -	$ -	$ -	$ 500,000	$ 500,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 500,000**	**$ 500,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ -	$ -	$ -	$ -	$ -	$ 500,000	$ 500,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 500,000**	**$ 500,000**

5200-700 - Sewer
Silo Digester No. 3 Exterior Cladding

Project Number:	WWM-2022-1542	**Budget Year:**	2023
Project Type:	RPWRF Capital	**Budget Stage:**	Adopted Budget
Year Identified:	2022	**Region:**	Multiple

Description

When Silo Digester No. 3 was constructed, the exterior cladding was removed from the project and deferred to a date in the future. Once the mixing system for this digester is constructed as part of a separate project in the Capital Improvement Plan (CIP), the exterior cladding will be installed as originally planned.

Justification

Exterior cladding on the silo digester will help insulate the digester, increasing operational efficiency. The exterior cladding will also match the aesthetic master plan guidelines for the entire treatment plant.

Comprehensive Plan Goals Met

CFU1: Adequate Public Facilities and Services
CFU2: Concurrency
CFU3: Coordination
CFU4: Service Provision
CFU5: Environmental Concerns.

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Sewer Fund	$ -	$ -	$ -	$ -	$ 2,000,000	$ -	$ 2,000,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,000,000**	**$ -**	**$ 2,000,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Construction	Sewer Fund	$ -	$ -	$ -	$ -	$ 2,000,000	$ -	$ 2,000,000
Total		**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,000,000**	**$ -**	**$ 2,000,000**

5200-700 - Sewer
Sewer Collections SCADA System

Project Number:	WWM-2023-1483	**Budget Year:**	2023
Project Type:	Collections Capital	**Budget Stage:**	Adopted Budget
Year Identified:		**Region:**	Multiple

Description

This project will construct real-time monitoring and control at 15 Combined Sewer Overflow (CSO) facilities and 26 sewer lift stations. This project will also construct monitoring along the sewer interceptor and 2 stormwater facilities locations.

Justification

Wastewater and Stormwater Collection System Supervisory Control and Data Acquisition (SCADA) Master Plan was completed in 2019. Projects were prioritized to meet three competing goals:

1) Protect the main sewer interceptor that conveys sewage to the Wastewater Treatment Facility from surcharge or excessive flows.
2) Further minimize frequency and volume of CSOs at each outfall.
3) Maximize the use of the Next Level of Treatment facility to ensure further environmental benefit to the Spokane River. Design of the first projects started in 2019 and included an isolated SCADA computer system and control center. This system would monitor the interceptor at Chestnut and Bridge, monitor and control for the Springfield Lift Station, CSO 24-1 Facility, and CSO 26-1 Facility. The remaining CSO facilities, lift stations, and monitoring locations have been prioritized to be installed over the next 6 years.

Comprehensive Plan Goals Met

CFU 1.2: Operational Efficiency

5200-700 - Sewer

Sewer Collections SCADA System - Continued

Funding

		2023	2024	2025	2026	2027	2028	6 Year Total
Reserves	Integrated Capital Management	$ 75,000	$ 825,000	$ 830,000	$ 880,000	$ 890,000	$ 990,000	$ 4,490,000
Total		**$ 75,000**	**$ 825,000**	**$ 830,000**	**$ 880,000**	**$ 890,000**	**$ 990,000**	**$ 4,490,000**

Spending

		2023	2024	2025	2026	2027	2028	6 Year Total
Design	Integrated Capital Management	$ 75,000	$ -	$ -	$ -	$ -	$ -	$ 75,000
Construction	Integrated Capital Management	-	825,000	830,000	880,000	890,000	990,000	4,415,000
Total		**$ 75,000**	**$ 825,000**	**$ 830,000**	**$ 880,000**	**$ 890,000**	**$ 990,000**	**$ 4,490,000**