



Vancouver Public Works

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2022-2027 Capital Improvement Program (CIP) Water | Sewer | SCIP | Stormwater

Letter from the Public Works Department

Public Works is responsible for operations, renewal and investment in our water, wastewater, and stormwater systems to meet an array of demands ranging from growth and development, regulatory compliance, asset replacement, and environmental protection to climate and seismic resiliency. It's vitally important that we manage our water resources to protect the assets that serve us all. The City of Vancouver (City) Public Works is developing a strategy for a resilient, integrated water system to serve our needs for generations to come. The 2022-2027 Water, Sewer, and Stormwater Capital Improvement Program (CIP) reflects the capital needs for each utility for the coming years.

Droughts, floods, aging infrastructure, and other risks require us to provide an integrated approach to managing our water resources across drinking water, wastewater, and stormwater utilities. Investments in each water system will help achieve the following goals:

- o Improve water and air quality for better public health and environmental protection
- Provide capacity to support economic vitality
- Improve natural areas and community livability
- Reduce flooding, seismic, and security risks
- Replace aging infrastructure
- Identify more sustainable practices that beneficially utilize wastewater and water resources

The goals listed above are central to the Water Resiliency Framework developed in 2021 by utilities to prioritize investments around a common vision. The City adopted a Water Resiliency Framework (Framework) to look more closely at impacts on our system and proactively address changing conditions like growth, climate change and aging infrastructure. The Framework recognizes the intrinsic connection of our water and relation to community health, economy, reliable infrastructure, and service. In Vancouver, water surrounds us. Sustaining clean water is essential to our community's future livability and vitality.



Each utility (water, wastewater, and stormwater) is working towards a common goal of protecting our water resources. For example, the water utility helps protect Vancouver's aquifers and provides safe, clean drinking water for the citizens of Vancouver. The wastewater utility collects and treats discharge from residential, commercial, and industrial users so that clean water can be reintroduced to the environment. The stormwater utility helps protect greenways and manage and clean stormwater runoff.

Using an integrated water approach, we protect our community, environment and infrastructure better.

Stormwater:

We manage systems that control stormwater including flood control as well as provides solutions to restore area streams and the environment.

300+ miles of stormwater pipe 24,000+ catch basins 5,752 infiltration wells 2,800 treatment facilities 19% tree canopy



We collect and treat wastewater from residential,commercial, and industrial users so that clean water can be reintroduced to the environment.

6.9 billion gallons of treated wastewater

2 treatment facilities

785 miles of wastewater pipe

41 pump stations

Drinking Water:

We provide high-quality and reliable drinking water and protect groundwater / aquifer water quality.

10.3 billion gallons of drinking water11 water stations1,090 miles of water pipe

This integrated approach to water resiliency as well as new regulations have identified new capital needs (in addition to what was in previous versions of the City's CIP) in the near term and in the long term.

Integrated Water

Management



Examples include:

- Water: Water Station #3 and #5 improvements; Well replacements; and PFAS and hypochlorite treatment system improvements.
- Wastewater: Improvements and expansion to the Marine Park Treatment Plant; expansion at the Westside Treatment Plaint; and conveyance/treatment of solids for both Marine Park and Westside treatment plants.
- Stormwater: Burnt Bridge Creek watershed improvements; compliance with new regulatory requirements; and new projects to help protect against flooding and restore habitat.

In order to help pay for these significant investments, staff will be working with City Council in 2022 to evaluate funding strategies.

What Happens Next?

We want to stay connected with you as we share plans to implement the Water Resiliency Framework. Through this process, we intend to:

- · Increase community awareness and commitment to invest in water
- Streamline capital project delivery
- Continue investing in more efficient operations and staff development
- Efficiently comply with existing laws
- Find balanced and affordable financing options

We must invest about \$750 million over the next 15 years to upgrade our infrastructure and make it more resilient.

Our future depends upon our ability to invest in our utilities in a way that enhances and preserves our community's livability, safety, economic and environmental well-being. As we navigate the challenges ahead, we will continue to seek out innovations and opportunities that will support our thriving community now and for future generations to come.

Highlights of the 2022-2027 Capital Improvement Program are shown in the table that follows.

Lon Pluckhahn,
Deputy City Manager
(Acting) Public Works Director

2022-2027

KEY WATER PROJECTS/EFFORTS:

- Replacement of Water Station 5 groundlevel reservoir, including upgrades to emergency power systems and booster pumping systems.
- Replacement of Water Station 3 groundlevel reservoir, elevated tank and booster pumping systems.
- Capital programs focused on rehabilitation and/or replacement of worn and obsolete water treatment facilities. This includes several chlorine disinfection system upgrades to state-ofthe-art sodium hypochlorite disinfection technology.

KEY WASTEWATER PROJECTS/EFFORTS:

- Ongoing, multi-phased project to replace the SCADA technology network for enhanced monitoring and operation of collection system pump stations and wastewater treatment plants.
- Replacement of aging electrical equipment for site power supply and emergency power switch gear at the Westside Treatment Plant.
- Installation of new aeration system turbine blowers at both Marine Park and Westside Treatment Plants.
- Prepare for multiple projects that will improve, expand, and deal with solids conveyance/treatment needs at Marine Park and Westside treatment plants.

- Ongoing upgrade and replacement of water mains throughout the distribution system that have been identified as high risk and/or high maintenance.
- Production well replacement projects at multiple water stations to improve reliability.
- Ongoing installation of transmission mains to move water from high production sources to areas of development.
- Electrical equipment replacement at water production stations.
- Preparation and implementation of new federal requirements pertaining to Per-Polyfluoroalkyl Substances (PFAS).
- Continued projects to completely rehabilitate or replace sections of the collection system's large-diameter interceptor piping.
- Ongoing individual projects within the Sewer Connection Incentive Program (SCIP) bringing reliable sewer service to 2,097 more homes.
- Ongoing rehabilitation or replacement of sewer mains throughout the collection system that have been identified as high risk and/or high maintenance.
- Upgrading of systems and equipment at the Industrial Pretreatment Lagoon for improved process control and energy efficiency.

KEY STORMWATER PROJECTS/EFFORTS:

- Ongoing efforts using limited available capital funds to leverage grants to address stormwater quality and quantity issues throughout Vancouver.
- Small capital projects involving regulatory compliance and replacement of substandard systems.
- Improvements to the Burnt Bridge Creek watershed.
- Implementation of new requirements and programs, as required by implementation timelines in the City's August 2019 Stormwater National Pollutant Discharge Elimination System (NPDES) permit. This will require new staffing, and also includes an inspection program for source control and comprehensive stormwater planning, changes to local ordinances and infrastructure design standards, and increased water quality monitoring of watershed basins.

Comprehensive Plan Policies for Water, Sewer and Surface Water (Adopted Nov. 7, 2011)

- PFS-1. SERVICE AVAILABILITY (ALL UTILITIES): Consider water, sewer, police, transportation, fire, schools, storm water management and parks as necessary public facilities and services. Ensure that facilities are sufficient to support planned development.
- PFS-2. SERVICE STANDARDS (ALL UTILITIES): Establish service standards or planning assumptions for estimating needed public facilities, based on service capabilities, local land use designations and nationally recognized standards.
- PFS-21. WASTEWATER RECLAMATION: Eliminate health hazards from domestic and industrial wastewater and return clean water to the environment.
- PFS-22. SEWER SERVICE: Provide sewers and sewer service to every Vancouver home, business, and industry at an affordable and equitable cost. Discourage development that includes on-site sewage treatment systems. Encourage existing development using septic systems to connect to public sewer as soon as available. Ensure that the infrastructure to support sewer service is in place prior to or at the time of development.
- PFS-23. WATER SERVICE: Provide safe, clean, quality drinking water to every Vancouver home, business, and industry. Discourage development that includes private drinking water wells. Provide water pressures and volumes necessary to support fire suppression hydrants and sprinkler systems. Ensure that the infrastructure to support water service is in place prior to or at the time of development.
- PFS-24. SEWER AND WATER SERVICE EXTENSION: Public sewer and water service should not be extended outside the Vancouver urban growth area except to (a) Remedy a threat to public health or safety. (b) Remedy a threat to water resources, (c) Provide service to uses within the urban reserve district otherwise required to be served (d) Support development envisioned in a jurisdiction's comprehensive plan (e) Water service may be extended if it is consistent with the Clark County Coordinated Water System Plan and does not increase density beyond the adopted Comprehensive Plan. The existence or extension of sewer or water service should not be used to justify changes to the Comprehensive Plan.
- PFS-25. SURFACE WATER MANAGEMENT: Manage storm water to safely pass floodwaters, maintain and improve water quality of receiving streams, lakes, and wetlands, protect and enhance fish and wildlife habitat, promote recreational opportunities, and enhance community aesthetics.

Comprehensive Plan Policy for Asset Management (Adopted Dec. 16, 2013)

PFS-35 City public facility assets shall be systematically managed to balance full life cycle costs, performance, risk, and service levels, using best management practices and data.

Financial Policies for Capital Planning and Asset Management (Adopted Nov. 16, 2020)

- 34. In pursuit of an asset management strategy that prioritizes safety, equity and climate action, the City will:
 - Consider the climate impacts of asset investments and pursue asset management strategies that reduce its contribution to climate change over time.
 - Consider equity impacts of capital projects and asset management strategies and prioritize investments that improve equity within the City.
 - Consider the potential improvements to community safety associated with capital investments and prioritize investments that improve community safety, particularly in the transportation system.

- 35. Asset management best practice involves managing the performance, risk and expenditures on infrastructure assets in an optimal and sustainable manner throughout their lifecycle covering planning, design, construction, operation, maintenance, and disposal. The City shall integrate the principles and best practices of Asset Management such as those embodied in the *International Infrastructure Management Manual* in the management of its assets.
- 36. **Asset Inventory** will be maintained with maintenance, repair and deferred maintenance costs identified and updated on an annual basis.
- 37. Maintenance of city assets shall be addressed on a current need, rather than deferred into the future.
- 40. A six-year City-Wide Capital Improvement Program shall be developed annually and shall provide a prioritized list of reasonably funded projects and those in process of securing funding. Capital Improvement Plans for utility assets shall be updated no less frequently than every two years. The comprehensive plan will identify longer-term capital needs by program area.
- 41. Funding for capital projects, including major facilities maintenance projects, will be allocated in a manner that balances community needs with City priorities, the potential for attracting matching funds, and the ability to reduce or limit expenses in future years.
- 42. Proceeds from the sale of capital assets of the city in the downtown are to be reinvested in the public infrastructure projects facilitating further economic development in downtown.
- 43. The City's objective is to incorporate a "pay-as-you-go" approach (using available cash and current resources) in the Capital Improvement program.
- 44. The capital budget will be adopted at the same time the City Operating Budget is adopted. The Capital budget will only include fully funded projects. The Capital Budget will only contain projects identified in the Capital Improvement Program.
- 45. A **capital repair appropriation** will be maintained for unanticipated major repairs of general operating facilities and for emergency replacement of general fund equipment. Additions to the capital repair contingency reserve will be made based on Council directions.
- 46. **Impacts on net annual operating and maintenance costs** will be identified as part of the funding considerations for new capital projects such as buildings, parks and street enhancements. This includes identifying potential reductions in maintenance costs if improvements are funded. The necessary funds to operate the capital facility will be identified at the time the capital budget is adopted.
- 47. In order to provide long-term sustainable utility services, the City will structure utility rates so that system reinvestment including major repair, rehabilitation, and replacement of utility assets can be fully funded on an ongoing basis in accordance with the City's "pay as you go" policy. This will be achieved through a plan of smaller incremental rate increases to maintain affordability. As identified by the utility capital improvement plan, rates will also include an investment component for capacity improvements and system expansion.
- 48. A **system development reserve** will be maintained to fund growth related capital costs. All systems development charge revenue will be contributed to the fund.



UTILITY FUNDING NARRATIVE

Each of the utilities has five components to their funding structure: Revenue, Expenses, Reserves, Debt, and Assets. In broad terms, Revenue is the money brought into the utility, Expenses are the moneys going out of the utility, Reserves are the moneys set aside for emergencies or capital work, Debt is the money owed on loans, and Assets are the value of the infrastructure/facilities and money held by the utility. Below is a general description of each component for the respective utilities.

Water

- -Revenues consist of: Ratepayer revenue, System Development Charges (SDC), Grants, and miscellaneous revenue.
- -Expenses consist of: Operations and maintenance activities, Taxes and fees, Loans made to other utilities, Debt service, and Capital improvements.
- -Reserves consist of: Debt service reserve, Capital emergency reserve, Water construction reserve, Sewer Connection Incentive Program (SCIP) reserve.
- -Debt consists of: Revenue bonds for capital improvements
- -Assets consist of: Pipes and appurtances, Water stations, Wells, Water rights, Real property/Easements, Distribution pumps, Operations and maintenance equipment, and cash.

<u>Sewer</u>

- -Revenues consist of: Ratepayer revenue, System Development Charges (SDC), Loans, and miscellaneous revenue.
- -Expenses consist of: Operations and maintenance activities, Taxes and fees, Debt service, and Capital improvements.
- -Reserves consist of: Debt service reserve, Capital emergency reserve, Sewer construction reserve.
- -Debt consists of: Revenue bonds for capital improvements, long-term Interfund loan from water.
- -Assets consist of: Pipes and appurtances, Pump stations, Wastewater treatment facilities, Real property/Easements, Operations and maintenance equipment, and cash.

Surface Water

- -Revenues consist of: Ratepayer revenue, Loans, Grants, and miscellaneous revenue.
- -Expenses consist of: Regulatory, Operations and maintenance activities, Taxes and fees, and Capital improvements.
- -Reserves consist of: Surface water construction reserve.
- -Debt consists of: State Revolving Loan (SRL) for capital improvements.
- -Assets consist of: Treatment facilities, Conveyance facilities, Flow control facilities, Real property/Easements, Operations and maintenance equipment, and cash.



CAPITAL PROJECT JUSTIFICATIONS

Each utility works on capital projects that can be lumped into five broad categories: Regulatory compliance, improved safety, new systems, replace/preserve/rehabilitate systems, or lower operating costs. Regulatory compliance projects include capital work done in order to comply with new State or Federal requirements. Improved safety projects are capital projects undertaken in order to improve the public safety and welfare. New systems capital projects are undertaken in order to increase capacity or facilitate growth. Replace/preserve/rehabilitate system capital projects are undertaken in order to replace old infrastructure or prolong existing infrastructure's effective life. Lower operating costs projects include capital work done in order to increase efficiencies or to otherwise reduce operating costs. Many projects will overlap categories, but these five categories provide the justification for why most public works capital projects are undertaken. Below are examples of the types of projects that can be found in each category for the respective utilities.

Water

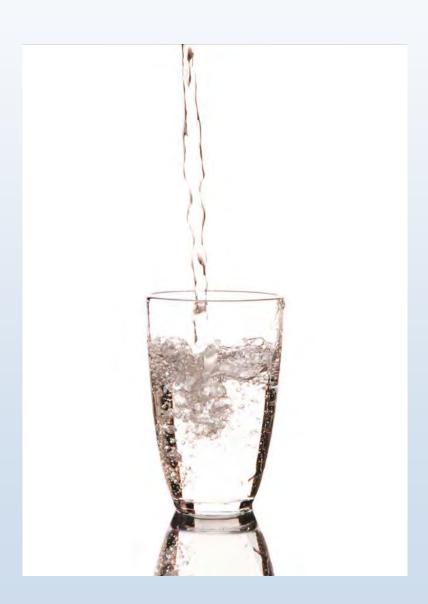
- (1)-Regulatory compliance: State (DOH) and Federal (EPA) projects.
- (2)-Improved safety: Fire flow improvements, seismic upgrades, and chemical system upgrades.
- (3)-New systems: Wells, pumps, treatment systems, controls, storage, and mains.
- (4)-Replace/preserve/rehabilitate systems: Wells, pumps, treatment systems, controls, storage, substandard and leaking mains.
- (5)-Lower operating costs: Water station upgrades and pump replacement.

Sewer

- (1)-Regulatory compliance: Improve discharge to water bodies and sludge burning (air quality).
- (2)-Improved safety: Groundwater protection improvements and Sewer Connection Incentive Program (SCIP).
- (3)-New systems: New trunk/interceptor/service mains and new pump stations.
- (4)-Replace/preserve/rehabilitate systems: Trenchless Repair projects and pump station replacements. (5)-Lower operating costs: Treatment plant upgrades and pump replacement.

Surface Water

- (1)-Regulatory compliance: NPDES compliance projects and Underground Injection Control (UIC) retrofit.
- (2)-Improved safety: Flooding mitigation and groundwater protection improvements.
- (3)-New systems: New treatment, conveyance, or flow control improvements.
- (4)-Replace/preserve/rehabilitate systems: Swale retrofits and drywell relocation projects.
- (5)-Lower operating costs: Swale retrofits and flow control retrofits.





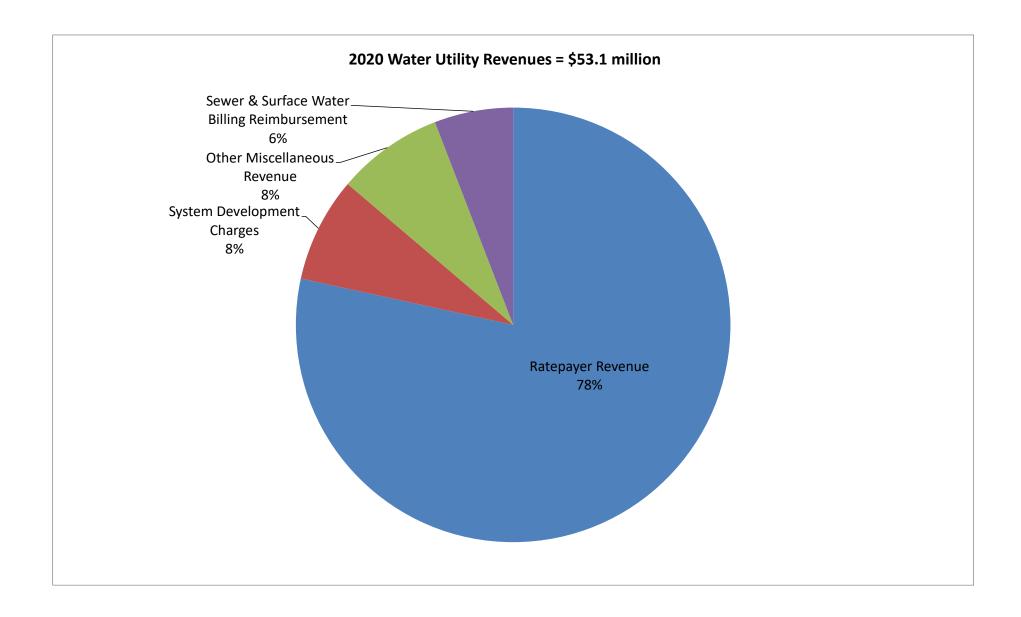


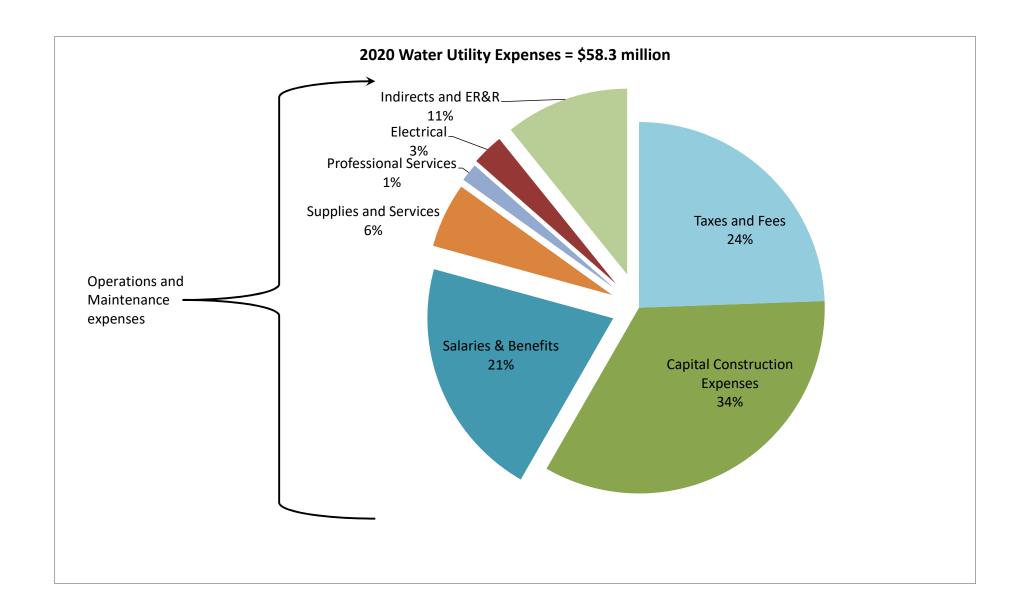
WATER FUND ACTIVITY (2014-2020)

	2014	2015	2016	2017	2018	2019	2020
Revenue							
Ratepayer Revenue	26,598,003	29,459,874	30,532,514	33,943,175	36,637,725	38,051,995	41,604,155
System Development Charges	2,060,907	3,305,909	3,509,012	3,300,742	4,411,287	3,800,001	4,138,992
Grants	41,385	87 , 1 <i>4</i> 5	10 7, 966	68,204	64,675	<i>75,</i> 219	768 , 242
Sewer & Surface Water Revenue	2,437,063	2,672,571	2,791,383	2,698,260	2,871,236	3,092,379	3,112,000
Other Miscellaneous Revenue*	3,903,125	7,221,121	3,995,010	5,374,457	5,597,457	5,989,609	3,432,081
Total Revenue	35,040,483	42,746,620	40,935,885	45,384,838	49,582,380	51,009,203	53,055,470
Expenses							
Salaries & Benefits	9,761,371	10,128,946	10,416,991	10,888,560	11,290,218	12,675,345	12,226,939
Supplies and Services	3,864,162	4,031,296	3,484,423	3,964,448	3,693,620	4,207,110	3,297,002
Professional Services	643,348	<i>717,47</i> 0	1 , 291 , 475	1,256,302	1,525,793	993,381	910,354
Electrical	1 , 570,177	1,606,447	1,491,564	1,602,216	1,565,038	1,561,398	1,597,120
Indirects and ER&R	<u>1,115,950</u>	2,028,397	5,152,546	5,099,613	5,487,922	6,276,554	6,296,152
Operations & Maintenance Expenses	16,955,008	18,512,556	21,836,999	22,811,139	23,562,591	25,713,788	24,327,567
Taxes and Fees	6,681,153	7,386,940	8,438,588	10,274,352	11,294,200	12,658,148	14,249,776
Debt Service	645,471	645,738	554,504	104,040	99,705	-	-
Loans to the Sewer Fund						-	-
Capital Construction Expenses	7,653,864	12,146,035	6,435,864	13,154,853	9,941,874	11,892,737	19,757,285
Expenses Subtotal	31,935,496	38,691,269	37,265,955	46,344,384	44,898,370	50,264,673	58,334,628
Depreciation	4,441,149	4,525,061	4,688,224	4,811,167	4,983,157	<u> </u>	
Total Expenses	36,376,645	43,216,330	41,954,179	51,155,551	49,881,527	50,264,673	58,334,628

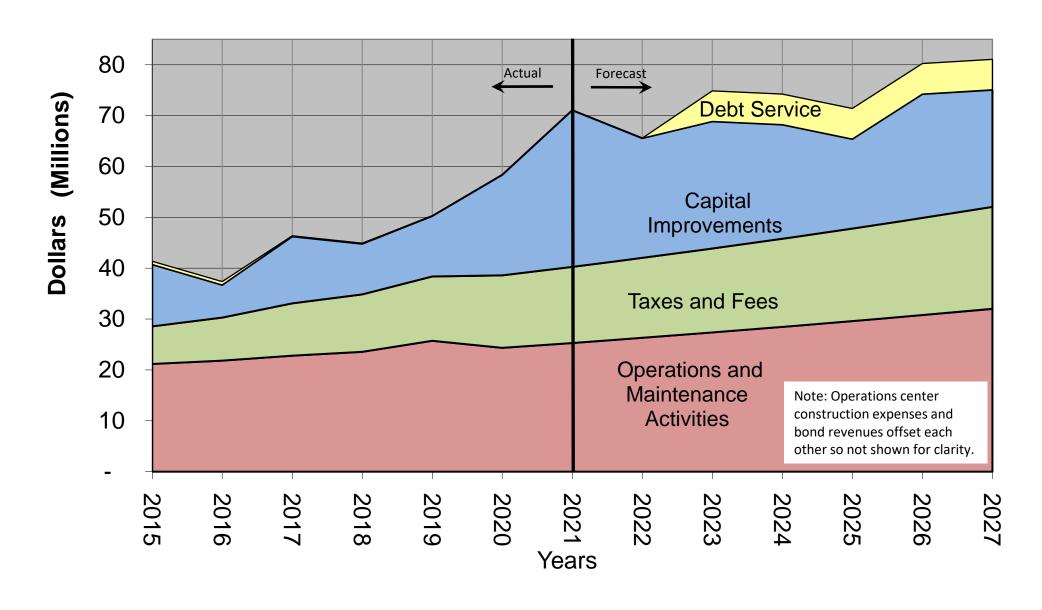
*Other Miscellaneous Revenues include items such as:

Misc Fines & Penalties
Interest Earnings
Interfund Rents
Service Installations
Latecomer Fees
Interfund Transfers
Proceeds from Refunded Debt

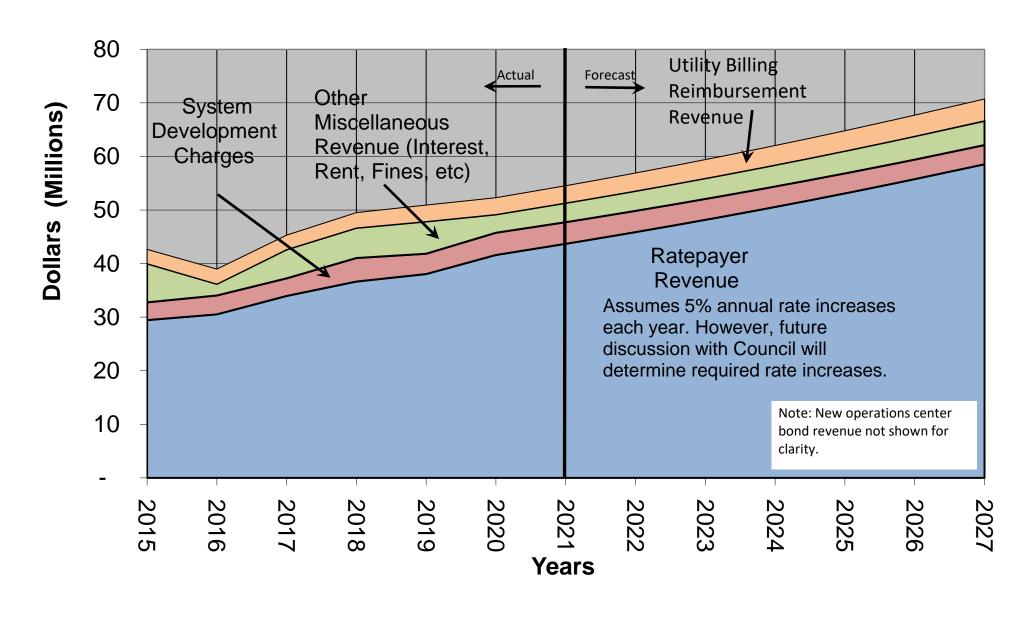


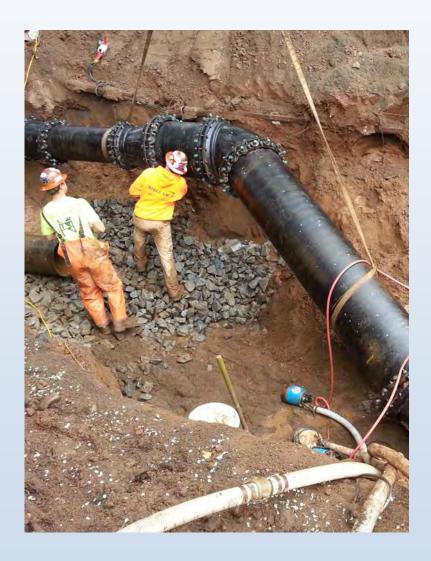


Water Expenses (2015-2027)



Water Revenues (2015-2027)





Water Utility CIP Changes

This page provides an overview of the changes from the previous 6-year project list (2021-2026) to this year's 6-year project list (2022-2027). The changes are segmented by: projects added; projects removed; and other.

Projects Added	Project No.	Comments			
Water Production					
PFAS Studies and new treatment	WTR-167	New drinking water treatment standards for			
		Per- and polyfluoroalkyl substances			
MCC Upgrades	WTR-166	New project (\$8M budget) for 2026			
Water Distribution					
None noted					
Water Transmission					
Lincoln Ave. to Main St. Trans Main (T-4, T-5, T-6)	WTR-165	New \$1M project 2021-2023			
BNSF Fourth Plain (T-3)	WTR-168	New \$2.5M project 2022-2023			

Project No.	Comments			
WTR-61	Project Completed			
WTR-107	Project Completed			
WTR-116	Project Completed			
WTR-117	Project Completed			
WTR-151	Project now on hold			
	Project Completed			
WTR-51	Project Completed			
WTR-A1-28	Project Completed			
Project No.	Comments			
WTR-101	Additional \$4.7M budget added 2024			
WTR-106	Project pushed out to 2024			
WTR-115	Project moved out one year to 2022			
	WTR-61 WTR-107 WTR-116 WTR-117 WTR-151 WTR-51 WTR-51 WTR-51 WTR-A1-28 Project No.			

^{*} Note 1. "Completed" indicates already completed as of the date of this document or anticipated completion prior to January 1, 2022.

6 YEAR CAPITAL IMPROVEMENT PROGRAM FOR WATER- (2022-2027)

*Note: All costs are in 2021 dollars

Mar. 16, 2022

	Project									
Project Description	Number	CIP#	2021**	2022	2023	2024	2025	2026	2027	Total
448 Water Construction Fund				-		-				
Water Production Projects										
PRODUCTION PROJECTS BY WELLFIELD:										
Water Station 1 - Two 4 MG Reservoirs& Standpipe	PRJ083462	WTR-39	8,700,000	1,931,000						1,931,000
Water Station 1: Replace Wells 3, 4, and 5	PRJ100490	WTR-44		1,000,000	3,000,000					4,000,000
Water Station 3 Reservoir/Tower/Booster Replace	PRJ100492	WTR-53		627,553	800,000	10,000,000	6,420,000	500,000		18,347,553
Water Station 3 Replace Wells 1 & 2 with one well	TBD	WTR-54			4 000 000		1,700,000			1,700,000
Sodium Hypo Gen System WS 4	TBD	WTR-145			1,200,000					1,200,000
Water Station 4 Replace Well 1 Water Station 4 Well 4 Building Replacement	TBD PRJ100240	WTR-43 WTR-67	510,000	885,818						885,818
WS 5 Reservoir, Pump, E-Power	PRJ100240	WTR-07	3,369,000	13,000,000	11,800,000	4,700,000				29,500,000
WS 5 Tower Internal Coating	PRJ100241	WTR-106	3,303,000	13,000,000	11,000,000	630,000				630,000
Water Station 5 Tank Upgrades and Ext Blast & Coating	TBD					000,000				-
Water Station 6 Well/Treatment Install	TBD	WTR-69								-
Water Station 6 Tank Upgrades and Ext Blast & Coating	TBD									-
WS 7 Hypo Gen System	PRJ100237	WTR-103	750,000	800,842						800,842
Water Station 7 Greensand	TBD	WTR-154						250,000		250,000
WS 7 Tower Internal Coating	PRJ100494	WTR-108	700,000	884,894						884,894
WS 7 Tank Upgrades and Ext OverCoat	TBD									-
WS 7 Water Right Well	TBD									-
Water Station 8 Replace Wells 2 & 3	TBD		050.000	450.000	050.000					-
WS 8 Hypo Gen System Sodium Hypo Gen System WS 15	PRJ100239 PRJ100495	WTR-104 WTR-63	350,000	450,000	350,000 700,000					800,000
Water Station 15 Wells 1-4 Replacement	TBD	WTR-63			700,000		3,000,000	1,500,000		700,000 4,500,000
WS 15 Water Right Wells/Treatment	TBD						3,000,000	1,500,000		4,500,000
Sodium Hypo Gen System Ellsworth	PRJ100493	WTR-64		1,001,889	850,000			+	1	1,851,889
Ellsworth Well Rehabilitation	TBD	WTR-16		.,,,,,,,	200,000	300,000				300,000
Ellsworth Greensand Replacement	TBD	WTR-155				,				-
Ellsworth Well Replacement	TBD	WTR-156							4,500,000	4,500,000
Ellsworth Roof Replacement	PRJ100503	WTR-160	700,000	695,393						695,393
Westside Wellfield Property	TBD	WTR-A1-24			Ţ			\Box		-
Westside Wellfield Construction	TBD	WTR-A1-24								-
										-
PRODUCTION PROJECTS - OTHER:	DD 1400045			50.000						-
Rezone Project for Vanc Low and Vanc High	PRJ100245	WTR-A1-114		50,000		4.750.000				50,000
NE 45th St Booster Pump Station Replace Study for Adding a 4th Pump at St. Johns	TBD TBD	WTR-146				1,750,000		10,000		1,750,000 10,000
Study for Additional HH Tanks	TBD							10,000		10,000
Heights High Groundwater Development	TBD		200,000	199,576	50,000					249,576
Reservoir Install Southeast	TBD			100,010	22,000					-
Standpipe in NE	TBD									-
System MCC Electrical Upgrades	TBD	WTR-166						3,000,000	3,000,000	6,000,000
Treatment Regulations Compliance	TBD	WTR-A1-23								-
PFAS Studies	PRJ100640	WTR-A1-23	1,000,000	948,520						948,520
PFAS Treatment	TBD	WTR-167					5,000,000	20,000,000	20,000,000	45,000,000
										-
SCADA Projects	DD 1400007	MATE A4 00	000 000	404.004						-
SCADA Firewall/Security/Data Concent/PLC Software SCADA PLC/HMI Upgrade		WTR-A1-29 WTR-A1-29	290,000	124,601 45,000	104,000	31,000				124,601 180,000
SCADA FEC/HIMI Opgrade SCADA Software	PRJ100304 PRJ100268		129,000	45,000	104,000	16,000	216,000	23,000	204,000	459,000
OO/LE/Y CONTINUED	1110100200	WIIICALI 20	120,000			10,000	210,000	20,000	204,000	-
Water Distribution Projects										
PRV Flowmeters/SCADA System Connections	PRJ083332	WTR-A1-12		112,676						112,676
Broadway - PH 1 (13th to 17th St)	PRJ083556	WTR-150	211,778	375,000						375,000
Water Main NE 49th St - NE 15th Ave to 40th Ave	PRJ100269	WTR-36	1,125,000	1,745,197						1,745,197
99th St Extension, NE 94th Ave to NE 104th Ave County	PRJ083560	WTR-109	600,000	585,278						585,278
17th St. to McLoughlin Blvd., F St. to I-5 (D-3)	PRJ100497	WTR-115	150,000	145,760						145,760
*SE 1st St - 164th Ave. to 192nd Ave.	PRJ100270	WTR-153			355,000					355,000
VL Rezone South of WS 1	PRJ100496	WTR-143		420,000						420,000
SCIP Coordination Projects Leak Abatement	PRJ083563	WTRA1-10 WTR-A1-3	100,000	100,000	100,000	100,000	100,000	100,000	4 000 000	500,000
Water Demand Response	PRJ100244 PRJ083553	WTR-A1-3	30,000	100,000	1,000,000 300,000	600,000 300,000	600,000	1,000,000 300,000	1,000,000 300,000	4,300,000 1,800,000
99th St Transmission Main - NE 140th Ave. to Ward Rd	TBD	WTR-96	30,000	300,000 30,000	2,777,000	300,000	300,000	300,000	300,000	2,807,000
SR 500/I-5 Interchange (move 24")*	TBD	WTR-90 WTR-49		30,000	2,111,000			550,000		550,000
Lower Grand Industrial Area	PRJ100439	WTR-163	56,000	54,329				355,000		54,329
Evergreen Blandford to Sleret 12" Replacement	TBD			.,,						-
NW Lavina St. & 42nd. St. (#7)	PRJ100505	WTR -157	80,000	773,307						773,307
Jefferson St. Realignment	TBD	WTR - 161			10,000	140,000				150,000
NE 46th St at NE 28th Ave (#20)	PRJ100410		40,000	34,605						34,605
52nd St - Daniels to Columbia (D-06)	PRJ100498	WTR-152	45,000	39,958				-		39,958
NE 45th St, NE 106th Ave to NE 109th Ave, Water	PRJ100575		178,000	239,865						239,865
INE STO STA ST JORGE ROWSTON MOIN			203,000	265,713					+	265,713 487,291
NE 53rd St & St Johns Rd Water Main	PRJ100576		400.000	107 004						487,291
NW Daniels St, W 39th to W 45th St, Water	PRJ100577	 WTR-150	406,000 275,000	487,291 588 601						520 604
NW Daniels St, W 39th to W 45th St, Water Broadway St - PH 2 (6th to 13th St)	PRJ100577 PRJ100590	WTR-150	406,000 275,000	588,601	650 000					588,601 655,000
NW Daniels St, W 39th to W 45th St, Water Broadway St - PH 2 (6th to 13th St) Main St 5th St to 15th St	PRJ100577 PRJ100590 TBD				650,000 300,000	2.000 000				655,000
NW Daniels St, W 39th to W 45th St, Water Broadway St - PH 2 (6th to 13th St)	PRJ100577 PRJ100590	WTR-150		588,601	650,000 300,000	2,000,000				
NW Daniels St, W 39th to W 45th St, Water Broadway St - PH 2 (6th to 13th St) Main St 5th St to 15th St	PRJ100577 PRJ100590 TBD	WTR-150		588,601		2,000,000				655,000
NW Daniels St, W 39th to W 45th St, Water Broadway St - PH 2 (6th to 13th St) Main St 5th St to 15th St Heights District Water Mains	PRJ100577 PRJ100590 TBD	WTR-150		588,601		2,000,000				655,000 2,300,000 -
NW Daniels St, W 39th to W 45th St, Water Broadway St - PH 2 (6th to 13th St) Main St 5th St to 15th St Heights District Water Mains Other Water Projects Operations Center Redevelopment	PRJ100577 PRJ100590 TBD TBD	WTR-150	275,000	588,601 5,000	300,000	2,000,000				655,000 2,300,000 - -
NW Daniels St, W 39th to W 45th St, Water Broadway St - PH 2 (6th to 13th St) Main St 5th St to 15th St Heights District Water Mains Other Water Projects Operations Center Redevelopment New Projects Master Plan Studies	PRJ100577 PRJ100590 TBD TBD TBD PRJ083491	WTR-150	275,000	588,601 5,000 2,943,000	300,000	2,000,000				655,000 2,300,000 - - - 77,943,000 - -
NW Daniels St, W 39th to W 45th St, Water Broadway St - PH 2 (6th to 13th St) Main St 5th St to 15th St Heights District Water Mains Other Water Projects Operations Center Redevelopment New Projects Master Plan Studies O&M Program Electronic Manual	PRJ100577 PRJ100590 TBD TBD PRJ083491 PRJ100246	WTR-150	275,000	588,601 5,000	300,000	2,000,000				655,000 2,300,000 - - 77,943,000
NW Daniels St, W 39th to W 45th St, Water Broadway St - PH 2 (6th to 13th St) Main St 5th St to 15th St Heights District Water Mains Other Water Projects Operations Center Redevelopment New Projects Master Plan Studies O&M Program Electronic Manual Study for Heights High HGL Balance	PRJ100577 PRJ100590 TBD TBD PRJ083491 PRJ100246 TBD	WTR-150	275,000	588,601 5,000 2,943,000	300,000					655,000 2,300,000 - - 77,943,000 - 300,000
NW Daniels St, W 39th to W 45th St, Water Broadway St - PH 2 (6th to 13th St) Main St 5th St to 15th St Heights District Water Mains Other Water Projects Operations Center Redevelopment New Projects Master Plan Studies O&M Program Electronic Manual	PRJ100577 PRJ100590 TBD TBD PRJ083491 PRJ100246	WTR-150	275,000	588,601 5,000 2,943,000	300,000	2,000,000	300,000	200,000		655,000 2,300,000 - - - 77,943,000 - -
NW Daniels St, W 39th to W 45th St, Water Broadway St - PH 2 (6th to 13th St) Main St 5th St to 15th St Heights District Water Mains Other Water Projects Operations Center Redevelopment New Projects Master Plan Studies O&M Program Electronic Manual Study for Heights High HGL Balance Water System Comp Plan	PRJ100577 PRJ100590 TBD TBD PRJ083491 PRJ100246 TBD	WTR-150	275,000	588,601 5,000 2,943,000	300,000		300,000	200,000		655,000 2,300,000 - - 77,943,000 - - 300,000 - 550,000
NW Daniels St, W 39th to W 45th St, Water Broadway St - PH 2 (6th to 13th St) Main St 5th St to 15th St Heights District Water Mains Other Water Projects Operations Center Redevelopment New Projects Master Plan Studies O&M Program Electronic Manual Study for Heights High HGL Balance Water System Comp Plan Transmission Master Plan Projects	PRJ100577 PRJ100590 TBD TBD PRJ083491 PRJ100246 TBD TBD	WTR-150	275,000	588,601 5,000 2,943,000	300,000		300,000	200,000		655,000 2,300,000 - - - 77,943,000 - - 300,000 - 550,000
NW Daniels St, W 39th to W 45th St, Water Broadway St - PH 2 (6th to 13th St) Main St 5th St to 15th St Heights District Water Mains Other Water Projects Operations Center Redevelopment New Projects Master Plan Studies O&M Program Electronic Manual Study for Heights High HGL Balance Water System Comp Plan Transmission Master Plan Projects *18th St Trans Main-136th to 162nd (T-40 ph2)	PRJ100577 PRJ100590 TBD TBD PRJ083491 PRJ100246 TBD TBD TBD	WTR-150	275,000	588,601 5,000 2,943,000 300,000	300,000		300,000	200,000		655,000 2,300,000 - - - 77,943,000 - - 300,000 - 550,000
NW Daniels St, W 39th to W 45th St, Water Broadway St - PH 2 (6th to 13th St) Main St 5th St to 15th St Heights District Water Mains Other Water Projects Operations Center Redevelopment New Projects Master Plan Studies O&M Program Electronic Manual Study for Heights High HGL Balance Water System Comp Plan Transmission Master Plan Projects	PRJ100577 PRJ100590 TBD TBD PRJ083491 PRJ100246 TBD TBD	WTR-150 WTR-A1-112 WTR-119	275,000	588,601 5,000 2,943,000	300,000		300,000	200,000		655,000 2,300,000 - - - 77,943,000 - - 300,000 - 550,000
NW Daniels St, W 39th to W 45th St, Water Broadway St - PH 2 (6th to 13th St) Main St 5th St to 15th St Heights District Water Mains Other Water Projects Operations Center Redevelopment New Projects Master Plan Studies O&M Program Electronic Manual Study for Heights High HGL Balance Water System Comp Plan Transmission Master Plan Projects *18th St Trans Main-136th to 162nd (T-40 ph2) Haagen Park, north of 9th St. (T-37)	PRJ100577 PRJ100590 TBD TBD PRJ083491 PRJ100246 TBD TBD TBD TBD TBD TBD	WTR-150 WTR-A1-112 WTR-119 WTR-128	275,000	588,601 5,000 2,943,000 300,000	300,000 75,000,000 932,000		300,000	200,000		655,000 2,300,000 - - 77,943,000 - - 300,000 - 550,000 - - - - 364,590 932,000
NW Daniels St, W 39th to W 45th St, Water Broadway St - PH 2 (6th to 13th St) Main St 5th St to 15th St Heights District Water Mains Other Water Projects Operations Center Redevelopment New Projects Master Plan Studies O&M Program Electronic Manual Study for Heights High HGL Balance Water System Comp Plan Transmission Master Plan Projects *18th St Trans Main-136th to 162nd (T-40 ph2) Haagen Park, north of 9th St. (T-37) WS 5 to Evergreen Trans Main Blandford (T-51)	PRJ100577 PRJ100590 TBD TBD PRJ083491 PRJ100246 TBD TBD TBD TBD TBD TBD TBD TBD	WTR-150 WTR-A1-112 WTR-119 WTR-128 WTR-120	275,000	588,601 5,000 2,943,000 300,000	75,000,000		300,000	200,000		655,000 2,300,000 - - 77,943,000 - - 300,000 - 550,000 - - - 364,590
NW Daniels St, W 39th to W 45th St, Water Broadway St - PH 2 (6th to 13th St) Main St 5th St to 15th St Heights District Water Mains Other Water Projects Operations Center Redevelopment New Projects Master Plan Studies O&M Program Electronic Manual Study for Heights High HGL Balance Water System Comp Plan Transmission Master Plan Projects *18th St Trans Main-136th to 162nd (T-40 ph2) Haagen Park, north of 9th St. (T-37) WS 5 to Evergreen Trans Main Blandford (T-51) SE Mill Plain Blvd 124th Ave. to 131st Ave. (T-46)	PRJ100577 PRJ100590 TBD TBD PRJ083491 PRJ100246 TBD TBD TBD TBD TBD TBD TBD TBD PRJ100502 TBD TBD TBD	WTR-150 WTR-A1-112 WTR-119 WTR-128 WTR-120 WTR-130	275,000	588,601 5,000 2,943,000 300,000	300,000 75,000,000 932,000 825,000	50,000	300,000	200,000		655,000 2,300,000 - - 77,943,000 - - 300,000 - 550,000 - - - 364,590 932,000 825,000
NW Daniels St, W 39th to W 45th St, Water Broadway St - PH 2 (6th to 13th St) Main St 5th St to 15th St Heights District Water Mains Other Water Projects Operations Center Redevelopment New Projects Master Plan Studies O&M Program Electronic Manual Study for Heights High HGL Balance Water System Comp Plan Transmission Master Plan Projects *18th St Trans Main-136th to 162nd (T-40 ph2) Haagen Park, north of 9th St. (T-37) WS 5 to Evergreen Trans Main Blandford (T-51) SE Mill Plain Blvd 124th Ave. to 131st Ave. (T-46) NE 9th St. to 18th St., 112th Ave. to 129th Ave. (T-36) Transmission Main - Burton Rd (T-34) SE Chkalov Dr., south of Mill Plain Blvd. (T-45)	PRJ100577 PRJ100590 TBD TBD PRJ083491 PRJ100246 TBD	WTR-150 WTR-A1-112 WTR-119 WTR-128 WTR-120 WTR-120 WTR-127 WTR-6 WTR-129	275,000	588,601 5,000 2,943,000 300,000	300,000 75,000,000 932,000 825,000	50,000				655,000 2,300,000
NW Daniels St, W 39th to W 45th St, Water Broadway St - PH 2 (6th to 13th St) Main St 5th St to 15th St Heights District Water Mains Other Water Projects Operations Center Redevelopment New Projects Master Plan Studies O&M Program Electronic Manual Study for Heights High HGL Balance Water System Comp Plan Transmission Master Plan Projects *18th St Trans Main-136th to 162nd (T-40 ph2) Haagen Park, north of 9th St. (T-37) WS 5 to Evergreen Trans Main Blandford (T-51) SE Mill Plain Blvd 124th Ave. to 131st Ave. (T-46) NE 9th St. to 18th St., 112th Ave. to 129th Ave. (T-36) Transmission Main - Burton Rd (T-34) SE Chkalov Dr., south of Mill Plain Blvd. (T-45) Lincoln to Main St. Trans Main (T-4, 5 & 6)	PRJ100577 PRJ100590 TBD TBD PRJ083491 PRJ100246 TBD	WTR-150 WTR-A1-112 WTR-119 WTR-128 WTR-120 WTR-130 WTR-127 WTR-6 WTR-129 WTR-165	275,000	588,601 5,000 2,943,000 300,000 364,590 1,849,479	300,000 75,000,000 932,000 825,000 200,000	50,000	200,000			655,000 2,300,000
NW Daniels St, W 39th to W 45th St, Water Broadway St - PH 2 (6th to 13th St) Main St 5th St to 15th St Heights District Water Mains Other Water Projects Operations Center Redevelopment New Projects Master Plan Studies O&M Program Electronic Manual Study for Heights High HGL Balance Water System Comp Plan Transmission Master Plan Projects *18th St Trans Main-136th to 162nd (T-40 ph2) Haagen Park, north of 9th St. (T-37) WS 5 to Evergreen Trans Main Blandford (T-51) SE Mill Plain Blvd 124th Ave. to 131st Ave. (T-46) NE 9th St. to 18th St., 112th Ave. to 129th Ave. (T-36) Transmission Main - Burton Rd (T-34) SE Chkalov Dr., south of Mill Plain Blvd. (T-45)	PRJ100577 PRJ100590 TBD TBD PRJ083491 PRJ100246 TBD	WTR-150 WTR-A1-112 WTR-119 WTR-128 WTR-120 WTR-120 WTR-127 WTR-6 WTR-129	1,800,000	588,601 5,000 2,943,000 300,000 364,590	932,000 825,000 200,000	50,000	200,000		29,004,000	655,000 2,300,000

^{*}Project timing is dependent upon the timing of the overriding project.

**2021 Amounts include revised delivery amount or actual spent in 2021 (as of November), whichever is higher



PROJECT: LEAK ABATEMENT



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Active

PROJECT DESCRIPTION

Project Description

Program for unplanned repair of substandard leaking water main.

Project Justification

2 - Improve safety/reliability; 4- Replace/preserve existing systems; and 5 - Lower Operating Costs - Contingency fund for emergency repairs

Project Area Water Project Areas Clark County Transportation Project Areas SCIP Project Areas Battle Ground Sanitary Sewer Project Areas Project Polys Camas Surface Water Project Areas Vancouver City Limits Washougal

VICINITY MAP 139th 139t

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100244

Budget / Proj. Task #:

Total Project Cost: \$5,000,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.

^{**}Transportation projects (TRANS-XXX) can be found in the 6 Year Transportation Improvement Plan (TIP) document.



PROJECT: TRANSMISSION MAIN-NE BURTON RD (T-34)



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Future

PROJECT DESCRIPTION

Project Description

Install a 24 inch transmission main to the east from NE 97th Ave to NE 124th Ave in Burton Rd.

Project Justification

3) - Add transmission capacity, to move water from supply sources to areas with increasing demand. Transmission mains are needed to move the water from the southwest to the east. This project improves transmission capabilities from WS 1 and Ellsworth to the east.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

FUNDING & SCHEDULE

Budget / Proj. #: TBD

Budget / Proj. Task #:

Total Project Cost: \$3,900,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: SCIP COORDINATION PROJECTS



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Active

PROJECT DESCRIPTION

Project Description

\$100,000/yr for coordination with Sewer Connection Incentive Program.

Project Justification

4 - Replace/preserve/rehabilitate aging main or substandard pipe materials in the distribution system. Projects replace aging main or substandard pipe materials in the distribution system, during scheduled SCIP projects.

Project Area Water Project Areas Clark County Transportation Project Areas SCIP Project Areas Battle Ground Sanitary Sewer Project Areas Project Polys Camas Surface Water Project Areas Vancouver City Limits Washougal

VICINITY MAP 19th 17th 18th 2 c 119th 2 c 119

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083563

Budget / Proj. Task #:

Total Project Cost: \$600,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water



PROJECT: PRV FLOWMETERS/SCADA SYSTEM CONNECTIONS



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Active

PROJECT DESCRIPTION

Project Description

Provides SCADA system connection to support improved operations and system monitoring capabilities.

Project Justification

2 - Improve system safety by improving reliability of data collection throughout the water system. This upgrades our existing data collection capability for system operating pressures and flows, at all pressure reducing valves

Project Area Water Project Areas Clark County Sanitary Sewer Project Areas Project Areas Project Polys Camas Surface Water Project Areas Vancouver City Limits Washougal

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083332

Budget / Proj. Task #:

Total Project Cost: \$112,677.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: ELLSWORTH WELL REHABILITATION



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Future

PROJECT DESCRIPTION

Project Description

Scheduled rehabilitation of three production wells at Ellsworth.

Project Justification

4 -Replace/repair/preserve existing assets. Project as identified by Water Operations. Site hydrogeologic conditions require well rehabilitation every 6-8 years to maintain system reliability, production capacity and prolong asset life. Rehabilitation of all three production wells at Ellsworth.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas



FUNDING & SCHEDULE

Budget / Proj. #:

Budget / Proj. Task #:

Total Project Cost: \$300,000.00

*Start of Const. (Year): 2024

TBD

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: TREATMENT REGULATIONS COMPLIANCE



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Future

PROJECT DESCRIPTION

Project Description

Program to fund future changes in drinking water regulations. Current project is looking at treatment options needed for upcoming PFAS regulations.

Project Justification

1 - Compliance with Regulations. Budget provided for unforeseen projects as needed to meet future changes to drinking water regulations. This could include additional treatment and/or storage requirements should regulations increase in the future.

Project Area Water Project Areas Clark County Transportation Project Areas SCIP Project Areas Battle Ground Sanitary Sewer Project Areas Project Polys Camas Surface Water Project Areas Vancouver City Limits Washougal

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100640

Budget / Proj. Task #:

Total Project Cost: \$1,000,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water



PROJECT: WATER DEMAND RESPONSE



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Active

PROJECT DESCRIPTION

Project Description

Funds for unexpected project that come up during the budget cycle.

Project Justification

4-Replace/rehabilitate/preserve system. General Line Item for all Demand Response Projects. Funds are typically used to purchase parts for developers on oversize main installation projects. This project covers otherwise unscheduled work during roadway coordination, emergency work, or oversized mains associated with developments. Helps build needed improvements while roadways are under construction.

Project Area Water Project Areas Clark County Sanitary Sewer Project Areas Project Areas Project Polys Camas Surface Water Project Areas Vancouver City Limits Washougal

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083553

Budget / Proj. Task #:

Total Project Cost: \$1,800,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water



PROJECT: SCADA SYSTEM PROJECTS



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Active

PROJECT DESCRIPTION

Project Description

Update our SCADA system software and all associated hardware at all Water Stations.

Project Justification

2 - Improve system security by making continuous improvement to the SCADA system. Project budget to improve reliability for system monitoring and operations, improve system redundancy and operational monitoring and reporting capabilities. Placeholder for ongoing upgrades to the SCADA system as technology continues to improve. Current projects for 2022-2027 6 yr CIP: 1) PRJ100267 -SCADA Firewall/Security/Data Connet/PLC SoftWare \$971,000; 2) PRJ100268 - SCADA PLC/HMI Software - \$232,000; 3) PRJ100268 - SCADA Software - \$76,000

Project Area Water Project Areas Clark County Transportation Project Areas SCIP Project Areas Battle Ground Sanitary Sewer Project Areas Project Polys Camas Surface Water Project Areas Vancouver City Limits Washougal

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100267

Budget / Proj. Task #:

Total Project Cost: \$1,900,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water



PROJECT: WATER MAIN NE 49TH ST, NE 15TH AVE TO ST. JOHN'S BLVD.



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Active

PROJECT DESCRIPTION

Project Description

Install 2500 LF of 10 inch and 4,300 LF of 8 inch water main to replace substandard main.

Project Justification

4 - Replace/preserve/rehabilitate systems - This project replaces substandard Asbestos Cement piping at high risk for leak failure, and improve relaiblity. Funded for design in 2019 for \$100,000, and \$805,000 for construction in 2020

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100269

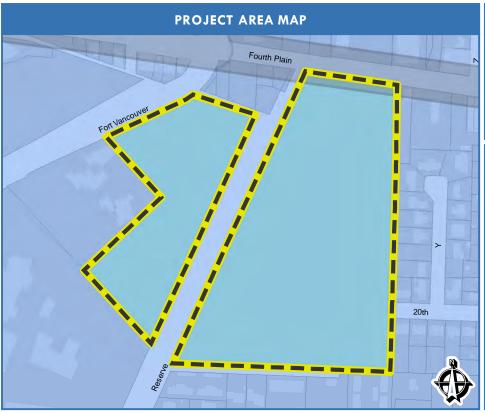
Budget / Proj. Task #:

Total Project Cost: \$1,200,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: WATER STATION #1 - TWO 4.0 MG RESERVOIRS AND STANDPIPE



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Active

PROJECT DESCRIPTION

Project Description

Construct two new 4 MG reservoirs meeting current seismic standards, to replace existing.

Project Justification

4 - Replace/preseve/rehabilitate existing systems - this project builds storage improvements identified in 2005 master plan. A reservoir constructed in 1909 and another constructed in the 1930's will be replaced by two new seismically sound 4 million gallon reservoirs. The existing 250 million gallon elevated tower constructed in the 1930's will be replaced with a new 1 million gallon steel standpipe. The design is to be completed in 2018 with construction to start in 2019. The construction duration is expected to be two and a half years, ending in 2022.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083462

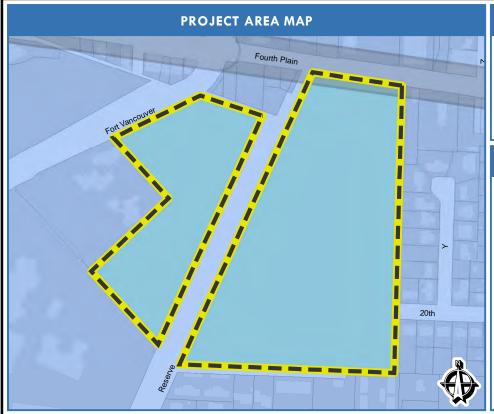
Budget / Proj. Task #:

Total Project Cost: \$24,480,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: WATER STATION 1- REPLACE WELLS 3, 4 AND 5.



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Active

PROJECT DESCRIPTION

Project Description

Rehabilitate existing WS 1 Wells 3, 4 & 5 to extend useful life.

Project Justification

4 -Replace/preserve/rehabilitate existing systems. This project replaces aging wells in poor condition to increase reliability for a secure water production/source, and extend asset life. Water Station #1 is an important and prolific well field. Three existing aged wells and pump houses will be replaced to provide security for the deliver of water from this site. Water rights will not be increased.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100490

Budget / Proj. Task #:

Total Project Cost: \$4,000,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: SR 500/I-5 INTERCHANGE (MOVE 24")



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Future Project Status:

PROJECT DESCRIPTION

Project Description

Waterline coordination for future I-5 Columbia River Crossing.

Project Justification

4 - Replace/preserve/rehabilitate existing water infrastructure. Budget for coordination with the WA State Department of Transportation Columbia River Crossing, & to protect and/or relocate existing water facilities which will be impacted by the State's proposed construction.

LEGEND Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

VICINITY MAP

FUNDING & SCHEDULE

Budget / Proj. #:

TBD

Budget / Proj. Task #:

Total Project Cost: \$550,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: WATER STATION 3 RESERVOIR/TOWER/BOOSTER REPLACEMENT



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Active

PROJECT DESCRIPTION

Project Description

Replace aging tower, booster station and reservoir at WS 3.

Project Justification

4 - Replace/preserve/rehabilitate aging water storage facilities to extend asset service life. Replacement of the aging reservoir and tower at WS 3 will extend asset service life and also improve system reliability.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100492

Budget / Proj. Task #:

Total Project Cost: \$16,920,000.00

*Start of Const. (Year): 2022-2023

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: WATER STATION 3 - REPLACE WELLS 1 & 2 WITH ONE WELL



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Future

PROJECT DESCRIPTION

Project Description

Replace aging wells to extend service life.

Project Justification

4 - Replace/preserve/rehabilitate existing assets; & 5- Lower operating costs. Replacement of aging wells based on performance and condition. Replacement of aging assets will maintain reliability of the existing well field and pumping capacity.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas

VICINITY MAP 119th 177th 3 8 9 10 119th 2 1 19th 2 1 19t

FUNDING & SCHEDULE

Budget / Proj. #: TBD

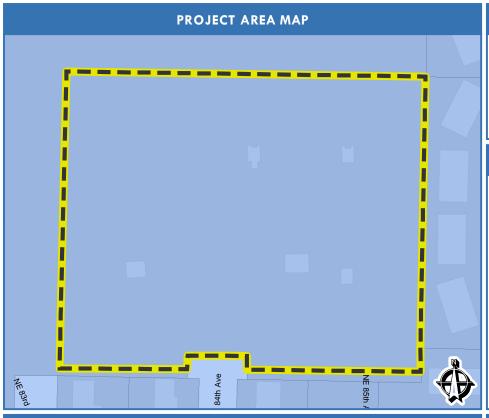
Budget / Proj. Task #:

Total Project Cost: \$1,700,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: SODIUM HYPO GEN SYSTEM WS 15



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Future

PROJECT DESCRIPTION

Project Description

Replace WS 15 chlorine gas disinfection to a sodium hypochlorite system.

Project Justification

2 - Improves system safety by eliminating chlorine gas disinfection systems; and 5 - lowers operating costs. Chlorine gas disinfection systems are becoming more expensive to operate. This replaces the existing system at WS 15 with a standardized sodium hypochlorite generation system. The city has standardized a new technology and is upgrading all systems for maintenance consistency and reliability.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas

VICINITY MAP 119th 177th 3 8 y 5 119th 3 1 139th 130th 139th 130th 130th 130th 130th 130th 130th 130th 130th 130t

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100495

Budget / Proj. Task #:

Total Project Cost: \$650,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: SODIUM HYPO GEN SYSTEM ELLSWORTH



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Active

PROJECT DESCRIPTION

Project Description

Replace/upgrade chlorine gas disinfection system at Ellsworth.

Project Justification

2 - Improves system safety by eliminating chlorine gas disinfection systems; and 5 - lowers operating costs. Chlorine gas disinfection systems are becoming more expensive to operate. This replaces the existing system at Ellsworth with a standardized sodium hypochlorite generation system. The city has standardized a new technology and is upgrading all systems for maintenance consistency and reliability.

Project Area SCIP Project Areas Clark County Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Taxlots

VICINITY MAP 19th 17th 18th 2 th 19th 2 th 19

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100493

Budget / Proj. Task #:

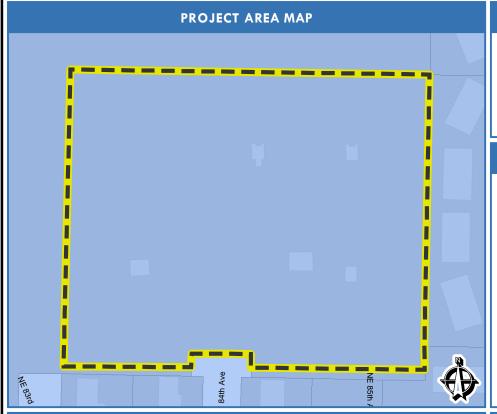
Total Project Cost: \$1,900,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.

^{**}Transportation projects (TRANS-XXX) can be found in the 6 Year Transportation Improvement Plan (TIP) document.



PROJECT: WATER STATION 15 WELLS 1-4 REPLACEMENT



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Future

PROJECT DESCRIPTION

Project Description

Build three new wells at WS 15 to fully use existing water rights.

Project Justification

3 - New systems; new wells are needed at WS 15 to fully use our existing water rights. This project will build three new wells, to replace the existing ones which currently do not fully use our water rights. The new wells will increase our production capacity by allowing us to fully utilize our water rights

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

FUNDING & SCHEDULE

Budget / Proj. #: TBD

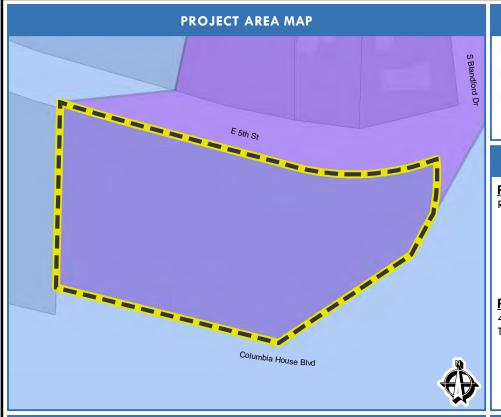
Budget / Proj. Task #:

Total Project Cost: \$4,500,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: WATER STATION 4 - REPLACE WELL 4 BUILDING



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Active

PROJECT DESCRIPTION

Project Description

Replace existing building for Well 4 at WS4.

Project Justification

4 - Replace/preserve/rehabilitate assets; to replace a deteriorating building in poor condition. This project will replace the building sitting over Well #4 at WS 4.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100240

Budget / Proj. Task #:

Total Project Cost: \$510,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: NE 99TH ST TRANS MAIN - NE 140TH AVE TO WARD RD.



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Future

PROJECT DESCRIPTION

Project Description

New transmission main to improve system capacity between WS 9 to WS 14.

Project Justification

4 - New systems to increase transmission capacity as identified in last Water System Comp Plan. Add new transmission capacity as identified in last Water System Comp Plan, needed to move water from supply sources to areas with increasing demand. Budget continues onstruction of new transmission main intended to increase water transmission capacity from WS 9 to WS 14

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

FUNDING & SCHEDULE

Budget / Proj. #:

Budget / Proj. Task #:

Total Project Cost: \$2,777,000.00

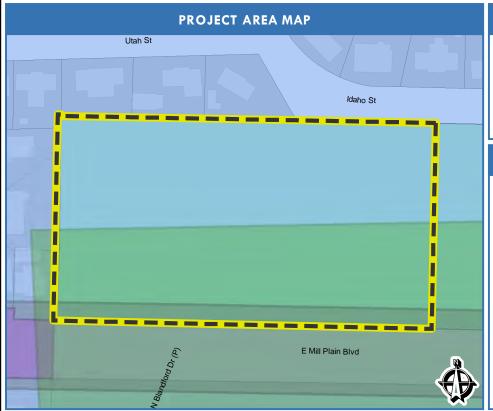
*Start of Const. (Year): 2023

TBD

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water



PROJECT: WATER STATION 5 RESERVOIR, BOOSTER PUMPS & E-POWER



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Active

PROJECT DESCRIPTION

Project Description

Replace existing reservoir and expand pumping system at WS 5 to improve transmission capacity to service area in Heights High Pressure Zone.

Project Justification

3 - New systems to provide additional capacity for future growth and improved reliability. Install additional pumping capacity at Water Station 5 to meet the growing demand and distribute more water to Heights High. Formerly listed as WTR-50

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

FUNDING & SCHEDULE

Budget / Proj. #: PR100238

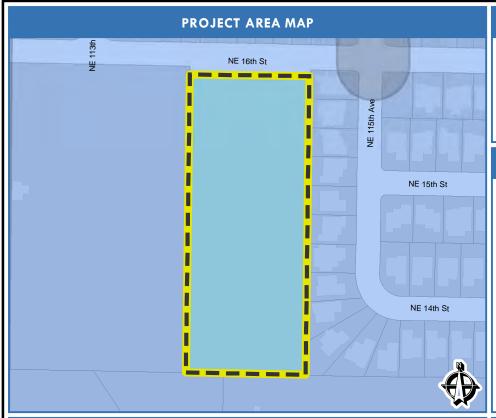
Budget / Proj. Task #:

Total Project Cost: \$30,600,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: WS 7 HYPO GEN SYSTEM



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Future

PROJECT DESCRIPTION

Project Description

Replace/upgrade existing sodium hypochlorite disinfection system at WS 7.

Project Justification

5 - Lower operating costs by replacing the existing sodium hypochlorite system with a new one. The city has a new standardized, disinfection technology and is upgrading all systems for maintenance consistency and reliability. Replacing the existing aging sodium hypochlorite system at WS 7 will reduce our annual operations and maintenance costs by reducing frequent repairs.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100237

Budget / Proj. Task #:

Total Project Cost: \$750,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: WS 8 HYPO GEN SYSTEM



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Active

PROJECT DESCRIPTION

Project Description

Replace and upgrade existing sodium hypochlorite disinfection system at WS 8.

Project Justification

5 - Lower operating costs by replacing the existing sodium hypochlorite system with a new one. The city has a new standardized, disinfection technology and is upgrading all systems for maintenance consistency and reliability. Replacing the existing aging sodium hypochlorite system at WS 7 will reduce our annual operations and maintenance costs by reducing frequent repairs.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100239

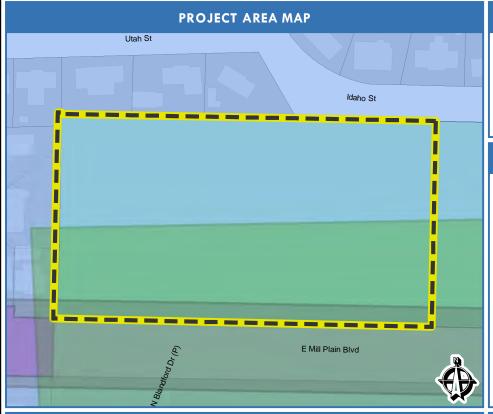
Budget / Proj. Task #:

Total Project Cost: \$700,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: WS 5 INTERNAL TOWER COATING



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Active

PROJECT DESCRIPTION

Project Description

Rehabilitate existing WS 5 Tower lining.

Project Justification

4 - Replace/preserve/rehabilitate the internal coating for our existing elevated water tower, to extend asset life by preventing corrosion. Rehab existing lining for our aging elevated steel tank, to extend asset service life.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

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FUNDING & SCHEDULE

Budget / Proj. #: PRJ100241

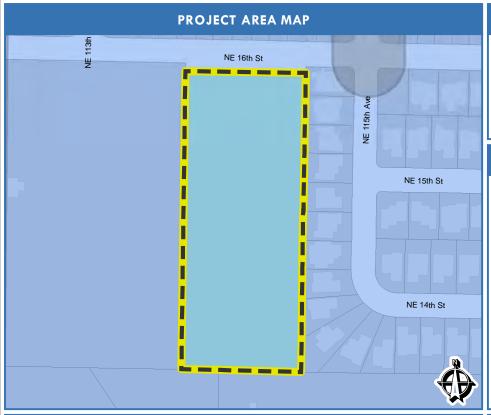
Budget / Proj. Task #:

Total Project Cost: \$700,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: WS 7 INTERNAL TOWER COATING



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Future

PROJECT DESCRIPTION

Project Description

Rehabilitate existing WS 7 tower lining.

Project Justification

4 - Replace/preserve/rehabilitate the internal coating for our existing elevated water tower, to extend asset life by preventing corrosion. Rehab aging elevated steel tank lining to extend asset service life.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100494

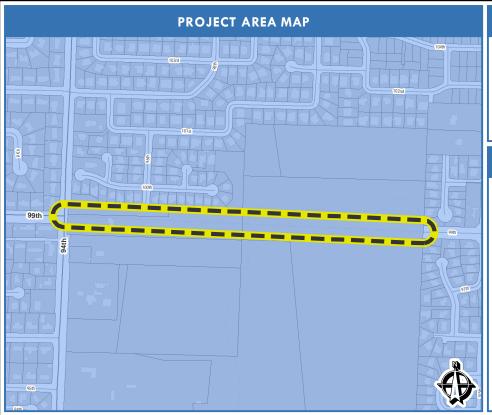
Budget / Proj. Task #:

Total Project Cost: \$700,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: 99TH ST TRANS MAIN - NE 94TH AVE TO NE 104TH AV



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Active

PROJECT DESCRIPTION

Project Description

Roadway Coordination - Install 2500 l.f. of new 12" DI Water Main in new Clark County road extension of NE 99th St. across the former Leichner Landfill.

Project Justification

3 - New systems to expand transmission capacity, providing additional capacity for future growth in farthest northeast portion of service area. Roadway Coordination - Install 2,500 l.f. of new 12" DI water main during construction of new roadway for Clark County CIP program.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083560

Budget / Proj. Task #:

Total Project Cost: \$620,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: 17TH ST. TO MCLOUGHLIN, "F" ST. TO I-5 (D-3)



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Active

PROJECT DESCRIPTION

Project Description

Replace 740 If of substandard main with 740 If of 8" Ductile Iron main.

Project Justification

2 - Improve safety and reliablity by addressing fire flow deficiencies. Install new pipelines to improve system reliablity, & address system pressure & fire flow deficiencies as identified in our lastest Water System Comprehensive Plan.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100497

Budget / Proj. Task #:

Total Project Cost: \$150,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: WS #5 TO EVERGREEN -TRANS MAIN BLANDFORD (T-51)



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Future

PROJECT DESCRIPTION

Project Description

Replace existing transmission main with 2,077 L.f. of new 30" ductile iron main.

Project Justification

3 - new systems to expand existing transmission capacity. To address system pressure deficiencies as identified in the most recent Water System Comprehensive Plan, & provide additional capacity for future growth. Project budget to replace the existing transmission main, with 2,077 L.f. of new 30" ductile iron main.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

FUNDING & SCHEDULE

Budget / Proj. #: TBD

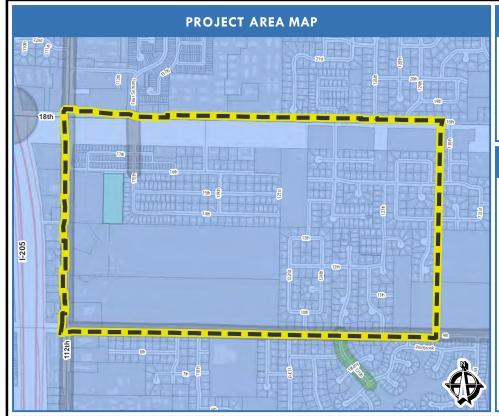
Budget / Proj. Task #:

Total Project Cost: \$932,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: NE 9TH ST. TO NE 18TH ST, NE 112TH TO NE 129TH AVE (T-36)



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Future

PROJECT DESCRIPTION

Project Description

Replace existing substandard main with 10,380 lf of new 24"ductile iron main, and 4,390 lf of new 18" DI main.

Project Justification

3 - New systems to replace existing mains and address system operating pressure deficiencies. This adds additional capacity for future growth and improved reliability, and addresses pressure deficiencies as identified in our most recent Water System Comprehensive Plan.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas



FUNDING & SCHEDULE

Budget / Proj. #: TBD

Budget / Proj. Task #:

Total Project Cost: \$5,500,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: HAAGAN PARK, NORTH OF NE 9TH ST. (T-37)



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Future

PROJECT DESCRIPTION

Project Description

New waterline to cross Haagan Park, and install 670 lf of new 16" ductile iron main.

Project Justification

3 - New systems to improve reliability and expand capacity across NE 9th St corridor. This adds capacity for future growth and improved reliability, and addresses pressure deficiencies as identified in our most recent Water System Comprehensive Plan.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas



FUNDING & SCHEDULE

Budget / Proj. #: PRJ100502

Budget / Proj. Task #:

Total Project Cost: \$265,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: CHKALOV DR., S. OF MILL PLAIN BLVD (T-45)



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Future

PROJECT DESCRIPTION

Project Description

Replace existing substandard main with 1,350 If of new 10"ductile iron main, and 1,110 If of new 8" DI main.

Project Justification

3 - New systems to replace existing mains. This adds additional capacity for future growth and improved reliability, and addresses pressure deficiencies as identified in our most recent Water System Comprehensive Plan.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots



FUNDING & SCHEDULE

Budget / Proj. #:

TBD

Budget / Proj. Task #:

Total Project Cost:

\$515,000.00

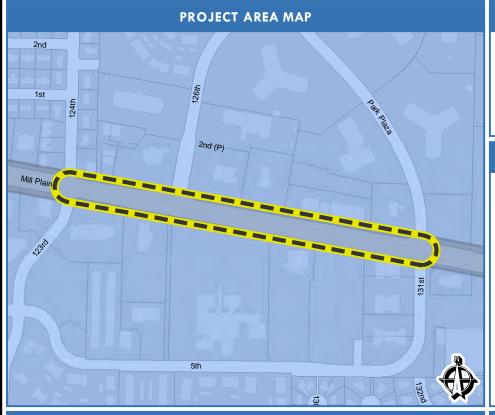
*Start of Const. (Year):

2025

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: MILL PLAIN BLVD. - 124TH AVE TO 131ST AVE (T-46)



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Future

PROJECT DESCRIPTION

Project Description

Replace existing substandard main with 2,960 lf of new 18" ductile iron main.

Project Justification

3 - New systems to replace existing mains. This adds additional capacity for future growth and improved reliability, and addresses pressure deficiencies as identified in our most recent Water System Comprehensive Plan.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

FUNDING & SCHEDULE

Budget / Proj. #:

Budget / Proj. Task #:

Total Project Cost: \$825,000.00

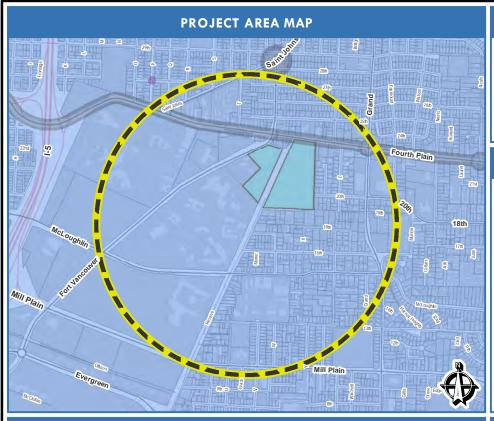
*Start of Const. (Year): 2023

TBD

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: VANCOUVER LOW PRESSURE ZONE REZONE SOUTH OF WATER STATION #1



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Future

PROJECT DESCRIPTION

Project Description

Water System Study for Vancouver Low Pressure Zone.

Project Justification

1 - Compliance with WDOH water system regulations. System Pressure Study to optimize water system delivery pressures over the middle of our service area. System study as recommended by our most recent Water System Comprehensive Plan.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots



FUNDING & SCHEDULE

Budget / Proj. #: PRJ100496

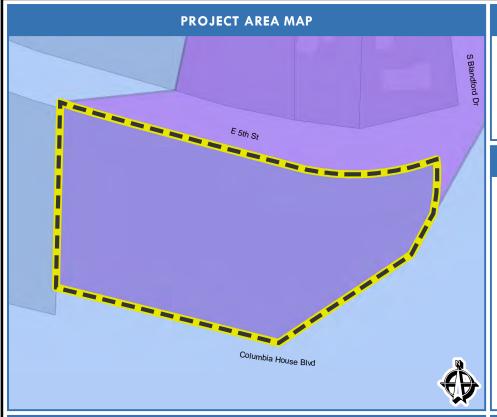
Budget / Proj. Task #:

Total Project Cost: \$420,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: SODIUM HYPO GENERATION SYSTEM WS #4



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Future

PROJECT DESCRIPTION

Project Description

Replace/upgrade the existing WS 4 disinfection.

Project Justification

2 - Improves system safety by eliminating chlorine gas disinfection systems. 5 - Lower operating costs, by replacing the existing sodium hypochlorite system. Chlorine gas disinfection systems are becoming more expensive to operate. The city has standardized a new technology and is upgrading all systems for maintenance consistency and reliability. The existing chlorine gas system will be replaced with sodium hypochlorite technology, which costs less and is much safer for the community and operators.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

FUNDING & SCHEDULE

Budget / Proj. #:

Budget / Proj. Task #:

Total Project Cost: \$1,200,000.00

*Start of Const. (Year): 2023

TBD

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: NE 45TH ST BOOSTER PUMP STATION REPLACEMENT



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Future

PROJECT DESCRIPTION

Project Description

Replace the existing pump station and booster pumps with a new pump station.

Project Justification

2 - Improve safety by replacing the current pump station and vault. The current pump station is old, difficult to maintain and located in a problematic vault. Project budget will replace the existing pump station with a new pump station that includes multiple correctly sized pumps located in a more accessible location.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas

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FUNDING & SCHEDULE

Budget / Proj. #: TBD

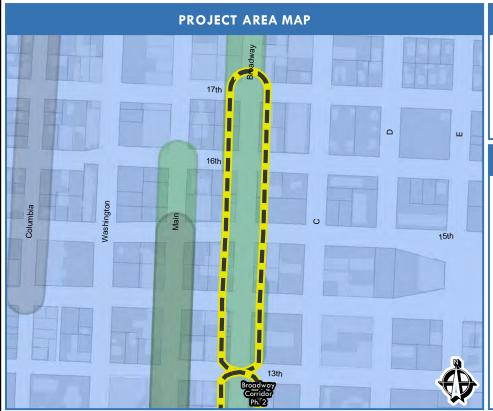
Budget / Proj. Task #:

Total Project Cost: \$1,750,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: BROADWAY - PH 1 AND PH 2



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Active

PROJECT DESCRIPTION

Project Description

Replace existing water main with Cl 52 Ductile Iron pipe. Phase 1 (13th to 17th St-PRJ0833556.) completed 2021, Phase 2 (6th to 13th St. -PRJ100590) scheduled 2022.

Project Justification

4- Replace/preserve/rehabilitate existing assets to extend service life. This project replaces aging water main in poor condition in this central downtown corridor. Project budget to install current standard CI 52 Ductile Iron, in preparation for 2022 street program preservation and repaving work.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots



FUNDING & SCHEDULE

Budget / Proj. #: PRJ100590

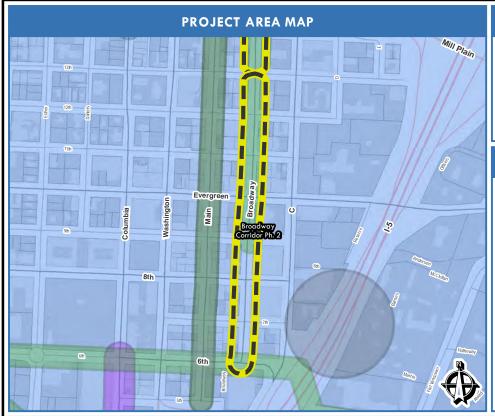
Budget / Proj. Task #:

Total Project Cost: \$830,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: BROADWAY - PH 1 AND PH 2



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Active

PROJECT DESCRIPTION

Project Description

Replace existing water main with Cl 52 Ductile Iron pipe. Phase 1 (13th to 17th St-PRJ0833556.) completed 2021, Phase 2 (6th to 13th St. -PRJ100590) scheduled 2022.

Project Justification

4- Replace/preserve/rehabilitate existing assets to extend service life. This project replaces aging water main in poor condition in this central downtown corridor. Project budget to install current standard CI 52 Ductile Iron, in preparation for 2022 street program preservation and repaving work.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100590

Budget / Proj. Task #:

Total Project Cost: \$830,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: 52ND ST - DANIELS TO COLUMBIA (D-06)



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Future

PROJECT DESCRIPTION

Project Description

Install new 1600 If 8" DI water main and abandon existin.

Project Justification

3- New systems to correct pressure deficiency as identified in our current Water System Master Plan. Project budget to replace one block of existing main. Install 1600 LF of new 8" DI water line and abandon 1600 LF of 4 inch OD Steel water main. Staff utilized a criticality matrix to prioritize pipes at highest risk for leaks and line breaks. This will replace aging waterlines which have exceeded their life expectantcy and have a history of breakage.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100498

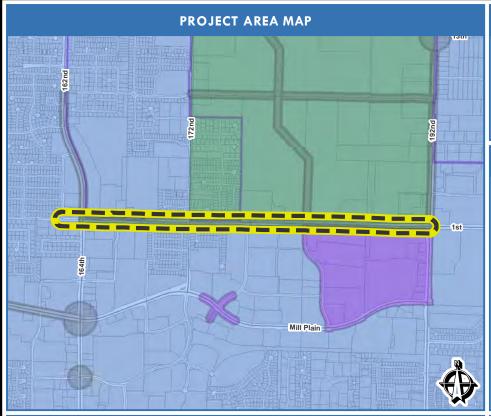
Budget / Proj. Task #:

Total Project Cost: \$450,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water



PROJECT: SE 1ST ST - SE 162ND AVE TO SE 192ND AVE



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Active

PROJECT DESCRIPTION

Project Description

Roadway Coordination project to install 1,800 lf of watermain.

Project Justification

3- New systems to correct pressure deficiency as identified in our current Water System Master Plan. To install new main during this Roadway Coordination project for SE 1st Improvements—SE 164th to SE 192nd Ave. Project budget to install 1800 If of new 12" ductile iron waterline.

Project Area SCIP Project Areas Battle Ground Transportation Project Areas Project Polys Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County



FUNDING & SCHEDULE

Budget / Proj. #: PRJ100270

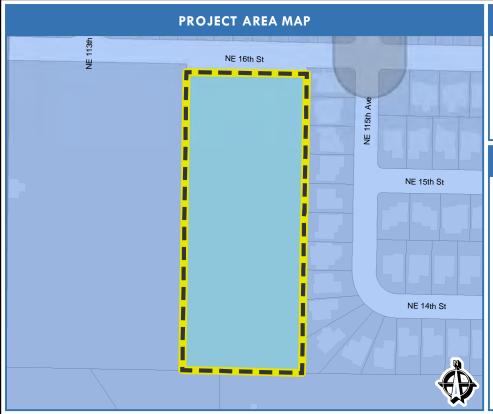
Budget / Proj. Task #:

Total Project Cost: \$360,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: WATER STATION #7 GREENSAND



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Future

PROJECT DESCRIPTION

Project Description

Remove and replace greensand filter media at WS 7.

Project Justification

4 - Replace/preserve/rehabilitate existing assets to extend service life. Scheduled replacement for greensand filter media, which loses reliablility over time, to continue providing reliable water system operations.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

VICINITY MAP 19th 139th 130th 139th 130th 139th 139th

FUNDING & SCHEDULE

Budget / Proj. #: TBD

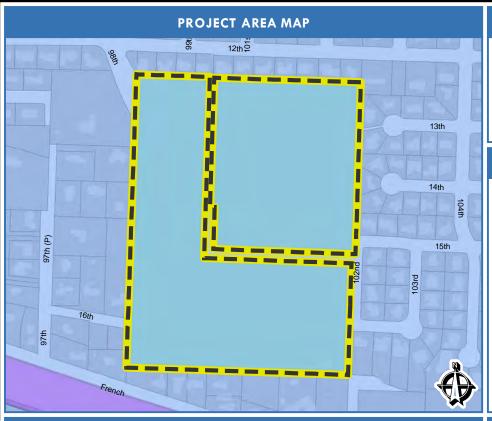
Budget / Proj. Task #:

Total Project Cost: \$250,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: ELLSWORTH WELL REPLACEMENT



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Future

PROJECT DESCRIPTION

Project Description

Replace/preserve/rehabilitate existing wells to extend asset service life and production reliability.

Project Justification

4 - Replace/preserve/rehabilitate existing assets to extend service life

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots



FUNDING & SCHEDULE

Budget / Proj. #: TBD

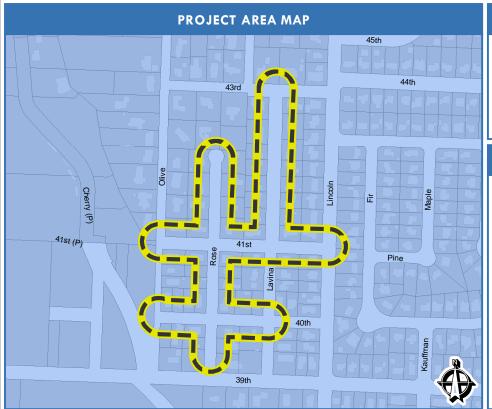
Budget / Proj. Task #:

Total Project Cost: \$4,500,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: NW LAVINA ST. & 42ND ST



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Future

PROJECT DESCRIPTION

Project Description

Install 1600 LF of new 8" DI water line and abandon existing.

Project Justification

4 - Replace/preserve/rehabilitate existing assets to extend service life. Install 1600 LF of new 8" DI water line and abandon 1600 LF of 4 inch OD Steel water mains. Staff utilized a criticality matrix to prioritize pipes at highest risk for leaks and line breaks. This will replace aging waterlines which have exceeded their life expectantcy and have a history of breakage.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots



FUNDING & SCHEDULE

Budget / Proj. #: PRJ100505

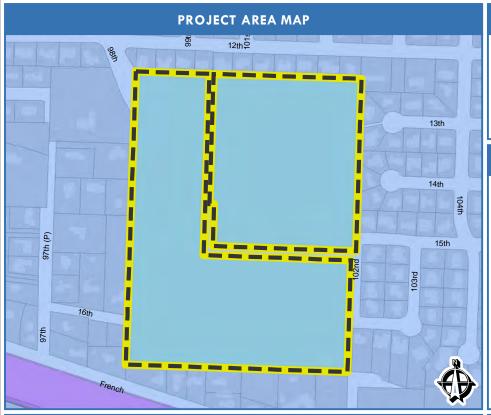
Budget / Proj. Task #:

Total Project Cost: \$640,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: ELLSWORTH ROOF REPLACEMENT



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Production

Project Status: Future

PROJECT DESCRIPTION

Project Description

Replace 25 year old roof at Ellsworth Water Production Plant.

Project Justification

4 - Replace/preserve/rehabilitate existing assets to extend service life. This is over 25 years old, and it's declining condition requires replacement to protect our water treatment plant facility.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas



FUNDING & SCHEDULE

Budget / Proj. #: PRJ100503

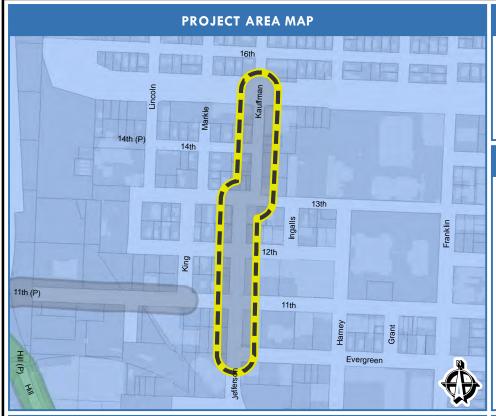
Budget / Proj. Task #:

Total Project Cost: \$700,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: JEFFERSON ST. REALIGNMENT - W. EVERGREEN TO W. MILL PLAIN



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Future

PROJECT DESCRIPTION

Project Description

Roadway Coordination project (TRANS-531) to install 1,800 lf of watermain and abandon existing.

Project Justification

4 - Replace/preserve/rehabilitate existing assets to extend service life. Waterline rehabilitation in coordination with Transportation program project.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

FUNDING & SCHEDULE

Budget / Proj. #: TBD

Budget / Proj. Task #:

Total Project Cost: \$150,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: LINCOLN AVE. TO MAIN ST. TRANSMISSION MAIN (T-4, T-5 AND T-6)



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Active

PROJECT DESCRIPTION

Project Description

Install new transmission main for improved fireflow and pressure in Lincoln High Pressure Zone.

Project Justification

This project scope now includes three formerly separate CIP projects, these were WTR-123 - Daniels to Main St (T-4); WTR-125 - 4th Plain Blvd & 25th St, Lincoln to Grant (T-5); and WTR-126 - 25th St, Grant to Franklin ST (T-6)

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100499

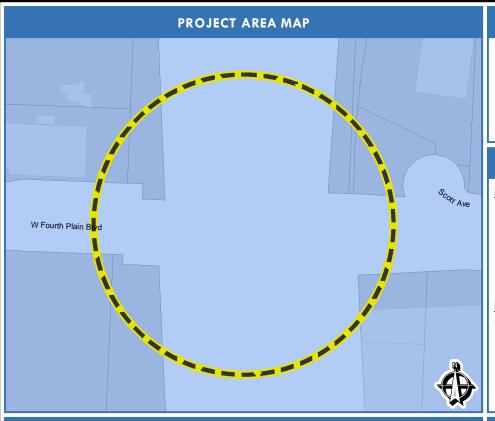
Budget / Proj. Task #:

Total Project Cost: \$900,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: BNSF FOURTH PLAIN TRANSMISSION (T-3)



PROJECT SUMMARY

Program/Discipline Type: Water

Project Type: Distribution

Project Status: Active

PROJECT DESCRIPTION

Project Description

Replacement along existing corridor for capacity & pressure

Project Justification

4 - Replace/preserve/rehabilitate existing assets to extend service life.

Project Area SCIP Project Areas Clark County Transportation Project Areas Project Polys Battle Ground Sanitary Sewer Project Areas Vancouver City Limits Camas Surface Water Project Areas Building Footprints Washougal Water Project Areas Taxlots

FUNDING & SCHEDULE

Budget / Proj. #:

Budget / Proj. Task #:

Total Project Cost: \$2,300,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



20 YEAR CAPITAL IMPROVEMENT PROGRAM FOR WATER- (2022-2042)

*Note: All costs are in 2021 dollars

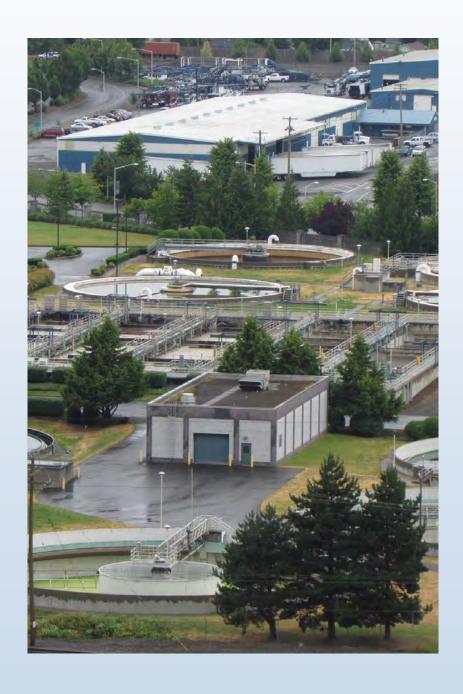
Mar. 16, 2022

CIP# 2021** 2032 448 Water Construction Fund Water Production Projects PRODUCTION PROJECTS BY WELLFIELD: Water Station 1 - Two 4 MG Reservoirs& Standpipe PRJ083462 WTR-39 8,700,000 1,931,000 Water Station 1: Replace Wells 3, 4, and 5 PRJ100490 WTR-44 1,000,000 3,000,000 4,000,000 627.553 6.420.000 18.347.553 Sodium Hypo Gen System WS 4 TBD WTR-145 TBD WTR-43
PRJ100240 WTR-67
PRJ100238 WTR-101 Water Station 4 Replace Well 1 1.500,000 1.500.00 885,818 Water Station 4 Well 4 Building Replacement 4,700,000 WS 5 Reservoir, Pump, E-Power 3,369,000 29,500,000 WS 5 Tower Internal Coating
Water Station 5 Tank Upgrades and Ext Blast & Coating PRJ100241 WTR-106 TBD ---2.500.000 Water Station 6 Well/Treatment Install PRJ100237 WTR-103 Water Station 6 Tank Upgrades and Ext Blast & Coating 1.800.00 1.800.000 750,000 800,842 250,000 TBD WTR-154 Water Station 7 Greensand WS 7 Tower Internal Coating PRJ100494 WTR-108 700,000 884,894 884,894 2.000.0 TBD TBD WS 7 Water Right Well Water Station 8 Replace Wells 2 & 3 1,200,000 1,200,000 2.400.000 PRJ100239 WTR-104
PRJ100495 WTR-63
TBD WTR-65 WS 8 Hypo Gen System Sodium Hypo Gen System WS 15 350,000 350,000 700,000 Water Station 15 Wells 1-4 Replacement 3,000,000 1,500,00 4,500,000 WS 15 Water Right Wells/Treatmen PRJ100493 WTR-64 TBD WTR-16 1,851,88 500,000 Ellsworth Well Rehabilitation 300,000 1,100,000 TBD WTR-155
TBD WTR-156
PRJ100503 WTR-160 Ellsworth Greensand Replacement Ellsworth Well Replacement 4,500,000 4,500,000 Ellsworth Roof Replacement 695,393 Westside Wellfield Construction PRODUCTION PROJECTS - OTHER: Rezone Project for Vanc Low and Vanc High NE 45th St Booster Pump Station Replace TBD WTR-146
TBD ---Study for Adding a 4th Pump at St. Johns Heights High Groundwater Developm 249,576 Reservoir Install Southeast TBD 1.000.000 4.500.000 2.500,000 8.000.000 TBD --TBD WTR-166
TBD WTR-A1-23 200,00 System MCC Electrical Upgrades 3,000,000 3,000,000 3,000,000 3,000,000 Treatment Regulations Compliance PFAS Studies 2,000,000 2,000,00 948 520 WTR-167 20,000,000 20,000,000 PFAS Treatment 00,000,000 SCADA Firewall/Security/Data Concent/PLC Software PRJ100267 WTR-A1-29 290,000 124,601 124,60 104,000 204,000 31,000 40,000 SCADA PLC/HMI Upgrade PRJ100504 WTR-A1-29 45,000 494,000 PR.I100268 WTR-A1-2 Water Distribution Projects 112.676 PRV Flowmeters/SCADA System Connections
Broadway - PH 1 (13th to 17th St)
Water Main NE 49th St - NE 15th Ave to 40th Ave
99th St Extension, NE 94th Ave to NE 104th Ave County PRJ083556 WTR-150
PRJ100269 WTR-36
PRJ083560 WTR-109 375,000 1,745,197 585,278 585,27 PRJ100497 WTR-115 PRJ100270 WTR-153 355,000 VL Rezone South of WS 1 PRJ100496 WTR-143 420.000 PRJ083563 WTRA1-10 PRJ100244 WTR-A1-3 SCIP Coordination Projects 1,000,000 1,600,000 1,600,000 1,000,000 1,700,000 1,700,000 1,000,000 1,000,000 2,000,000 2,000,000 2,000,000 2,000,000 2,000,000 2,000,000 2,000,000 2,000,000 100,000 1,000,000 600,000 1,000,000 600,000 29,900,000 Water Demand Response

99th St Transmission Main - NE 140th Ave. to Ward Rd PRJ083553 WTR-A1-27 300,000 300,000 300,000 300,000 300,00 400,00 400,00 400,000 SR 500/I-5 Interchange (move 24")* Lower Grand Industrial Area PRJ100439 WTR-163 54,329 54,329 Evergreen Blandford to Sleret 12" Replacement 1,200,000 773,307 NW Lavina St. & 42nd. St. (#7) 80,000 773,307 Jefferson St. Realignment NF 46th St at NF 28th Ave (#20 34 605 52nd St - Daniels to Columbia (D-06) 39,958 39,958 PRJ100575 NE 45th St, NE 106th Ave to NE 109th Ave, Water 178,000 239,865 239,865 NE 53rd St & St Johns Rd Water Main NW Daniels St, W 39th to W 45th St, Water 406,000 487,291 588,601 Broadway St - PH 2 (6th to 13th St) 588,601 Main St. - 5th St to 15th St 650.000 Heights District Water Mains 300,000 Other Water Projects Operations Center Redevelopment PRJ083491 1,800,000 2,943,000 75,000,000 77,943,000 New Projects Master Plan Studies O&M Program Electronic Manua Study for Heights High HGL Balance TBD TBD 40,000 Water System Comp Plan 300,000 1,000,000 Transmission Master Plan Projects 18th St Trans Main-136th to 162nd (T-40 ph2 TBD WTR-119 2.410.00 2.410.000 Haagen Park, north of 9th St. (T-37) WS 5 to Evergreen Trans Main Blandford (T-5 PRJ100502 WTR-128
TBD WTR-120 364,590 932,000 SE Mill Plain Blvd. - 124th Ave. to 131st Ave. (T-46) TBD WTR-130 825,000 825,000 NE 9th St. to 18th St., 112th Ave. to 129th Ave. (T-36) Transmission Main - Burton Rd (T-34) 5,500,000 3,900,000 200,000 200,000 3,700,00 SE Chkalov Dr., south of Mill Plain Blvd. (T-45) TBD WTR-129 515,000 515,000 Lincoln to Main St. Trans Main (T-4, 5 & 6) PRJ100499 WTR-165 1.849.479 743.00 2.592.479 TBD WTR-168 BNSF 4th Plain (T-3) - 30,000 2,250,000 21,998,254 34,534,735 104,296,000 25,917,000 18,351,000 31,133,000 29,004,000 25,100,000 23,100,000 20,873,000 8,751,000 Total Water Project

**2021 Amounts include revised delivery amount or actual spent in 2021 (as of November), whichever is higher

^{*}Project timing is dependent upon the timing of the overriding project.





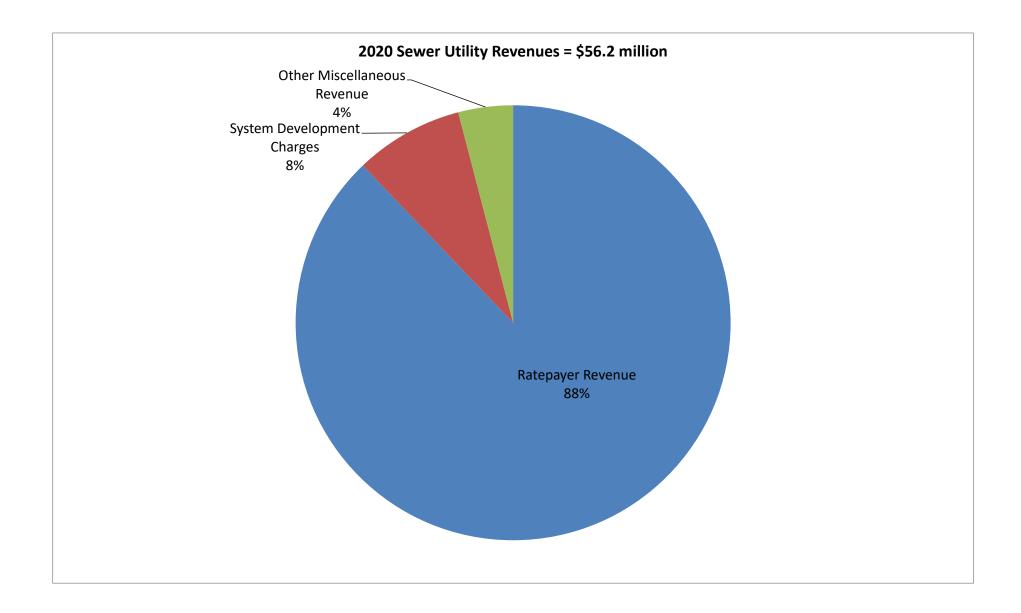


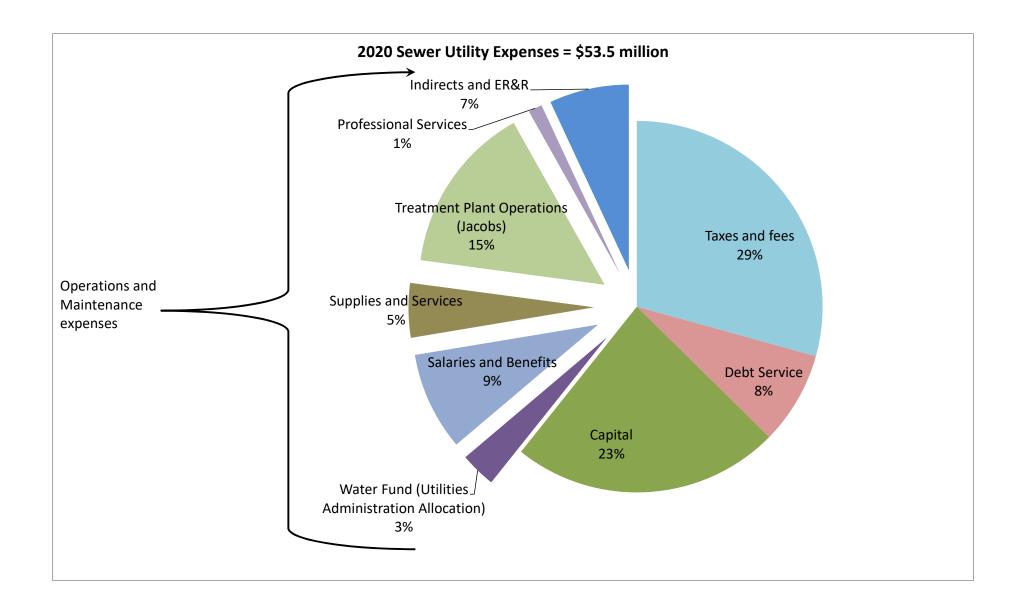
SEWER FUND ACTIVITY (2014-2020)

	2014	2015	2016	2017	2018	2019	2020
Revenue							
Ratepayer Revenue	38,560,932	39,398,594	41,047,713	44,097,502	46,221,354	48,488,415	49,513,910
System Development Charges	2,305,002	3,512,883	3,746,572	3,388,484	5,392,397	4,260,484	4,550,640
Loan from 448						-	-
Transfer from 449		1,481,1 <i>7</i> 8	320,000		300,000	300,000	300,000
Transfer from 445						-	-
Grants	-					-	197,404
Other Miscellaneous Revenue*	<u>1,262,608</u>	1,326,636	1,580,359	1,429,444	1,821,082	<u>5,169,520</u>	1,794,262
Total Reve	nue 42,128,542	45,719,291	46,694,644	48,915,430	53,734,833	58,218,419	56,356,216
Expenses							
Salaries and Benefits	3,282,642	3,534,554	3,825,615	4,092,566	4,326,158	4,591,536	4 , 574 , 490
Supplies and Services	<i>597,</i> 701	783 , 576	2,403,694	2,441,737	2,514,704	2,853,900	2,533,899
Treatment Plant Operations	9,737,910	10,451,933	7,272,743	9,653,370	8,429,429	10,094,21 <i>7</i>	7,888,373
Professional Services	829,260	167,866	434,346	441,504	1,630,039	419,763	646 , 781
Indirects and ER&R	<u>2,091,019</u>	<u>2,344,593</u>	<u>3,451,753</u>	<u>3,706,889</u>	<u>3,732,695</u>	<u>3,987,416</u>	<u>3,713,252</u>
Operations & Maintenance Expenses	16,538,532	17,282,522	17,388,151	20,336,066	20,633,025	21,946,832	19,356,795
Taxes and fees	8,438,083	8,639,218	9,695,006	11,567,646	12,505,146	14,461,569	15,680,236
Debt Service	11,281,751	10,804,118	10,248,093	7,564,975	6,927,123	4,320,185	4,325,680
Capital	412,178	<i>75</i> 9,811	2,382,843	6,526,165	6,601,298	12,802,915	12,486,861
Water Fund (Utilities Administration Allocation)	<u>1,325,340</u>	1,456,374	<u>1,538,700</u>	1,484,043	1,531,326	1,649,269	1,659,733
Expenses Subt	otal 37,995,884	38,942,043	41,252,793	47,478,895	48,197,918	55,180,770	53,509,305
Depreciation	<u>7,587,492</u>	<u>7,390,390</u>	<u>7,381,432</u>	<u>7,166,559</u>	7,399,184	<u>0</u>	<u>0</u>
Total Expe	ense 45,583,376	46,332,433	48,634,225	54,645,454	55,597,102	55,180,770	53,509,305

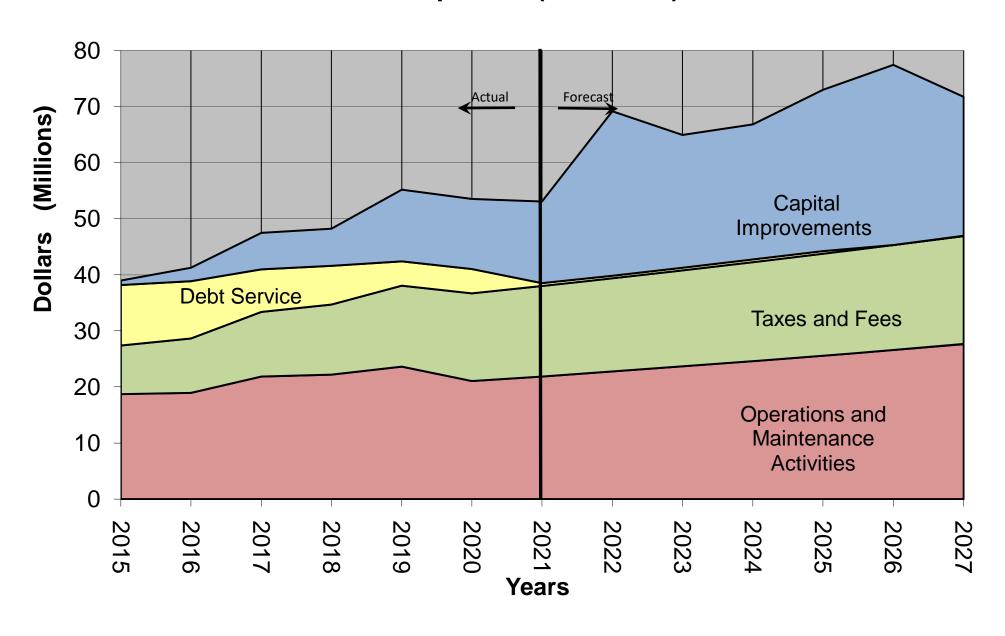
*Other Miscellaneous Revenues include items such as:

Septic Tank Receiving Interest Earnings Latecomer Fees

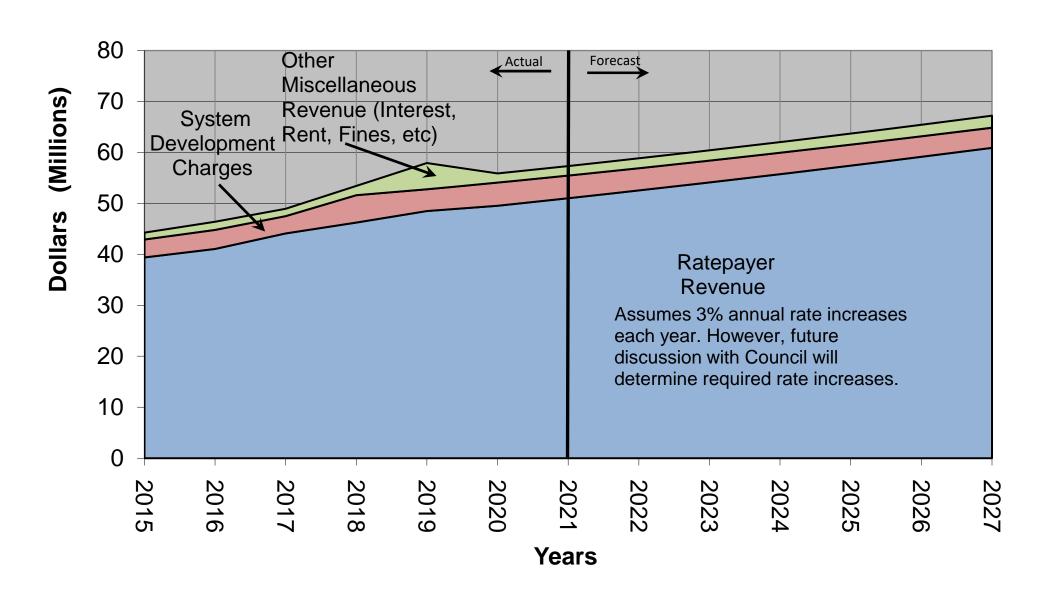




Sewer Expenses (2015-2027)



Sewer Revenues (2015-2027)





Sewer Utility CIP Changes

This page provides an overview of the changes from the previous 6-year project list (2021-2026) to this year's 6-year project list (2022-2027). The changes are segmented by: projects added; projects removed; and other.

Projects Added	Project Number	Comments
COLLECTION SYSTEM:		
4 th & Washington Sewer Replacement	SS-169	New in 2021
Earhart PS Removal and Gravity	SS-170	New in 2021
Maplecrest PS Reconstruction and FMA FM Extension	SS-172	New in 2021
Westridge PS & Fishers PS Discharge Reconst.	SS-173	New in 2021
Heights District Collections System Improvements	SS-182	Heights District Redevelopment
Wastewater WRF:		
WS Outfall Improvements	SS-171	New project for effluent mixing
WS Grit Classifier Replacement	SS-174	Equipment replacement – aging/worn equipment
WS Sodium Hypochlorite Delivery	SS-175	Operability and Safety upgrade
MP WRF Process Piping R&R	SS-176	\$1.2M for ongoing R&R for aging/worn process pipes
Marine Park Phase 3A	SS-177	To serve community growth
Marine Park Force Main	SS-178	Solids handling capacity improvement to serve growth
Marine Park Phase 3B	SS-181	Full site capacity final buildout
Westside Solids/Digesters	SS-179	New solids handling facility design starting 2027
WS WRF Process Piping R&R	SS-180	\$1.8M for ongoing R&R for aging/worn process pipes

Projects Removed	Project	Comments				
	Number					
<u>COLLECTION SYSTEM:</u>						
Basin B-4 Pump Station Removal (Sandcastle)	SS-8	Project removed from budget				
GMA Pump Station Improvements	SS-21	Project scope now included in new SS-172				
Southside Interceptor Phase 1	SS-152	Completed in 2021				
Wastewater WRF:						
Air Gap/City Water Protection	SS-115	Completed in 2021				
Marine Park Blower	SS-147	Completed in 2021				
UV Design Consultant	SS-165	Project cancelled and scope now in SS-175				
Lagoon Blower Upgrade		Combined with Lagoon Aeration Upgrade SS-102				
Andresen Pump Station Upgrade		Completed in 2021				
Marine Park WWTF/Primary Clarifier No. 3		Completed in 2021				
Westside WWTF Buildings Coatings No 3		Completed in 2021				
Westside Grit Re-route	SS-158	Project scope now included in SS-174				

Other Changes (Budget/Schedule)	Project No.	Comments
Collection System:		
Capital Preservation – Collection System	SS-A1-6	6 yr. CIP plan increased by \$400K
Wastewater (WRF):		
BBC Pump Station Upgrade	SS-28	6 yr. CIP plan increased by \$2.3M
Westside Schwing Pump Replacements	SS-80	\$0.85M Project budget added for 2022
WS Replace Centrifuges	SS-87	Add'l \$2.6M budget added for project in 2024
WS Clarifier Center Well Upgrade 3,4,5	SS-116	Project and \$200K budget moved back to 2023
MP UV Upgrade	SS-157	Project budget moved ahead to 2022/2023 due to supplier discontinuing spare parts, budget added for new total of \$2,150,000
Marine Park Bar Screens Upgrade	SS-160	\$2M project budget added in 2025
WS Solids Planning	SS-167	\$1M Scoping and pre-design added 2022-2024



6 YEAR CAPITAL IMPROVEMENT PROGRAM FOR SEWER COLLECTIONS AND WASTEWATER Mar 17, 2022

Note: All costs are in 2021 dollars

Mar. 17, 2022

						Mar. 17, 2022				
Project Name	Project Number	CIP#	2021**	2022	2023	2024	2025	2026	2027	Total
Collection	Number	OIF#	2021	2022	2023	2024	2025	2020	2021	Total
Standby Power	PRJ083471	SS-A1-3	-	200,000	100,000	100,000	100,000	100,000	100,000	700,000
Main Street, 5th to 15th*	PRJ083583	SS-5	-		700,000	-				700,000
Heights District	TBD	SS-182	-	4 000 000	100,000	1,900,000	0.000.000	0.000.000	2 222 222	2,000,000
IR - Interceptor Rehabilitation Pinebrook Force Main Reroute	PRJ083584 PRJ100474	SS-A1-135 SS-10	222,731	1,000,000 465,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	11,000,000 465,000
Manhole/Wye Rehabilitation	PRJ083588	SS-A1-138	-	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Basin A-20-1 & Force Main Relocation (59th Street)	PRJ083589	SS-1	-	,		,	500,000	,	,	500,000
Capital Preservation - Collection System	PRJ083591	SS-A1-6	-	2,000,000	2,000,000	3,000,000	3,000,000	4,000,000	4,000,000	18,000,000
63rd St Pump Station re-build/relocate SE 1st St SE 164th Ave. to SE 192nd Ave Design*	PRJ083592 PRJ083594	SS-140 SS-15	1,284,210 30,000	500,000 60,000						500,000 60,000
NE 137th Avenue - NE 49th St. to NE Fourth Plain Blvd.*	PRJ1003594	SS-13	- 30,000	60,000	430,000					430,000
Broadway Ph 2	PRJ100396	SS-168	30,982	300,000						300,000
Section 30 Arterial Expansion*	PRJ100475	SS-23	-	-	450,000	450,000	450,000	450,000	450,000	-
Wastewater Collection SCADA G1 - Trunk Interceptor Rehab	PRJ083711 PRJ100260	SS-153 SS-155	796,995	250,000 200,000	150,000	150,000	150,000	150,000	150,000	1,000,000 200,000
Port PS Rehabilitation	PRJ083744	SS-162	936,472	1,337,352						1,337,352
Southside Interceptor Rehab Ph 2	PRJ100261	SS-152	1,408,632	1,482,798						1,482,798
Southside Interceptor Rehab Ph 3 Southside Interceptor Rehab Ph 4	PRJ100262 PRJ100476	SS-152 SS-152	50,000 100,000	2,000,000 2,350,000	1,000,000					2,000,000 3,350,000
Southside Interceptor Rehab Ph 5	PRJ100477	SS-152	100,000	2,330,000	1,000,000					3,330,000
E - Interceptor Rehab PH 1	PRJ100478	SS-163	100,000	1,700,000	2,000,000					3,700,000
E - Interceptor Rehab PH 2 Burnt Bridge Creek Interceptor - Ph 1	PRJ100479 TBD	SS-163 SS-164	-		200,000	1,200,000				1,400,000
Burnt Bridge Creek Interceptor - Ph 1 Burnt Bridge Creek Interceptor - Ph 2	TBD	SS-164 SS-164	-		150,000	680,000				830,000
Burnt Bridge Creek Interceptor - Ph 3	TBD	SS-164	-		50,000	240,000				290,000
Burnt Bridge Creek Interceptor - Ph 4	TBD	SS-164	-		50,000	575,000				625,000
Broadway - 13th to McLoughlin E - Interceptor Rehab PH 3	PRJ100342 TBD	SS-166 SS-163	320,995			200,000	2,200,000			2,400,000
E - Interceptor Rehab PH 3 E - Interceptor Rehab PH 4	TBD	SS-163	-			200,000	200,000	4,000,000		4,200,000
E - Interceptor Rehab PH 5	TBD	SS-163	-				,	200,000	2,000,000	2,200,000
E - Interceptor Rehab PH 6	TBD	SS-163	-							-
E - Interceptor Rehab PH 7 4th & Washington Sewer Replacement	TBD PRJ100613	SS-163 SS-169	50,000	210,000						210,000
Earhart PS Removal and Gravity Extension	PRJ100639	SS-170	50,000	434,000						434,000
Maplecrest PS Recosntruction and GMA FM Extension	PRJ100657	SS-172	100,000	1,400,000						1,400,000
Westridge PS and Fishers PS Discharge Upgrade Mill Plain Blvd SE 102nd Ave to Chkalov	PRJ100660 PRJ083597	SS-173 	100,000	100,000	1,000,000					1,100,000
Mill Plain One Pump Station Upgrades	PRJ100355		79,568							-
Wyeast Sewer Improvements	PRJ100376		2,614							-
Port PS Force Main Bypass	PRJ100589		100,000							-
AB-1 Rehab B 1-2 Rehab	TBD TBD	N/A N/A	-							-
Sub-Total Collection=	100	IN/A	5,923,199	16,089,150	10,030,000	10,145,000	8.250.000	10,550,000	8,350,000	63.414.150
Treatment			0,020,100	10,000,100	.0,000,000	10,110,000	0,200,000	10,000,000	0,000,000	55,111,155
- Tourne	.									
Marine Park WRF:										
Marine Park Solids Conveyance Feasiblity Study	PRJ100427	SS-156	27,663	312,338						312,338
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade	TBD	SS-160	27,663	312,338	390,000		2,600,000			2,990,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements	TBD TBD	SS-160 SS-177	27,663	312,338	390,000	3,250,000	3,250,000			2,990,000 6,500,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System	TBD TBD TBD	SS-160 SS-177 SS-85	27,663	312,338	,	3,250,000				2,990,000 6,500,000 1,000,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements	TBD TBD	SS-160 SS-177	27,663	312,338	390,000	3,250,000	3,250,000	9,100,000	9,100,000	2,990,000 6,500,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements	TBD TBD TBD TBD TBD TBD TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181	27,663	312,338	,		3,250,000	9,100,000	9,100,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R	TBD TBD TBD TBD TBD TBD TBD TBD TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176			,		3,250,000	9,100,000	9,100,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176	283,766	6,234	1,500,000	2,000,000	3,250,000 1,000,000		, ,	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000 6,234
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4	TBD	\$\$-160 \$\$-177 \$\$-85 \$\$-157 \$\$-178 \$\$-181 \$\$-176	283,766 10,461		1,500,000	2,000,000	3,250,000 1,000,000		, ,	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176	283,766	6,234	1,500,000	2,000,000	3,250,000 1,000,000		, ,	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000 6,234
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176	283,766 10,461	6,234 5,000	1,500,000	2,000,000	3,250,000 1,000,000 200,000	200,000	200,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000 6,234 5,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176	283,766 10,461	6,234 5,000	1,500,000	2,000,000	3,250,000 1,000,000 200,000	200,000	200,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000 6,234 5,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside WRF Process Piping R&R	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32	283,766 10,461 120,356	6,234 5,000 905,000	1,500,000	2,000,000	3,250,000 1,000,000 200,000	200,000	200,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000 6,234 5,000 - 12,905,000 1,500,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside WRF Process Piping R&R Westside WRF Process Piping R&R Westside Outfall Improvements	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32 SS-180 SS-171	283,766 10,461 120,356 24,603	6,234 5,000 905,000 120,000 250,000	1,500,000 200,000 2,000,000	2,000,000	3,250,000 1,000,000 200,000 2,000,000	200,000	200,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000 6,234 5,000 - 12,905,000 - 120,000 1,500,000 250,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside WRF Process Piping R&R	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32	283,766 10,461 120,356	6,234 5,000 905,000	1,500,000 200,000 2,000,000	2,000,000	3,250,000 1,000,000 200,000 2,000,000	200,000	200,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000 6,234 5,000 - 12,905,000 1,500,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection Westside WRF Process Piping R&R Westside Outfall Improvements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacements	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32 SS-180 SS-171 SS-78 SS-147 SS-80	283,766 10,461 120,356 24,603	6,234 5,000 905,000 120,000 250,000 439,584 399,231 300,000	1,500,000 200,000 2,000,000	2,000,000	3,250,000 1,000,000 200,000 2,000,000	200,000	200,000	2,990,000 6,500,000 1,000,000 20,200,000 - 1,000,000 6,234 5,000 - 12,905,000 1,500,000 1,500,000 250,000 439,584 399,231 300,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection Westside WRF Process Piping R&R Westside Outfall Improvements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacements Westside Grit Classifier Replacement	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32 SS-180 SS-171 SS-78 SS-147 SS-80 SS-174	283,766 10,461 120,356 24,603	6,234 5,000 905,000 120,000 250,000 439,584 399,231	1,500,000 200,000 2,000,000	2,000,000	3,250,000 1,000,000 200,000 2,000,000	200,000	200,000	2,990,000 6,500,000 1,000,000 20,200,000 - 1,000,000 6,234 5,000 - 12,905,000 1,500,000 250,000 439,584 399,231
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection Westside WRF Process Piping R&R Westside Outfall Improvements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacements	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32 SS-180 SS-171 SS-78 SS-147 SS-80	283,766 10,461 120,356 24,603	6,234 5,000 905,000 120,000 250,000 439,584 399,231 300,000	1,500,000 200,000 2,000,000	2,000,000	3,250,000 1,000,000 200,000 2,000,000	200,000	200,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000 6,234 5,000 - 12,905,000 1,500,000 1,500,000 250,000 439,584 399,231 300,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection Westside WRF Process Piping R&R Westside Outfall Improvements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacements Westside Grit Classifier Replacement Westside Sodium Hypochlorite Delivery West 16th St. Pump Station (Pump Replacement) West 16th St. Force Main Reline	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32 SS-180 SS-171 SS-78 SS-147 SS-80 SS-174 SS-175 SS-58 SS-131	283,766 10,461 120,356 24,603	6,234 5,000 905,000 120,000 250,000 439,584 399,231 300,000	200,000 200,000 2,000,000 300,000 200,000 150,000	2,000,000	3,250,000 1,000,000 200,000 2,000,000	200,000	200,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000 6,234 5,000 - 12,905,000 - 120,000 1,500,000 250,000 439,584 399,231 300,000 1,100,000 - 200,000 150,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection Westside WRF Process Piping R&R Westside Outfall Improvements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacements Westside Grit Classifier Replacement Westside Sodium Hypochlorite Delivery West 16th St. Pump Station (Pump Replacement) West 16th St. Force Main Reline WS Wet Process Improvements	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32 SS-32 SS-180 SS-171 SS-78 SS-147 SS-80 SS-174 SS-175 SS-58 SS-131 SS-71	283,766 10,461 120,356 24,603	6,234 5,000 905,000 120,000 250,000 439,584 399,231 300,000	200,000 200,000 2,000,000 300,000 200,000 150,000 420,000	2,000,000	3,250,000 1,000,000 200,000 2,000,000	200,000	200,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000 6,234 5,000 - 12,905,000 1,500,000 250,000 439,584 399,231 300,000 1,100,000 200,000 1,500,000 439,584 399,231 300,000 1,100,000 200,000 150,000 420,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection Westside WRF Process Piping R&R Westside Outfall Improvements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacement Westside Grit Classifier Replacement Westside Sodium Hypochlorite Delivery West 16th St. Pump Station (Pump Replacement) West Process Improvements Secondary Clarifier Tank Coating 1&2	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32 SS-32 SS-180 SS-171 SS-78 SS-174 SS-80 SS-174 SS-92	283,766 10,461 120,356 24,603 60,416 770	6,234 5,000 905,000 120,000 250,000 439,584 399,231 300,000 1,100,000	200,000 200,000 2,000,000 300,000 200,000 150,000	2,000,000	3,250,000 1,000,000 200,000 2,000,000	200,000	200,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000 6,234 5,000 - 12,905,000 1,500,000 250,000 439,584 399,231 300,000 1,100,000 - 200,000 150,000 420,000 420,000 300,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection Westside WRF Process Piping R&R Westside Outfall Improvements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacements Westside Grit Classifier Replacement Westside Sodium Hypochlorite Delivery West 16th St. Pump Station (Pump Replacement) West 16th St. Force Main Reline WS Wet Process Improvements	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32 SS-32 SS-180 SS-171 SS-78 SS-147 SS-80 SS-174 SS-175 SS-58 SS-131 SS-71	283,766 10,461 120,356 24,603	6,234 5,000 905,000 120,000 250,000 439,584 399,231 300,000	200,000 200,000 2,000,000 300,000 200,000 150,000 420,000	2,000,000	3,250,000 1,000,000 200,000 2,000,000	200,000	200,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000 6,234 5,000 - 12,905,000 1,500,000 250,000 439,584 399,231 300,000 1,100,000 200,000 1,500,000 439,584 399,231 300,000 1,100,000 200,000 150,000 420,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection Westside WRF Process Piping R&R Westside Outfall Improvements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacement Westside Sodium Hypochlorite Delivery West 16th St. Pump Station (Pump Replacement) West 16th St. Purp Station (Pump Replacement) West 16th St. Porce Main Reline WS Wet Process Improvements Secondary Clarifier Tank Coating 1&2 WS Secondary Clarifier Center Well Upgrade 3, 4, 5 Westside Expand Odor Control System (Foul Air Removal Tower) Burnt Bridge Creek Pump Station Upgrade	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32 SS-32 SS-180 SS-171 SS-78 SS-147 SS-80 SS-174 SS-175 SS-58 SS-131 SS-71 SS-78 SS-131 SS-71 SS-92 SS-116 SS-81 SS-28	283,766 10,461 120,356 24,603 60,416 770	6,234 5,000 905,000 120,000 250,000 439,584 399,231 300,000 1,100,000	200,000 2,000,000 300,000 2,000,000 420,000 420,000 300,000	2,000,000	3,250,000 1,000,000 200,000 2,000,000 300,000	200,000	200,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000 6,234 5,000 - 12,905,000 1,500,000 250,000 439,584 399,231 300,000 1,100,000 - 200,000 150,000 420,000 300,000 200,000 500,000 2,996,776
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection Westside WRF Process Piping R&R Westside Outfall Improvements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacement Westside Grit Classifier Replacement Westside Sodium Hypochlorite Delivery West 16th St. Pump Station (Pump Replacement) West 16th St. Force Main Reline WS Wet Process Improvements Secondary Clarifier Tank Coating 1&2 WS Secondary Clarifier Tank Coating 1&2 WS Secondary Clarifier Center Well Upgrade 3, 4, 5 Westside Expand Odor Control System (Foul Air Removal Tower) Burnt Bridge Creek Pump Station Upgrade CP&C 4 Multi Coating Projects	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32 SS-32 SS-180 SS-171 SS-78 SS-147 SS-80 SS-174 SS-175 SS-58 SS-131 SS-71 SS-92 SS-116 SS-92 SS-116 SS-81 SS-28 SS-32	283,766 10,461 120,356 24,603 60,416 770 932	6,234 5,000 905,000 120,000 250,000 439,584 399,231 300,000 1,100,000	200,000 2,000,000 300,000 2,000,000 420,000 300,000	2,000,000	3,250,000 1,000,000 200,000 2,000,000 300,000	200,000	200,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000 6,234 5,000 - 12,905,000 1,500,000 250,000 439,584 399,231 300,000 1,100,000 - 200,000 420,000 420,000 300,000 200,000 500,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection Westside WRF Process Piping R&R Westside Outfall Improvements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacement Westside Sodium Hypochlorite Delivery West 16th St. Pump Station (Pump Replacement) West 16th St. Purp Station (Pump Replacement) West 16th St. Porce Main Reline WS Wet Process Improvements Secondary Clarifier Tank Coating 1&2 WS Secondary Clarifier Center Well Upgrade 3, 4, 5 Westside Expand Odor Control System (Foul Air Removal Tower) Burnt Bridge Creek Pump Station Upgrade	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32 SS-32 SS-180 SS-171 SS-78 SS-147 SS-80 SS-174 SS-175 SS-58 SS-131 SS-71 SS-78 SS-131 SS-71 SS-92 SS-116 SS-81 SS-28	283,766 10,461 120,356 24,603 60,416 770	6,234 5,000 905,000 120,000 250,000 439,584 399,231 300,000 1,100,000	200,000 2,000,000 300,000 2,000,000 420,000 420,000 300,000	2,000,000	3,250,000 1,000,000 200,000 2,000,000 300,000	200,000	200,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000 6,234 5,000 - 12,905,000 1,500,000 250,000 439,584 399,231 300,000 1,100,000 - 200,000 150,000 420,000 300,000 200,000 500,000 2,996,776
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection Westside WRF Process Piping R&R Westside Outfall Improvements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacement Westside Grit Classifier Replacement Westside Sodium Hypochlorite Delivery West 16th St. Furne Station (Pump Replacement) West 16th St. Force Main Reline WS Wet Process Improvements Secondary Clarifier Tank Coating 1&2 WS Secondary Clarifier Center Well Upgrade 3, 4, 5 Westside Expand Odor Control System (Foul Air Removal Tower) Burnt Bridge Creek Pump Station Upgrade CP&C 4 Multi Coating Projects CP&C Gravity Thickener - 2 Coatings Process Controls Electronics WS - Centrifuge #1 System Replacement	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32 SS-32 SS-180 SS-171 SS-78 SS-180 SS-174 SS-78 SS-175 SS-58 SS-171 SS-92 SS-131 SS-92 SS-116 SS-81 SS-28 SS-32 SS-70 SS-87	283,766 10,461 120,356 24,603 60,416 770 932 26,621	6,234 5,000 905,000 120,000 439,584 399,231 300,000 1,100,000 200,000	200,000 2,000,000 300,000 150,000 420,000 300,000 2,000,000 250,000 315,000	2,000,000 200,000 2,000,000 300,000	3,250,000 1,000,000 200,000 2,000,000 300,000 500,000	3,000,000	3,000,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000 6,234 5,000 - 12,905,000 1,500,000 250,000 439,584 399,231 300,000 1,100,000 - 200,000 150,000 420,000 300,000 2,996,776 500,000 1,995,000 3,715,000 3,715,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection Westside WRF Process Piping R&R Westside Outfall Improvements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacement Westside Sodium Hypochlorite Delivery West 16th St. Force Main Reline WS Wet Process Improvements Secondary Clarifier Center Well Upgrade 3, 4, 5 Westside Expand Odor Control System (Foul Air Removal Tower) Burnt Bridge Creek Pump Station Upgrade CP&C 4 Multi Coating Projects CP&C Gravity Thickener - 2 Coatings Process Controls Electronics WS - Centrifuge #1 System Replacement WS Gravity Belt Thickener/ Polymer Refurbish	TBD	SS-160 SS-177 SS-85 SS-177 SS-85 SS-157 SS-181 SS-176 SS-32 SS-180 SS-171 SS-78 SS-180 SS-171 SS-78 SS-117 SS-80 SS-171 SS-78 SS-131 SS-71 SS-58 SS-131 SS-71 SS-92 SS-116 SS-81 SS-82 SS-32 SS-70 SS-87	283,766 10,461 120,356 24,603 60,416 770 932 26,621 3,823 2,006,735	6,234 5,000 905,000 120,000 439,584 399,231 300,000 1,100,000 996,776	200,000 200,000 2,000,000 300,000 420,000 300,000 2,000,000 250,000 200,000 315,000 400,000	2,000,000 200,000 2,000,000 300,000 250,000 200,000 2,400,000	3,250,000 1,000,000 200,000 2,000,000 300,000 500,000	3,000,000	3,000,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000 6,234 5,000 - 12,905,000 1,500,000 250,000 439,584 399,231 300,000 1,100,000 - 200,000 150,000 420,000 200,000 200,000 500,000 2,996,776 500,000 1,995,000 3,715,000 400,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWFF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection Westside WRF Process Piping R&R Westside Outfall Improvements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacement Westside Sodium Hypochlorite Delivery West 16th St. Pump Station (Pump Replacement) West 16th St. Force Main Reline WS Wet Process Improvements Secondary Clarifier Tank Coating 1&2 WS Secondary Clarifier Center Well Upgrade 3, 4, 5 Westside Expand Odor Control System (Foul Air Removal Tower) Burnt Bridge Creek Pump Station Upgrade CP&C Gravity Thickener - 2 Coatings Process Controls Electronics WS - Centrifuge #1 System Replacement WS Gravity Belt Thickener/ Polymer Refurbish Westside Electrical Upgrades	TBD	SS-160 SS-177 SS-85 SS-177 SS-85 SS-157 SS-181 SS-176 SS-32 SS-180 SS-171 SS-78 SS-180 SS-171 SS-78 SS-181 SS-78 SS-180 SS-171 SS-92 SS-131 SS-71 SS-92 SS-116 SS-81 SS-28 SS-32 SS-70 SS-87 SS-159 SS-161	283,766 10,461 120,356 24,603 60,416 770 932 26,621 3,823 2,006,735	6,234 5,000 905,000 120,000 439,584 399,231 300,000 1,100,000 200,000 996,776	200,000 2,000,000 300,000 150,000 420,000 300,000 2,000,000 250,000 315,000	2,000,000 200,000 2,000,000 300,000 250,000 200,000	3,250,000 1,000,000 200,000 2,000,000 300,000 500,000	3,000,000	3,000,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000 6,234 5,000 - 12,905,000 1,500,000 250,000 439,584 399,231 300,000 1,100,000 - 200,000 150,000 420,000 300,000 2,996,776 500,000 1,995,000 3,715,000 3,715,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection Westside WRF Process Piping R&R Westside Outfall Improvements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacement Westside Sodium Hypochlorite Delivery West 16th St. Force Main Reline WS Wet Process Improvements Secondary Clarifier Center Well Upgrade 3, 4, 5 Westside Expand Odor Control System (Foul Air Removal Tower) Burnt Bridge Creek Pump Station Upgrade CP&C 4 Multi Coating Projects CP&C Gravity Thickener - 2 Coatings Process Controls Electronics WS - Centrifuge #1 System Replacement WS Gravity Belt Thickener/ Polymer Refurbish	TBD	SS-160 SS-177 SS-85 SS-177 SS-85 SS-157 SS-181 SS-176 SS-32 SS-180 SS-171 SS-78 SS-180 SS-171 SS-78 SS-117 SS-80 SS-171 SS-78 SS-131 SS-71 SS-58 SS-131 SS-71 SS-92 SS-116 SS-81 SS-82 SS-32 SS-70 SS-87	283,766 10,461 120,356 24,603 60,416 770 932 26,621 3,823 2,006,735	6,234 5,000 905,000 120,000 439,584 399,231 300,000 1,100,000 996,776	200,000 200,000 2,000,000 300,000 420,000 300,000 2,000,000 250,000 200,000 315,000 400,000	2,000,000 200,000 2,000,000 300,000 250,000 200,000 2,400,000	3,250,000 1,000,000 200,000 2,000,000 300,000 500,000	3,000,000	3,000,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000 6,234 5,000 - 12,905,000 1,500,000 250,000 439,584 399,231 300,000 1,100,000 - 200,000 150,000 420,000 200,000 200,000 200,000 200,000 1,996,776 500,000 1,995,000 3,715,000 400,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection Westside WRF Process Piping R&R Westside Outfall Improvements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacement Westside Sodium Hypochlorite Delivery West 16th St. Force Main Reline WS Wet Process Improvements Secondary Clarifier Tank Coating 1&2 WS Secondary Clarifier Center Well Upgrade 3, 4, 5 Westside Expand Odor Control System (Foul Air Removal Tower) Burnt Bridge Creek Pump Station Upgrade CP&C 4 Multi Coating Projects CP&C Gravity Thickener - 2 Coatings Process Controls Electronics WS - Centrifuge #1 System Replacement WS Gravity Belt Thickener/ Polymer Refurbish Westside Blebal Westside WWTF Buildings Coatings WS/MP Chemical Tanks Replacements	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32 SS-32 SS-180 SS-171 SS-78 SS-147 SS-80 SS-171 SS-78 SS-171 SS-92 SS-116 SS-81 SS-71 SS-92 SS-116 SS-81 SS-70 SS-87 SS-159 SS-161 SS-76	283,766 10,461 120,356 24,603 60,416 770 932 26,621 3,823 2,006,735	6,234 5,000 905,000 120,000 439,584 399,231 300,000 1,100,000 996,776	200,000 200,000 2,000,000 300,000 420,000 300,000 2,000,000 250,000 200,000 315,000 400,000	2,000,000 200,000 2,000,000 300,000 250,000 200,000 2,400,000	3,250,000 1,000,000 200,000 2,000,000 300,000 500,000	3,000,000	3,000,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 1,000,000 6,234 5,000 12,905,000 1,500,000 250,000 439,584 399,231 300,000 1,100,000 200,000 420,000 200,000 200,000 2,996,776 500,000 3,715,000 400,000 3,715,000 400,000 3,378,388 500,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWTF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection Westside WRF Process Piping R&R Westside Outfall Improvements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacement Westside Grit Classifier Replacement Westside Sodium Hypochlorite Delivery West 16th St. Force Main Reline WS Wet Process Improvements Secondary Clarifier Tank Coating 1&2 WS Secondary Clarifier Center Well Upgrade 3, 4, 5 Westside Expand Odor Control System (Foul Air Removal Tower) Burnt Bridge Creek Pump Station Upgrade CP&C 4 Multi Coating Projects CP&C Gravity Thickener - 2 Coatings Process Controls Electronics WS - Centrifuge #1 System Replacement WS Gravity Belt Thickener/ Polymer Refurbish Westside Blectrical Upgrades Wet Well Rehab Westside Solids Planning	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32 SS-32 SS-180 SS-171 SS-78 SS-147 SS-80 SS-174 SS-175 SS-58 SS-131 SS-71 SS-92 SS-116 SS-81 SS-70 SS-87 SS-159 SS-161	283,766 10,461 120,356 24,603 60,416 770 932 26,621 3,823 2,006,735	6,234 5,000 905,000 120,000 439,584 399,231 300,000 1,100,000 996,776 905,000 1,000,000	200,000 200,000 2,000,000 300,000 420,000 300,000 2,000,000 250,000 200,000 315,000 400,000	2,000,000 200,000 2,000,000 300,000 250,000 200,000 2,400,000	3,250,000 1,000,000 200,000 2,000,000 300,000 500,000	3,000,000	3,000,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWFF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection Westside WRF Process Piping R&R Westside Outfall Improvements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacement Westside Grit Classifier Replacement Westside Sodium Hypochlorite Delivery West 16th St. Pump Station (Pump Replacement) West 16th St. Force Main Reline WS Wet Process Improvements Secondary Clarifier Tank Coating 1&2 WS Secondary Clarifier Center Well Upgrade 3, 4, 5 Westside Expand Odor Control System (Foul Air Removal Tower) Burnt Bridge Creek Pump Station Upgrade CP&C 4 Multi Coating Projects CP&C Gravity Thickener - 2 Coatings Process Controls Electronics WS - Centrifuge #1 System Replacement WS Gravity Belt Thickener/ Polymer Refurbish Westside Electrical Upgrades Wet Well Rehab Westside Solids Planning Air Gap/City Water Protection	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32 SS-32 SS-180 SS-171 SS-78 SS-171 SS-78 SS-171 SS-78 SS-171 SS-80 SS-174 SS-175 SS-58 SS-131 SS-71 SS-92 SS-116 SS-81 SS-28 SS-32 SS-70 SS-87 SS-159 SS-161 SS-76 SS-167	283,766 10,461 120,356 24,603 60,416 770 932 26,621 3,823 2,006,735	6,234 5,000 905,000 120,000 439,584 399,231 300,000 1,100,000 996,776	200,000 2,000,000 300,000 150,000 420,000 300,000 250,000 200,000 400,000 500,000	2,000,000 200,000 2,000,000 300,000 250,000 200,000 2,400,000 1,000,000	3,250,000 1,000,000 200,000 2,000,000 300,000 500,000	3,000,000	200,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWFF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside WRF Process Piping R&R Westside W1 Protection Westside WRF Process Piping R&R Westside Outfall Improvements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacement Westside Grit Classifier Replacement Westside Sodium Hypochlorite Delivery West 16th St. Pump Station (Pump Replacement) West 16th St. Force Main Reline WS Wet Process Improvements Secondary Clarifier Tank Coating 1&2 WS Secondary Clarifier Center Well Upgrade 3, 4, 5 Westside Expand Odor Control System (Foul Air Removal Tower) Burnt Bridge Creek Pump Station Upgrade CP&C 4 Multi Coating Projects CP&C Gravity Thickener - 2 Coatings Process Controls Electronics WS - Centrifuge #1 System Replacement WS Gravity Belt Thickener/ Polymer Refurbish Westside BlowTF Buildings Coatings WS/MP Chemical Tanks Replacements Westside Solids Planning Air Gap/City Water Protection Westside Solids/Digesters	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32 SS-32 SS-180 SS-171 SS-78 SS-147 SS-80 SS-174 SS-175 SS-58 SS-131 SS-71 SS-92 SS-116 SS-81 SS-70 SS-87 SS-159 SS-161	283,766 10,461 120,356 24,603 60,416 770 932 26,621 3,823 2,006,735	6,234 5,000 905,000 120,000 439,584 399,231 300,000 1,100,000 996,776 905,000 1,000,000	200,000 2,000,000 300,000 150,000 420,000 300,000 250,000 200,000 400,000 500,000	2,000,000 200,000 2,000,000 300,000 250,000 200,000 2,400,000 1,000,000	3,250,000 1,000,000 200,000 2,000,000 300,000 500,000	3,000,000	3,000,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 1,000,000 6,234 5,000 12,905,000 1,500,000 250,000 439,584 399,231 300,000 1,100,000 200,000 150,000 200,000 500,000 2,996,776 500,000 1,905,000 3,715,000 400,000 3,378,388 500,000 2,800,000 2,800,000 2,800,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWFF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection Westside WRF Process Piping R&R Westside Outfall Improvements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacement Westside Grit Classifier Replacement Westside Sodium Hypochlorite Delivery West 16th St. Pump Station (Pump Replacement) West 16th St. Force Main Reline WS Wet Process Improvements Secondary Clarifier Tank Coating 1&2 WS Secondary Clarifier Tank Coating 1&2 WS Secondary Clarifier Center Well Upgrade 3, 4, 5 Westside Expand Odor Control System (Foul Air Removal Tower) Burnt Bridge Creek Pump Station Upgrade CP&C 4 Multi Coating Projects CP&C Gravity Thickener - 2 Coatings Process Controls Electronics WS - Centrifuge #1 System Replacement WS Gravity Belt Thickener/ Polymer Refurbish Westside Electrical Upgrades Wet Well Rehab Westside WNTF Buildings Coatings WS/MP Chemical Tanks Replacements Westside Solids/Digesters Lagoon:	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32 SS-180 SS-171 SS-78 SS-147 SS-80 SS-171 SS-78 SS-171 SS-92 SS-116 SS-81 SS-71 SS-92 SS-116 SS-87 SS-159 SS-161 SS-76 SS-167 SS-77	283,766 10,461 120,356 24,603 60,416 770 932 26,621 3,823 2,006,735 280,617 528 32,949	6,234 5,000 905,000 120,000 439,584 399,231 300,000 1,100,000 996,776 905,000 1,000,000	200,000 2,000,000 300,000 150,000 420,000 300,000 250,000 200,000 400,000 400,000	2,000,000 200,000 2,000,000 300,000 250,000 200,000 2,400,000 1,000,000	3,250,000 1,000,000 200,000 2,000,000 300,000 500,000	3,000,000	200,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 1,000,000 6,234 5,000 12,905,000 12,905,000 250,000 439,584 399,231 300,000 1,500,000 200,000 150,000 200,000 500,000 2,996,776 500,000 3,715,000 400,000 3,715,000 400,000 3,715,000 400,000 3,715,000 400,000 3,715,000 3,715,000 3,715,000 3,715,000 3,715,000 3,715,000 3,715,000 3,715,000 3,715,000 3,715,000 3,715,000 3,715,000 3,715,000 3,715,000 3,715,000 3,715,000 3,715,000 3,715,000 3,715,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWFF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection Westside WRF Process Piping R&R Westside W1 Protection Westside WRF Process Piping R&R Westside Blower WS Schwing Pump Replacements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacement Westside Sodium Hypochorite Delivery West 16th St. Force Main Reline WS Wet Process Improvements Secondary Clarifier Tank Coating 1&2 WS Secondary Clarifier Center Well Upgrade 3, 4, 5 Westside Expand Odor Control System (Foul Air Removal Tower) Burnt Bridge Creek Pump Station Upgrade CP&C 4 Multi Coating Projects CP&C 4 Multi Coating Projects CP&C Gravity Thickener - 2 Coatings Process Controls Electronics WS - Centrifuge #1 System Replacement WS Gravity Belt Thickener/ Polymer Refurbish Westside Electrical Upgrades Wet Well Rehab Westside Solids Planning Air Gap/City Water Protection Westside Solids/Digesters Lagoon: Lagoon Aeration Upgrade	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32 SS-32 SS-180 SS-171 SS-78 SS-147 SS-80 SS-174 SS-175 SS-58 SS-131 SS-71 SS-92 SS-116 SS-81 SS-92 SS-161 SS-70 SS-87 SS-159 SS-161 SS-76 SS-167 SS-179 SS-102	283,766 10,461 120,356 24,603 60,416 770 932 26,621 3,823 2,006,735 280,617 528 32,949	6,234 5,000 905,000 120,000 439,584 399,231 300,000 1,100,000 996,776 905,000 1,000,000 1,878,388	200,000 2,000,000 300,000 150,000 420,000 300,000 250,000 200,000 400,000 500,000	2,000,000 200,000 2,000,000 300,000 250,000 200,000 2,400,000 1,000,000	3,250,000 1,000,000 200,000 2,000,000 300,000 500,000	3,000,000	200,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 1,000,000 6,234 5,000 12,905,000 1,500,000 250,000 439,584 399,231 300,000 1,100,000 200,000 150,000 420,000 300,000 200,000 500,000 2,996,776 500,000 1,905,000 400,000 3,715,000 400,000 3,715,000 400,000 3,378,388 500,000 2,800,000 2,800,000 3,938 5,000,000
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWFF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection Westside WRF Process Piping R&R Westside WRF Process Piping R&R Westside Untrall Improvements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacement Westside Sodium Hypochlorite Delivery West 16th St. Force Main Reline WS Wet Process Improvements Secondary Clarifier Center Well Upgrade 3, 4, 5 Westside Expand Odor Control System (Foul Air Removal Tower) Burnt Bridge Creek Pump Station Upgrade CP&C 4 Multi Coating Projects CP&C Gravity Thickener - 2 Coatings Process Controls Electronics WS - Centrifuge #1 System Replacement WS Gravity Belt Thickener / Polymer Refurbish Westside Electrical Upgrades Wet Well Rehab Westside Solids Planning Air Gap/City Water Protection Westside Solids/Digesters Lagoon: Lagoon Aeration Upgrade Lagoon Upgrade Engineering Design	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32 SS-180 SS-171 SS-78 SS-147 SS-80 SS-171 SS-78 SS-171 SS-92 SS-116 SS-81 SS-71 SS-92 SS-116 SS-87 SS-159 SS-161 SS-76 SS-167 SS-77	283,766 10,461 120,356 24,603 60,416 770 932 26,621 3,823 2,006,735 280,617 252 32,949	6,234 5,000 905,000 120,000 439,584 399,231 300,000 1,100,000 996,776 905,000 1,000,000 1,878,388 3,938	200,000 2,000,000 2,000,000 300,000 150,000 420,000 300,000 250,000 200,000 400,000 400,000 400,000	2,000,000 200,000 2,000,000 300,000 250,000 200,000 2,400,000 1,000,000	3,250,000 1,000,000 200,000 2,000,000 300,000 500,000 2,000,000	200,000	200,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 1,000,000 6,234 5,000 12,905,000 1,500,000 250,000 439,584 399,231 300,000 1,100,000 200,000 200,000 200,000 200,000 200,000 1,905,000 2,996,776 500,000 3,715,000 400,000 3,715,000 400,000 3,715,000 400,000 3,715,000 400,000 3,378,38 500,000 2,800,000 2,800,000 2,800,000 3,938 5,000,000 4,326,401
Marine Park Solids Conveyance Feasiblity Study MP Bar Screens Upgrade Marine Park Phase 3A - Secondary Process Enhancements Marine Park - Refurbish Odor Control System MP UV Upgrade Marine Park Force Main Marine Park Phase 3B - Complete full site capacity improvements Marine Park WRF Process Piping R&R Marine Park WWFF Primary Clarifier No. 3 Andresen Pump Station Pump No. 4 Marine Park Blower Capital Preservation and Compliance (2)-Both MP and WSTP Westside WRF: Westside W1 Protection Westside WRF Process Piping R&R Westside WRF Process Piping R&R Westside WRF Process Piping R&R Westside Gutfall Improvements Main Industrial Pumpstation Upgrade Westside Blower WS Schwing Pump Replacement Westside Grit Classifier Replacement Westside Grit Classifier Replacement West 16th St. Pump Station (Pump Replacement) West 16th St. Force Main Reline WS Wet Process Improvements Secondary Clarifier Center Well Upgrade 3, 4, 5 Westside Expand Odor Control System (Foul Air Removal Tower) Burnt Bridge Creek Pump Station Upgrade CP&C 4 Multi Coating Projects CP&C Gravity Thickener - 2 Coatings Process Controls Electronics WS - Centrifuge #1 System Replacement WS Gravity Belt Thickener/ Polymer Refurbish Westside Electrical Upgrades Wet Well Rehab Westside Solids Planning Air Gap/City Water Protection Westside Solids/Digesters Lagoon: Lagoon Aeration Upgrade	TBD	SS-160 SS-177 SS-85 SS-157 SS-178 SS-181 SS-176 SS-32 SS-32 SS-180 SS-171 SS-78 SS-147 SS-80 SS-174 SS-175 SS-58 SS-131 SS-71 SS-92 SS-116 SS-81 SS-92 SS-161 SS-70 SS-87 SS-159 SS-161 SS-76 SS-167 SS-179 SS-102	283,766 10,461 120,356 24,603 60,416 770 932 26,621 3,823 2,006,735 280,617 528 32,949	6,234 5,000 905,000 120,000 439,584 399,231 300,000 1,100,000 996,776 905,000 1,000,000 1,878,388	200,000 2,000,000 300,000 150,000 420,000 300,000 250,000 200,000 400,000 400,000	2,000,000 200,000 2,000,000 300,000 250,000 200,000 2,400,000 1,000,000	3,250,000 1,000,000 200,000 2,000,000 300,000 500,000	3,000,000	200,000	2,990,000 6,500,000 1,000,000 1,500,000 20,200,000 - 1,000,000 6,234 5,000 - 12,905,000 1,500,000 250,000 439,584 399,231 300,000 1,100,000 200,000 420,000 300,000 200,000 500,000 2,996,776 500,000 400,000 3,3715,000 400,000 3,378,388 - 500,000 2,800,000 2,800,000 2,800,000 - 1,500,000

^{*}Project timing is dependent upon the timing of the overriding project.

**2021 Amounts include revised delivery amount or actual spent in 2021 (as of August), whichever is higher



PROJECT: Basin A-20-1 & Force Main Relocation (59th Street)



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Collection **Project Type:**

Future Project Status:

PROJECT DESCRIPTION

Project Description

Extend 6" to 24" gravity sewer in NE 59th Street, when NE 59th St is constructed west of NE 162nd Ave.

Project Justification/Priority

(4) = Replace/preserve/rehabilitate system. Funds budgeted are for oversize participation in the form of supplying oversize force main sewerline pipe to the developer driven project.

LEGEND Project Area Water Project Areas Battle Ground **SCIP Project Areas** Transportation Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washouaal Surface Water Project Areas Clark County

VICINITY MAP

FUNDING & SCHEDULE

Budget / Proj. #:

PRJ100250

Budget / Proj. Task #:

Total Project Cost: \$500,000.00

*Start of Const. (Year):

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Standby Power



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Collection

Project Status: Active

PROJECT DESCRIPTION

Project Description

Install permanent emergency power standby generators at selected sewer pump stations.

Project Justification/Priority

(2) - Improve reliability/operability/maintainabiliy - Initial project was completed in 2016 for \$35,000. Multi year program for installation of emergency power standby generators at selected sewer pump stations. Back up power increases system reliability, by reducing risks of backups, staff overtime, and provides better use of emergency response resource.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

VICINITY MAP 139th 139t

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083471

Budget / Proj. Task #:

Total Project Cost: \$700,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Main Street, 5th St. to 15th St.



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Collection

Project Status: Active

PROJECT DESCRIPTION

Project Description

Roadway Coordination project -Replace 1,900 ft of original (1890) clay mains in Main St.

Project Justification/Priority

(4) = Replace/preserve/rehabilitate systems -- to replace and rehabilitate our oldest mains, (Installed 1890's in Vancouver's first sanitary sewer project), to extend the reliable asset service life. Our oldest mains will be replaced in coordination with planned Transportation Improvement Program improvements in Main Street. Sewer line construction will be triggered if the TIP Project moves ahead. Sewer CIP design will be included in the Transportation CIP project plan set.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083583

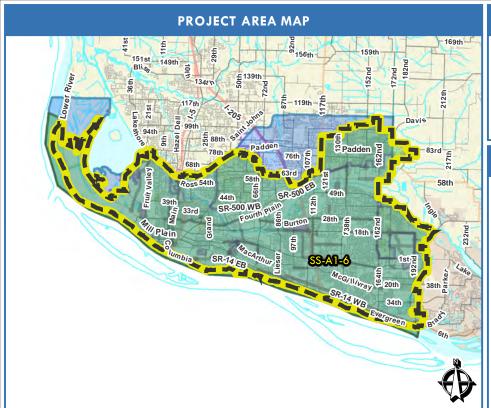
Budget / Proj. Task #:

Total Project Cost: \$700,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Capital Preservation - Collection System



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Collection

Project Status: Active

PROJECT DESCRIPTION

Project Description

Multi year program to rehabilitate sewer mains shown to be failing due to sewerline condition.

Project Justification/Priority

(4) = Replace/preserve/rehabilitate systems -- To replace/repair assets that have reached the end of useful service life. Multi year program driven by field inspection data collected by our ongoing TV inspection condition assessment program. Field inspections show these pipes are in deteriorated condition and in need of restoration. Budgeted at about \$2,400,000 per year.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083591

Budget / Proj. Task #:

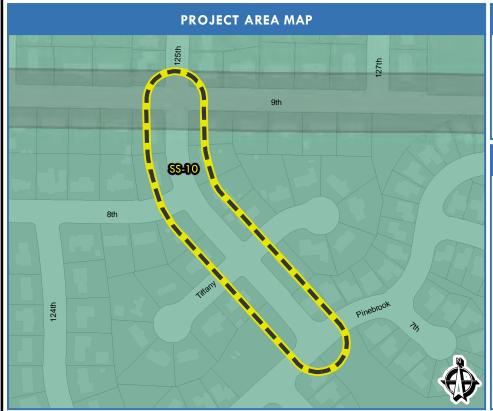
Total Project Cost: \$18,000,000.00

*Start of Const. (Year): ongoing

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Pinebrook Forcemain Reroute



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Collection

Project Status: Active

PROJECT DESCRIPTION

Project Description

Install a new 700 lf pressure main to eliminate a corroded 4,400 ft. force main.

Project Justification/Priority

(4) - Replace/preserve/rehabilitate systems - to extend asset service life. This pump station program project will install 700 feet of new force main to redirect the discharge from this pump station to the master planned location. This will eliminate a 4,400 foot long force main that has corroded downstream piping. Timing for the project is dependent on other projects as the entire discharge infrastructure does not yet exist. Project 083238 needs to take the Sandcastle Pump Station off-line and the Camelot Court SCIP project needs to extend 12-inch main through that neighborhood. The Pinebrook Forcemain Reroute project will also fix a downstream bottleneck.

LEGEND Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County



FUNDING & SCHEDULE

Budget / Proj. #: PRJ083587

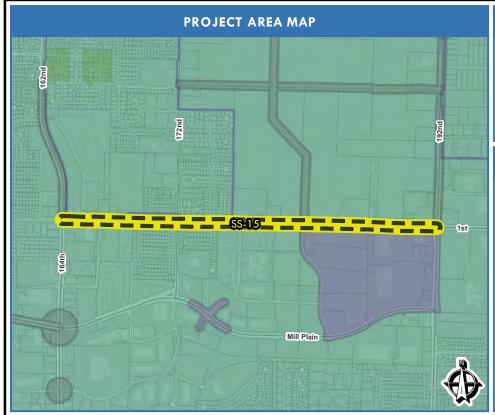
Budget / Proj. Task #:

Total Project Cost: \$700,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: SE 1st St - SE 164th Ave. to SE 192nd Ave. Design*



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Collection

Project Status: Active

PROJECT DESCRIPTION

Project Description

Roadway Coordination project for sewerline design of needed stubs and/or laterals in SE 1st St, to serve new development in Section 30.

Project Justification/Priority

(3) = New systems; to provide reliable sewer capacity to serve area growth near Section 30. This Roadway Coordination project will fund project design to install needed stubs and/or laterals in SE 1st St, to provide sewer to developing parcels in and near Section 30. The project design (and construction) will be included within the Transportation project to widen SE 1st St. Sewerline construction timing is dependant on the Transportation project. Funding is for sewerline design to be included in transportation contract drawings. Transportation construction is unfunded.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083594

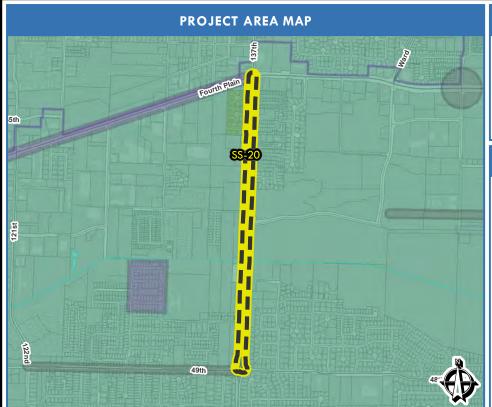
Budget / Proj. Task #:

Total Project Cost: \$90,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: NE 137th Avenue - NE 49th St. to NE Fourth Plain Blvd.



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Collection

Project Status: Active

PROJECT DESCRIPTION

Project Description

Roadway Coordination project to install approximately 2,600 feet of 8-inch main, to provide sewer to unsewered parcels.

Project Justification/Priority

(3) - New systems to provide sewer capacity in unsewered arterial corridor. This project will take advantage of the proposed road improvements to install new main to serve unsewered parcels. By combining with a road improvement project, construction costs are reduced significantly. The project design and construction will be included within the Transportation project to widen NE 137th Ave. Timing is dependent on the Transportation project, currently unfunded.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100251

Budget / Proj. Task #:

Total Project Cost: \$430,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Section 30 Arterial Expansion



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Collection

Project Status: Active

PROJECT DESCRIPTION

Project Description

Roadway Coordination project budget to install sewer mains in SE 1st St during Transportation's SE 1st St (Sec. 30) Arterial Expansion Project.

Project Justification/Priority

(3) = New systems - To install new sewer mains in the Transportation's Section 30 (SE 1st St) Arterial Expansion Project as identified in the Transportation Improvement Program. Timing is dependent on the Transportation project. Project budget is based on an estimate of 17,000 feet of 12-inch main.

LEGEND Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County



FUNDING & SCHEDULE

Budget / Proj. #: PRJ083600

Budget / Proj. Task #:

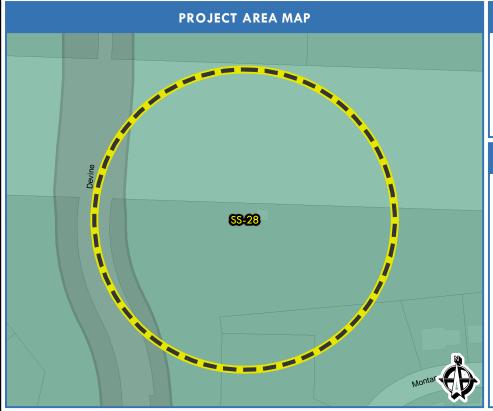
Total Project Cost: \$500,000.00

*Start of Const. (Year): 2021

*All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Burnt Bridge Creek Pump Station Upgrade



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Treatment

Project Status: Active

PROJECT DESCRIPTION

Project Description

Burnt Bridge Creek Pump Station - rehabilitate existing mechanical systems & pump motors

Project Justification/Priority

(4) = Replace/preserve/rehabilitate systems - This project repairs the piping from BBC intercepter into the BBC pump station wetwell, and installs a diversion gate at Andresen pump station (In Mill Plain near Tower Mall). This also replaces pump, motors, drives and mechanical fittings to activate the pump station.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

FUNDING & SCHEDULE

Budget / Proj. #:

PRJ100256

Budget / Proj. Task #:

Total Project Cost: \$3,000,000.00

*Start of Const. (Year):

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Capital Preservation and Compliance (Treatment)



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Treatment

Project Status: Active

PROJECT DESCRIPTION

Project Description

Annual program to fund extraordinary maintenance of new capital and unexpected repairs outside the limits of the O&M Contract.

Project Justification/Priority

(4) = Replace/preserve/rehabilitate systems - This program funds extraordinary maintenance of new capital, small equipment and/or unexpected treatment plant repairs outside the scope of the O&M contract. Total list of identified projects currently totals \$8,760,000, with following projected construction schedule: 2021 - \$1,400,000; 2022 - \$1,365,000; 2023 - \$3,400,000. Projects include: Rehab MP Primary Clarifiers; Rehab thickened sludge tanks at WSTP; Rehab Odor Control ductwork and booster fans at Westside; replace the slide gates at Westside aeration basins; replace the WS piping network for sodium hypochlorite; replace FBF incinerator CEMS unit; Rehab Westside primary and Wasted Act. Sludge storage tanks.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083621

Budget / Proj. Task #:

Total Project Cost: \$13,000,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: CP&C 4 Multi Coating Projects



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Treatment Project Type:

Active **Project Status:**

PROJECT DESCRIPTION

Project Description

Annual fund for extraordinary maintenance of capital and small equipment outside the limits of our WWTP Operations &

Project Justification/Priority

(4) - Repair/preserve/replace - Funding from CP&C; a yearly allocation of money used to fund extraordinary maintenanceof new capital and small equipment outside the limits of the O&M Contract and/or unexpected treatment plant repairs outside the scope of the O&M contract. Replace waterproof coatings on various basins and units at the wastewater treatment plant facilities to preserve our assets, and extend their useful expected service life.

LEGEND Water Project Areas Battle Ground Project Area SCIP Project Areas Transportation Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washouaal Surface Water Project Areas Clark County

VICINITY MAP

FUNDING & SCHEDULE

Budget / Proj. #:

PRJ083622

Budget / Proj. Task #:

Total Project Cost: \$500,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: West 16th St. Pump Station (Pump Replacement)



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Collection

Project Status: Active

PROJECT DESCRIPTION

Project Description

Replace the W. 16th St. pump station pumps based on 2019 condition inspection.

Project Justification/Priority

(4) = Replace/preserve/rehabilitate systems- The West 16th St. pump station serves the Fruit Valley neighborhood. The pump station condition was inspected and assessed in 2019. This resulted in recommended R&R repairs, including complete replacement of the existing original pump. The lift station must be maintained and system components repaired or replaced as needed, to continue providing reliable (uninterrupted) service.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

FUNDING & SCHEDULE

Budget / Proj. #:

TBD

Budget / Proj. Task #:

Total Project Cost:

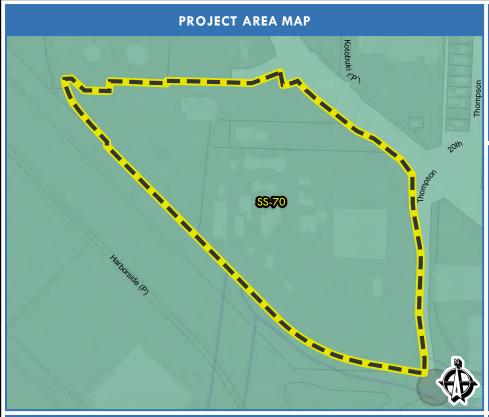
\$200,000.00

*Start of Const. (Year):

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Process Controls Electronics (SCADA WS/MP)



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Treatment

Project Status: Active

PROJECT DESCRIPTION

Project Description

Upgrade and replace process controls and electronic data acquisition systems throughout the Westside WRF.

Project Justification/Priority

(4) = Replace/preserve/rehabilitate systems ---This multi year project (2018-2022) provides full replacement of Programmable Logic Controls (PLC) hardware and operating platforms at both treatment plants. This project updates our aging and obsolete plant operations SCADA (most components at least 20 years old) up to current standards for reliability, speed, transparency and security. Project goals include: 1) Replacement of obsolete/unmaintainable Programmable Logic Control (PLC) Hardware and computer networks throughout both Westside and Marine Park; 2) updating operating software and operator interfaces; 3) Replace telemetry (leased land lines) with high speed internet links; 4) Provide secure server rooms; 5) Provide secure control rooms at both treatment plants; 6) numerous process monitoring/instrumentation upgrades for operations reliability; 7) replace VFD Drives on all 100 HP pump motor assets."

The Computers, PLC hardware and system network equipment being replaced in this project has an expected service life of 5-7 years, therefore the long term CIP shows future funds for ongoing R&R and SCADA upgrades.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

VICINITY MAP FUNDING & SCHEDULE

Budget / Proj. #:

PRJ083626

Budget / Proj. Task #:

Total Project Cost:

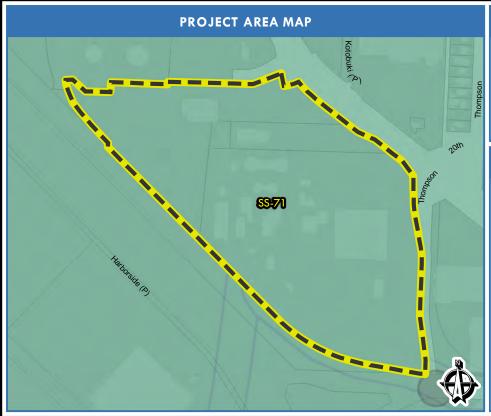
\$15,000,000.00

*Start of Const. (Year):

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: WS Wet Process Improvements



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Treatment Project Type:

Active **Project Status:**

PROJECT DESCRIPTION

Project Description

Control equipment and control system upgrades to optimize secondary treatment capacity at Westside WWTP.

Project Justification/Priority

(1) = Compliance with regulations ---Equipment upgrades for wastewater treatment processes, to replace equipment and controls to optimize secondary treatment capacity at Westside WRF.

LEGEND Project Area Water Project Areas Battle Ground Transportation Project Areas **SCIP Project Areas** Camas Sanitary Sewer Project Areas Vancouver City Limits Washouaal Surface Water Project Areas Clark County

VICINITY MAP

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083601

Budget / Proj. Task #:

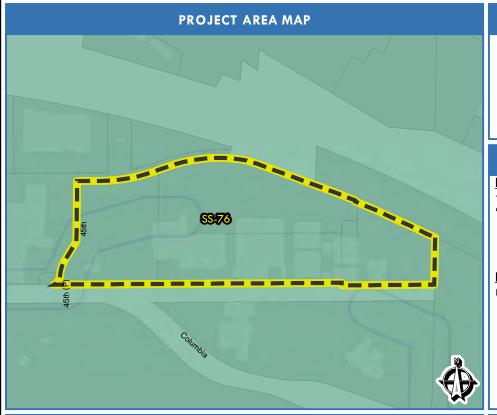
Total Project Cost: \$420,000.00

*Start of Const. (Year):

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: WS/MP Chemical Tanks Replacements



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Treatment

Project Status: Active

PROJECT DESCRIPTION

Project Description

This budget amount is a placeholder for future replacement of fiberglass/plastic tanks used in chemical processes, due to age related wear and deterioration.

Project Justification/Priority

(4) = Replace/preserve/rehabilitate systems .

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

FUNDING & SCHEDULE

Budget / Proj. #:

083608

Budget / Proj. Task #:

Total Project Cost:

\$500,000.00

*Start of Const. (Year):

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Main Industrial Pumpstation Upgrade



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Treatment

Project Status: Active

PROJECT DESCRIPTION

Project Description

Rehabilitate Main Industrial Pump Station mechanical and electrical sytems.

Project Justification/Priority

(4) = Replace/preserve/rehabilitate systems --Mechanical and electrical components have reached their useful life and need replacment and/or rehabilitation to maintain reliable and uninterrupted service to Lagoon user industries. This is the original, 40 year old Main Industrial Pump Station transferring food processing wastewater to the lagoon. This project includes new pumps and also a new protective wet well coating to extend pump station service life.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County



FUNDING & SCHEDULE

Budget / Proj. #:

PRJ100432

Budget / Proj. Task #:

Total Project Cost:

\$500,000.00

*Start of Const. (Year):

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: WS Schwing Pump Replacements



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Treatment

Project Status: Active

PROJECT DESCRIPTION

Project Description

Replace existing worn and outdated Schwing Pumps at Westside.--Wastewater CIP project priority #8 of 9.

Project Justification/Priority

(4) = Replace/preserve/rehabilitate systems; At Westside WRF, to replace 20 yr old aging and outdated Schwing Pumps in the USV Disinfection process. These 20 year old solids transfer pumps (Schwing) have reached their useful life. They need replacement to provide updated, maintainable equipement, reduce maintenance repairs and parts, and provide reliable processing capacity.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100486

Budget / Proj. Task #:

Total Project Cost: \$300,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Westside Expand Odor Control System (Foul Air Removal Tower)



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Treatment

Project Status: Future

PROJECT DESCRIPTION

Project Description

Replace exisiting (bult in 1998) Westside WWTP Foul Air air scrubber unit, now approaching the end of it's expected useful service life.

Project Justification/Priority

(1) = Compliance with regulations. Unit must be replaced to reliably treat hydrogen sulfide emissions in accordance with our air emissions permit with SWCAA (Southwest Washington Clean Air Agency). Foul air system (Hydrogen sulfide) process volumes and related H2S emissions have increased since installation. Project includes budget for a pre-design report and alternatives evaluation.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

FUNDING & SCHEDULE

Budget / Proj. #: N/A

Budget / Proj. Task #:

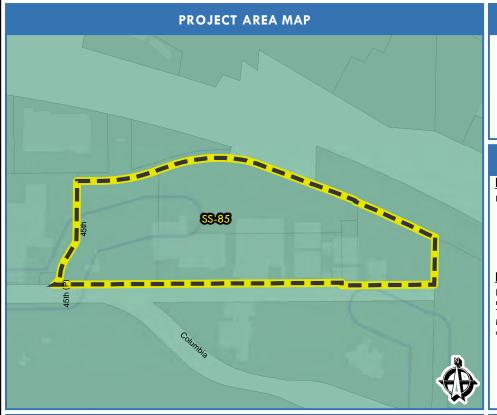
Total Project Cost: \$500,000.00

*Start of Const. (Year): 2025

*All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: MP - Refurbish Odor Control System



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Treatment Project Type:

Future Project Status:

PROJECT DESCRIPTION

Project Description

Replace and upgrade original 1995 Marine Park Foul Air air scrubber unit and ancillary process equipment.

Project Justification/Priority

(4) = Replace/preserve/rehabilitate systems. This unit is at the end of it's useful life, and must be replaced to provide reliable hydrogen sulfide treatment to comply with our air emissions permit with Southwest Washington Clean Air Agency. This project includes unit replacement along with engineering design and preplanning for condition assessment and and to identify any needed (capacity) upgrades. This includes engineering and pre-planning work to evaluate alternatives based on condition, capacity needs, and any needed upgrades.

LEGEND Project Area Water Project Areas Battle Ground Transportation Project Areas **SCIP Project Areas** Camas Sanitary Sewer Project Areas Vancouver City Limits Washouaal Surface Water Project Areas Clark County

VICINITY MAP

FUNDING & SCHEDULE

Budget / Proj. #:

TBD

Budget / Proj. Task #:

Total Project Cost:

\$1,000,000.00

*Start of Const. (Year):

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: WS - Centrifuge #1 System Replacement



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Treatment

Project Status: Future

PROJECT DESCRIPTION

Project Description

Replace existing Westside WWTP Sludge Centrifuges.

Project Justification/Priority

(4) = Replace/preserve/rehabilitate systems.--Scheduled replacement of our Westside wastewater sludge centrifuges for solids thickening, at the end of their useful life. Replacement is needed/scheduled at regular seven year intervals.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

VICINITY MAP 19th 177b 18 6 7 6 119ah 25 12 12ah 13ah 13ah 15 12ah 15

FUNDING & SCHEDULE

Budget / Proj. #:

TBD

Budget / Proj. Task #:

Total Project Cost:

\$3,715,000.00

*Start of Const. (Year):

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Westside Secondary Clarifier Tank Coating 1 & 2



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Treatment

Project Status: Future

PROJECT DESCRIPTION

Project Description

Repair/replace existing coatings for Westside WWTP clarifiers #1 and #2

Project Justification/Priority

(4) = Replace/preserve/rehabilitate systems.--Based on condition assessments - repair and replace existing worn and peeling coatings for our Clarifiers #1 and #2 to extend service life.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

FUNDING & SCHEDULE

Budget / Proj. #:

TBD

Budget / Proj. Task #:

Total Project Cost:

\$300,000.00

*Start of Const. (Year):

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Lagoon Aeration Upgrade



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Treatment

Project Status: Future

PROJECT DESCRIPTION

Project Description

Replace aging mechanical equipment with more energy efficient systems.

Project Justification/Priority

(5) = Lower operating costs. --The lagoon provides valuable treatment capacity to our system and must be maintained in reliable condition. The diffusers deteriorate with age and will be replaced at the end of their reasonable service life. This project will replace aging equipment with more energy efficient systems that also allow for treatment capacity expansion. Project now includes the \$300K scope from SS-83, for planning and design to check for needed process and capacity upgrades.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083712

Budget / Proj. Task #:

Total Project Cost: \$7,460,000.00

*Start of Const. (Year): 2021

*All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.

**Transportation projects (TRANS-XXX) can be found in the 6 Year Transportation Improvement Plan (TIP) document.



PROJECT: Westside Secondary Clarifier Center Well Upgrade 3, 4, 5



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Treatment Project Type:

Active **Project Status:**

PROJECT DESCRIPTION

Project Description

Replace and rehabilitate our Westside secondary claifier wet wells.

Project Justification/Priority

(4) - Replace/Preserve/Rehabilitate systems --Replace and rehab the wet wells in the Westside Secondary Clarifiers, to extend their service life and maintain process reliablity

LEGEND Project Area Water Project Areas Battle Ground Transportation Project Areas **SCIP Project Areas** Camas Sanitary Sewer Project Areas Vancouver City Limits Washouaal Surface Water Project Areas Clark County



FUNDING & SCHEDULE

Budget / Proj. #: PRJ083604

Budget / Proj. Task #:

Total Project Cost: \$200,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: W. 16th St. Force Main Reline



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Collection **Project Type:**

Future Project Status:

PROJECT DESCRIPTION

Project Description

Rehabilitate W. 16 St. pressure main to extend useful life.

Project Justification/Priority

(4) = Replace/preserve/rehabilitate systems -- Rehab existing W. 16th St Force Main to restore asset structural integrity and extend asset service life with trenchless repair technology

LEGEND Water Project Areas Battle Ground Transportation Project Areas **SCIP Project Areas** Camas Sanitary Sewer Project Areas Vancouver City Limits Washouaal

VICINITY MAP

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083581

Budget / Proj. Task #:

Total Project Cost: \$150,000.00

*Start of Const. (Year): 2023

Clark County

Surface Water Project Areas

Project Area

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: IR - Interceptor Rehabilitation Program



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type:

Project Status: Active

PROJECT DESCRIPTION

Project Description

Rehabilitate our largest pipelines based on the 2016 Sewer Interceptor Condition Assessment study results and recommendations.

Project Justification/Priority

(4) = Replace/preserve/rehabilitate - to complete prioritized list of needed rehabilitation projects as identified in the 2016 Sewer Interceptor Condition Assessment study. This project designs and contracts for needed interceptor repairs, according to prioritzed project lists based on actual condition information and estimated asset risk of loss for unplanned failure.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

VICINITY MAP 19th 177th 18 6 9 6 119th 20 1 19th 139th 130th 139th 139th 139th 139th 139th 139th 139th 139th 139th 139t

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083584

Budget / Proj. Task #:

Total Project Cost: \$11,000,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Manhole/Wye Rehabilitation



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Collection **Project Type:**

Active **Project Status:**

PROJECT DESCRIPTION

Project Description

Yearly program (\$100,000/yr) to rehabilitate system manholes and pipeline wyes.

Project Justification/Priority

4 - Repair/preserve/rehabilitate ---For repair of documented Inflow and Infiltration sources and reduce/eliminate Inflow & Infiltration into the sewer collection system

LEGEND Project Area Water Project Areas Battle Ground Transportation Project Areas **SCIP Project Areas** Camas Sanitary Sewer Project Areas Vancouver City Limits Washouaal Surface Water Project Areas Clark County

VICINITY MAP

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083558

Budget / Proj. Task #:

Total Project Cost: \$500,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: 63rd St Pump Station rebuild/relocate



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Collection **Project Type:**

Active **Project Status:**

PROJECT DESCRIPTION

Project Description

Replaces and relocates existing pump station at end of its service life.

Project Justification/Priority

2 - To relocate/upgrade existing pump station & replace obsolete equipment, and improve reliability, operability and maintainability. Scope will include completely decommissioning the existing lift station to replace it with new, maintainable and reliable equipment and telemetry, meeting current standards.

LEGEND Water Project Areas Battle Ground Project Area Transportation Project Areas **SCIP Project Areas** Camas Sanitary Sewer Project Areas Vancouver City Limits Washouaal Surface Water Project Areas Clark County

VICINITY MAP

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083592

Budget / Proj. Task #:

Total Project Cost: \$1,400,000.00

*Start of Const. (Year):

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Southside Interceptor Rehab - Phases 1 - 5



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Collection

Project Status: Active

PROJECT DESCRIPTION

Project Description

Southside Interceptor Pipeline rehabilitation at Westside WWTP, to be completed in five phases ranging between 2,100 lf. and 2,700 lf. apiece.

Project Justification/Priority

(4) -Replace/preserve/rehabilitate. Ranked as most critically needed repair by Interceptor Condition Assessment Report. To provide consulting design and construction services for re-lining of 42" diameter concrete Southside Interceptor, from Westside Water Reclamation Facility headworks and upstream. Repairs propose using trenchless technology. Phase 1 (Completed in 2021 for \$2.2M) is for 2,100 feet; Phase 2 in 2021 for \$1.5M; Phase 3 in 2022 for \$1.6M; Phase 4 in 2022 for \$2.1M; Phase 5 in 2023 for \$2.7 M. All phases total 15,961 ft. (3 miles).

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083710

Budget / Proj. Task #:

Total Project Cost: \$10,400,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Wastewater Collection SCADA



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Collection

Project Status: Active

PROJECT DESCRIPTION

Project Description

Replace aging lift station SCADA equipment.

Project Justification/Priority

(4) -Replace/preserve/rehabilitate. Upgrade and replace existing (obsolete) Lift Station SCADA system throughout our service area, some of it over 20 years old. Recurring/ongoing Equipment replacement is needed to update our SCADA system electronics and hardware, maintain system reliability, and extend asset service life.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083711

Budget / Proj. Task #:

Total Project Cost: \$1,000,000.00

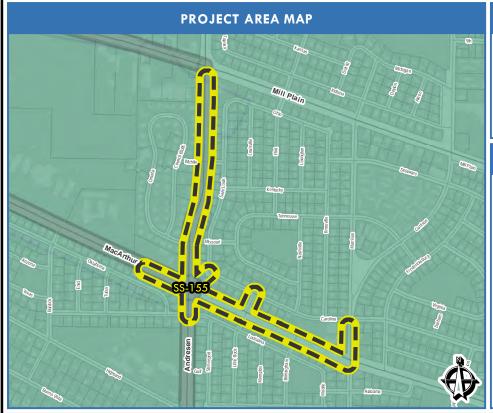
*Start of Const. (Year): 2018

*All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.

**Transportation projects (TRANS-XXX) can be found in the 6 Year Transportation Improvement Plan (TIP) document.



PROJECT: G2-1 Trunk Interceptor Rehabilitation



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Collection

Project Status: Active

PROJECT DESCRIPTION

Project Description

Rehabilitate G2-1 Trunk Interceptor structural defects due to ongoing hydrogen sulfide corrosion, and tree root intrusion. Repair approximately 270 lineal feet of 18" concrete sewer main showing signs of compromised structural integrity.

Project Justification/Priority

(4) - replace/preserve/rehabilitate. This area is just downstream of a force main discharge, from MH 903 to MH 1413. This project also provides 10 lf point repair between MH 2017 to MH 2013. Rehabilitation will be done using trenchless methods of repair.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

VICINITY MAP 1390 1390 1190 1770 18 5 7 6 1900 1390 1190 1770 18 5 7 6 1900 1390 1190 1770 18 5 7 6 1900 1390 1190 1770 18 5 7 6 1900 18

FUNDING & SCHEDULE

Budget / Proj. #: PRJ0100260

Budget / Proj. Task #:

Total Project Cost: \$1,300,000.00

*Start of Const. (Year): 2020

*All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Marine Park Solids Conveyance Feasiblity Study



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Treatment

Project Status: Active

PROJECT DESCRIPTION

Project Description

2020 Engineering Study for new Solids Pressure Main - 8,100 If pipeline from Marine Park to Westside WWTP.

Project Justification/Priority

(3) = New systems - Project will expand our pumping capacity for transfer of wastewater solids, betweek Marine Park WRF and the sludge incineration facility at Westside WRF. \$130K planned for 2020 engineering study and planning work, to provide project planning, alternatives analysis, and project design. Project would install 8,100 feet of 6 inch and 8 inch, and install an additional 6,811 feet of 6 inch and 8 inch inside an existing dry line. This is needed to provide additional processing capacity at Westside WRF. This provides a dedicated pressure sewer line to pump activated sludge from Marine Park WRF to Westside WRF, allowing us to pump Marine Park WRF primary solids and waste activated sludge directly to Westside's solids handling tanks (and bypass the headworks). Construction currently unfunded.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100427

Budget / Proj. Task #:

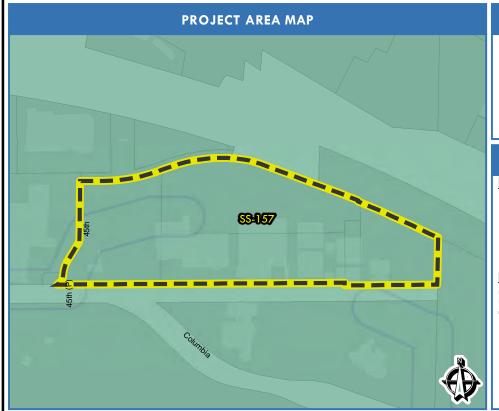
Total Project Cost: \$400,000.00

*Start of Const. (Year): 2021

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: MP UV Upgrade



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Treatment **Project Type:**

Active **Project Status:**

PROJECT DESCRIPTION

Project Description

Replace and upgrade 1995 Marine Park Ultraviolet Disinfection system to extend servie life.

Project Justification/Priority

(4) - replace/preserve/rehabilitate-- Engineering services and construction budget to replace and upgrade Marine Park Ultraviolet Disinfection system, to extend asset service life. This replaces 20 year old systems which are obsolete and unmaintainable. This also improves energy effeciency for this wastewater disinfection system.

LEGEND Project Area Water Project Areas Battle Ground Transportation Project Areas **SCIP Project Areas** Camas Sanitary Sewer Project Areas Vancouver City Limits Washouaal Surface Water Project Areas Clark County

VICINITY MAP

FUNDING & SCHEDULE

Budget / Proj. #:

TBD

Budget / Proj. Task #:

Total Project Cost:

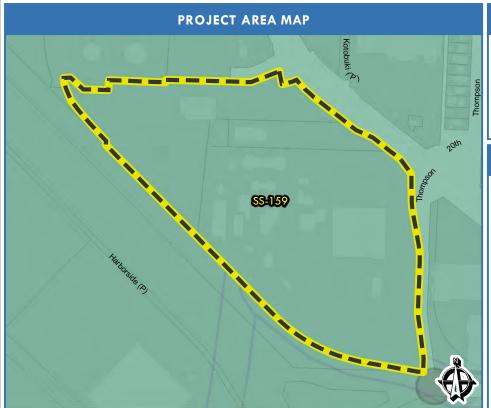
\$1,500,000.00

*Start of Const. (Year):

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: WS Gravity Belt Thickener/Polymer Refurbish



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Treatment

Project Status: Future

PROJECT DESCRIPTION

Project Description

Replace existing 40 yr. old gravity belt thickener equipment.

Project Justification/Priority

(4) - replace/preserve/rehabilitate. This project completely replaces the belt filter press, and related ancillary equipment for a fully functioning sludge dewatering system. Project is needed to extend service life, & improve employee safety and process control.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

VICINITY MAP 19th 177th 18 6 9 15 119th 19th 139th 13

FUNDING & SCHEDULE

Budget / Proj. #:

TBD

Budget / Proj. Task #:

Total Project Cost:

\$400,000.00

*Start of Const. (Year):

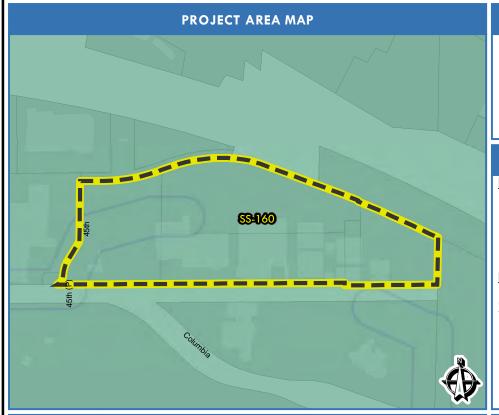
2023

*All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.

**Transportation projects (TRANS-XXX) can be found in the 6 Year Transportation Improvement Plan (TIP) document.



PROJECT: MP Bar Screens Upgrade



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Treatment

Project Status: Future

PROJECT DESCRIPTION

Project Description

Replace all bar screens at Marine Park WWTP Headworks.

Project Justification/Priority

(4) - replace/preserve/rehabilitate -MP barscreens, originially installed in 1995, have exceeded their useful life. The rakes and screens have become inefficient and unreliable and require frequent maintenance. This project includes \$100K in 2023 for engineering design, and \$500K in 2024 for project construction.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

VICINITY MAP 1980 13980

FUNDING & SCHEDULE

Budget / Proj. #:

TBD

Budget / Proj. Task #:

Total Project Cost:

\$3,070,000.00

*Start of Const. (Year):

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Westside Electrical Upgrade Design and Electrical Upgrades



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Treatment

Project Status: Active

PROJECT DESCRIPTION

Project Description

Replace and rehabilitate electriical power service equipment at Westside WWTP.

Project Justification/Priority

(4) - replace/preserve/rehabilitate. Westside Power supply and backup power equipment are critical assets. This equipment is now over 40 years old and unreliable under emergency power loads. Replace and rehabilitate electrical power equipment, switchgear, I&C and power transfer equipment at the Westside WWTP site. To upgrade critical assets for improved plant operation and reliability.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083714

Budget / Proj. Task #:

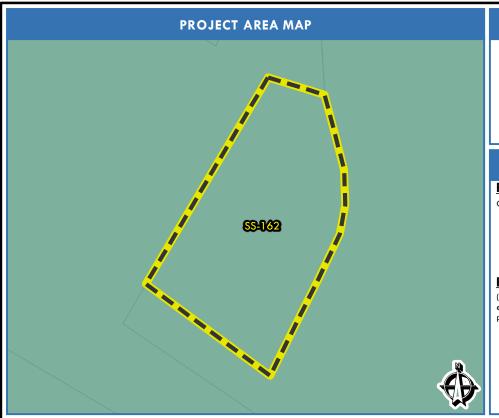
Total Project Cost: \$10,000,000.00

*Start of Const. (Year): 2018

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Port Pump Station Rehabilitation



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Collection

Project Status: Active

PROJECT DESCRIPTION

Project Description

Convert existing Port Pumpstation to a submersible pump station.

Project Justification/Priority

(3) = New Systems; to upgrade/upsize our existing system and improve overall pump station reliablity- Conversion of existing Port PS to a submersible pump station (new city standard equip[ment) with addition of new backup generator to provide emergency power supply.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083744

Budget / Proj. Task #:

Total Project Cost: \$1,300,000.00

*Start of Const. (Year): 2020

*All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: E Interceptor Rehab Phases 1 to 7



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Collection

Project Status: Active

PROJECT DESCRIPTION

Project Description

Rehabilitate E interceptor in seven phases between 2022 and 2030 for a total CIP cost \$23.8M (2019 estimate).

Project Justification/Priority

(4) - replace/preserve/rehabilitate.--To provide consulting design and construction services for re-lining of 42" diameter concrete "E" Interceptor, from Marine Park Water Reclamation Facility and upstream. Proposed repairs to use trenchless technology. Phase 1 is estimated at \$3.8M, & rehabilitates 2,613 ft from MH 12759 to MH1424, scheduled for 2022. First of seven phase project: Phase 1 - \$3.2M, 2022; Phase 2 \$0.5 M, 2023; Phase 3 - \$.6 M, 2025; Phase 4 - \$2.4M, 2026; Phase 5 - \$2.0 M, 2027; Phase 6 - \$2.4M, 2028; Phase 7 - \$10M in 2029-2030. All phases total 17,998 ft. (3.4 miles). Wastewater CIP project priority #6 of 15 projects

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County



FUNDING & SCHEDULE

Budget / Proj. #:

TBD

Budget / Proj. Task #:

Total Project Cost:

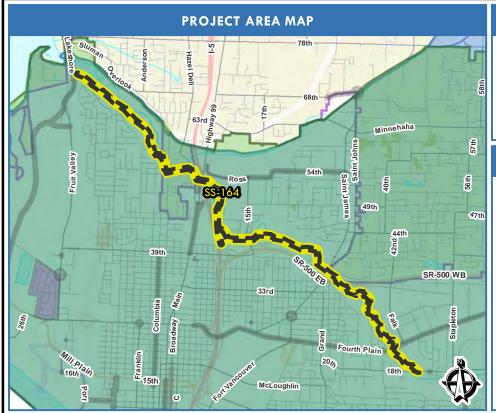
: \$11,000,000.00

*Start of Const. (Year):

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Burnt Bridge Creek Interceptor Rehab Phases 1 to 4



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Collection

Project Status: Active

PROJECT DESCRIPTION

Project Description

Rehabilitate Burnt Bridge Creek interceptor in four phases between 2023 and 2024, totalling \$3.6M (2019 estimate)

Project Justification/Priority

(4) - replace/preserve/rehabilitate.--To provide consulting design and construction services for re-lining of 36"-42" diameter concrete Burnt Bridge Creek Interceptor. First of four phase project: Phase 1 - \$1.4M; Phase 2 \$830,000; Phase 3 - \$290,000; Phase 4- \$630,000. All phases planned for 2023-2024 construction, totalling 26,773 LF (5.07 Miles).

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County



FUNDING & SCHEDULE

Budget / Proj. #:

Budget / Proj. Task #:

Total Project Cost: \$3,600,000.00

*Start of Const. (Year):

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Broadway - 13th to McLoughlin



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Collection **Project Type:**

Active **Project Status:**

PROJECT DESCRIPTION

Project Description

Replace 1,405 linear feet of deteriorating Sewer Main line in coordination with a Pavement Management Program pavement restoration project.

Project Justification/Priority

(4) - replace/preserve/rehabilitate.--Project will rehab aging sewer infrastruture in lower Broadway , to extend service life, during upcoming 2022 street preservation and repaving work.

Water Project Areas Battle Ground **SCIP Project Areas** Camas Sanitary Sewer Project Areas Vancouver City Limits Washouaal

VICINITY MAP

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100342

Budget / Proj. Task #:

Total Project Cost: \$420,000.00

2021 *Start of Const. (Year):

*All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.

Clark County

LEGEND

Project Area

Transportation Project Areas

Surface Water Project Areas



PROJECT: Westside Solids Planning



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Treatment **Project Type:**

Future Project Status:

PROJECT DESCRIPTION

Project Description

Replace the 1998 Fluidized Bed Furnace at Westside WWTP, which has exceeded it's service life of 20 years.

Project Justification/Priority

(4) - replace/preserve/rehabilitate.... The Fluidized Bed Furnace at Westside - originally installed in 1999 - has exceeded it's service life of 20 years.

LEGEND Water Project Areas Battle Ground Transportation Project Areas **SCIP Project Areas** Camas Sanitary Sewer Project Areas Vancouver City Limits Washouaal

VICINITY MAP

FUNDING & SCHEDULE

Budget / Proj. #:

Budget / Proj. Task #:

Total Project Cost: \$90,000,000.00

*Start of Const. (Year): 2027

*All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.

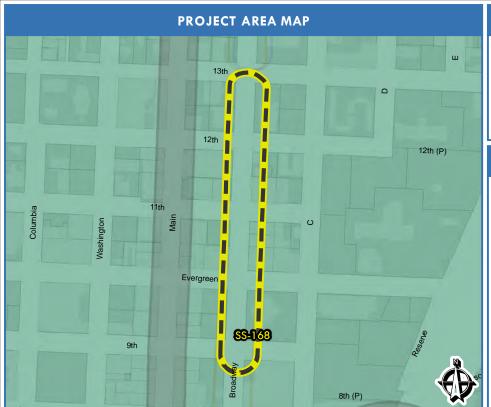
Clark County

Surface Water Project Areas

Project Area



PROJECT: Broadway PH 2



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Collection

Project Status: Active

PROJECT DESCRIPTION

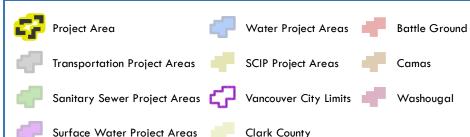
Project Description

Replace 1,287 linear feet of deteriorating Sewer Main line in coordination with a Pavement Management Program pavement restoration project.

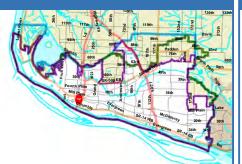
Project Justification/Priority

Inspection of sewer mains have show degradation. Coordination with Pavement Restoration reduces ovrall costs of the replacement of the sewer mains.

LEGEND



VICINITY MAP



FUNDING & SCHEDULE

Budget / Proj. #: PRJ100396

Budget / Proj. Task #:

Total Project Cost: \$300,000.00

*Start of Const. (Year): 2021

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: 4th & Washington Sewer Replacement



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Collection

Project Status: Active

PROJECT DESCRIPTION

Project Description

Replace existing main at intersection of 4th and Washington.

Project Justification/Priority

(4) - replace/preserve/rehabilitate.--Project will rehab aging sewer infrastruture in lower Washington, to extend service life.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100613

Budget / Proj. Task #:

Total Project Cost: \$200,000.00

*Start of Const. (Year): 2021

*All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water



PROJECT: Earheart Pump Station Removal and Gravity



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Collection

Project Status: Active

PROJECT DESCRIPTION

Project Description

Decommission Earhart Pumpstation and replace existing discharge line with gravity system.

Project Justification/Priority

(3) = New Systems; to upgrade/upsize our existing system and reduce ongoing maintenance.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

VICINITY MAP 19th 17th 17th 18th 5 to 6 119th 5 to 6 119

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100639

Budget / Proj. Task #:

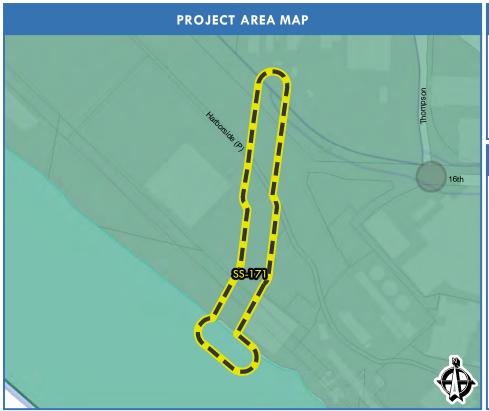
Total Project Cost: \$450,000.00

*Start of Const. (Year):

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Westside Outfall Improvements



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Treatment

Project Status:

PROJECT DESCRIPTION

Project Description

System upgrade to improve discharge water quality & effluent mixing

Project Justification/Priority

(3) = New Systems; to upgrade/upsize our existing system and reduce ongoing maintenance

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

VICINITY MAP 19th 177n 13 5 7 6 119th 27 1 19th 130th 130th

FUNDING & SCHEDULE

Budget / Proj. #: PRJ 100646

Budget / Proj. Task #:

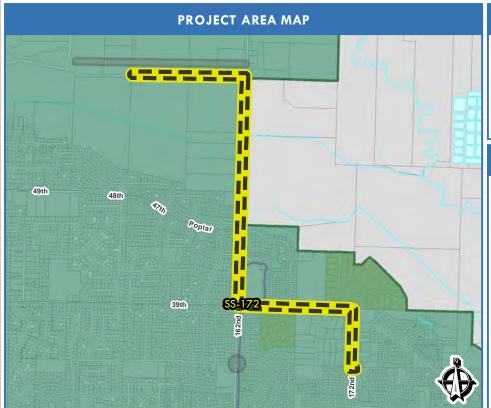
Total Project Cost: \$605,000.00

*Start of Const. (Year): 2

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Maplecrest PS Reconstruction and Force Main Extension



PROJECT SUMMARY

Program/Discipline Type:

Project Type: Collection

Project Status: Active

PROJECT DESCRIPTION

Project Description

Reconstruct Maplecrest PS to increase system operability, and extend force main for system growth.

Project Justification/Priority

(3) = New Systems; to upgrade/upsize our existing system and reduce ongoing maintenance.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

VICINITY MAP 19th 17th 12 6 7 6 11sh 2 6 7 6 11sh 2 7 6 11sh 2 6 7 6 11sh 2 7 6 11sh 2

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100657

Budget / Proj. Task #:

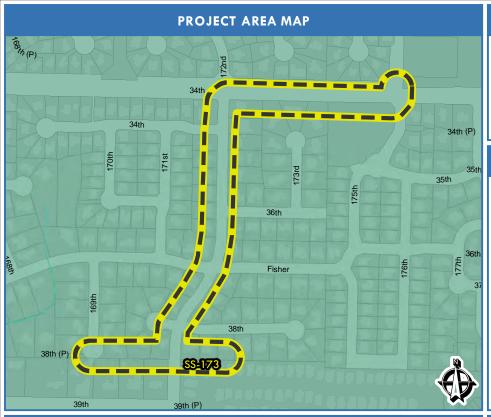
Total Project Cost: \$1,500,000.00

*Start of Const. (Year): 2021

*All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Westridge PS and Fisher's Landing PS Discharge Upgrade.



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Collection

Project Status: Active

PROJECT DESCRIPTION

Project Description

Reconstruction of existing pumpstation to improve capacity.

Project Justification/Priority

(3) = New Systems; to upgrade/upsize our existing system, improve capacity and reduce ongoing maintenance

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100660

Budget / Proj. Task #:

Total Project Cost: \$1,300,000.00

*Start of Const. (Year): 2021

*All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.

^{**}Transportation projects (TRANS-XXX) can be found in the 6 Year Transportation Improvement Plan (TIP) document.



PROJECT: Westside Grit Classifier Replacement



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Treatment

Project Status: Active

PROJECT DESCRIPTION

Project Description

Replace the existing roof protecting our grit classifier equipment, now at the end of its useful service life.

Project Justification/Priority

(4) - replace/preserve/rehabilitate the existing roof -The existing roof is past it's service life and needs to be replaced to protect our grit classifier equipment.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

FUNDING & SCHEDULE

Budget / Proj. #:

TBD

Budget / Proj. Task #:

Total Project Cost:

\$1,100,000.00

*Start of Const. (Year):

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: WS Sodium Hypochlorite Delivery



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Treatment

Project Status: Active

PROJECT DESCRIPTION

Project Description

Improve Sodium hypochlorite storage and handling tanks and piping to reduce operator safety hazards and improve operability.

Project Justification/Priority

(3) = New Systems; to upgrade/upsize our existing system and reduce ongoing maintenance.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

VICINITY MAP 19th 177h 13 6 7 6 119th 2 1 19th 139th 130th 139th 139th 139th 139th 139th 139th 139th 139th 139th 139th

FUNDING & SCHEDULE

Budget / Proj. #:

TBD

Budget / Proj. Task #:

Total Project Cost:

\$500,000.00

*Start of Const. (Year):

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Marine Park WRF Process Piping R&R



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Treatment

Project Status: Active

PROJECT DESCRIPTION

Project Description

Treatment Plant process piping rehabilitation and replacement.

Project Justification/Priority

(4) - replace/preserve/rehabilitate the existing piping as it reaches the end of its useful service life.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County



FUNDING & SCHEDULE

Budget / Proj. #:

TBD

Budget / Proj. Task #:

Total Project Cost:

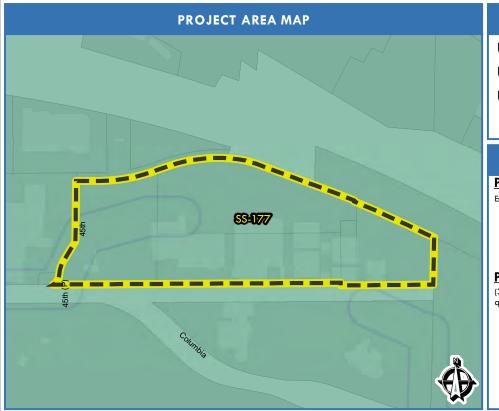
st: \$1,000,000.00

*Start of Const. (Year):

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Marine Park WRF Phase 3A - Secondary Process Enhancements



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Treatment

Project Status: Future

PROJECT DESCRIPTION

Project Description

Engineering studies, scoping and plant improvements to meet system growth and permit requirements

Project Justification/Priority

(3) = New Systems; to upgrade/upsize our existing system; and 1) Compliance with existing regulations - to maintain water quality and odor controlcompliance with permit limits, while serving existing and continuing system growth.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County



FUNDING & SCHEDULE

Budget / Proj. #:

TBD

Budget / Proj. Task #:

Total Project Cost:

\$6,500,000.00

*Start of Const. (Year):

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Marine Park Force Main



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Treatment

Project Status: Future

PROJECT DESCRIPTION

Project Description

This is a new forcemain needed to provide improved solids handling between Marine Park and Westside WWTP

Project Justification/Priority

(3) = New Systems; to upgrade/upsize our existing system; and 1) Compliance with existing regulations - to maintain water quality and odor controlcompliance with permit limits, while serving existing and continuing system growth.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

VICINITY MAP 19th 17th 18th 2 c 119th 2 c 119

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100427

Budget / Proj. Task #:

Total Project Cost: \$20,200,000.00

*Start of Const. (Year): 2024

*All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.

**Transportation projects (TRANS-XXX) can be found in the 6 Year Transportation Improvement Plan (TIP) document.



PROJECT: Westside Solids Digesters



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Treatment

Project Status: Future

PROJECT DESCRIPTION

Project Description

Construct New Solids Handling facility to replace current fluidized bed furnace technology. Design beginning in 2027.

Project Justification/Priority

Solids handling to manage growth and improve operations sustainabilty and energy efficiency.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

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VICINITY MAP

FUNDING & SCHEDULE

Budget / Proj. #:

TBD

Budget / Proj. Task #:

Total Project Cost:

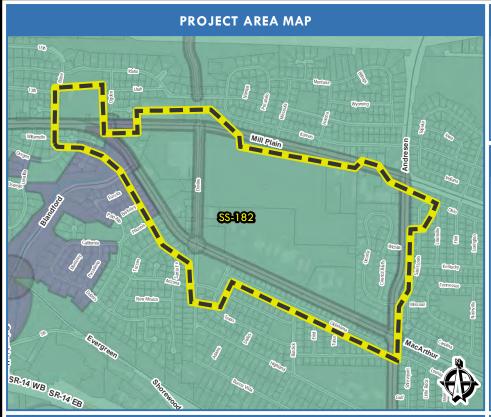
\$90,000,000.00

*Start of Const. (Year):

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Heights District Collection System Improvements



PROJECT SUMMARY

Program/Discipline Type: Sanitary Sewer

Project Type: Collection

Project Status: Future

PROJECT DESCRIPTION

Project Description

Sewer collections system realignment as needed for Heights District redevelopment

Project Justification/Priority

(3) = New Systems; to upgrade/upsize our existing system and support econominc redevelopment in the Heights District.

Project Area Water Project Areas Battle Ground Transportation Project Areas SCIP Project Areas Camas Sanitary Sewer Project Areas Vancouver City Limits Washougal Surface Water Project Areas Clark County

FUNDING & SCHEDULE

Budget / Proj. #:

Budget / Proj. Task #:

Total Project Cost: \$2,000,000.00

*Start of Const. (Year): 2023

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.

/ancouver			LIMPROVEMEN ECTIONS AND V			Note: All costs a	re in 2021 dollars																		+
WASHINGTON			Mar 17, 2022			Mar. 17, 2022																			
	Project																								
ect Name ection	Number	CIP#	2021**	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	
dby Power	PRJ083471	SS-A1-3		200,000	100,000	100,000	100,000	100,000	100,000	100,000															
Street, 5th to 15th*	PRJ083583	SS-5	-	200,000	700,000	100,000	100,000	100,000	100,000	100,000															
hts District	TBD	SS-182	-		100,000	1,900,000																			
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nole/Wye Rehabilitation	PRJ083588	SS-A1-138	-	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	
in A-20-1 & Force Main Relocation (59th Street)	PRJ083589	SS-1	-				500,000																		
tal Preservation - Collection System St Pump Station re-build/relocate	PRJ083591 PRJ083592	SS-A1-6 SS-140	1,284,210	2,000,000 500.000	2,000,000	3,000,000	3,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	1,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	7
Ist St SE 164th Ave. to SE 192nd Ave Design*	PRJ083594	SS-15	30,000	60,000																					
137th Avenue - NE 49th St. to NE Fourth Plain Blvd.*	PRJ100251	SS-20	00.000	000 000	430,000																				
tion 30 Arterial Expansion*	PRJ100396 PRJ100475	SS-168 SS-23	30,982	300,000																					
stewater Collection SCADA	PRJ083711	SS-153		250,000	150,000	150,000	150,000	150,000	150,000	150,000															
- Trunk Interceptor Rehab t PS Rehabilitation	PRJ100260 PRJ083744	SS-155 SS-162	796,995 936,472	200,000 1,337,352																					
thside Interceptor Rehab Ph 2	PRJ100261	SS-152	1,408,632	1,482,798																					
thside Interceptor Rehab Ph 3 thside Interceptor Rehab Ph 4	PRJ100262 PRJ100476	SS-152 SS-152	50,000 100.000	2,000,000	1.000.000																				
thside Interceptor Rehab Ph 5	PRJ100476 PRJ100477	SS-152	100,000	2,350,000	1,000,000																				
Interceptor Rehab PH 1	PRJ100478	SS-163	100,000	1,700,000	2,000,000																				
Interceptor Rehab PH 2 nt Bridge Creek Interceptor - Ph 1	PRJ100479 TBD	SS-163 SS-164	-		200,000	1,200,000							+		+	-									
rnt Bridge Creek Interceptor - Ph 2	TBD	SS-164	-		150,000	680,000																			
rnt Bridge Creek Interceptor - Ph 3 rnt Bridge Creek Interceptor - Ph 4	TBD TBD	SS-164 SS-164			50,000 50,000	240,000 575,000										-		-							
oadway - 13th to McLoughlin	PRJ100342	SS-166	320,995		50,000																				
Interceptor Rehab PH 3	TBD	SS-163				200,000	2,200,000	4.000.000																	
Interceptor Rehab PH 4 Interceptor Rehab PH 5	TBD TBD	SS-163 SS-163	-				∠∪∪,∪∪∪	4,000,000	2,000,000				- 										 	-	
- Interceptor Rehab PH 6	TBD	SS-163						,	,,	2,400,000															
- Interceptor Rehab PH 7	TBD PRJ100613	SS-163 SS-169	50.000	210.000			·				2,500,000	2,500,000													
rhart PS Removal and Gravity Extension	PRJ100639	SS-170	50,000	434,000																					
aplecrest PS Recognitruction and GMA FM Extension	PRJ100657	SS-172	100,000	1,400,000	1 000 000		-																		
estridge PS and Fishers PS Discharge Upgrade Il Plain Blvd SE 102nd Ave to Chkalov	PRJ100660 PRJ083597	SS-173 	100,000 60,000	100,000	1,000,000								- 										 	-	
Il Plain One Pump Station Upgrades	PRJ100355		79,568																						
yeast Sewer Improvements ort PS Force Main Bypass	PRJ100376 PRJ100589		2,614 100,000													-		-							
3-1 Rehab	TBD	N/A	-										1,500,000												
1-2 Rehab	TBD	N/A	-										800,000												
Sub-Total Collection=			5,923,199	16,089,150	10,030,000	10,145,000	8,250,000	10,550,000	8,350,000	8,750,000	8,600,000	8,600,000	8,400,000 6	,100,000 6,	100,000 6	6,100,000	6,100,000	6,100,000	6,100,000	6,100,000	6,100,000	6,100,000	6,100,000	6,100,000	164
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larine Park WRF:			i																						
arine Park Solids Conveyance Feasiblity Study	PRJ100427	SS-156	27,663	312,338																					
P Bar Screens Upgrade arine Park Phase 3A - Secondary Process Enhancements	TBD	SS-160	-		390,000	0.050.000	2,600,000																		
arine Park Phase 3A - Secondary Process Enhancements arine Park - Refurbish Odor Control System	TBD TBD	SS-177 SS-85	-			3,250,000	3,250,000 1,000,000																		
P UV Upgrade	TBD	SS-157	-		1,500,000		1,000,000																		
arine Park Force Main	TBD	SS-178	-			2,000,000		9,100,000	9,100,000																2
arine Park Phase 3B - Complete full site capacity improvements arine Park WRF Process Piping R&R	TBD TBD	SS-181 SS-176	-		200.000	200,000	200.000	200.000	200,000	200.000	200.000	200.000	200.000	200.000	200.000	200.000	200.000	200.000	24,700,000 200.000	24,700,000	200.000	200,000	200.000	200.000	4
arine Park WWTF Primary Clarifier No. 3	PRJ100594		283,766	6,234	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	
ndresen Pump Station Pump No. 4	PRJ100433		10,461	5,000																					
arine Park Blower	PRJ100263		120,356	005.000	0.000.000	0.000.000	0.000.000	2 000 000	2 000 000	2 200 200	2 200 200	0.000.000					4.000.000	4,000,000	4.000.000		4 000 000			200 000	_
apital Preservation and Compliance (2)-Both MP and WSTP Vestside WRF:	PRJ083621	SS-32		905,000	2,000,000	2,000,000	2,000,000	3,000,000	3,000,000	3,000,000			3 000 000						4,000,000	l	4,000,000		<u> </u>	300,000	5
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	PRJ100614		24 603	120 000							3,000,000	3,000,000	3,000,000	3,000,000	1,000,000	4,000,000	4,000,000	4,000,000							
estside W1 Protection estside WRF Process Piping R&R	PRJ100614 TBD	SS-180	24,603	120,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	3,000,000	3,000,000		300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000		
estside W1 Protection estside WRF Process Piping R&R estside Outfall Improvements	TBD PRJ100646	SS-180 SS-171	-	250,000	300,000	300,000	300,000	300,000	300,000	300,000									300,000	300,000	300,000	300,000	300,000		
estside W1 Protection estside WRF Process Piping R&R estside Outfall Improvements in Industrial Pumpstation Upgrade	TBD	SS-180	-		300,000	300,000	300,000	300,000	300,000	300,000									300,000	300,000	300,000	300,000	300,000		
estside W1 Protection setside WRF Process Piping R&R estside Outfall Improvements sin Industrial Pumpstation Upgrade setside Blower S Schwing Pump Replacements	TBD PRJ100646 PRJ100483 PRJ100264 PRJ100486	SS-180 SS-171 SS-78 SS-147 SS-80	60,416 770	250,000 439,584 399,231 300,000	300,000	300,000	300,000	300,000	300,000	300,000									300,000	300,000	300,000	300,000	300,000		
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3/18/2022





<u>Sewer Connection Incentive Program (SCIP)</u> <u>CIP Changes</u>

This page provides an overview of the changes from the previous 6-year project list (2021-2026) to this year's 6 year project list (2022-2027). The changes are segmented by: projects added; projects removed; and other.

Projects Added	Project Number	Comments
None		
Projects Removed	Project	Comments
	Number	
Gillis St Sewer Extension	SCIP-258	Project completed

Other Changes	Project Number	Comments
West Vancouver (216 homes)	SCIP-W-238	\$2M budget added 2025/2026
East Vancouver - North (261 Parcels)	SCIP-EN-240	Project moved out to 2023 and \$1.4M budget added over 2023-2025
East Vancouver – Central (458 Parcels)	SCIP-EC-242	\$1.2M project budget added 2023-2025
Central Vancouver – North (344 Parcels)	SCIP-CN-239	Project budget reduced from \$2.8M to \$1.0M
East Vancouver - South (154 Parcels)	SCIP-ES-241	Project moved one year out from 2024 to 2025

Note - "Completed" indicates already completed as of the date of this document or anticipated completion prior to January 1, 2022.



6 YEAR CAPITAL IMPROVEMENT PROGRAM FOR SCIP (2022 - 2027)

Note: All costs are in 2021 dollars

Mar. 3, 2022

DDG IFOT NAME	Project	OID#	0004**	0000	0000	0004	0005	0000*	0007	0 V T-1-1
PROJECT NAME	Number	CIP#	2021**	2022	2023	2024	2025	2026*	2027	6 Year Total
Demand Response - SCIP	PRJ083093	SCIP-A1-10	136	250,000	250,000	250,000	250,000	250,000	_	1,250,136
West Vancouver (216 homes)	PRJ083682	SCIP-W-238	130	230,000	230,000	230,000	,	1,000,000		2,000,000
, ,		SCIP-EN-240		1 000 000	900 000	1 400 000	1,000,000	1,000,000	-	
East Vancouver - North (261 Parcels)	PRJ100258			1,000,000	800,000	1,400,000	600,000	4 000 000	-	3,800,000
East Vancouver - Central (458 Parcels)	PRJ100480	SCIP-EC-242		3,000,000	800,000	800,000	800,000	1,600,000	-	7,000,000
Central Vancouver - North (344 Parcels)	PRJ083685	SCIP-CN-239			1,000,000				-	1,000,000
NE 9th St East of NE 112th (8 lots)	PRJ083718	SCIP-234			200,000				-	200,000
East Vancouver South (154 parcels)	N/A	SCIP-ES-241					1,000,000	500,000	-	1,500,000
Central Vancouver South (Parcels)	PRJ083680	SCIP-CS-243	170			1,300,000			-	1,300,170
East Vancouver PH3	PRJ100392	SCIP-254	1,309,487	1,283,116					-	2,592,603
Central Vancouver North PH2	PRJ100393	SCIP-255	188,945						-	188,945
Vista Robles	PRJ100469	SCIP-204	37,375	300,000					-	337,375
NE 58th St and Andresen	PRJ100470	SCIP-155	59,439	676,000					-	735,439
NE 60th St	PRJ100471	SCIP-257	53,421	1,400,000					-	1,453,421
									-	
New-Different in Budget									-	=
East Vancouver Ph 1 SCIP	PRJ083681		2,203						-	2,203
Central Vancouver North Ph1 (SCIP)	PRJ083745		3,086	Project com	pleted in 2020	0			-	3,086
East Vancouver Ph2 (SCIP)	PRJ083746		184,404	-					-	184,404
Grove St Gillis St Sewer Extension - Ops (SCIF	PRJ100597	SCIP-258	59,283						-	59,283
NE 49th St & 22nd Ave Sewr Improvements	PRJ100631		80,000	78,000					-	158,000
TOTAL PLANNED PROJECTS	-		1,977,949	7,987,116	3,050,000	3,750,000	3,650,000	3,350,000	-	23,765,065

^{*2021} Budget amounts include 2020 carry forwards

^{*}SCIP projects are projected to be completed by 2026.

^{**2021} Amounts include revised delivery amount or actual spent in 2021 (as of October), whichever is higher



PROJECT: NE 49th Street at 22nd Avenue



PROJECT SUMMARY

Program/Discipline Type: SCIP

Project Type:

Project Status: Active

PROJECT DESCRIPTION

Project Description

Sewer extension to provide service to three parcels on the south side of NE 49th Street east of 22nd Avenue. These parcels were removed from Central Vancouver North Phase 1 (SCIP-251) in order to coordinate the sewer extension with replacement of the water main in 49th Street.

Project Justification/Priority

(2) = Improve Safety; (3) = New Systems

Prioritization criteria were established at the beginning of the program based on health and safety (viability of existing septic systems), proximity to ground water supply and surface water, density, and homeowner requests. Projects are being completed based on the overall prioritization rating. Higher priority projects were completed by 2010 and the remaining projects are completed based primarily on health and safety, budget and homeowner requests.

Project Area Water Project Areas Clark County Transportation Project Areas ScIP Project Areas Battle Ground Sanitary Sewer Project Areas Project Polys Camas Surface Water Project Areas Vancouver City Limits Washougal

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100631

Budget / Proj. Task #:

Total Project Cost: \$78,000.00

*Start of Const. (Year): 2022

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Demand Response



PROJECT SUMMARY

Program/Discipline Type: SCIP

Project Type: Citywide

Project Status: Future

PROJECT DESCRIPTION

Project Description

Sanitary sewer will be extended as part of the City's ongoing proactive efforts to make reliable public sewer available within our service area prior to failure of the existing septic systems.

Sewer extensions of 300 feet or less will be constructed as needed to connect parcels with failing septic systems or failing substandard connecitons.

Project Justification/Priority

(2) = Improve Safety; (3) = New Systems

Prioritization criteria were established at the beginning of the program based on health and safety (viability of existing septic systems), proximity to ground water supply and surface water, density, and homeowner requests. Projects are being completed based on the overall prioritization rating. Higher priority projects were completed by 2010 and the remaining projects are completed based primarily on health and safety, budget and homeowner requests.

Project Area Water Project Areas Clark County Transportation Project Areas SCIP Project Areas Battle Ground Sanitary Sewer Project Areas Project Polys Camas Surface Water Project Areas Vancouver City Limits Washougal

VICINITY MAP 19th 17th 18th 2 c 119th 2 c 119

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083093

Budget / Proj. Task #:

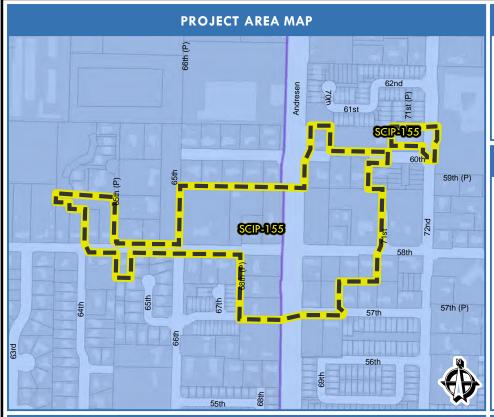
Total Project Cost: \$1,250,000.00

*Start of Const. (Year): 2022-2027

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: NE 58th - Andresen



PROJECT SUMMARY

Program/Discipline Type: SCIP

Project Type:

Project Status: Active

PROJECT DESCRIPTION

Project Description

Sanitary sewer will be extended as part of the City's ongoing proactive efforts to make reliable public sewer available within our service area prior to failure of the existing septic systems.

Project also includes NE 65th Ct. (SCIP-156)

Project Justification/Priority

(2) = Improve Safety; (3) = New Systems

Prioritization criteria were established at the beginning of the program based on health and safety (viability of existing septic systems), proximity to ground water supply and surface water, density, and homeowner requests. Projects are being completed based on the overall prioritization rating. Higher priority projects were completed by 2010 and the remaining projects are completed based primarily on health and safety, budget and homeowner requests.

Project Area Water Project Areas Clark County Transportation Project Areas SCIP Project Areas Battle Ground Sanitary Sewer Project Areas Project Polys Camas Surface Water Project Areas Vancouver City Limits Washougal

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100470

Budget / Proj. Task #:

Total Project Cost: \$676,000.00

*Start of Const. (Year): 2022

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Vista Robles



PROJECT SUMMARY

Program/Discipline Type: SCIP

Project Type:

Project Status: Active

PROJECT DESCRIPTION

Project Description

Sanitary sewer will be extended as part of the City's ongoing proactive efforts to make reliable public sewer available within our service area prior to failure of the existing septic systems.

Project Justification/Priority

(2) = Improve Safety; (3) = New Systems

Prioritization criteria were established at the beginning of the program based on health and safety (viability of existing septic systems), proximity to ground water supply and surface water, density, and homeowner requests. Projects are being completed based on the overall prioritization rating. Higher priority projects were completed by 2010 and the remaining projects are completed based primarily on health and safety, budget and homeowner requests.

Project Area Water Project Areas Clark County Transportation Project Areas ScIP Project Areas Battle Ground Sanitary Sewer Project Areas Project Polys Camas Surface Water Project Areas Vancouver City Limits Washougal

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100469

Budget / Proj. Task #:

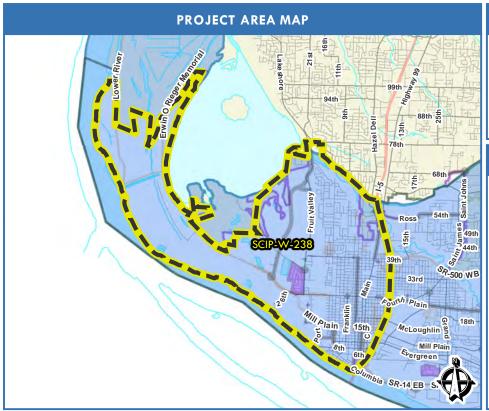
Total Project Cost: \$350,000.00

*Start of Const. (Year): 2021-2022

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: West Vancouver



PROJECT SUMMARY

Program/Discipline Type: SCIP

Project Type: West Vancouver

Project Status: Future

PROJECT DESCRIPTION

Project Description

Sanitary sewer will be extended within several small un-sewered pockets west of Interstate 5 as part of the City's ongoing proactive efforts to make reliable public sewer available within our service area prior to failure of the existing septic systems.

Project Justification/Priority

(2) = Improve Safety; (3) = New Systems

Prioritization criteria were established at the beginning of the program based on health and safety (viability of existing septic systems), proximity to ground water supply and surface water, density, and homeowner requests. Projects are being completed based on the overall prioritization rating. Higher priority projects were completed by 2010 and the remaining projects are completed based primarily on health and safety, budget and homeowner requests.

Project Area Water Project Areas Clark County Transportation Project Areas SCIP Project Areas Battle Ground Sanitary Sewer Project Areas Project Polys Camas Surface Water Project Areas Vancouver City Limits Washougal

VICINITY MAP 19th 17th 18th 2 c 119th 2 c 119

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083682

Budget / Proj. Task #:

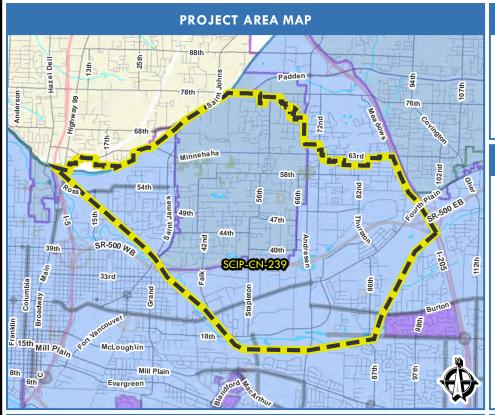
Total Project Cost: \$2,000,000.00

*Start of Const. (Year): 2025-2026

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Central Vancouver - North



PROJECT SUMMARY

Program/Discipline Type: SCIP

Project Type: Central Vancouver - North

Project Status: Future

PROJECT DESCRIPTION

Project Description

Sanitary sewer will be extended to small un-sewered pockets within the central - north sewer service boundary as part of the City's ongoing proactive efforts to make reliable public sewer available within our service area prior to failure of the existing septic systems.

Project Justification/Priority

(2) = Improve Safety; (3) = New Systems

Prioritization criteria were established at the beginning of the program based on health and safety (viability of existing septic systems), proximity to ground water supply and surface water, density, and homeowner requests. Projects are being completed based on the overall prioritization rating. Higher priority projects were completed by 2010 and the remaining projects are completed based primarily on health and safety, budget and homeowner requests.

Project Area Water Project Areas Clark County Transportation Project Areas SCIP Project Areas Battle Ground Sanitary Sewer Project Areas Project Polys Camas Surface Water Project Areas Vancouver City Limits Washougal

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083685

Budget / Proj. Task #:

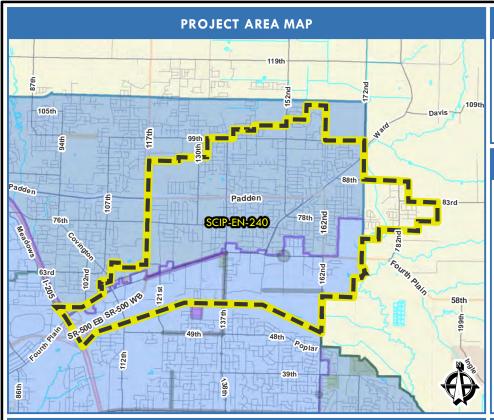
Total Project Cost: \$2,000,000.00

*Start of Const. (Year): 2022-2023

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: East Vancouver - North



PROJECT SUMMARY

Program/Discipline Type: SCIP

Project Type: East Vancouver - North

Project Status: Future

PROJECT DESCRIPTION

Project Description

Sanitary sewer will be extended in several small un-sewered pockets within the north east section of the sewer service boundary as part of the City's ongoing proactive efforts to make reliable public sewer available within our service area prior to failure of the existing septic systems.

Project Justification/Priority

(2) = Improve Safety; (3) = New Systems

Prioritization criteria were established at the beginning of the program based on health and safety (viability of existing septic systems), proximity to ground water supply and surface water, density, and homeowner requests. Projects are being completed based on the overall prioritization rating. Higher priority projects were completed by 2010 and the remaining projects are completed based primarily on health and safety, budget and homeowner requests.

Project Area Water Project Areas Clark County Transportation Project Areas SCIP Project Areas Battle Ground Sanitary Sewer Project Areas Project Polys Camas Surface Water Project Areas Vancouver City Limits Washougal

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100258

Budget / Proj. Task #:

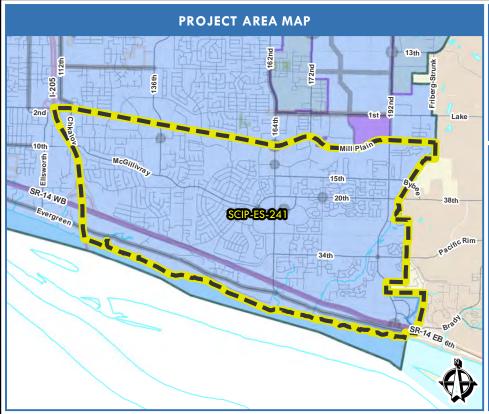
Total Project Cost: \$2,800,000.00

*Start of Const. (Year): 2023-2025

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: East Vancouver - South



PROJECT SUMMARY

Program/Discipline Type: SCIP

Project Type: East Vancouver - South

Project Status: Future

PROJECT DESCRIPTION

Project Description

Sanitary sewer will be extended as part of the City's ongoing proactive efforts to make reliable public sewer available within our service area prior to failure of the existing septic systems.

Project Justification/Priority

(2) = Improve Safety; (3) = New Systems

Prioritization criteria were established at the beginning of the program based on health and safety (viability of existing septic systems), proximity to ground water supply and surface water, density, and homeowner requests. Projects are being completed based on the overall prioritization rating. Higher priority projects were completed by 2010 and the remaining projects are completed based primarily on health and safety, budget and homeowner requests.

Project Area Water Project Areas Clark County Transportation Project Areas SCIP Project Areas Battle Ground Sanitary Sewer Project Areas Project Polys Camas Surface Water Project Areas Vancouver City Limits Washougal

FUNDING & SCHEDULE

Budget / Proj. #:

Budget / Proj. Task #:

Total Project Cost: \$1,500,000.00

*Start of Const. (Year): 2025-2026

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: East Vancouver - Central



PROJECT SUMMARY

Program/Discipline Type: SCIP

Project Type: East Vancouver - Central

Project Status: Future

PROJECT DESCRIPTION

Project Description

Sanitary sewer will be extended in several small pockets within the east central sewer boundary as part of the City's ongoing proactive efforts to make reliable public sewer available within our service area prior to failure of the existing septic systems.

Project Justification/Priority

(2) = Improve Safety; (3) = New Systems

Prioritization criteria were established at the beginning of the program based on health and safety (viability of existing septic systems), proximity to ground water supply and surface water, density, and homeowner requests. Projects are being completed based on the overall prioritization rating. Higher priority projects were completed by 2010 and the remaining projects are completed based primarily on health and safety, budget and homeowner requests.

Project Area Water Project Areas Clark County Transportation Project Areas SCIP Project Areas Battle Ground Sanitary Sewer Project Areas Project Polys Camas Surface Water Project Areas Vancouver City Limits Washougal

VICINITY MAP 19th 17th 18th 2 c 119th 2 c 119

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083684

Budget / Proj. Task #:

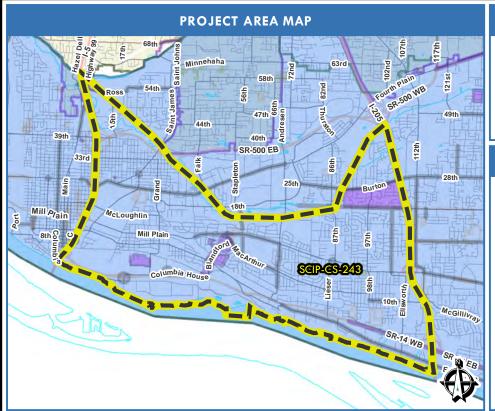
Total Project Cost: \$3,000,000.00

*Start of Const. (Year): 2022-2023

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: Central Vancouver - South



PROJECT SUMMARY

Program/Discipline Type: SCIP

Project Type: Central Vancouver - South

Project Status: Future

PROJECT DESCRIPTION

Project Description

Sanitary sewer will be extended as part of the City's ongoing proactive efforts to make reliable public sewer available within our service area prior to failure of the existing septic systems.

Project Justification/Priority

(2) = Improve Safety; (3) = New Systems

Prioritization criteria were established at the beginning of the program based on health and safety (viability of existing septic systems), proximity to ground water supply and surface water, density, and homeowner requests. Projects are being completed based on the overall prioritization rating. Higher priority projects were completed by 2010 and the remaining projects are completed based primarily on health and safety, budget and homeowner requests.

Project Area Water Project Areas Clark County Transportation Project Areas SCIP Project Areas Battle Ground Sanitary Sewer Project Areas Project Polys Camas Surface Water Project Areas Vancouver City Limits Washougal

VICINITY MAP 13th 17th 15th 5 th 15

FUNDING & SCHEDULE

Budget / Proj. #:

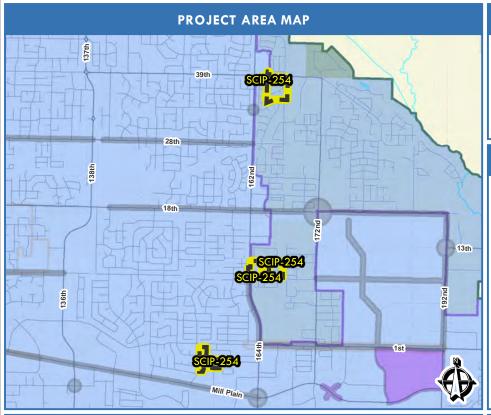
Budget / Proj. Task #:

Total Project Cost: \$1,300,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: East Vancouver Phase 3



PROJECT SUMMARY

Program/Discipline Type: SCIP

Project Type:

Project Status: Active

PROJECT DESCRIPTION

Project Description

Sanitary sewer will be extended as part of the City's ongoing proactive efforts to make reliable public sewer available within our service area prior to failure of the existing septic systems.

Project consists of sites previously identified as Camelot (SCIP-78), Lewis Addition (SCIP-83), and Pheasant Run (SCIP-99).

Project Justification/Priority

(2) = Improve Safety; (3) = New Systems

Prioritization criteria were established at the beginning of the program based on health and safety (viability of existing septic systems), proximity to ground water supply and surface water, density, and homeowner requests. Projects are being completed based on the overall prioritization rating. Higher priority projects were completed by 2010 and the remaining projects are completed based primarily on health and safety, budget and homeowner requests.

Project Area Water Project Areas Clark County Transportation Project Areas SCIP Project Areas Battle Ground Sanitary Sewer Project Areas Project Polys Camas Surface Water Project Areas Vancouver City Limits Washougal

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100392

Budget / Proj. Task #:

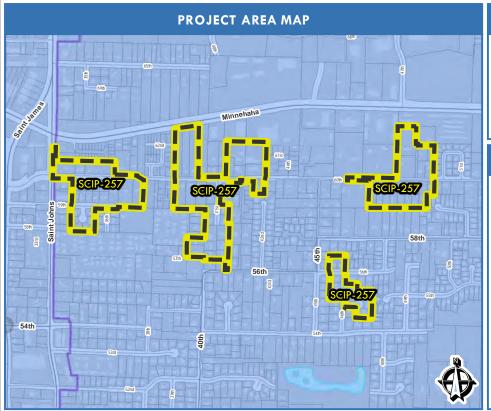
Total Project Cost: \$1,300,000.00

*Start of Const. (Year): 2021-2022

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: NE 60th Street



PROJECT SUMMARY

Program/Discipline Type: SCIP

Project Type:

Project Status: Active

PROJECT DESCRIPTION

Project Description

Sanitary sewer will be extended as part of the City's ongoing proactive efforts to make reliable public sewer available within our service area prior to failure of the existing septic systems.

Project consists of sites previously identified as NE 60th Street Ph. 1 (SCIP-128), NE 60th Street Ph. 2 (SCIP-129), and Fullerton Ph. 3 (SCIP-140).

Project Justification/Priority

(2) = Improve Safety; (3) = New Systems

Prioritization criteria were established at the beginning of the program based on health and safety (viability of existing septic systems), proximity to ground water supply and surface water, density, and homeowner requests. Projects are being completed based on the overall prioritization rating. Higher priority projects were completed by 2010 and the remaining projects are completed based primarily on health and safety, budget and homeowner requests.

Project Area Water Project Areas Clark County Transportation Project Areas SCIP Project Areas Battle Ground Sanitary Sewer Project Areas Project Polys Camas Surface Water Project Areas Vancouver City Limits Washougal

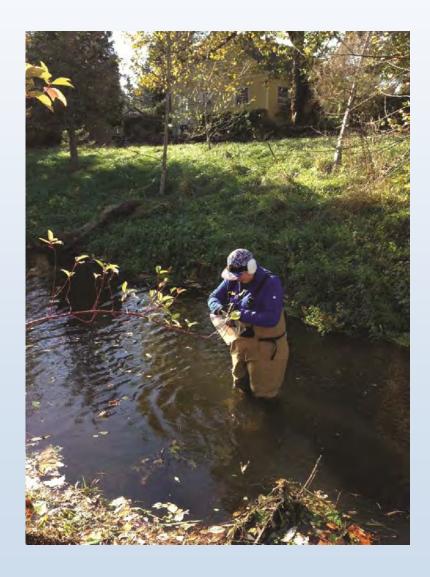
FUNDING & SCHEDULE

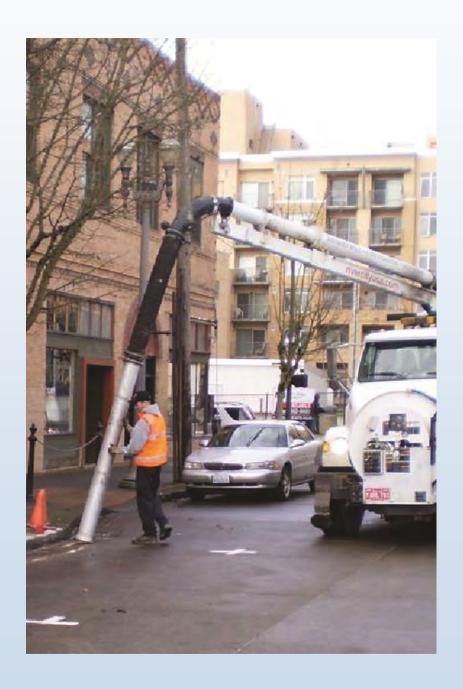
Budget / Proj. #: PRJ100471

Budget / Proj. Task #:

Total Project Cost: \$1,500,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.





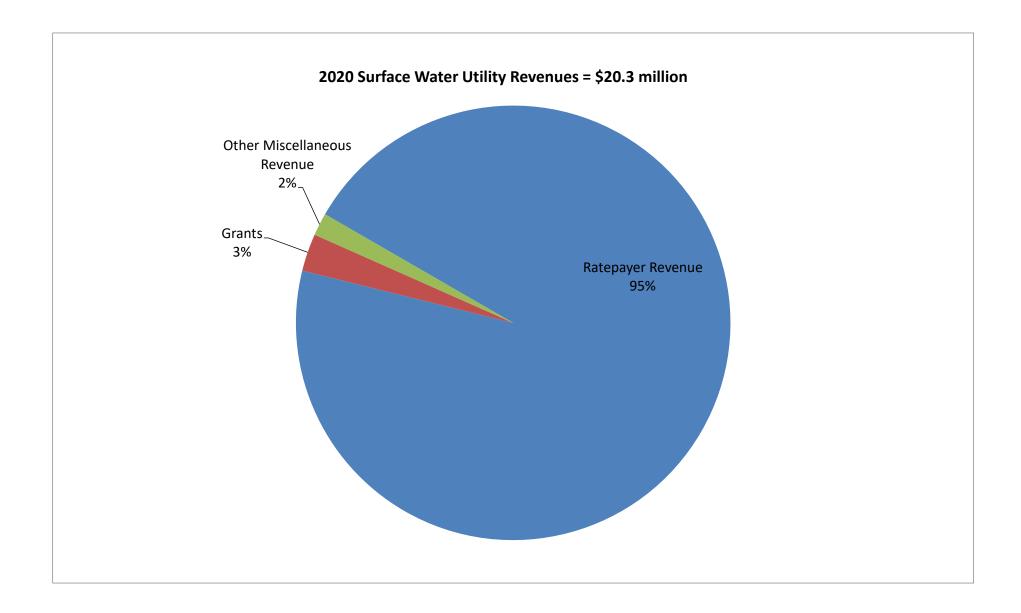


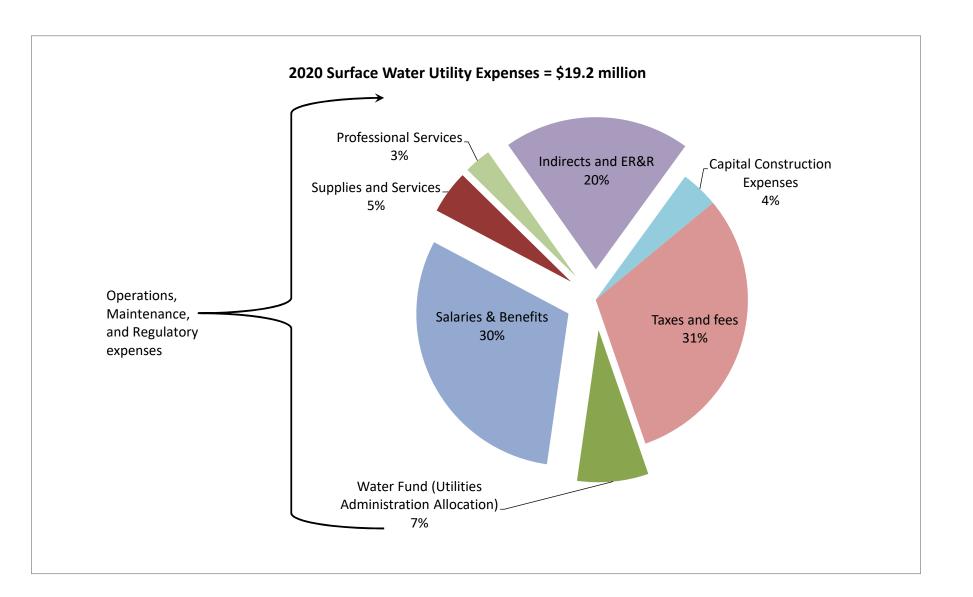
SURFACE WATER FUND ACTIVITY (2014-2020)

	2014	2015	2016	2017	2018	2019	2020
Revenue							
Ratepayer Revenue	11,661,445	12,373,597	13,495,966	14,731,122	16,430,604	18,083,133	19,423,876
SRF Loan (included in Misc. Rev.)							
Grants	523,679	191,068	870,750	158,297	222,555	430,911	565,583
Other Miscellaneous Revenue*	503,531	594,199	386,433	340,956	435,833	543,944	342,482
Total Revenue	12,688,655	13,158,864	14,753,149	15,230,375	17,088,992	19,057,988	20,331,941
Expenses							
Salaries & Benefits	3,784,125	4,123,518	4,486,659	4,642,878	5,069,368	5,553,123	5,849,620
Supplies and Services	934,475	1,082,082	956,181	1,011, <i>7</i> 38	1,422,954	1,027,667	880,635
Professional Services	388,733	31 <i>7,</i> 953	440,642	645,537	655,466	382,198	550,061
Indirects and ER&R	2,216,433	2,626,469	3,033,560	3,099,472	3,502,196	3,542,366	<u>3,791,763</u>
Operations, maintenance, and regulatory expenses	7,323,766	8,150,022	8,917,042	9,399,625	10,649,984	10,505,354	11,072,079
Taxes and fees	2,471,031	2,615,047	3,008,814	3,655,827	4,282,263	5,158,088	5,883,835
Debt Service	86,231	88,346	88,292	88,291	0	0	0
Capital Construction Expenses	912,996	568,769	1,461,915	758,683	873,938	1,043,287	768,663
General Fund	0	0	0	0	0	0	0
Water Fund (Uitilities Administration Allocation)	1,111,723	1,216,197	1,258,937	1,214,217	1,339,910	1,443,110	1,452,267
Street Maintenance Fund	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Expenses Subtotal	11,905,747	12,638,381	14,735,000	15,116,643	17,146,095	18,149,839	19,176,844
Depreciation Total Expense	377,653 12,283,400	380,454 13,018,835	433,403 15,168,403	548,072 15,664,715	844,768 1 7,990,863	<u>0</u> 18,149,839	<u>0</u> 19,176,844

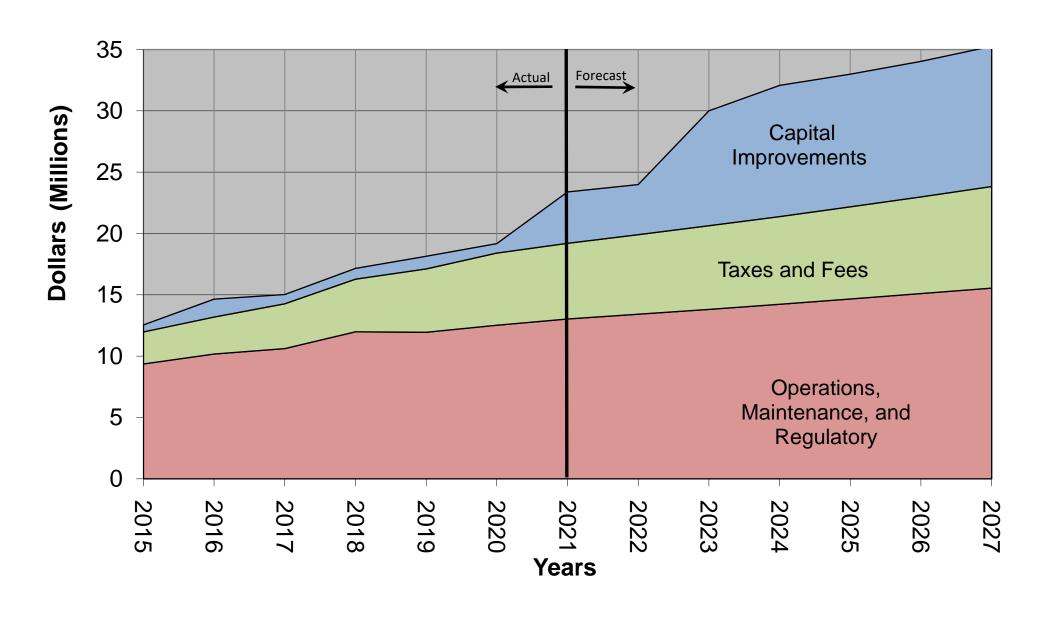
* Other Miscellaneous Revenues include items such as:

Site Plan Review
Subdivision Fees
Interest
WDOT Revenue
Transfer from General Fund

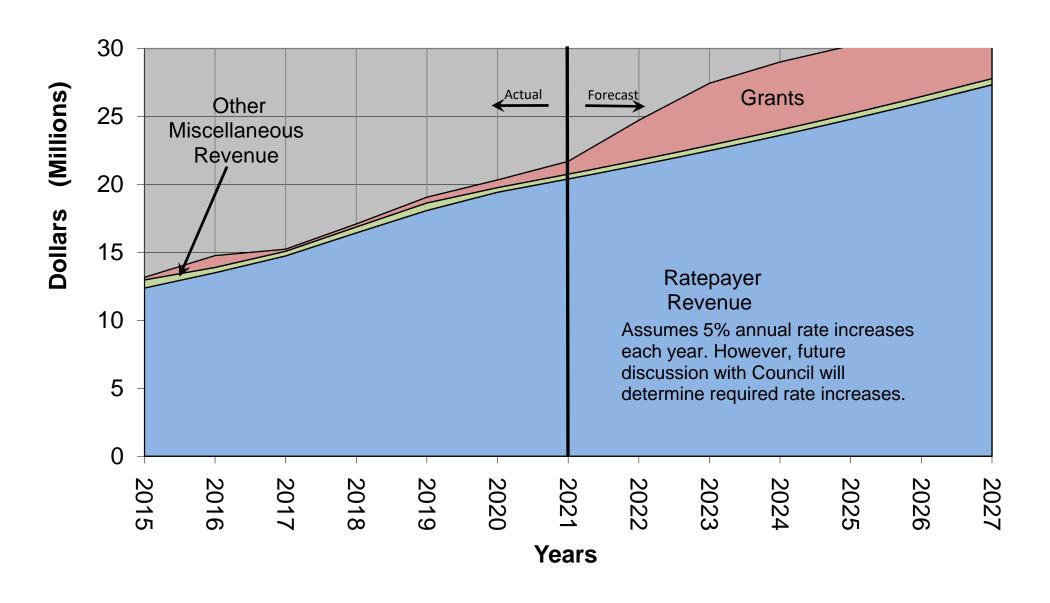


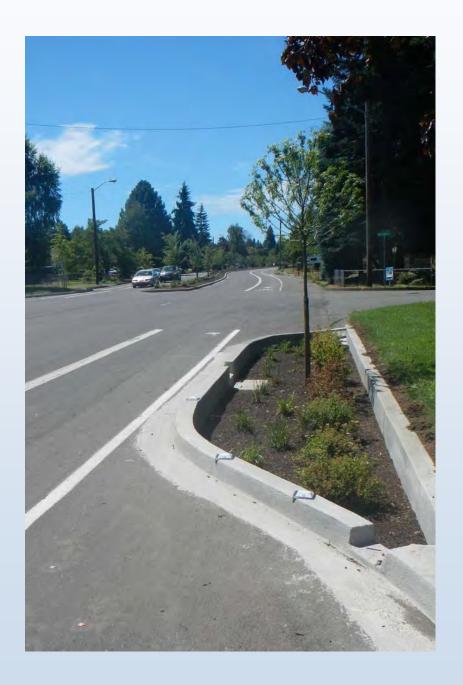


Surface Water Expenses (2015-2027)



Surface Water Revenues (2015-2027)





Surface Water Utility CIP Changes

This page provides an overview of the changes from the previous 6-year project list (2021-2026) to this year's 6-year project list (2022-2027). The changes are segmented by: projects added; projects removed; and other.

Projects Added	Project Number	Comments
Fruit Valley Neighborhood Grants – PRJ100642	SW-58	Rehab aging infrastructure for street flooding
E. Mill Plain CTC -PRJ100643	SW-59	E. Mill Plain Basin Study
N 38 th St and F St	SW-60	Rehab existing infrastructure for flooding
Columbia Slope Study	SW-61	WDOE Grant – System study to identify improvement
Fourth Plain Central – SR 500 to NE 131st Ave.	SW-62	Ecology Retrofits Grant
E. Mill Plain UIC Treatment	SW-63	Ecology Retrofits Grant
W. 22 nd St and Thompson	SW-64	Ecology Retrofits Grant
Columbia Way to Columbia River Retrofits	SW-65	Ecology Retrofits Grant

Projects Removed	Project Number	Comments
Topper's Landing Outfall Repair – PRJ100514	TBD	Completed in 2021
Land Donation at Arnold Park – PRJ08374	N/A	Land donation indefinitely postponed
Talton Sewer – PRJ100403	N/A	Completed in 2021

Other Changes	Project No.	Comments
Ecology SFAP Grants \$5 Million/yr.	TBD	Annual recurring \$5M grant matches added 2024 and beyond
Property Acquisition) Corporate Woods/Kevanna Park)	TBD	Annual recurring \$500K grant matches added 2023 and beyond



6 YEAR CAPITAL IMPROVEMENT PROGRAM FOR SURFACE WATER MANAGEMENT 2022-2027

All costs are in 2021 dollars

Mar. 18, 2022

PROJECT NAME	Project Number	CIP#	2021	Mar. 18, 2022 2022	2023	2024	2025	2026	2027	Totals
FUNDED PROJECTS:										
RC - Regulatory Compliance Projects - NPDES/TMDL RC - Country Club Village Phase B	TBD	SW-A1-36								0
RC - Expanded Private Stormwater Facility Inspection Program - Grant RC - Surface Water Manual Re-evaluation and Assessment	PRJ100271 PRJ100276	n/A	39,916	71,067 192,309						71,067 192,309
RC - 15th Ave East Greenway Restoration RC - Lower Grand Industrial Area LID Retrofits - Grant	TBD PRJ083662	SW-A1-34 SW-41	58,068	1,145,397						1,145,397
RC - Blandford Drive Subbasins LID Retrofits - Grant	PRJ100275	SW-47	50,000	200,000	2,738,495					2,938,495 0
RC - Regulatory Compliance Projects - UIC Retrofits RC - UIC Retrofit Ph 1 - Water Quality Treatment	TBD	SW-A1-11								(
RC - UIC Retrofit Ph 2 - Decommission & WQ Treatment RC - Peterson Channel Greenway Restoration	TBD TBD	SW-A1-11								(
RC - Central Fourth Plain - Grant Application RC - NE Fourth Plain (123rd-131st South) Water Quality Retrofits - Grant	PRJ083633 PRJ100273	SW-62 SW-45	363 76,757	114,637 817,043	2,030,000					2,144,637 817,043
RC - NE Ross Street LID Retrofits - Grant RC - East Orchards Fourth Plain Water Quality Retrofits - Grant	PRJ083686 PRJ100274	SW-46 SW-45	79,960 97,932	874,040 826,968						874,040 826,968
RC - Fourth Plain SR500-131st Ave	TBD	SW-A1-11	97,932	620,906						020,900
RC - Fourth Plain 131st Ave-162nd Ave RC - Columbia Way to Columbia River Retrofits	TBD PRJ100384	SW-65		42,000	30,000	40,000	1,746,821			1,858,821
RC - E. Mill Plain UIC Treatment RC - Hearthwood Infiltration Expansion	PRJ100450 PRJ100487	SW-63 SW-50	15,356	54,644 300,000	1,651,362					1,706,006 300,000
RC - Image Infiltration Expansion RC - SE 18th Cir. & SE 113th Ave Storm Sewer Upgrade	PRJ100488 PRJ100489	SW-51 SW-52		75,000 50,000	200,000 200,000					275,000 250,000
RC - Fruit Valley Rd. Infiltration Expansion RC - Evergreen Culvert Replacements	PRJXXXXXX PRJXXXXXX	SW-53 SW-54			250,000 100,000	150,000 250,000				400,000 350,000
RC - 27th & P St RC - McGillivray Ponding Rehab	PRJXXXXXX PRJXXXXXX	SW-55 SW-56				25,000 50,000	150,000 200,000			175,000 250,000
RC - North Image & NE 129th Ave RC - Fruit Valley Neighborhood Storm Retrofit	PRJXXXXXX PRJ100642	SW-57 SW-58	39,680	10,320			20,000	100,000		120,000
RC - East Mill Plain CTC Basin Study RC - N. 38th St and F St	PRJ100643 TBD	SW-59 SW-60	9,627	100,373 10,000						100,373
Arterial Safety Projects -		SW-A1-24		.,						C
SS - 164th Ave Median Swale Retrofit SS - Mill Plain at Hearthwood & Olympia	TBD TBD	SW-A1-24 SW-A1-24								C
SS - Mill Plain & 164th Ave SS - Mill Plain & 155th Ave	TBD TBD	SW-A1-24								0
SS - WIII Plain & ISSTN AVE Facility Retrofits Program -	100	SW-A1-24								0
SS - Fruit Valley Rd	PRJ083642	SW-A1-36		30,000	22.000	150.000				30,000
SS - Primrose Court DS#105 SS - Creekside Meadows III (NE 124th Ct & 47th St)	PRJ083655 TBD	SW-A1-36 SW-A1-36		5,000	23,000	150,000				178,000
SS - Tiffany Meadows (SE 169th & 17th St) SS - Kristi Lane (NE 35th Cir & 119th Ave)	TBD TBD	SW-A1-36								0
SS - Burnt Bridge Creek Storm Water Outfall - new added to SW-A1-36	PRJ100445	SW-A1-36	78,707	104,000						104,000
Property Acquisitions - Flood Plain, Habitat, Wetlands PA - 51st St Sump Basin (2.5 Ac =\$170,000)	TBD	SW-A1-20								0
PA - 15th Ave Wetlands (11 AC =\$405,000) Property Acquisitions Grants \$500,000/year max (Corporate Woods/Kevanna Park)	TBD TBD	SW-A1-38 SW-A1-20			500,000	500,000	500,000	500,000	500,000	2,500,000
Coordination Projects (SCIP/Trans)-	TBD	SW-A1-21								0
DR - Stormwater Demand Response (Drainage Problems)	TBD	SW-A1-12								0
DR - Stormwater Retrofits- Demand (Major Projects) DR - Stormwater Demand Response (DR) - To be Retired/Closed when pri2-4 complete	PRJ083356 PRJ100221	SW-A1-12			50,000	50,000	50,000	50,000		200,000
DR - W 22nd St & Thompson	PRJ100190	SW-64		73,708	100,000	2,304,997				2,478,705 0
Sub-Standard Systems - SS - Columbia Slope Culvert - Mill Creek	TBD PRJ083663	SW-A1-37 SW-A1-37	54,967							0
SS - Columbia Slope Culvert - Chelsea Culvert SS - SE 17th Street Outfall	PRJ083664 PRJ083666	" " SW-48	12,189	5,000 237,811	145,000					150,000 237,811
SS - Fisher's Creek Culvert	TBD	SW-A1-37	12,107	207 /011						0
WSDOT FEE PROJECTS (WSDOT) WSDOT Fees - 2018 Use Only	PRJ083154 PRJ100223	SW-A1-5		423						423
WSDOT Fees - 2020 WSDOT - SR14 Exit 1 Vegetation	PRJ100449 TBD	11 11	22,859	648,764	408,040	412,120	416,242	420,404	424,608	2,730,178
WSDOT - I-IS Leverich East Slope Vegetation	TBD TBD	" "								0
WSDOT - SR500 Andresen Islands Vegetation	TBD TBD	11 11								0
WSDOT - SR500 to I-205 Vegetation WSDOT - SR500 & St Johns Vegetation	TBD	11 11								0
WSDOT - SR14 & 164th Ave Vegetation WSDOT - SR500 & 39th St Vegetation	TBD TBD	""								0
WSDOT - Orchards UIC Study WSDOT - 112th Ave & I-205 Revegetation	TBD TBD	11 11								0
WP - WATERSHED PLANNING (WP)	TBD	SW-A1-39								0
WP - Linda Lane/Central 4th Plain Stormwater Quality WP - Burton Channel Green Retrofit-Basin Study and Design - Grant	TBD PRJ083512	SW-A1-39 SW-40	77,735	41,996						41 , 996
WP - NPDES/TMDL Watershed Health & Water Quality Monitoring WP - Source Control (EPA Grant)	PRJ100272 PRJ100451	N/A SW-A1-39	141,083 18,068	158,917 71,932						158,917 71,932
WP - Columbia Slope Retrofit Evaluation WP - Columbia Slope WQ Monitoring	PRJ100448 PRJ100455	SW-61 SW-A1-39	58,558 69,670	391,442 115,330	200,000	232,000				823,442 115,330
WP - Capacity Grant	PRJ100447	SW-A1-39	46,437	3,563						3,563 0
Operation Coordination Substandard Systems & PIT Cases: Cimarron Basin Study and Infiltration Expansion	TBD						150,000	300,000		450,000
UIC Retrofit Ph 2 - Decommission & WQ Treatment	TBD TBD				50,000	150,000	•			200,000
164th Ave Median Swale Retrofit SE Evergreen Hwy & 5th Ave C-Tran	TBD					150,000	750,000	35,000	100,000	135,000
Metallic Storm Main CCTV Investigation Non Metallic Storm Main CCTV Investigation	TBD TBD							250,000		250,000 0
Failed Storm Main Lining & Repair - Ph 1 Failed Storm Main Lining & Repair - Ph 2	TBD TBD	<u> </u>								0
East Mill Plain Infiltration Basin Study East Mill Plain Infiltration Expansion - Ph 1	TBD TBD	_								0
East Mill Plain Infiltration Expansion - Ph 2 Hiddenbrook & 36th Circle Swale Replacement	TBD TBD					30,000	175,000			205,000
Substandard Swale/LID Retrofits	TBD					30,000	173,000	50.000	200,000	200,000
NE 3rd St Infiltration Expansion Fairway Drive Infiltration Expansion	TBD TBD							50,000	150,000 75,000	200,000 75,000
Todd Rd Study and Infiltration Expansion Old City Cemetary Storm Conveyance Expansion	TBD TBD					50,000	250,000			300,000
Burton Basin Study (Otak 2021):		<u> </u>								C
NE 112 th Ave, NE 18th St to NE 26 th St NE 98 th Ave, NE Burton Rd to NE 18 th Ave	TBD									C
NE 97 th Ave, NE 16 th St to NE 7 th St	TBD TBD									C
NE 98 th Ave, NE 10 th St to NE 16 th St & NE 16 th St to NE 102 nd Ave NE 92 nd Ave, at 19 th Cir (near Meadowbrook Marsh Park Entrance)	TBD TBD							1,161,955		1,161,955
NE Cranbrook Dr, NE Burton Rd to NE 21 st St	TBD									(
NE 21 st St & NE 20 th St, NE 93 rd Ct to NE 96 th Ct & NE 94 th Ct to NE 96 th Ct NE 105 th Ave, NE 25 th St to NE 22 nd St, continue on NE 102 nd Ave to NE 24 th St	TBD TBD									(
Columbia Slope Study (Herrera 2022):										(
Hwy Regional Facility at Hwy 14 at SE Riverside Dr. Regional Facility at Wintler Community Park (B)	TBD TBD								1,500,000	1,500,000
Hwy Regional Facility at SE 78th Ave and Hwy 14	TBD									C
Regional Facility at Wy'East School Community Park Bioretention at N Blandford Dr	TBD TBD									(
Green Street at SE McGillivray Blvd and SE Bella Vista Rd	TBD									C

Designal Facility at Wildygood Park	TDD	1							
Regional Facility at Wildwood Park Treatment Vault Retrofit at SE 164th Ave, Shari's Restaurant	TBD TBD								
Regional Facility at SE 164th Ave and SE Cascade Park Dr	TBD								
· ·	TBD								
Regional Facility near Biddlewood Park									
Green Streets on SE Talton Ave and Cascade Park Dr.	TBD								
WSDOT Biofiltration Swale Retrofit at Cascade Park Dr.	TBD								
							1 500 000		2 222 22
BBC WQ Study TMDL/SMAP Projects Currently Identified (InHouse Ongoing)							1,500,000	1,500,000	3,000,00
NE 121st Ave north (NO18031)	TBD								'
NE 121st Ave south (NO18027)	TBD								
NE 49th St Oakbrook Apts (NO17974)	TBD								
NE 51st Cir E of 112th Ave (NO17967)	TBD								
NE 112th Ave north side BBC (NO17935)	TBD								
NE 112th Ave south side BBC (NO17912)	TBD								
NE 44th St at NE 104th Ave (NO16902)	TBD								
NE 109th Ave from ivy lined ditch (NO15869)	TBD								
NE 109th Ave from south side (NO15917)	TBD								
NE 101st Ct/NE 35th (Site 163649000) Confluence	TBD								
NE 112th Ave/NE 26th St (NO15005)	TBD								
DF020 NE 98th Ave (south of Burton) (NO24790)	TBD								
NE 21st St east of NE 96th Ct (NO30192)	TBD								
NE 92nd Ave/NE 19th Cir (NO13929)	TBD								
NE Bridgecreek Ave/ NE 20th St (NO27373)	TBD								
NE 65th Ave/E 18th St (NO04963)	TBD								1
Devine Road/E 18th St (NO04895)	TBD								
Stapleton Rd into swale (NO04908)	TBD								
NE Fourth Plain Brandt Road (NO01683)	TBD								
NE Fourth Plain Grand to Algona (NO01682)	TBD								
Linda Lane Vault (NO06184)	TBD								
Drummond Ave/E. 33rd St (NO24308)	TBD								1
Arnold Park/ NE St John's/St James (NO15529)	TBD								
NE 41st Circle (historic site BBC3.4) (NO06483)	TBD								
NE 14th Ave/NE 43rd St (NO15940)	TBD								
Future Studies and Projects/Programs for Further Analysis and Prioritization:									1
BBC Orchards Study (Herrera 2016)	TBD								
BBC Outfalls Study (Parametrix 2022) Future TMDL/SMAP Projects	TBD								
UIC Study (Consultant TBD 2021 - 2023) including Decommisioning	TBD								
Peterson Channel Basin - 112th & Ivy Ditch	TBD								
Fruit Valley Road Study/Project	TBD								
East Mill Plain CTC Projects	TBD								
E 164th Median Swale Retrofits	TBD								
Greenway & Creek Restoration Program	TBD								
Arnold Park Study	TBD								
Central 4th Pln Basin Study	TBD								
51st Sump Area Study & Property	TBD								
Downtown Capacity & Condition Assessement (CH Study 90's)	TBD								
Urban Forestry & Canopy Desert Basin TMDL Coordination	TBD								
DePave Program	TBD								
Property Acquisition Program	TBD								
Swale Retrofit Program (Sadd&Clark)	TBD								
Pump Station Study and Retrofits	TBD								
CCTV (metal pipes, outfalls, culverts)	TBD								
Outfall Assessement & Replacement/Repair Program (ie East I-5 to Columbia)	TBD								
Sweepers and Vactors - Grants	TBD								
	.55								
NEW PROJECTS									
Stormwater Pollution Enhanced Source Control	PRJ100586		9,711	190,289					190,28
Topper's Landing Outfall Repair	PRJ100586 PRJ100514		166,292	170,207					
Talton Storm Sewer Extension	PRJ100314 PRJ100403		75,854						
	DD 11 00 40 4		220	1 .					
Downtown IDDE Study Ecology SFAP Grants \$5 million/year max	PRJ100404 TBD		238	1	5,000,000	5,000,000	5,000,000	5,000,000	20,000,00

^{*}Project timing is dependent upon the timing of the coordinating project

**2021 Amounts include revised delivery amount or actual spent in 2021 (as of October), whichever is higher
Shading indicates not included in 6-year plan, but money expected to be spent in 2021



PROJECT: WSDOT FEE PROJECTS



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type: State Fee Projects

Project Status: Active

PROJECT DESCRIPTION

Project Description

Projects are for surface water from Washington State right-of-way.

Project Justification/Priority

Annual fee project for Washington State Department of Transportation. Projects include piping and drainage ways, water quality, and property acquisition. Project cost estimated at \$353,000 per year. State code provides imposition of charges with respect to surface water from state highway right of ways.

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Vancouver City Limits Surface Water Project Areas Fixed Clark County Water Project Areas Fixed Battle Ground

VICINITY MAP 19th 17th 17th 18 5 7 6 119th 22 119th 17th 18 119th 17th 18 119th 18

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083154

Budget / Proj. Task #: PRJ083154

Total Project Cost: \$2,500,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: UNDERGROUND INJECTION CONTROL RETROFITS



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type: Regulatory Compliance

Project Status: Active

PROJECT DESCRIPTION

Project Description

Program to retrofit our exisiting underground injection control system, as required by new state NPDES permit regulations.

Project Justification/Priority

State regulations require new and existing UICs (i.e. stormwater infiltration systems) meet specific requirements to protect groundwater quality.....Retrofit projects include: reconstructing systems, raising systems, adding water quality treatment, replacing systems to detain, treat and discharge to surface water. Projects include *Fourth Plain-SR500 to 131st Ave (#TBD - Sched. For 2023), Fourth Plain-131st Ave to 162nd Ave (#TBD-Sched. For 2024), UIC Retrofits Ph 1-3 (Ph1 #TBD-Sched. In 2023, Ph.2 #TBD sched in 2025).

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Sanitary Sewer Project Areas Fixed Surface Water Project Areas Fixed Water Project Areas Fixed Water Project Areas Fixed Battle Ground

FUNDING & SCHEDULE

Budget / Proj. #: SW Const. Fund

Budget / Proj. Task #:

varies

Total Project Cost:

\$2,135,000.00

*Start of Const. (Year):

2020

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: STORMWATER RETROFITS - DEMAND RESPONSE



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type: Emergency or Critical Demand

Project Status: Active

PROJECT DESCRIPTION

Project Description

Ongoing fund for unanticipated projects, both within Public Works and other departments.

Project Justification/Priority

Coordination Projects budgeted in the 443 Surfacewater Construction Fund. Projects may include: Roadway Coordination, Traffic Hazard/Property Threatening High Water, Slope Stability/Erosion Prevention, Tree Plantings, NPDES Permitting, and Surface Water Monitoring for Quality and Quantity.

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Vancouver City Limits Surface Water Project Areas Fixed Water Project Areas Fixed Battle Ground

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083556

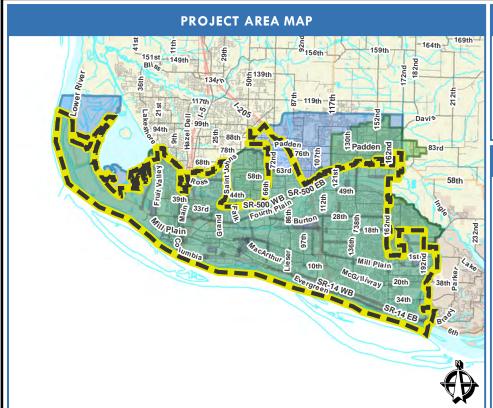
Budget / Proj. Task #: PRJ083556

Total Project Cost: \$200,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: PROPERTY ACQUISITIONS - FLOODPLAIN, HABITAT & WETLANDS



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Acquisition **Project Type:**

Future **Project Status:**

PROJECT DESCRIPTION

Project Description

Acquisition of flood plain and habitat properties, as identified in the property acquisition priority area plan and as properties become available.

Project Justification/Priority

* NE 51st St Sump Basin - (PRJXXXXXXX) - budgeted for \$170K, moved from 2020 to 2023; *Property Acquisitions -(#083650)- budgeted for \$400K; *NE 15th Ave Wetlands (PRJXXXX)) - Scheduled in 2023/2024 &budgeted for \$810K. Future acquisitions being considered are in Alki basin and BBC Greenway.

LEGEND Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed [Vancouver City Limits Surface Water Project Areas Fixed Clark County Water Project Areas Fixed Battle Ground

VICINITY MAP

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100385

Budget / Proj. Task #:

\$2,500,000.00

Total Project Cost:

*Start of Const. (Year):

2023

varies

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: CP (FORMERLY SCIP) COORDINATION PROJECTS*



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type: Stormwater Retrofit Coordinati

Project Status: Future

PROJECT DESCRIPTION

Project Description

Surface Water Coordination Projects constructed as part of the City Sewer Septic Connection Incentive Program (SCIP).

Project Justification/Priority

Upgrade and standardize quantity and quality surface water treatment facilities within the project limits of the associated SCIP project. Project funding on hold until 2023/24 biennium.

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Vancouver City Limits Surface Water Project Areas Fixed Clark County Water Project Areas Fixed Battle Ground

VICINITY MAP 19th 177th 35 b 0 c 119th 25 b 0 c 11

FUNDING & SCHEDULE

Budget / Proj. #43 SW Construction Fund

Budget / Proj. Task #:

Total Project Cost:

\$0.00

TBD

*Start of Const. (Year):

2023

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: FACILITY RETROFIT PROGRAM



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Stormwater Retrofit Coordinati **Project Type:**

Project Status: Active

PROJECT DESCRIPTION

Project Description

This Surface Water management program identifies substandard facilities, and retrofits swales to meet current water quality standards.

Project Justification/Priority

Budgeted in the 443 Surfacewater Construction Fund - This program wil retrofit swales providing new facilities that meeting the city's current standards for water quality and maintenance. Assessment of the city's swale facility assets resulted in a priority list of swale requiring retrofits. The top six swales include Primrose Court, Brickhaven, Tiffany Meadows, Creekside Meadows III, Kristi Lane, and Oak Run. Each swale project will include a cost benefit analysis for projected savings return on maintenance costs. Oak Run and Brickhaven completed in 2017. Current projects are *2021 projects for Fruit Valley Rd. (PRJ0836342) for \$30 K and SE 17th St Outfall (PRJ083666) for \$334K; and 2023/24 biennium: Primrose Court (\$23K), Creekside Meadows (\$27K); Tiffany Meadows (\$31K); Kristi Lane (\$90K).

LEGEND Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Vancouver City Limits Surface Water Project Areas Fixed Clark County Water Project Areas Fixed Battle Ground

VICINITY MAP

FUNDING & SCHEDULE

Bud448 Serbic#:Water Construction Fund

Budget / Proj. Task #:

\$312,000.00 **Total Project Cost:**

*Start of Const. (Year):

2021

varies

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: SUBSTANDARD SYSTEMS PROGRAM



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type: Stormwater Retrofit Coordinati

Project Status: Active

PROJECT DESCRIPTION

Project Description

This Surface Water management program identifies and retrofits or replaces sub-standard stormwater systems.

Project Justification/Priority

Budgeted in the 443 Surfacewater Construction Fund: This program is for culverts and pipes that have reached the end of their life cycle in need of repair or drywells that continue to overflow even with repeated maintenance and cleaning. Projects are prioritized based upon severity criteria such as traffic safety, potential property damage, nuisance flooding, etc. Current projects include Columbia Slope Culvert - Mill Creek (PRJ083663 - \$600K in 2019-2021); Fisher's Creek Culvert (PRJ-TBD-\$160K in 2023); Columbia Slope Culvert - Chelsea Culvert (PRJ083644 \$245K in 2023).

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Vancouver City Limits Surface Water Project Areas Fixed Clark County Water Project Areas Fixed Battle Ground

VICINITY MAP 19th 17th 17th 18 8 9 c 119th 22 c 100 c

FUNDING & SCHEDULE

Budget / Proj. #43 SW Construction Fund

Budget / Proj. Task #:

varies

Total Project Cost:

\$562,590.00

*Start of Const. (Year):

Ongoing

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: BURTON CHANNEL LID RETROFIT PLANNING & DESIGN- (100% FUNDED BY ECOLOGY GRANT)



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type: Ecology Retrofit Grant

Project Status: Active

PROJECT DESCRIPTION

Project Description

This is an "Underground Injection Control Retrofit" project for Burton Channel, 100% funded by Ecology grant.

Project Justification/Priority

This study for Burton Channel will result in proposed projects to secure Ecology Grant funding 300 Grants - State for Stormwater LID retrofit improvementsStormwater runoff is currently discharged untreated into drywells located throughout the subdivision. The shallow groundwater contributes base flow to Burnt Bridge Creek.

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Vancouver City Limits Surface Water Project Areas Fixed Water Project Areas Fixed Battle Ground



FUNDING & SCHEDULE

Budget / Proj. #: PRJ083512

Budget / Proj. Task #: 083512

Total Project Cost: \$128,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: LOWER GRAND AVE. INDUSTRIAL LID RETROFITS



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type: Ecology Retrofit Grant

Project Status: Active

PROJECT DESCRIPTION

Project Description

This will construct Low Impact Development improvements in Lower Grand Industrial Areaand is 75% funded by Ecology grant.

Project Justification/Priority

These Water Quality retrofits are needed to improve surface water and water quality treatment systems in the lower Grand Industrial Area, in the vicinity of SE 2nd St and "Y". Project design began, in 2019, with construction planned for 2021. Project will install several improvements withing the Lower Grand Industrial Area (SE 1st St and "Y" St). This includes new sections of impervious pavement on new roads, and installation of vegetation bio-retention facilities. Improve drainage by adding improvements to manage stormwater runoff.

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Vancouver City Limits Surface Water Project Areas Fixed Water Project Areas Fixed Battle Ground

VICINITY MAP 1980

FUNDING & SCHEDULE

Budget / Proj. #: PRJ083662

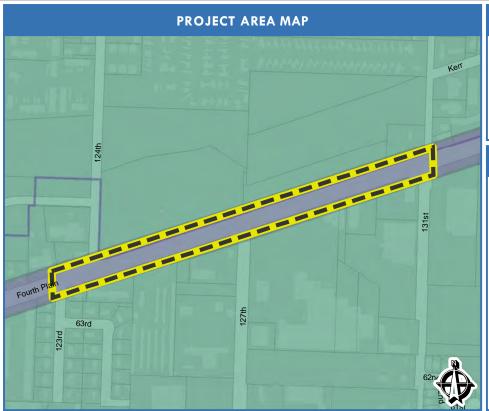
Budget / Proj. Task #: PRJ083662

Total Project Cost: \$1,200,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: NE 4TH PLAIN (NE 123RD AVE TO NE 131ST AVE) WQ RETROFITS - NORTH & SOUTH SIDE -300 GRANTS - STATE



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type: Ecology Retrofit Grant

Project Status: Active

PROJECT DESCRIPTION

Project Description

Water quality retrofits to improve surface water facilities in the NE 4th Plain corridor between NE 123rd Ave. to NE 131st Ave.

Project Justification/Priority

*North side NE 4th Plain (PRJ100274) -project costs estimated at: \$ 41K Design, \$ 660K Construction; *South side (PRJ100273) -NE 4th Plain project costs estimated at \$ 43K design and \$760K construction. Both projects total \$86K for design, and \$1.42M for construction. This is an Ecology grant funded project to retrofit the storm systems along the south half of NE Fourth Plain from 123rd to 131st Avenue. This project will construct 12 bio-retention facilities and Silva Cell storage units along the south half of the street, and 13 bio-retention facilities on the north side. Untreated stormwater runoff from this principal arterial road, infiltrates via drywells impacting surface and groundwater quality as subsurface flow contributes to baseflow in Burnt Bridge Creek and may migrate deeper into the City's drinking water aquifer. A recent planning study of Orchards basin identified this corridor as a top priority for stormwater quality retrofits. This project will reduce total suspended solids, oil & grease and heavy metals which will result in improved water quality.

Project Area Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Vancouver City Limits Clark County Water Project Areas Fixed Battle Ground

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100273

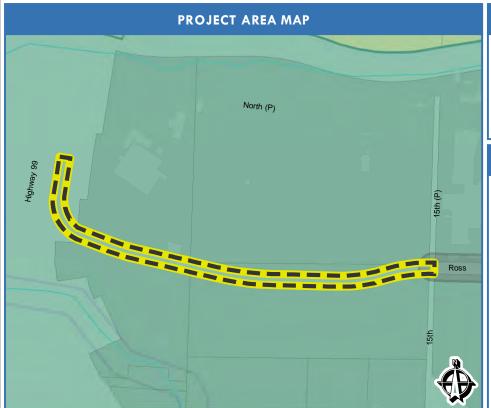
Budget / Proj. Task #: PRJ100273/274

Total Project Cost: \$1,898,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: **NE ROSS ST. LID RETROFITS**



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type: Ecology Retrofit Grant

Project Status: Active

PROJECT DESCRIPTION

Project Description

Water Quality retrofits to improve surface water quality treatment systems in the NE Ross St corridor in the vicinity of NE 15th Ave.

Project Justification/Priority

NE Ross St. is a city owned roadway that has a traditional storm drainage collection system with a series of inlets connected to an underground storm pipe. This collection system discharges directly to Burnt Bridge Creek which is a 303d listed stream. This stream has a TMDL under development for impairments of concern including fecal coliform, temperature, dissolved oxygen, and pH. This project will reduce pollutant discharges to the creek by disconnecting roadway runoff from the existing storm pipeline. New collection facilities will be built to convey this runoff to new flow control and treatment BMP facilities. Dry wells will be provided downstream of the bioretention swales to provide additional infiltration, flow control and runoff treatment.

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Vancouver City Limits Surface Water Project Areas Fixed Water Project Areas Fixed Battle Ground

FUNDING & SCHEDULE

Budget / Proj. #: 300 Grants - State

Budget / Proj. Task #:

PRJ083686

Total Project Cost:

\$984,000.00

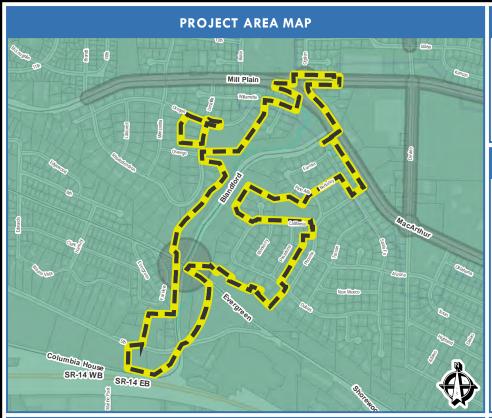
*Start of Const. (Year):

2022

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: BLANDFORD DRIVE SUBBASINS LID RETROFITS - GRANT FUNDED



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type:

Project Status: Active

PROJECT DESCRIPTION

Project Description

Water Quality retrofits to improve surface water quality treatment systems in the Blandford Drive Corridor, in the vicinity of Evergreen Blvd.

Project Justification/Priority

The Blandford canyon discharges to a low-lying area along Columbia House Blvd. which is privately owned and adjacent to a city drinking water well and water production facility. The City is responsible for water quality and flow within this the public right of way. The city would like to retrofit the public right-of-way with LID Best Management Practices. This would include disconnecting roadway runoff from the existing storm pipelines, and install new collection and conveyance to new treatment and flow control BMP's. The existing outfall would be maintained for emergency overflow. This is an Ecology grant funded (75%) project to retrofit the storm systems in the streets that contribute stormwater runoff to the Blandford Drive basin. The project will use Low Impact Development techniques, specifically bioretention facilities, to provide water quality reatment and infiltration of stormwater. Currently the runoff contributes flow to areas adjacent to the city drinking water well station. This project will provide water quality benefit to the surface water and protect groundwater.

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Vancouver City Limits Surface Water Project Areas Fixed Water Project Areas Fixed Battle Ground

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100275

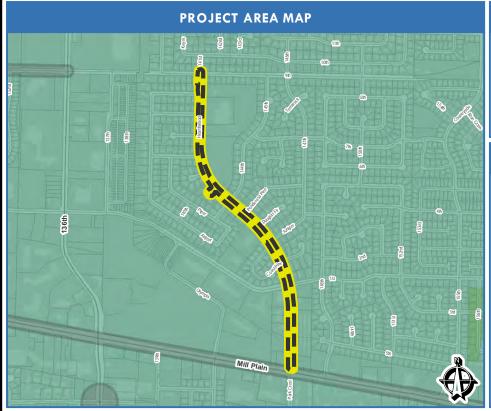
Budget / Proj. Task #: PRJ100275

Total Project Cost: \$3,059,900.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: HEARTHWOOD INFILTRATION EXPANSION



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type:

Project Status: Active

PROJECT DESCRIPTION

Project Description

New Surface Water system retrofits to improve system capacity.

Project Justification/Priority

SW-A1-11 RC UIC Retrofits . Surface Water CIP Priority #3 of 13 projects. The Hearthwood neighborhood has many aging drywells that were designed in infiltrate stormwater runoff from the area streets into the ground. Over the years these systems have been clogged with debris, significantly decreasing their performance. This project will provide system improvements to collect the debris for easier and less frequent Maintenance cleaning. Decreasing the localized flooding in the neighborhood.

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Vancouver City Limits Surface Water Project Areas Fixed Water Project Areas Fixed Battle Ground

VICINITY MAP 19th 17th 18th 2 c 119th 2 c 119

FUNDING & SCHEDULE

Budget / Proj. #: PRJXXXXXX

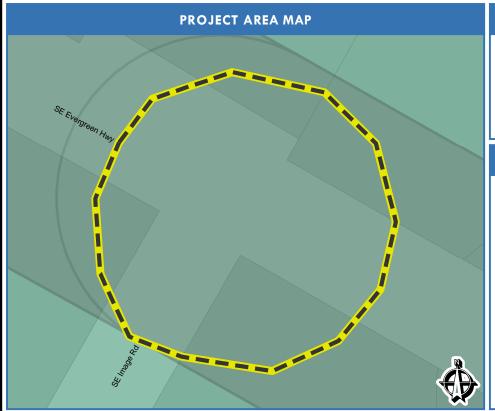
Budget / Proj. Task #:

Total Project Cost: \$1,700,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: IMAGE INFILTRATION EXPANSION



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type:

Project Status: Active

PROJECT DESCRIPTION

Project Description

New Surface Water system retrofits to improve system capacity.

Project Justification/Priority

SW-A1-11 RC UIC Retrofits. This project will expand the substandard system, improving performance to prevent localized flooding.

Project Area Project Area SCIP Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Vancouver City Limits Surface Water Project Areas Fixed Water Project Areas Fixed Battle Ground

VICINITY MAP Second Plan Control Cont

FUNDING & SCHEDULE

Budget / Proj. #: PRJXXXXXX

Budget / Proj. Task #:

Total Project Cost: \$275,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: SE 18TH CIRCLE AND SE 113TH AVE UPGRADE



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type:

Project Status: Active

PROJECT DESCRIPTION

Project Description

New Surface Water system retrofits to improve system capacity.

Project Justification/Priority

SW-A1-11 RC UIC Retrofits. This project will expand the substandard system, improving performance to prevent localized flooding.

Project Area Project Area SCIP Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Surface Water Project Areas Fixed Water Project Areas Fixed Water Project Areas Fixed Battle Ground



FUNDING & SCHEDULE

Budget / Proj. #: PRJXXXXXX

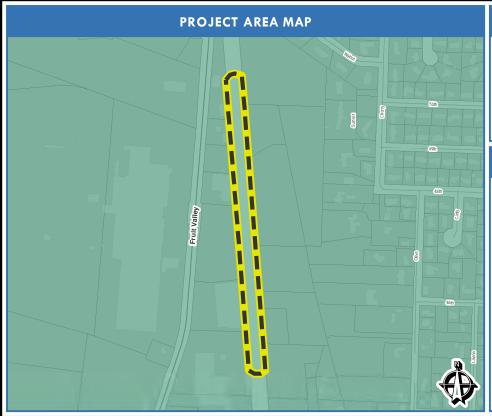
Budget / Proj. Task #:

Total Project Cost: \$250,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: FRUIT VALLEY ROAD INFILTRATION EXPANSION



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type:

Project Status: Future

PROJECT DESCRIPTION

Project Description

New surface water system retrofits to improve system capacity.

Project Justification/Priority

SW-A1-11 RC UIC Retrofits. This project will expand the substandard system to help address the frequent flooding in Fruit Valley Road.

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Vancouver City Limits Surface Water Project Areas Fixed Water Project Areas Fixed Battle Ground

FUNDING & SCHEDULE

Budget / Proj. #: PRJXXXXXX

Budget / Proj. Task #:

Total Project Cost: \$400,000.00

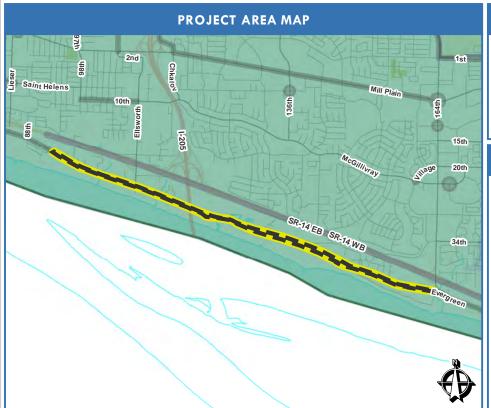
*Start of Const. (Year): 2023

*All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.

**Transportation projects (TRANS-XXX) can be found in the 6 Year Transportation Improvement Plan (TIP) document.



PROJECT: EVERGREEN CULVERT REPLACEMENTS



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type:

Project Status: Future

PROJECT DESCRIPTION

Project Description

New surface water system retrofits to improve system capacity.

Project Justification/Priority

SW-A1-11 RC UIC Retrofits. This project will assess and prioritize repairs and replacement of culverts under Evergreen Hwy.

The majority of these culverts date back to the original construction of Evergreen Hwy.

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Vancouver City Limits Surface Water Project Areas Fixed Water Project Areas Fixed Battle Ground

FUNDING & SCHEDULE

Budget / Proj. #: PRJXXXXXX

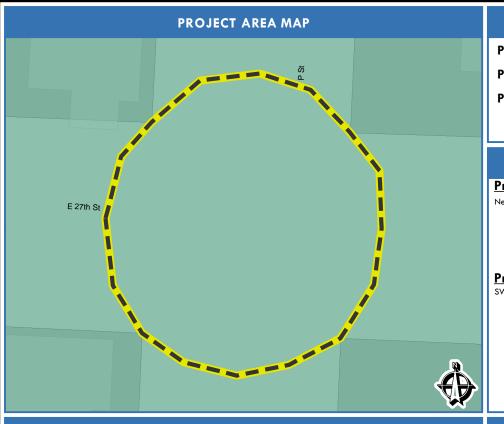
Budget / Proj. Task #:

Total Project Cost: \$400,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: 27TH & P ST



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type:

Project Status: Future

PROJECT DESCRIPTION

Project Description

New surface water system retrofits to improve system capacity.

Project Justification/Priority

SW-A1-11 RC UIC Retrofits; to expand the substandard system to help address the frequent flooding in this intersection.

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Vancouver City Limits Surface Water Project Areas Fixed Water Project Areas Fixed Battle Ground

FUNDING & SCHEDULE

Budget / Proj. #: PRJXXXXXX

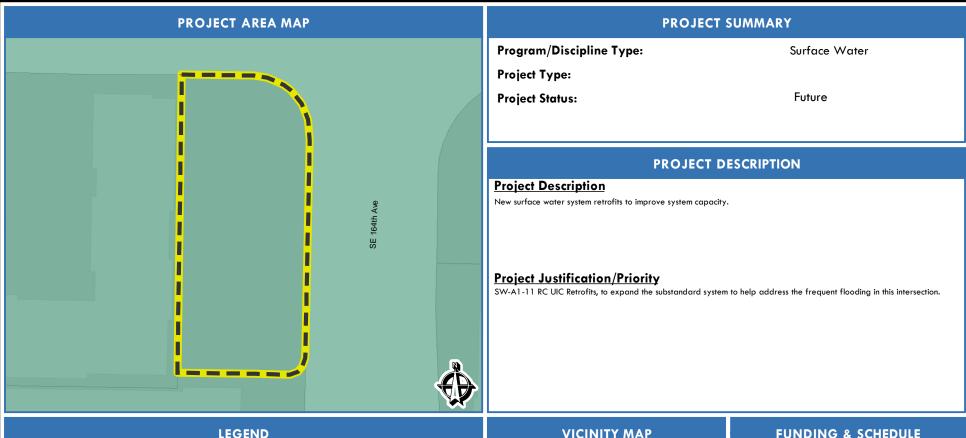
Budget / Proj. Task #:

Total Project Cost: \$175,000.00

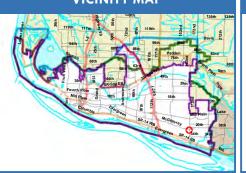
^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: MCGILLIVRAY PONDING REHABILITATION







FUNDING & SCHEDULE

Budget / Proj. #: **PRJXXXXXX**

Budget / Proj. Task #:

Total Project Cost: \$250,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: NORTH IMAGE - NE 129TH AVE.



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type:

Project Status: Future

PROJECT DESCRIPTION

Project Description

New surface water system retrofits to improve system capacity.

Project Justification/Priority

SW-A1-11 RC UIC Retrofits -This project will expand the substandard system, improving performance to prevent localized flooding.

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Vancouver City Limits Surface Water Project Areas Fixed Water Project Areas Fixed Battle Ground



FUNDING & SCHEDULE

Budget / Proj. #: PRJXXXXXX

Budget / Proj. Task #:

Total Project Cost: \$120,000.00

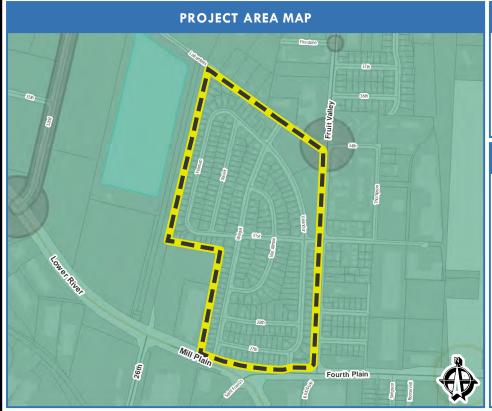
*Start of Const. (Year): 2025

*All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.

**Transportation projects (TRANS-XXX) can be found in the 6 Year Transportation Improvement Plan (TIP) document.



PROJECT: FRUIT VALLEY NEIGHBORHOOD STORM RETROFIT



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type: Ecology Retrofit Grant

Project Status: Active

PROJECT DESCRIPTION

Project Description

This is an Ecology grant funded project to fix residential street flooding.

Project Justification/Priority

Many residences experience recurring flooding into their yards. The project will install stormwater treatment and infiltration throughout the neighborhood on residential streets to minimize the street and yard flooding. It will also relieve the amount of stormwater the Fruit Valley stormwater pump station has to pump during large rain storms.

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Vancouver City Limits Surface Water Project Areas Fixed Water Project Areas Fixed Battle Ground



FUNDING & SCHEDULE

Budget / Proj. #: PRJ100642

Budget / Proj. Task #:

Total Project Cost: \$50,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: E. MILL PLAIN CTC BASIN STUDY



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type: Safety

Project Status: Active

PROJECT DESCRIPTION

Project Description

System basin study to identify alternatives to address localized flooding.

Project Justification/Priority

This basin study project is analyzing the area with rainwater flowing off parking lots that drains through pipes to SE 184th Ave and Mill Plain. This area is an isolated low spot that soon after construction by the city began experiencing frequent flooding. There have already been multiple phases of improvements to the stormwater system to help rectify the situation and prevent flooding that is impassable to vehicular traffic during heavy rains. This engineering study will come up with multiple suggested solutions and estimates for addressing the flooding. Surface Water Management Engineer's are working in coordination with PacTrust the area Developer. The intent is to have a coordinated improvement, prior to their future developments.

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Surface Water Project Areas Fixed Water Project Areas Fixed Battle Ground

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100643

Budget / Proj. Task #:

Total Project Cost: \$110,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: N 38TH ST AND F ST



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type: Emergency or Critical Demand

Project Status: Active

PROJECT DESCRIPTION

Project Description

Extend the existing conveyance system a block west of the intersection, and north into the alley between F and Main St.

Project Justification/Priority

Extend existing system so there will be new pipe that meets current size standards to convey all of the flow from the alley. This will minimize maintenance and the potential for flooding.

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Vancouver City Limits Surface Water Project Areas Fixed Clark County Water Project Areas Fixed Battle Ground

FUNDING & SCHEDULE

Budget / Proj. #: TBD

Budget / Proj. Task #:

Total Project Cost: \$10,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: COLUMBIA SLOPE STUDY



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type: Ecology Retrofit Grant

Project Status: Active

PROJECT DESCRIPTION

Project Description

Ecology grant funded water quality monitoring study at eleven sites within the Columbia basin. City match of \$207,983.00.

Project Justification/Priority

1) - Compliance with WDOE regulations, To find surface water impacts to local receiving water quality, and help prioritize needed surface water retrofits.

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Sanitary Sewer Project Areas Fixed Surface Water Project Areas Fixed Water Project Areas Fixed Water Project Areas Fixed Battle Ground

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100448

Budget / Proj. Task #:

Total Project Cost: \$207,983.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.

^{**}Transportation projects (TRANS-XXX) can be found in the 6 Year Transportation Improvement Plan (TIP) document.



PROJECT: FOURTH PLAIN CENTRAL - SR500 TO NE 131ST AVE.



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type: Ecology Retrofit Grant

Project Status: Active

PROJECT DESCRIPTION

Project Description

Underground Injection Control retrofits. City match of \$541,250.00.

Project Justification/Priority

1) - Compliance with WDOE regulations, replacing and retrofitting existing underground injection control systems

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Vancouver City Limits Surface Water Project Areas Fixed Water Project Areas Fixed Battle Ground



FUNDING & SCHEDULE

Budget / Proj. #: PRJ083633

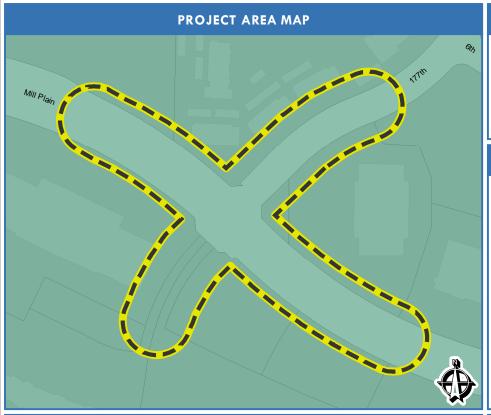
Budget / Proj. Task #:

Total Project Cost: \$2,200,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: E. MILL PLAIN UIC TREATMENT



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type: Ecology Retrofit Grant

Project Status: Active

PROJECT DESCRIPTION

Project Description

Underground Injection Control retrofits. City match of \$430,341.00.

Project Justification/Priority

1) - Compliance with WDOE regulations, replacing and retrofitting existing underground injection control systems

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Surface Water Project Areas Fixed Water Project Areas Fixed Water Project Areas Fixed Battle Ground

VICINITY MAP 119th 177b 18 5 7 6 119th 19 7 119th 19 7

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100450

Budget / Proj. Task #:

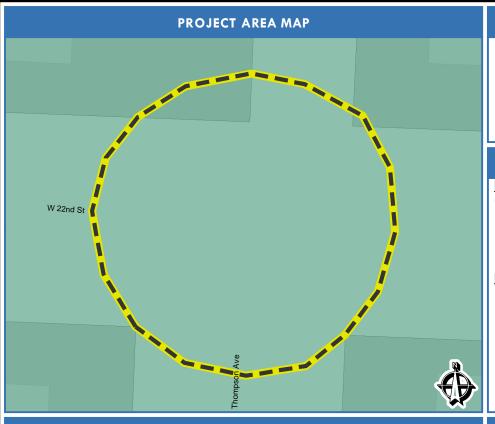
Total Project Cost: \$1,700,000.00

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^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: W. 22ND. ST AND THOMPSON



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type: Ecology Retrofit Grant

Project Status: Active

PROJECT DESCRIPTION

Project Description

Underground Injection Control retrofits. City match of \$618,719.00

Project Justification/Priority

1) - Compliance with WDOE regulations, replacing and retrofitting existing underground injection control systems

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Vancouver City Limits Surface Water Project Areas Fixed Water Project Areas Fixed Battle Ground

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100190

Budget / Proj. Task #:

Total Project Cost: \$618,719.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



PROJECT: COLUMBIA WAY TO COLUMBIA RIVER RETROFITS



PROJECT SUMMARY

Program/Discipline Type: Surface Water

Project Type: Ecology Retrofit Grant

Project Status: Active

PROJECT DESCRIPTION

Project Description

Underground Injection Control retrofits. City match of \$461,705.00.

Project Justification/Priority

1) - Compliance with WDOE regulations, replacing and retrofitting existing underground injection control systems

Project Area SCIP Project Areas Fixed Transportation Project Areas Fixed Project Polys Washougal Sanitary Sewer Project Areas Fixed Vancouver City Limits Surface Water Project Areas Fixed Water Project Areas Fixed Battle Ground

FUNDING & SCHEDULE

Budget / Proj. #: PRJ100384

Budget / Proj. Task #:

Total Project Cost: \$1,900,000.00

^{*}All project timing will be dependent on coordination with other departments including streets, pavement management, sewer, water and surface water.



20 YEAR CAPITAL IMPROVEMENT PROGRAM FOR SURFACE WATER MANAGEMENT

All costs are in 2021 dollars 2022-2041 PROJECT NAME Project CIP# 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 Totals UNDED PROJECTS: UNDED PROJECTS:

(C - Regulatory Compliance Projects - NPDES/TMDL

RC - Country Club Village Phase B

RC - Expanded Private Stormwater Facility Inspection Program - Grant TBD SW-A1-36
PRJ100271 "" 39,916
PRJ100276 N/A RC - Surface Water Manual Re-evaluation and Assessment RC - 15th Ave East Greenway Restoration RC - Lower Grand Industrial Area LID Retrofits - Grant 192,309 192,309 TBD SW-A1-34
PRJ083662 SW-41 58,068 1,145,397 1,145,397 PRJ100275 SW-47 50,000 200,000 2,738,49 RC - Blandford Drive Subbasins LID Retrofits - Grant 2.938.495 RC - Regulatory Compliance Projects - UIC Retrofits
RC - UIC Retrofit Ph 1 - Water Quality Treatment
RC - UIC Retrofit Ph 2 - Decommission & WQ Treatment
RC - Peterson Channel Greenway Restoration
RC - Central Fourth Plain - Grant Application
RC - NE Fourth Plain (123rd-131st South) Water Quality Retrofits - Grant
RC - NE Ross Street LID Retrofits - Grant TBD SW-A1-1 TBD ""
TBD SW-A1-11 | IBU | SW-A1-11 | PRJ083683 | SW-62 | 363 | 114,637 | 2,030,000 | PRJ100273 | SW-45 | 76,757 | 817,043 | PRJ083686 | SW-46 | 79,960 | 874,040 | PRJ083686 | SW-46 | 79,960 | 874,040 | 2.144.637 817,043 874,040 PRJ100274 SW-45 97,932 826,968
TBD SW-A1-11 826,968 TBD " "
PRJ100384 SW-65 42,000 30,000 54,644 1,651,362 RC - Columbia Way to Columbia River Retrofits
RC - E. Mill Plain UIC Treatment
RC - Hearthwood Infiltration Expansion 40.000 1.746.821 1.858.821 PRJ100450 SW-63 15,356
PRJXXXXXX SW-50
PRJXXXXXX SW-50 1 706 00 300,000 RC - Hearthwood unintration Expansion
RC - Image Infiltration Expansion
RC - SE 18th Cir. & SE 113th Ave Storm Sewer Upgrade
RC - Fruit Valley Rd. Infiltration Expansion
RC - Evergene Culvert Replacements
RC - 27th & P St | PRJXXXXXX | SW-51 | 75,000 | PRJXXXXXX | SW-52 | 50,000 | PRJXXXXXX | SW-53 | PRJXXXXXX | SW-53 | PRJXXXXXX | SW-55 | PRJXXXXXX | SW-56 | PRJXXXXXX | SW-56 | PRJXXXXXX | SW-56 | PRJXXXXXX | SW-57 | PRJ100642 | SW-58 | 39,680 | 10,320 | PRJ100643 | SW-59 | 9,627 | 100,373 | PRJ100643 | SW-59 | PRJ100643 | PRJ100643 | PRJ100643 | PRJ100643 | PRJ100643 | PRJ100643 | PRJ10064 50,000 200,000 250,000 250,000 100,000 250,000 400,000 350,000 175,000 150,000 250,000 25,000 150,000 50,000 200,000 RC - 27th & P St RC - McGillivray Ponding Rehab RC - North Image & NE 129th Ave RC - Fruit Valley Neighborhood Storm Retrofit RC - East Mill Plain CTC Basin Study 250,000 120,000 10,320 100,373 100.00 RC - N. 38th St and F St TBD SW-60 10,000 10,000 SW-A1-24
TBD SW-A1-24
TBD SW-A1-24
TBD "
TBD SW-A1-24 Arterial Safety Projects -SS - Mill Plain & 155th Ave SW-A1-36 acility Retrofits Program -30,000 SS - Fruit Valley Rd SS - Primrose Court DS#105 5,000 23,000 150,000 SS - Primrose Court DS#105
SS - Creekside Meadows III (NE 124th Ct & 47th St)
SS - Tiffany Meadows (SE 169th & 17th St)
SS - Kristi Lane (NE 35th Cir & 119th Ave)
SS - Burnt Bridge Creek Storm Water Outfall - new added to SW-A1-36 PRJ100445 SW-A1-36 78.707 104.000 104.000 Property Acquisitions - Flood Plain, Habitat, Wetlands PA - 15th Ave Wetlands (11 AC =\$405,000)

Property Acquisitions Grants \$500,000/year max 500,000 500,000 500,000 9,500,000 TBD SW-A1-21 Coordination Projects (SCIP/Trans)-TBD SW-A1-12 DR - Stormwater Demand Response (Drainage Problems) DR - Stormwater Retrofits- Demand (Major Projects)
DR - Stormwater Demand Response (DR) - To be Retired/Closed when prj2-4 compl
DR - W 22nd St & Thompson PRJ083356 SW-A1-1 200,000 50,000 100,000 50,000 2,304,997 50,000 50,000 TBD SW-A1-37
PRJ083663 SW-A1-37 54,967 Sub-Standard Systems -SS - Columbia Slope Culvert - Mill Creek SS - Columbia Slope Culvert - Chelsea Ct SS - SE 17th Street Cultrall SS - Fisher's Creek Culvert 150,00 237,81 PRJ083664 ""
PRJ083666 SW-48 12,189 5,000 237,811 145,000 TBD SW-A1-37 PRJ083154 SW-A1-5 WSDOT FEE PROJECTS (WSDOT) DOT Fees - 2018 Use Only SDOT Fees - 2020 SDOT - SR14 Exit 1 Vegetation SDOT - Ellsworth Vegetation SDOT - I-5 Leverich East Slope Vegetation 22,859 648,764 408,040 412,120 416,242 420,404 424,608 428,854 433,143 437,474 441,849 446,267 450,730 455,237 459,790 464,388 473,722 483,244 9,135,610 469,031 478,459 483,244 SDOT - SR500 Andresen Islands Vegetation SDOT - SR500 to I-205 Vegetation SDOT - SR500 & St Johns Vegetation /SDOT - SR14 & 164th Ave Vegetation TBD " VSDOT - SR500 & 39th St Vegetation WSDOT - Orchards UIC Study SDOT - 112th Ave & I-205 Revegetation WP - WATERSHED PLANNING (WP) WP - Linda Lane/Central 4th Plain Stormwater Quality
WP - Burton Channel Green Retrofit-Basin Study and Design - Grant 41,996 158,917 71,932 823,442 77.735 PRJ083512 SW-40 PRJ100272 N/A 141,083 PRJ100451 SW-A1-39 18,068 PRJ100448 SW-61 58,558 158,917 71,932 WP - NPDES/TMDL Watershed Health & Water Quality Monitoring WP - Source Control (EPA Grant) 232,000 200,000 WP - Columbia Slope Retrofit Evaluation 391,442 WP - Columbia Slope WQ Monitoring Operation Coordination Substandard Systems & PIT Cases: 150,000 300,000 450,000 Cimarron Basin Study and Infiltration Expansion 200,000 900,000 UIC Retrofit Ph 2 - Decommission & WQ Treatment TBD 150 000 TBD 164th Ave Median Swale Retrofit 150,000 SE Evergreen Hwy & 5th Ave C-Tran TBD 135.00 250,000 250,000 Metallic Storm Main CCTV Investigation 250,000 900,000 900,000 Non Metallic Storm Main CCTV Investigation TBD 250,000 Failed Storm Main Lining & Repair - Ph 1 750,000 Failed Storm Main Lining & Repair - Ph 2 TBD TBD 250,000 1,500,000 East Mill Plain Infiltration Basin Study 250,000 1,500,000 East Mill Plain Infiltration Expansion - Ph 1 1.500.000 East Mill Plain Infiltration Expansion - Ph 2 TBD 1.500.00 TBD 205,000 Hiddenbrook & 36th Circle Swale Replacement 30,000 TBD TBD TBD Substandard Swale/LID Retrofits 200,000 750,000 750.00 1.700.000 50,000 200,000 NE 3rd St Infiltration Expansion 150,000 Fairway Drive Infiltration Expansion 75.000 225,00 Todd Rd Study and Infiltration Expansion 225,000 Old City Cemetary Storm Conveyance Expansion TBD 50,000 250,000 300,000 Burton Basin Study (Otak 2021): 670,400 670,400 NE 112th Ave, NE 18th St to NE 26th St TBD TBD 757,600 1,072,650 NE 98th Ave, NE Burton Rd to NE 18th Ave 757,600 NE 97th Ave, NE 16th St to NE 7th St

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PROJECT NAME	Project	CIP#	2021		2023	2024	2025	Mar. 18, 2022 2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	Totals
NE 98 th Ave, NE 10 th St to NE 16 th St & NE 16 th St to NE 102 nd Ave	TBD	0	2021	2022	2020	2024	2020	1,161,955	202.	2020	2020	2000	2001	2002	2000	2004	2000	2000	2007	2000	2000	20-10	1 2011	1,161,955
NE 92 nd Ave, at 19 th Cir (near Meadowbrook Marsh Park Entrance)	TBD	1						.,,						272,350									+	272,350
NE Cranbrook Dr, NE Burton Rd to NE 21st St	TBD									644,700				, , , , ,										644,700
NE 21st St & NE 20th St, NE 93rd Ct to NE 96th Ct & NE 94th Ct to NE 96th Ct	TBD																	745,600						745,600
NE 105 th Ave, NE 25 th St to NE 22 nd St, continue on NE 102 nd Ave to NE 24 th St	TBD																		751,100					751,100
																								(
Columbia Slope Study (Herrera 2022):																								
Hwy Regional Facility at Hwy 14 at SE Riverside Dr.	TBD								1,500,000															1,500,000
Regional Facility at Wintler Community Park (B) Hwy Regional Facility at SE 78th Ave and Hwy 14	TBD TBD									500,000		1.000.000												500,000 1.000.000
Regional Facility at Wy'East School Community Park	TBD											1,000,000		750,000									+	750,000
Bioretention at N Blandford Dr	TBD													730,000		2,250,000							+	2,250,000
Green Street at SE McGillivray Blvd and SE Bella Vista Rd	TBD															2,200,000	1,000,000						_	1,000,000
Regional Facility at Wildwood Park	TBD																500,000						1	500,000
Treatment Vault Retrofit at SE 164th Ave, Shari's Restaurant	TBD																	1,250,000						1,250,000
Regional Facility at SE 164th Ave and SE Cascade Park Dr	TBD																		1,000,000					1,000,00
Regional Facility near Biddlewood Park	TBD																			750,000				750,000
Green Streets on SE Talton Ave and Cascade Park Dr.	TBD																				1,750,000			1,750,000
WSDOT Biofiltration Swale Retrofit at Cascade Park Dr.	TBD																					2,500,000	+	2,500,000
DDC MO Study TMDI (SMAD Decises Corresponde Identified (Indiance Opening)		1			ļ			1,500,000	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000	24,000,000
BBC WQ Study TMDL/SMAP Projects Currently Identified (InHouse Ongoing) NF 121st Ave north (NO18031)	TBD	1			1	 		1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	24,000,000
NE 121st Ave north (NO18027)	TBD				1	1				+				1				1					+	
NE 49th St Oakbrook Apts (NO17974)	TBD				1	l		l l	İ	-				l	i								+	
NE 51st Cir E of 112th Ave (NO17967)	TBD					1								1				1						(
NE 112th Ave north side BBC (NO17935)	TBD																							
NE 112th Ave south side BBC (NO17912)	TBD																							(
NE 44th St at NE 104th Ave (NO16902)	TBD																							
NE 109th Ave from ivy lined ditch (NO15869)	TBD																							
NE 109th Ave from south side (NO15917)	TBD																						+	
NE 101st Ct/NE 35th (Site 163649000) Confluence	TBD	_																					+	
NE 112th Ave/NE 26th St (NO15005) DE020 NE 98th Ave (south of Burton) (NO24790)	TBD TBD	1			ļ				-	-	-							+					+	- 7
NE 21st St east of NE 96th Ct (NO30192)	TBD																						+	
NE 92nd Ave/NE 19th Cir (NO13929)	TBD				1				<u> </u>		-							+					+	- 6
NE Bridgecreek Ave/ NE 20th St (NO27373)	TBD	1																					+	(
NE 65th Ave/E 18th St (NO04963)	TBD																						1	(
Devine Road/E 18th St (NO04895)	TBD																							(
Stapleton Rd into swale (NO04908)	TBD																							(
NE Fourth Plain Brandt Road (NO01683)	TBD																							
NE Fourth Plain Grand to Algona (NO01682)	TBD																							
Linda Lane Vault (NO06184)	TBD																						+	
Drummond Ave/E. 33rd St (NO24308)	TBD TBD																						+	-
Arnold Park/ NE St John's/St James (NO15529) NE 41st Circle (historic site BBC3.4) (NO06483)	TBD	1			ļ				-	-	-							+					+	
NE 14th Ave/NE 43rd St (NO15940)	TBD																						+	
NE 14(II AVGNE 45/0 6) (NO 15546)	100				1				<u> </u>		-							+					+	
Future Studies and Projects/Programs for Further Analysis and Prioritization:		1																					+	(
BBC Orchards Study (Herrera 2016)	TBD																							(
BBC Outfalls Study (Parametrix 2022) Future TMDL/SMAP Projects	TBD																							(
UIC Study (Consultant TBD 2021 - 2023) including Decommisioning	TBD																							(
Peterson Channel Basin - 112th & Ivy Ditch	TBD																							(
Fruit Valley Road Study/Project	TBD																							(
East Mill Plain CTC Projects	TBD																						+	-
E 164th Median Swale Retrofits	TBD TBD	_																					+	
Greenway & Creek Restoration Program Arnold Park Study	TBD	1			-				-	-	-							+					+	1 7
Central 4th Pln Basin Study	TBD																						+	- 7
51st Sump Area Study & Property	TBD				1				<u> </u>		-							+					+	
Downtown Capacity & Condition Assessement (CH Study 90's)	TBD																						1	
Urban Forestry & Canopy Desert Basin TMDL Coordination	TBD																						1	(
DePave Program	TBD																							(
Property Acquisition Program	TBD																							(
Swale Retrofit Program (Sadd&Clark)	TBD																							(
Pump Station Study and Retrofits	TBD	1																					+	_
CCTV (metal pipes, outfalls, culverts)	TBD	1			1	 				-				 	1			ļ					+	 '
Outfall Assessement & Replacement/Repair Program (ie East I-5 to Columbia) Sweepers and Vactors - Grants	TBD TBD	1			1	 					-			 	 							 	+	
Sweepers and vaciofs - Grants	IRD	1			-	-					+			-	-			 				-	+	
NEW PROJECTS								 			-				 							 	+	+
Stormwater Pollution Enhanced Source Control	PRJ100586		9,711	190,289	t	1		+	†					1	l			l					+	190,28
Topper's Landing Outfall Repair	PRJ100514		166,292	. 30,200	1	l		l l	İ	-				l	i								+	.00,20
Talton Storm Sewer Extension	PRJ100403		75,854																					
Downtown IDDE Study	PRJ100404		238	1																				
Ecology SFAP Grants \$5 million/year max	TBD							5,000,000		5,000,000			5,000,000					5,000,000						90,000,000
CIP Total for Planned Projects			1.300.027	6.961.974	8,675,897	9.544.117	9.408.063	9.367.359	9,449,608	9.173.554	9.358.143	9.257.874	9,691,849	9.218.617	9.708.330	9.705.237	8.959.790	9,459,988	9 220 131	9 296 372	9,228,459	9 983 244	7 483 244	183 151 850

CIP Total for Planned Projects

Project timing is dependent upon the timing of the coordinating project

"2021 Amounts include revised delivery amount or actual spent in 2021 (as of October), whichever is higher
Shading indicates not included in 6-year plan, but money expected to be spent in 2021



For additional information see: www.cityofvancouver.us/utilitycip









To request other formats, please contact:

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