Funded Projects

Overview

The Stormwater (Watershed) Capital Program is designed to promote and maintain the health and safety of the environment for all Gresham citizens through effective stormwater and natural resource management including: planning, designing, constructing, and maintaining all elements of the public stormwater system. The 5-year CIP program is a vital component to meeting these stated goals, along with meeting the requirements of our regulators and expectations of our residents. Through careful planning and capital project implementation, most historical challenges associated with flood management are now being addressed. While additional flood control projects are still needed, the CIP efforts show an increase in improvements in the areas of surface and ground water quality, stream health, natural resources, and maintenance of existing infrastructure. Properly functioning stormwater infrastructure and healthy streams and wetlands are an important part of the economic engine for sustaining and improving the livability and quality of life in Gresham.

One of the business strategies being employed by Watershed is the application of a comprehensive asset management system beginning with the Operations program, and ultimately applied to the Capital Improvement Program.

Drivers to the CIP program include:

- 1. Projects directly related to meeting State and Federal storm water discharge permit requirements to protect surface and groundwater resources
- 2. Projects needed to reduce flooding (future build out) and 'prevent' property damage
- 3. Projects needed to improve the quality of our waterways

Highlights

Significant projects during the coming fiscal years include:

- Localized Drainage Improvements project #CIPSW00001 will focus on drainage improvements at the Bull Run Condos;
- 2. Rehab & Repair of Pipe System project #CIPSW00004 will focus on culvert improvements near the intersection of SW Towle Ave. and SW 33rd ;
- Stormwater Facility Improvements project #CIPSW00005 will focus on the Fairview Creek regional water quality facility retrofit near the intersection of SE Division and NW Birdsdale Ave.;
- 4. Segments 3B & 3C, Fairview Creek Basin Central Core Trunk Improvement project #CIPSW00016 will begin concept design work.

Project funding comes from a combination of stormwater utility rates, system development charges, grants, debt and private-public partnerships.



Stormwater (Watershed Management) Expenditure Graph by Fiscal Year

| Stormwater Fu | inded Summary | | | | | | | |
|--------------------|---|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Project | Project Name | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | Total |
| CIPSW00001 | Localized Drainage Improvements | 460,276 | 325,000 | 112,000 | 115,000 | 118,000 | 125,000 | 1,255,276 |
| CIPSW00002 | Low Impact Dev Practices Retrofit Program | 1,242,675 | 25,000 | 300,000 | 300,000 | 300,000 | 300,000 | 2,467,675 |
| CIPSW00003 | Stream and Slope Improvements | 745,712 | 275,000 | 100,000 | 100,000 | 100,000 | 100,000 | 1,420,712 |
| CIPSW00004 | Rehab & Repair of Pipe System | 1,924,436 | 812,260 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 6,736,696 |
| CIPSW00005 | Stormwater Facility Improvements | 595,692 | 700,000 | 100,000 | 100,000 | 100,000 | 100,000 | 1,695,692 |
| CIPSW00006 | Riparian & Wetland Improvement Projects | 626,229 | 635,000 | 75,000 | 75,000 | 75,000 | 75,000 | 1,561,229 |
| CIPSW00008 | Segment 2, Fairview Creek Basin Central Core Trunk Impr | 406,904 | 0 | 0 | 0 | 0 | 0 | 406,904 |
| CIPSW00009 | Infrastructure Capacity Improvements | 272,439 | 80,000 | 350,000 | 100,000 | 100,000 | 100,000 | 1,002,439 |
| CIPSW00015 | West Gresham Water Quality and Infiltration Facilities | 397,111 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 897,111 |
| CIPSW00016 | Segments 3B & 3C, Fairview Creek Basin Central Core Tru | 2,324,282 | 0 | 0 | 0 | 0 | 0 | 2,324,282 |
| CIPSW00021 | Environmental Risk Prevention | 200,000 | 200,000 | 150,000 | 150,000 | 150,000 | 150,000 | 1,000,000 |
| CIPSW00023 | Water Quality Tree Wells | 0 | 150,000 | 340,000 | 0 | 0 | 0 | 490,000 |
| CIPSW00024 | Outfall Repair and Rehab | 0 | 400,000 | 0 | 0 | 0 | 0 | 400,000 |
| Grand Total | | 9,195,756 | 3,702,260 | 2,627,000 | 2,040,000 | 2,043,000 | 2,050,000 | 21,658,016 |
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| Stormwater Funded Summary by | y Resource | | | | | | |
|------------------------------|------------|-----------|-----------|-----------|-----------|-----------|------------|
| Description | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | Total |
| Other | 150,000 | 60,000 | 0 | 0 | 0 | 0 | 210,000 |
| Debt-Operating | 0 | 150,000 | 340,000 | 0 | 0 | 0 | 490,000 |
| Dev/SDC Credit | 406'904 | 0 | 0 | 0 | 0 | 0 | 406,904 |
| Operating | 4,163,918 | 1,565,000 | 868,500 | 745,000 | 746,500 | 750,000 | 8,838,918 |
| Repair/Replacement Reserves | 3,436,247 | 1,887,260 | 1,243,500 | 1,245,000 | 1,246,500 | 1,250,000 | 10,308,507 |
| SDC | 1,038,687 | 40,000 | 175,000 | 50,000 | 50,000 | 50,000 | 1,403,687 |
| Grand Total | 9,195,756 | 3,702,260 | 2,627,000 | 2,040,000 | 2,043,000 | 2,050,000 | 21,658,016 |
| | | | | | | | |

| Stormwater Fu | nded Resource Detail | | | | | | | | |
|-------------------|--|------------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Project | Project Name | Description | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | Total |
| CIPSW00001 | Localized Drainage Improvements | Operating | 230,138 | 162,500 | 56,000 | 57,500 | 59,000 | 62,500 | 627,638 |
| | | Repair/Replace | 230,138 | 162,500 | 56,000 | 57,500 | 59,000 | 62,500 | 627,638 |
| CIPSW00001 Tot | al | | 460,276 | 325,000 | 112,000 | 115,000 | 118,000 | 125,000 | 1,255,276 |
| CIPSW00002 | Low Impact Dev Practices Retrofit Program | Operating | 1,242,675 | 25,000 | 300,000 | 300,000 | 300,000 | 300,000 | 2,467,675 |
| CIPSW00002 Tot | al | | 1,242,675 | 25,000 | 300,000 | 300,000 | 300,000 | 300,000 | 2,467,675 |
| CIPSW00003 | Stream and Slope Improvements | Repair/Replace | 745,712 | 275,000 | 100,000 | 100,000 | 100,000 | 100,000 | 1,420,712 |
| CIPSW00003 Tot | al | | 745,712 | 275,000 | 100,000 | 100,000 | 100,000 | 100,000 | 1,420,712 |
| CIPSW00004 | Rehab & Repair of Pipe System | Repair/Replace | 1,924,436 | 812,260 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 6,736,696 |
| CIPSW00004 Tot | al | | 1,924,436 | 812,260 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 6,736,696 |
| CIPSW00005 | Stormwater Facility Improvements | Operating | 222,846 | 350,000 | 50,000 | 50,000 | 50,000 | 50,000 | 772,846 |
| | | Other | 150,000 | 0 | 0 | 0 | 0 | 0 | 150,000 |
| | | Repair/Replace | 222,846 | 350,000 | 50,000 | 50,000 | 50,000 | 50,000 | 772,846 |
| CIPSW00005 Tot | al | | 595,692 | 700,000 | 100,000 | 100,000 | 100,000 | 100,000 | 1,695,692 |
| CIPSW00006 | Riparian & Wetland Improvement Projects | Operating | 313,114 | 287,500 | 37,500 | 37,500 | 37,500 | 37,500 | 750,614 |
| | | Other | 0 | 60,000 | 0 | 0 | 0 | 0 | 60,000 |
| | | Repair/Replace | 313,115 | 287,500 | 37,500 | 37,500 | 37,500 | 37,500 | 750,615 |
| CIPSW00006 Tot | al | | 626,229 | 635,000 | 75,000 | 75,000 | 75,000 | 75,000 | 1,561,229 |
| CIPSW00008 | Segment 2, Fairview Creek Basin Central Core Trunk Im | ם Dev/SDC Credit | 406,904 | 0 | 0 | 0 | 0 | 0 | 406,904 |
| CIPSW00008 Tot | al | | 406,904 | 0 | 0 | 0 | 0 | 0 | 406,904 |
| CIPSW00009 | Infrastructure Capacity Improvements | Operating | 163,464 | 40,000 | 175,000 | 50,000 | 50,000 | 50,000 | 528,464 |
| | | SDC | 108,975 | 40,000 | 175,000 | 50,000 | 50,000 | 50,000 | 473,975 |
| CIPSW00009 Tot | al | | 272,439 | 80,000 | 350,000 | 100,000 | 100,000 | 100,000 | 1,002,439 |
| CIPSW00015 | West Gresham Water Quality and Infiltration Facilities | Operating | 397,111 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 897,111 |
| CIPSW00015 Tot | al | | 397,111 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 897,111 |
| CIPSW00016 | Segments 3B & 3C, Fairview Creek Basin Central Core T | 'i Operating | 1,394,570 | 0 | 0 | 0 | 0 | 0 | 1,394,570 |
| | | SDC | 929,712 | 0 | 0 | 0 | 0 | 0 | 929,712 |
| CIPSW00016 Tot | al | | 2,324,282 | 0 | 0 | 0 | 0 | 0 | 2,324,282 |
| CIPSW00021 | Environmental Risk Prevention | Operating | 200,000 | 200,000 | 150,000 | 150,000 | 150,000 | 150,000 | 1,000,000 |
| CIPSW00021 Tot | al | | 200,000 | 200,000 | 150,000 | 150,000 | 150,000 | 150,000 | 1,000,000 |
| CIPSW00023 | Water Quality Tree Wells | Debt-Operating | 0 | 150,000 | 340,000 | 0 | 0 | 0 | 490,000 |
| CIPSW00023 Tot | al | | 0 | 150,000 | 340,000 | 0 | 0 | 0 | 490,000 |
| CIPSW00024 | Outfall Repair and Rehab | Operating | 0 | 400,000 | 0 | 0 | 0 | 0 | 400,000 |
| CIPSW00024 Tot | al | | 0 | 400,000 | 0 | 0 | 0 | 0 | 400,000 |
| Grand Total | | _ | 9,195,756 | 3,702,260 | 2,627,000 | 2,040,000 | 2,043,000 | 2,050,000 | 21,658,016 |
| | | | | | | | | | |



CIPSW00001: Localized Drainage Improvements

Description: This project repairs the storm drainage system to correct surface drainage problems identified by staff and the public. These repairs are located in various neighborhood districts. The projects in this CIP listed by priority include Bull Run Condos Inlets and Halsey Improvements. The priority of the projects are subject to change. (Estimation of benefits: Growth related 0%; Existing System related 100%).

Justification: The project corrects drainage problems that result in damage to private properties or that cause localized flooding.

Type of project: Repair and rehabilitation of facilities and utilities, and to correct deficiencies.

GRESHAM City Wide Project

| Funds | • | Description 💽 | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | Total |
|------------------|-----|-----------------------------|---------|---------|---------|---------|---------|---------|-----------|
| Resources | | Operating | 230,138 | 162,500 | 56,000 | 57,500 | 59,000 | 62,500 | 627,638 |
| | | Repair/Replacement Reserves | 230,138 | 162,500 | 56,000 | 57,500 | 59,000 | 62,500 | 627,638 |
| Resources | Γot | al | 460,276 | 325,000 | 112,000 | 115,000 | 118,000 | 125,000 | 1,255,276 |
| Expenses | | Design/Const Admin | 30,000 | 39,000 | 13,400 | 13,800 | 14,200 | 15,000 | 125,400 |
| | | Construction | 373,776 | 246,100 | 84,800 | 87,100 | 89,300 | 94,600 | 975,676 |
| | | Admin (14%) | 56,500 | 39,900 | 13,800 | 14,100 | 14,500 | 15,400 | 154,200 |
| Expenses T | ota | al | 460,276 | 325,000 | 112,000 | 115,000 | 118,000 | 125,000 | 1,255,276 |

Stormwater

CIPSW00002: Low Impact Development Practices Retrofit Program

Description: This project replaces conventional systems by integrating Low Impact Development practices such as rain gardens, stormwater planters, swales, drywells, porous pavement & pavers. The project is located in various neighborhood districts and may also be used to leverage stormwater revenue by partnering with private developers, public entities and other programs to apply LID retrofits more cost effectively. In 2024-25, the Watershed Division will be partnering with Transportation on a pervious pavement pilot project. (Estimation of benefits: Growth related 0%; Existing System related 100%).

Justification: This project addresses water quality and water quantity issues relating to the City's NPDES Permit that requires a reduction in pollutants over time. Efforts are achieved through implementing sustainable best management practices that mimic natural hydrologic functions throughout each major creek basin.

Type of project: Construction of facilities and utilities to correct deficiencies and improve water quality and quantity.



| Funds | Description | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | Total |
|---------------------|--------------------|-----------|---------|---------|---------|---------|---------|-----------|
| Resources | Operating | 1,242,675 | 25,000 | 300,000 | 300,000 | 300,000 | 300,000 | 2,467,675 |
| Resources To | otal | 1,242,675 | 25,000 | 300,000 | 300,000 | 300,000 | 300,000 | 2,467,675 |
| Expenses | Design/Const Admin | 100,000 | 3,000 | 26,700 | 26,700 | 26,700 | 26,700 | 209,800 |
| | Construction | 985,075 | 16,900 | 231,500 | 231,500 | 231,500 | 231,500 | 1,927,975 |
| | Property Acq | 5,000 | 2,000 | 5,000 | 5,000 | 5,000 | 5,000 | 27,000 |
| | Admin (14%) | 152,600 | 3,100 | 36,800 | 36,800 | 36,800 | 36,800 | 302,900 |
| Expenses To | tal | 1,242,675 | 25,000 | 300,000 | 300,000 | 300,000 | 300,000 | 2,467,675 |

Stormwater

CIPSW00003: Stream and Slope Improvements

Description: This project improves stream function and bank stability for the purposes of water quality, sensitive species habitat, critical riparian functions, and natural hazard mitigation. Stabilization of slope and bank problem areas will be done based on prioritization of known problems (as identified and ranked in the Natural Resources Master Plan) and will also assess newly discovered areas of instability. Major goals in addressing slope stabilization issues include minimizing potential for larger slope failures and associated property loss, infrastructure damage, and clean up needs. Efforts include field surveys, environmental site assessments, encumbrance research, data analysis, mapping, modeling, and hydrologic investigations, design, acquisition of easement rights or full ownership of undeveloped lands, permitting, construction, and meeting related mitigation requirements. The project addresses needs in various neighborhoods, and significantly contributes to City compliance with state and federal water quality, aquatic habitat, and critical habitat protection, and mitigates risks to public safety and infrastructure investments. (Estimation of benefits: Growth related 0%; Existing System related 100%).

Justification: Gresham's creeks serve as major components of the public stormwater conveyance system for the City. Risk of streambank and slope failures has increased due to ongoing stream bed, streambank, and upslope erosion caused by stormwater discharges, flashy stream flows and hydromodification, and climate change impacts to waterways and adjacent forests. Slope and bank failures adversely impact adjacent structures and infrastructure, and harm aquatic life. Projects are prioritized for implementation based on likelihood of and consequences of significant slope movement with the goal to address issues prior to failure when the mitigation is much less costly.

Type of project: Streambank/Slope stabilization.



| Funds | Ŧ | Description 🗾 🗾 | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | Total |
|--------------------|-----|-----------------------------|---------|---------|---------|---------|---------|---------|-----------|
| Resources | | Repair/Replacement Reserves | 745,712 | 275,000 | 100,000 | 100,000 | 100,000 | 100,000 | 1,420,712 |
| Resources 1 | ſot | al | 745,712 | 275,000 | 100,000 | 100,000 | 100,000 | 100,000 | 1,420,712 |
| Expenses | | Design/Const Admin | 100,000 | 30,300 | 11,000 | 11,000 | 11,000 | 11,000 | 174,300 |
| | | Construction | 549,112 | 205,900 | 71,700 | 71,700 | 71,700 | 71,700 | 1,041,812 |
| | | Property Acq | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 30,000 |
| | | Admin (14%) | 91,600 | 33,800 | 12,300 | 12,300 | 12,300 | 12,300 | 174,600 |
| Expenses To | ota | al | 745,712 | 275,000 | 100,000 | 100,000 | 100,000 | 100,000 | 1,420,712 |

CIPSW00004: Rehab & Repair of Pipe System

Description: This project provides for analysis, design and re-construction of stormwater facilities that are in poor physical condition and in need of rehabilitation. The projects involve repairs and new construction to replace deficient stormwater systems and trench settlement. The specific projects will be identified using industry standard asset management practices, which will include analyzing system condition data using a Computerized Maintenance Management System. Projects are located in various neighborhood districts. The top projects for FY 24-25 include improvements to the Towle Rd Culvert. (Estimation of Benefits: Growth related 0%; Existing System related 100%).

Justification: This project will ensure that our existing stormwater infrastructure remains useful and effective.

Type of project: Repair and rehabilitation of facilities.



| Funds | Description 💽 | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | Total |
|---------------------|-----------------------------|-----------|---------|-----------|-----------|-----------|-----------|-----------|
| Resources | Repair/Replacement Reserves | 1,924,436 | 812,260 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 6,736,696 |
| Resources To | tal | 1,924,436 | 812,260 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 6,736,696 |
| Expenses | Design/Const Admin | 100,000 | 97,500 | 72,200 | 72,200 | 72,200 | 72,200 | 486,300 |
| | Construction | 1,588,136 | 614,960 | 805,000 | 805,000 | 805,000 | 805,000 | 5,423,096 |
| | Admin (14%) | 236,300 | 99,800 | 122,800 | 122,800 | 122,800 | 122,800 | 827,300 |
| Expenses Total | | 1,924,436 | 812,260 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 6,736,696 |

Stormwater

CIPSW00005: Stormwater Facility Improvements

Description: This project corrects deficient or damaged stormwater facilities and associated discharge receiving areas and evaluates existing local ineffective stormwater systems for improvements in design, slope protection, maintenance access, increase of flood storage, added water quality benefits & riparian planting. Fees collected in-lieu of improvements will contribute to funding construction. The top projects for FY 24-25 include improvements to the Old Towne Estates Stormwater Facility and the Fairview Creek Regional Water Quality Facility.

Justification: This project will bring facilities up to current or operational standards, improve immediately adjacent lands significantly impacted by past high velocity or flow discharges, and assists the City in meeting state and federal permit requirements for water quality improvement, pollutant removal, and annual reporting.

Type of project: Design and construction of facilities to correct existing system deficiencies and improve water quantity and quality.



| Funds | * | Description 🗾 🗾 | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | Total |
|-----------------|-----|-----------------------------|---------|---------|---------|---------|---------|-----------|-----------|
| Resources | | Other | 150,000 | 0 | 0 | 0 | 0 | 0 | 150,000 |
| | | Operating | 222,846 | 350,000 | 50,000 | 50,000 | 50,000 | 50,000 | 772,846 |
| | | Repair/Replacement Reserves | 222,846 | 350,000 | 50,000 | 50,000 | 50,000 | 50,000 | 772,846 |
| Resources Total | | 595,692 | 700,000 | 100,000 | 100,000 | 100,000 | 100,000 | 1,695,692 | |
| Expenses | | Design/Const Admin | 75,000 | 102,200 | 14,600 | 14,600 | 14,600 | 14,600 | 235,600 |
| | | Construction | 447,492 | 511,800 | 73,200 | 73,200 | 73,200 | 73,200 | 1,252,092 |
| | | Admin (14%) | 73,200 | 86,000 | 12,200 | 12,200 | 12,200 | 12,200 | 208,000 |
| Expenses T | ota | al | 595,692 | 700,000 | 100,000 | 100,000 | 100,000 | 100,000 | 1,695,692 |

Stormwater

CIPSW00006: Riparian and Wetland Improvement Projects

Description: This project addresses riparian, floodplain, and wetland improvements needed to support local water quality, riparian tree cover and forest health, habitat, and watershed hydrology. Project also supports City response to regulatory requirements for protected areas, including identification of wetland and habitat mitigation opportunities for City infrastructure improvement and repair projects. Identified opportunities are scoped and prioritized through the City's Natural Resources Master Plan. Efforts include field surveys, environmental site assessments, encumbrance research, data collection and analysis, master planning, mapping, modeling, and hydrologic investigations, design, acquisition of easement rights or full ownership of undeveloped lands, permitting, construction, and meeting related mitigation requirements. The top projects for FY 24-25 include removal of undocumented fill in the Johnson Creek Basin and Meadow-Johnson Creek Confluence Rehabilitation resulting from upstream fill violation actions.

Justification: Assists the City in meeting state and federal water quality, stream shade, habitat, flood control, and mitigation requirements through projects that improve the condition and function of the City's natural resources. This includes increasing riparian tree canopy to meet state-required stream temperature standards, increasing the climate resiliency of city forest resources, and improving habitat conditions for protected species. To the extent possible, City investment in these projects is leveraged by grants and extensive engagement of non-profits, residents, school groups, and businesses in volunteer stewardship at project sites.

Type of project: Riparian/Wetland Improvements.

FSHAM City Wide Project

| Funds | Ŧ | Description 🗾 🗾 | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | Total |
|--------------------|-----|-----------------------------|---------|---------|---------|---------|---------|---------|-----------|
| Resources | | Other | 0 | 60,000 | 0 | 0 | 0 | 0 | 60,000 |
| | | Operating | 313,114 | 287,500 | 37,500 | 37,500 | 37,500 | 37,500 | 750,614 |
| | | Repair/Replacement Reserves | 313,115 | 287,500 | 37,500 | 37,500 | 37,500 | 37,500 | 750,615 |
| Resources T | ot | al | 626,229 | 635,000 | 75,000 | 75,000 | 75,000 | 75,000 | 1,561,229 |
| Expenses | | Property Acq | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 30,000 |
| | | Other | 544,329 | 552,000 | 60,800 | 60,800 | 60,800 | 60,800 | 1,339,529 |
| | | Admin (14%) | 76,900 | 78,000 | 9,200 | 9,200 | 9,200 | 9,200 | 191,700 |
| Expenses To | ota | al | 626,229 | 635,000 | 75,000 | 75,000 | 75,000 | 75,000 | 1,561,229 |

CIPSW00008: Segment 2, Fairview Creek Basin Central Core Trunk Improvement

Description: The City-wide Stormwater Master Plan (June 30, 2022) recommends installation of 322 LF of 84-inch HDPE pipe to bypass a portion of an existing 66-inch concrete pipe that crosses a currently vacant property. The project is identified as project FC-3f-C in the master plan. This project is part of drainage improvements in the Civic Neighborhood. SDC project #FC-10.

Justification: Eliminates localized street and property flooding and limits surcharging to acceptable levels.

Type of project: Design and construction of facilities to meet growth and to correct deficiencies.



| Funds | • | Description | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | Total |
|-----------------|-----|---------------------|---------|---------|---------|---------|---------|---------|---------|
| Resources | | Dev/SDC Credit | 406,904 | 0 | 0 | 0 | 0 | 0 | 406,904 |
| Resources Total | | | 406,904 | 0 | 0 | 0 | 0 | 0 | 406,904 |
| Expenses | | Construct/Reimburse | 406,904 | 0 | 0 | 0 | 0 | 0 | 406,904 |
| Expenses T | ota | ıl | 406,904 | 0 | 0 | 0 | 0 | 0 | 406,904 |

Stormwater

CIPSW00009: Infrastructure Capacity Improvements

Description: This program systematically addresses capacity deficiencies in existing pipes and culverts. Projects are identified through multiple channels including existing and future master plans, local drainage improvement reports, SDC Methodology project list, and field data. This project may also leverage stormwater revenue by partnering with private developers, public entities and other programs resulting in the construction of stormwater improvements in a more cost-effective manner. This project may provide systems development charge credits to developers for certain identified improvements. Projects are prioritized based on criticality. During FY 24-25, pre-design for a stormwater conveyance and treatment facility improvements at the Fairview Creek and Stark Street will be completed with design following in FY 25-26.

Justification: This project increases conveyance capacity to alleviate potential flooding issues.

Type of Project: Design and construction of facilities to meet growth and to correct deficiencies.



| Funds | • | Description | • | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | Total |
|--------------------|----|--------------------|--------|---------|---------|---------|---------|-----------|---------|-----------|
| Resources | | Operating | | 163,464 | 40,000 | 175,000 | 50,000 | 50,000 | 50,000 | 528,464 |
| | | SDC | | 108,975 | 40,000 | 175,000 | 50,000 | 50,000 | 50,000 | 473,975 |
| Resources T | ot | al | | 272,439 | 80,000 | 350,000 | 100,000 | 100,000 | 100,000 | 1,002,439 |
| Expenses | | Design/Const Admin | n | 50,000 | 25,000 | 55,000 | 15,000 | 15,000 | 15,000 | 175,000 |
| | | Construction | | 188,939 | 45,200 | 252,000 | 72,700 | 72,700 | 72,700 | 704,239 |
| | | Admin (14%) | | 33,500 | 9,800 | 43,000 | 12,300 | 12,300 | 12,300 | 123,200 |
| Expenses Total | | 272,439 | 80,000 | 350,000 | 100,000 | 100,000 | 100,000 | 1,002,439 | | |

Stormwater

CIPSW00015: West Gresham Water Quality and Infiltration Facilities

Description: This project addresses capacity-related flooding in arterial roadways in the West Gresham watershed as identified by the 2020 Stormwater Master Plan by identifying, designing, and constructing upstream water quality and infiltration facilities. Specific sites will be identified in part by acquisition potential and infiltration rates. Sub-silt injection mechanisms may also be considered.

Justification: This project represents one element of a multi-faceted approach to reduce arterial flooding by introducing treatment and infiltrating runoff, thereby minimizing necessary downstream infrastructure improvements.

Type of Project: Design and construction of facilities to improve water quantity and quality, and to correct deficiencies. Easement/property acquisition may be required.



| Funds | • | Description | • | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | Total |
|--------------------|-----|-------------------|---|---------|---------|---------|---------|---------|---------|---------|
| Resources | | Operating | | 397,111 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 897,111 |
| Resources T | ot | al | | 397,111 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 897,111 |
| Expenses | | Design/Const Admi | n | 75,000 | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 | 150,000 |
| | | Construction | | 263,311 | 67,700 | 67,700 | 67,700 | 67,700 | 67,700 | 601,811 |
| | | Property Acq | | 10,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 35,000 |
| | | Admin (14%) | | 48,800 | 12,300 | 12,300 | 12,300 | 12,300 | 12,300 | 110,300 |
| Expenses To | ota | l | | 397,111 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 897,111 |

CIPSW00016: Segments 3B & 3C, Fairview Creek Basin Central Core Trunk Improvement

Description: The City-wide Stormwater Master Plan (June 30, 2022) recommends replacing 1,630 LF of existing 54-inch pipe from MH 3253-F-026 to MH 3252-F-006 with 84-inch pipe. Replacement and upsizing of this existing pipe helps to reduce predicted surface flooding. Adjustment to pipe alignment in the former K-Mart parking lot will facilitate re-development opportunities for this property. The project is identified as project FC-3g-C in the master plan. This project is part of drainage improvements in the Civic Neighborhood. SDC projects #FC-12 and #FC-13.

Justification: Eliminates localized street and property flooding and limits surcharging to acceptable levels.

Type of Project: Design and construction of facilities to meet growth and to correct deficiencies.



| Funds | 🗾 Description 🛛 🗾 | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | Total |
|--------------------|--------------------|-----------|---------|---------|---------|---------|---------|-----------|
| Resources | Operating | 1,394,570 | 0 | 0 | 0 | 0 | 0 | 1,394,570 |
| | SDC | 929,712 | 0 | 0 | 0 | 0 | 0 | 929,712 |
| Resources T | otal | 2,324,282 | 0 | 0 | 0 | 0 | 0 | 2,324,282 |
| Expenses | Design/Const Admin | 209,203 | 0 | 0 | 0 | 0 | 0 | 209,203 |
| | Construction | 1,799,679 | 0 | 0 | 0 | 0 | 0 | 1,799,679 |
| | Property Acq | 30,000 | 0 | 0 | 0 | 0 | 0 | 30,000 |
| | Admin (14%) | 285,400 | 0 | 0 | 0 | 0 | 0 | 285,400 |
| Expenses To | otal | 2,324,282 | 0 | 0 | 0 | 0 | 0 | 2,324,282 |

Stormwater

CIPSW00021: Environmental Risk Prevention

Description: This effort will reduce risks to both natural resources and public infrastructure and is focused on areas where naturally steep topography and drainageways have been significantly altered from past development impacts from housing, roads, culverts, impoundments, and buried linear pipes. In high slope situations, signs of potential stream failures were assessed where such failures would undermine critical public infrastructure and related public services. Projects implemented under this CIP are selected both in response to significant site changes reported after high rain events, and by stream bed analysis to evaluate and estimate risk of potential failure. These projects are necessary to prevent exponential increase in future damage and related repair costs, and will be pursued in cooperation with the other departments whose infrastructure is contributing to the stream damage or is at risk of exposure or undermining. Example projects include provision of flow detention and stream restoration related to relic high velocity stormwater outfalls, and sewer crossings on steep drainage channels where the impact of the sewer pipe becoming exposed is potentially very high. The top areas for FY 24-25 include assessment of 17th and Paloma Outfall, SE Florence Ct Outfall, and 16th and Ironwood encroachment area.

Justification: Projects are implemented to respond to or prevent system failures where infrastructure and waterway conflicts pose potential for regulatory violations, public health risks, or new or exacerbated infrastructure damage. This is intended to be a multidisciplinary CIP with contributions by multiple divisions within the City, as the causes of degradation and responsibility to mitigate risk crosses other disciplines.

Type of Project: Construction of facilities and restoration of natural high gradient waterways to correct historic deficiencies.

| CITY OF GRESHAM | |
|--------------------|--------------|
| City V | Vide Project |

| Funds | Description | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | Total |
|--------------------|------------------|-----------|---------|---------|---------|---------|---------|-----------|
| Resources | Operating | 200,000 | 200,000 | 150,000 | 150,000 | 150,000 | 150,000 | 1,000,000 |
| Resources T | otal | 200,000 | 200,000 | 150,000 | 150,000 | 150,000 | 150,000 | 1,000,000 |
| Expenses | Design/Const Adm | in 50,000 | 50,000 | 40,000 | 40,000 | 40,000 | 40,000 | 260,000 |
| | Construction | 125,400 | 125,400 | 91,600 | 91,600 | 91,600 | 91,600 | 617,200 |
| | Admin (14%) | 24,600 | 24,600 | 18,400 | 18,400 | 18,400 | 18,400 | 122,800 |
| Expenses To | otal | 200,000 | 200,000 | 150,000 | 150,000 | 150,000 | 150,000 | 1,000,000 |

CIPSW00023: Water Quality Tree Wells

Description: This project removes existing sidewalk and adds street trees which will treat and infiltrate stormwater, while also providing shade over the sidewalk and street along the length of Powell Blvd. The landscape strip between the curb and sidewalk is not currently wide enough for trees, so this innovative project will use structural soil to create root space, as well as a metal tree grate to ensure adequate pedestrian access between the tree and back of walk. It is anticipated that this project will be funded primarily through SRF principal forgiveness. (Estimation of benefits: Growth related 0%; Existing System related 100%).

Justification: This project addresses water quality and water quantity issues by treating existing stormwater runoff from Powell Blvd, a major pollutant-generating arterial in the Johnson Creek watershed. The project provides a major retrofit that helps the City make progress towards pollutant reduction requirements in the City's Water Quality Permit.

Type of Project: Construction of facilities and utilities to correct deficiencies and improve water quality and quantity.



| Funds | Description | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | Total |
|--------------------|--------------------|---------|---------|---------|---------|---------|---------|---------|
| Resources | Debt-Operating | 0 | 150,000 | 340,000 | 0 | 0 | 0 | 490,000 |
| Resources T | otal | 0 | 150,000 | 340,000 | 0 | 0 | 0 | 490,000 |
| Expenses | Design/Const Admin | 0 | 30,000 | 25,000 | 0 | 0 | 0 | 55,000 |
| | Construction | 0 | 101,600 | 273,200 | 0 | 0 | 0 | 374,800 |
| | Admin (14%) | 0 | 18,400 | 41,800 | 0 | 0 | 0 | 60,200 |
| Expenses To | otal | 0 | 150,000 | 340,000 | 0 | 0 | 0 | 490,000 |

CIPSW00024: Outfall Repair and Rehab

Description: This project repairs drainage outfalls that are identified by staff and the public as deficient and/or at risk for destabilizing slopes. These repairs are located in various neighborhood districts. The projects in this CIP listed by priority include Hogan Drive Outfall Extension and Hunters Highland Area Discharge Repairs. The priority of the projects are subject to change. (Estimation of benefits: Growth related 0%; Existing System related 100%).

Justification: This project corrects issues and hazards related to deficient outfalls that have resulted in destabilization of and damage to private properties, or that cause localized flooding.

Type of Project: Repair and rehabilitation of outfalls, and to correct deficiencies.

GRESHAM City Wide Project

| Funds | • | Description | - | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | Total |
|--------------------|-----|-------------------|---|---------|---------|---------|---------|---------|---------|---------|
| Resources | | Operating | | 0 | 400,000 | 0 | 0 | 0 | 0 | 400,000 |
| Resources 1 | ot | al | | 0 | 400,000 | 0 | 0 | 0 | 0 | 400,000 |
| Expenses | | Design/Const Admi | n | 0 | 48,000 | 0 | 0 | 0 | 0 | 48,000 |
| | | Construction | | 0 | 302,900 | 0 | 0 | 0 | 0 | 302,900 |
| | | Admin (14%) | | 0 | 49,100 | 0 | 0 | 0 | 0 | 49,100 |
| Expenses To | ota | 1 | | 0 | 400,000 | 0 | 0 | 0 | 0 | 400,000 |



| Stormwater | · Unfunded and Future Summary | | | | | | | |
|------------|--|---------|---------|---------|---------|---------|---------|-----------|
| Project | Project Name | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | Total |
| 901500 | NE 5th Street Storm Drain | 0 | 0 | 0 | 0 | 0 | 0 | 145,201 |
| 903700 | Willow Parkway Storm Drain | 0 | 0 | 0 | 0 | 0 | 0 | 99,818 |
| 907400 | 194th Avenue Pipe Enlargement at I-84 | 0 | 0 | 0 | 0 | 0 | 0 | 307,800 |
| 909200 | Hogan Place Storm Drain | 0 | 0 | 0 | 0 | 0 | 0 | 741,456 |
| 009606 | Burlingame Cr. South of Powell Valley Road | 0 | 0 | 0 | 0 | 0 | 0 | 298,575 |
| 008606 | Kelly Creek, South of SE Salquist Road | 0 | 0 | 0 | 0 | 0 | 0 | 348,033 |
| 006606 | Burnside Diversion to Kelly Creek | 0 | 0 | 0 | 0 | 0 | 0 | 1,379,683 |
| 910700 | Division to Kelly Stormdrain | 0 | 0 | 0 | 0 | 0 | 0 | 350,465 |
| 910800 | Division Street Diversion | 0 | 0 | 0 | 0 | 0 | 0 | 91,426 |
| 911100 | Stark Street (West) PRF | 0 | 0 | 0 | 0 | 0 | 0 | 85,712 |
| 911200 | Burnside (West) PRF | 0 | 0 | 0 | 0 | 0 | 0 | 53,352 |
| 911300 | Burnside (East) PRF | 0 | 0 | 0 | 0 | 0 | 0 | 68,570 |
| 911400 | Water Qual Facility @ 194th Ave. | 0 | 0 | 0 | 0 | 0 | 0 | 511,020 |
| 912100 | Pipe Replacements - East of 194th Ave. | 0 | 0 | 0 | 0 | 0 | 0 | 72,487 |
| 912300 | Pipe Replacements - N. 181st | 0 | 0 | 0 | 0 | 0 | 0 | 1,378,401 |
| 912500 | Pipe Replacements - S. 181st (50 year fix) | 0 | 0 | 0 | 0 | 0 | 0 | 1,372,875 |
| 912700 | Pipe Replacements - South 162nd Ave. | 0 | 0 | 0 | 0 | 0 | 0 | 105,774 |
| 913200 | SW 7th St: Johnson Creek Riparian Corridor Improvemen | 0 | 0 | 0 | 0 | 0 | 0 | 2,119,025 |
| 913300 | East Gresham Grade School | 0 | 0 | 0 | 0 | 0 | 0 | 420,828 |
| 913400 | SE Dowsett St. Riparian Corridor Restoration | 0 | 0 | 0 | 0 | 0 | 0 | 137,975 |
| 913500 | Grace Community Church | 0 | 0 | 0 | 0 | 0 | 0 | 130,062 |
| 913600 | Bus Creek Restoration | 0 | 0 | 0 | 0 | 0 | 0 | 66,201 |
| 913700 | West Gresham Grade School: Johnson Creek Riparian Cor | 0 | 0 | 0 | 0 | 0 | 0 | 102,600 |
| 913800 | SW14th Stabilization: Johnson Creek Riparian Corridor Im | 0 | 0 | 0 | 0 | 0 | 0 | 85,500 |
| 913900 | SE Regner to Hogan: Johnson Creek Riparian Corridor Im | 0 | 0 | 0 | 0 | 0 | 0 | 773,554 |
| 914000 | Willowbrook Pond | 0 | 0 | 0 | 0 | 0 | 0 | 25,711 |
| 914300 | Water Quality Monitoring-Fairview Creek PRF | 0 | 0 | 0 | 0 | 0 | 0 | 22,800 |
| 915200 | Atherton Ave. Culvert Improvement | 0 | 0 | 0 | 0 | 0 | 0 | 42,371 |
| 915400 | Butler Creek- Groups 1A, B & C Pipe Improvement | 0 | 0 | 0 | 0 | 0 | 0 | 397,263 |
| 915500 | Butler Creek- Groups 2A & B Pipe Improvement | 0 | 0 | 0 | 0 | 0 | 0 | 183,892 |
| 915600 | Brick Creek Culvert Improvement | 0 | 0 | 0 | 0 | 0 | 0 | 87,592 |
| 915800 | Butler West- Group 3 - Pipe Improvement | 0 | 0 | 0 | 0 | 0 | 0 | 267,037 |
| 915900 | Cedar Creek- Group 1 - Pipe Improvement | 0 | 0 | 0 | 0 | 0 | 0 | 233,604 |
| 916000 | Cedar Creek- Group 2- Culvert Improvement | 0 | 0 | 0 | 0 | 0 | 0 | 119,618 |
| 916100 | Mawcrest Dr Pipe Improvement | 0 | 0 | 0 | 0 | 0 | 0 | 78,085 |
| 916200 | Miller Ct Pipe Improvement | 0 | 0 | 0 | 0 | 0 | 0 | 171,056 |
| 916300 | Morlan Ave Pipe Improvement | 0 | 0 | 0 | 0 | 0 | 0 | 97,900 |

| Stormwater Unfunded and Future Sumn | nary | | | | | | | |
|---|------------------------------|---------|---------|---------|---------|---------|---------|-----------|
| Project Project Name | | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | Total |
| 916400 Powell Blvd East - Group 2 Pipe | e Improvement | 0 | 0 | 0 | 0 | 0 | 0 | 149,069 |
| 916500 Powell Loop - Group 1 - Pipe In | mprovement | 0 | 0 | 0 | 0 | 0 | 0 | 368,953 |
| 916600 Powell Loop - Group 2 - Pipe In | mprovement | 0 | 0 | 0 | 0 | 0 | 0 | 267,957 |
| 916700 Roberts Drive - Pipe Improvem | nent | 0 | 0 | 0 | 0 | 0 | 0 | 262,942 |
| 916900 Towle Ave East - Group 1 - Pip | e Improvement | 0 | 0 | 0 | 0 | 0 | 0 | 117,400 |
| 917000 Towle Ave East - Group 2 - Pip | e Improvement | 0 | 0 | 0 | 0 | 0 | 0 | 356,853 |
| 917100 Towle Ave South - Pipe Improv | vement | 0 | 0 | 0 | 0 | 0 | 0 | 152,097 |
| 917200 Walters Drive - Culvert Improv | vement | 0 | 0 | 0 | 0 | 0 | 0 | 58,263 |
| 917300 Hogan Place Regional PRF | | 0 | 0 | 0 | 0 | 0 | 0 | 783,938 |
| 917500 Ironwood Access Road Culvert | t Removal | 0 | 0 | 0 | 0 | 0 | 0 | 137,179 |
| 917600 NE Hale Place Bank Stabilizatio | uo | 0 | 0 | 0 | 0 | 0 | 0 | 144,254 |
| 917800 NE 7th Ct. Channel Modificatio | uo | 0 | 0 | 0 | 0 | 0 | 0 | 137,031 |
| 917900 Riparian Enhancements near G | Gr. Golf Course | 0 | 0 | 0 | 0 | 0 | 0 | 154,851 |
| 918100 Highway 26 Ecology Embankm | nent | 0 | 0 | 0 | 0 | 0 | 0 | 664,633 |
| 918200 Vista Way PRF | | 0 | 0 | 0 | 0 | 0 | 0 | 160,832 |
| 918300 23rd Ave and Hale Street PRF | | 0 | 0 | 0 | 0 | 0 | 0 | 151,597 |
| 918600 Major Outfall Rehabilitation (N | NE Scott, SW Condor, SE Lai | 0 | 0 | 0 | 0 | 0 | 0 | 138,668 |
| 919000 SE Powell Valley Road | | 0 | 0 | 0 | 0 | 0 | 0 | 206,653 |
| 919100 Bell Acres Trailer Park | | 0 | 0 | 0 | 0 | 0 | 0 | 1,172,946 |
| 919300 Gresham Golf Course Creek M | leandering | 0 | 0 | 0 | 0 | 0 | 0 | 557,374 |
| 919400 SE 24th Street to SE Salquist Ro | oad | 0 | 0 | 0 | 0 | 0 | 0 | 336,896 |
| 919500 Johnson Creek Restoration at I | Main City Park | 0 | 0 | 0 | 0 | 0 | 0 | 179,556 |
| CIPSW00007 Fujitsu Ponds Restoration | | 0 | 0 | 0 | 0 | 0 | 0 | 248,000 |
| CIPSW00014 Johnson Creek Stormwater LID | D Retrofit | 0 | 0 | 0 | 0 | 0 | 0 | 702,000 |
| CIPSW00017 Chastain Creek Improvements | and Fill Remediation | 0 | 0 | 0 | 0 | 0 | 0 | 7,500,000 |
| CIPSW00018 SW 7th Street: Johnson Creek | Corridor Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 2,559,990 |
| CIPSW00019 SE Hogan to Regner: Johnson C | Creek Corridor Improvemer | 0 | 0 | 0 | 0 | 0 | 0 | 1,243,923 |
| CIPSW00020 SE 252nd Avenue: Johnson Cre | eek Corridor Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 710,979 |
| CIPSW00025 NE Halsey Street Pipe Improve | ements | 0 | 0 | 0 | 0 | 0 | 0 | 4,420,008 |
| CIPSW00026 Halsey Capacity Improvements | s and Water Quality Facility | 0 | 0 | 0 | 0 | 0 | 0 | 2,267,460 |
| CIPSW00027 NE Kirk Park Water Quality Fac | cility | 0 | 0 | 0 | 0 | 0 | 0 | 666,000 |
| CIPSW00028 NW 1st Street/Ava Avenue Pip | be Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 779,760 |
| CIPSW00029 Elliot Avenue Pipe Improveme | ents | 0 | 0 | 0 | 0 | 0 | 0 | 863,000 |
| CIPSW00030 Elliot Avenue Green Street | | 0 | 0 | 0 | 0 | 0 | 0 | 341,000 |
| CIPSW00031 Channel Replacement Southea | ast of Division and Clevelan | 0 | 0 | 0 | 0 | 0 | 0 | 1,652,886 |
| CIPSW00032 Hogan Drive Outfall Extension | | 0 | 0 | 0 | 0 | 0 | 0 | 2,348,000 |
| CIPSW00033 17th and 18th Street Green Str | reets Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 644,000 |

| Stormwater I | Unfunded and Future Summary | | | | | | | |
|--------------------|---|---------|---------|---------|---------|---------|---------|------------|
| Project | Project Name | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | Total |
| CIPSW00034 | Division Street Pipe Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 2,464,000 |
| CIPSW00035 | Powell and Hwy 26 Pipe Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 7,149,000 |
| CIPSW00036 | SE Salquist Road Pipe Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 1,000,000 |
| CIPSW00037 | Wendy Ave. and 16th St. Green Street Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 556,000 |
| CIPSW00038 | Fairview Creek Stark Street Culvert | 0 | 0 | 0 | 0 | 0 | 0 | 401,000 |
| CIPSW00039 | Stark St. Water Quality Swale | 0 | 0 | 0 | 0 | 0 | 0 | 671,000 |
| CIPSW00040 | Wallula Ave. Open Channel | 0 | 0 | 0 | 0 | 0 | 0 | 411,426 |
| CIPSW00041 | NE Burnside Road Pipe Replacements | 0 | 0 | 0 | 0 | 0 | 0 | 3,612,546 |
| CIPSW00042 | NE 19th Ave. Parallel Pipe | 0 | 0 | 0 | 0 | 0 | 0 | 2,196,000 |
| CIPSW00043 | Liberty Ave. Green Street | 0 | 0 | 0 | 0 | 0 | 0 | 505,000 |
| CIPSW00044 | Civic Drive Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 1,022,000 |
| CIPSW00045 | K-Mart Pipe Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 4,948,398 |
| Grand Total | | 0 | 0 | 0 | 0 | 0 | 0 | 71,516,640 |
| | | | | | | | | |



901500: NE 5th Street Storm Drain

Description: This project consists of 900 L.F. of 15" and 18" storm drain in NE 5th Street from Roberts Street to NE Elliott. The project is located in the Central City Neighborhood District.

Justification: The existing storm system is under capacity for the existing level of development in the basin.

Type of Project: Construction of facilities and utilities for growth and to correct deficiencies.



| Funds | - | Description | * | Total |
|------------------------|---|------------------|----|---------|
| Resources | | Bond | | 145,201 |
| Resources Total | | | | 145,201 |
| Expenses | | Design/Const Adm | in | 29,393 |
| | | Construction | | 97,976 |
| | | Admin (14%) | | 17,832 |
| Expenses Total | | | | 145,201 |

903700: Willow Parkway Storm Drain

Description: This project constructs approximately 400 L.F. of 18" storm drain to replace an existing 12" pipe between SW Eastwood Avenue and SW Meyers Place. The project is located in the Southwest Neighborhood District and is in the Johnson Creek Basin.

Justification: The existing undersized pipe is unable to convey the 10-year storm flows. The project will provide the increased capacity required to convey 10-year flows from existing development to prevent local flooding.

Type of Project: Construction of facilities and utilities to correct deficiencies.



| Funds | - | Description | • | Total |
|------------------------|---|------------------|----|--------|
| Resources | | Operating | | 99,818 |
| Resources Total | | | | 99,818 |
| Expenses | | Design/Const Adm | in | 20,206 |
| | | Construction | | 67,354 |
| | | Admin (14%) | | 12,258 |
| Expenses Total | | | | 99,818 |

907400: 194th Avenue Pipe Enlargement at I-84

Description: This project installs a 36" stormwater pipe through the existing transportation corridor occupied by I-84 and a railroad. This project is located in the North Gresham Neighborhood District and the West Gresham Basin.

Justification: The existing storm pipe crossing I-84 and adjacent to the railroad is 24". Enlargement of this storm pipe to 36" is required to convey runoff from future development. A pre-requisite to this project is the West Gresham Master Plan, currently underway.

Type of Project: Construction of facilities and utilities for growth.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | • | Description | Total |
|-----------------|---|--------------------|---------|
| Resources | | Operating | 307,800 |
| Resources Total | | | 307,800 |
| Expenses | | Design/Const Admin | 60,000 |
| | | Property Acq | 10,000 |
| | | Construction | 200,000 |
| | | Admin (14%) | 37,800 |
| Expenses Total | | | 307,800 |

909200: Hogan Place Storm Drain

Description: This project replaces 2,750 ft. of storm drain pipe of various diameters. This project is located in the North Central and Powell Valley Neighborhood Districts.

Justification: This section of storm pipe is not adequate to accommodate stormwater runoff from the area upstream. If improvements are not made, flooding in the project area may occur. Increasing capacity will permit continued growth in SE Gresham. This project is identified as element B4, B6 and B8-B10 in the 1988 Kelly Creek Basin Master Plan.

Type of Project: Design and construction of facilities to meet growth and to correct deficiencies.



| Funds | • | Description | Total |
|------------------------|----------|--------------------|---------|
| Resources | | Operating | 741,456 |
| Resources Total | | | 741,456 |
| Expenses | | Design/Const Admin | 150,100 |
| | | Construction | 500,300 |
| | | Admin (14%) | 91,056 |
| Expenses Total | | | 741,456 |

909600: Burlingame Cr. South of Powell Valley Road

Description: This project adds stormwater conveyance capacity consisting of 2300 linear feet of improvements. This project is located in the Mt Hood Neighborhood.

Justification: Increase channel size to handle peak flows and reduce potential flood damage. This project is identified as element B21 in the 1988 Kelly Creek Basin Master Plan.

Type of Project: Design and construction of facilities to correct deficiencies.



| Funds | • | Description | • | Total |
|-----------------|---|------------------|----|---------|
| Resources | | Operating | | 298,575 |
| Resources Total | | | | 298,575 |
| Expenses | | Design/Const Adm | in | 60,440 |
| | | Construction | | 201,468 |
| | | Admin (14%) | | 36,667 |
| Expenses Total | | | | 298,575 |

909800: Kelly Creek, South of SE Salquist Road

Description: This project adds stormwater conveyance capacity consisting of channel improvements in Kelly Creek, south of SE Salquist. This project is located in the Kelly Creek Neighborhood.

Justification: An increased channel size is required to handle peak flows and reduce potential flood damage. This project is identified as element A19 in the 1988 Kelly Creek Basin Master Plan.

Type of Project: Design and construction of facilities to correct deficiencies.



| Funds | * | Description | * | Total |
|------------------------|---|------------------|----|---------|
| Resources | | Operating | | 348,033 |
| Resources Total | | | | 348,033 |
| Expenses | | Design/Const Adm | in | 70,452 |
| | | Construction | | 234,840 |
| | | Admin (14%) | | 42,741 |
| Expenses Total | | | | 348,033 |

909900: Burnside Diversion to Kelly Creek

Description: This project adds stormwater conveyance capacity consisting of 2920 linear feet of up to 72" parallel storm drain pipe from E Burnside to Kelly Creek. This project is located in the Northeast Neighborhood.

Justification: Increase pipe size to handle peak flows and reduce potential flood damage. This project is identified as element A12.1-A12.5 in the 1988 Kelly Creek Basin Master Plan.

Type of Project: Design and construction of facilities to correct deficiencies.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | * | Description | * | Total |
|------------------------|---|------------------|----|-----------|
| Resources | | Operating | | 1,379,683 |
| Resources Total | | | | 1,379,683 |
| Expenses | | Design/Const Adm | in | 279,288 |
| | | Construction | | 930,960 |
| | | Admin (14%) | | 169,435 |
| Expenses Total | | | | 1,379,683 |

910700: Division to Kelly Stormdrain

Description: Upsize the main trunk line on Division. Existing pipe size is 12-inch in diameter. Suggested replacement pipe size is 24-inch. This project is located in the Central City Neighborhood and in the Fairview Creek Drainage Basin. SDC project #FC-5. (Estimation of benefits: Growth related 32%; Existing System related 68%).

Justification: Eliminates local storm drain system flooding.

Type of Project: Storm drain improvements.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| • | Description | Total |
|---|-------------------|---|
| | Operating | 238,316 |
| | SDC | 112,149 |
| | | 350,465 |
| | Design/Const Admi | 70,917 |
| | Construction | 236,500 |
| | Admin (14%) | 43,048 |
| | | 350,465 |
| | • | Description Operating SDC Design/Const Admi Construction Admin (14%) |

910800: Division Street Diversion

Description: This project will construct a diversion structure to divert the flows from the area south of Division Street into the proposed Birdsdale water quality facility. This 18 acre area drains a developed residential area constructed from the 1950-1970s, as well as a portion of Division Street. This project is in the Northwest Neighborhood and in the Fairview Creek Drainage Basin. SDC project #FC-1. (Estimation of benefits: Growth related 7%; Existing System related 93%).

Justification: There is no existing water quality treatment in this area and flows can be accommodated in the Birdsdale Facility.

Type of Project: Water quality treatment.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | • | Description | Total | |
|-----------------|---|-------------------|-------|----|
| Resources | | Operating | 85,02 | 25 |
| | | SDC | 6,40 |)1 |
| Resources Total | | | 91,42 | 26 |
| Expenses | | Design/Const Admi | 18,53 | 88 |
| | | Construction | 61,69 |)1 |
| | | Admin (14%) | 11,19 |)7 |
| Expenses Total | | | 91,42 | 26 |

911100: Stark Street (West) PRF

Description: Install a pollution reduction facility at the intersection of SE Stark St. and SE 205th. This project is in the North Central Neighborhood and in the Fairview Creek Drainage Basin. (Estimation of benefits: Growth related 70%; Existing System related 30%). SDC project #FC-3.

Justification: There is no existing water quality treatment in this area. This facility would improve stormwater quality flowing to Fairview Creek.

Type of Project: Water quality treatment.



| s: Fur | nds | • | Description | Тс | otal |
|--------|---------------|---|-------------------|----|--------|
| Res | Resources | | Operating | | 25,713 |
| | | | SDC | | 59,999 |
| Res | sources Total | | | | 85,712 |
| Exp | Expenses | | Design/Const Admi | | 11,974 |
| | | | Construction | | 63,216 |
| | | | Admin (14%) | | 10,522 |
| Exp | enses Total | | | | 85,712 |

911200: Burnside (West) PRF

Description: This project would install a pollution reduction facility at Burnside Street prior to discharging to Fairview Creek. The 9 acre area drains a fully developed area dominated by commercial and residential properties. A portion of Burnside Street is also located within the drainage area served by this project. This project is in the North Central Neighborhood and in the Fairview Creek Drainage Basin. (Estimation of benefits: Growth related 0%; Existing System related 100%).

Justification: There is no water quality treatment in this area and this facility would improve the quality of stormwater flowing to Fairview Creek.

Type of Project: Structural pollutant reduction facility.



| Funds | - | Description | • | Total |
|-----------------|---|------------------|----|--------|
| Resources | | Operating | | 53,352 |
| Resources Total | | | | 53,352 |
| Expenses | | Design/Const Adm | in | 10,800 |
| | | Construction | | 36,000 |
| | | Admin (14%) | | 6,552 |
| Expenses Total | | | | 53,352 |

911300: Burnside (East) PRF

Description: Install a pollution reduction facility (PRF) at Burnside Street, just east of Fairview Creek. This water quality area drains a 19 acre residential area constructed from 1960-1970. This project is in the North Central Neighborhood and in the Fairview Creek Drainage Basin. SDC project #FC-4. (Estimation of benefits: Growth related 10%; Existing System related 90%).

Justification: There is no existing water quality treatment in this area and this facility would improve the quality of stormwater flowing into Fairview Creek.

Type of Project: Stormwater quality treatment.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | * | Description | Total |
|-----------------|---|-------------------|--------|
| Resources | | Operating | 61,712 |
| | | SDC | 6,858 |
| Resources Total | | | 68,570 |
| Expenses | | Design/Const Admi | 12,815 |
| | | Construction | 47,295 |
| | | Admin (14%) | 8,460 |
| Expenses Total | | | 68,570 |
911400: Water Quality Facility @ 194th Ave

Description: Create a 2.1 - acre-feet water quality facility at the north-eastern corner of the culde-sac at the north end of 194th Avenue south of I-84. Based on impervious percentages for existing and future conditions, 62% of the project would benefit flows associated with future development. This project is located in the North Gresham neighborhood district and the West Gresham Drainage Basin.

Justification: This facility would provide water quality treatment for a drainage area of approximately 102 acres.

Type of Project: Construction of facilities related to growth and to correct deficiencies.



| Funds | • | Description | Total |
|-----------------|----------|--------------------|---------|
| Resources | | Operating | 511,020 |
| Resources Total | | | 511,020 |
| Expenses | | Design/Const Admin | 49,800 |
| | | Property Acq | 232,320 |
| | | Construction | 166,143 |
| | | Admin (14%) | 62,757 |
| Expenses Total | | | 511,020 |

912100: Pipe Replacements – East of 194th Ave

Description: Replace pipe segments to the east of the 194th Avenue cul-de-sac. Project elements are as follows: 1) Replace 21" Dia pipe with 30" Dia pipe, 493' Long. 2) Replace 21" Dia pipe with 27" Dia pipe, 228' Long. 3) Replace 24" Dia pipe with 27" Dia pipe, 107' Long. This CIP is addressing 10-year design storm problems. This project is in the North Gresham Neighborhood and the West Gresham Drainage Basin. SDC project #WG-4. (Estimation of benefits: Growth related 49%; Existing System related 51%).

Justification: This capital project will provide increased capacity to alleviate expected flooding problems at the intersection of Halsey St. and Barr St.

Type of Project: Construction of facilities and utilities to correct deficiencies.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | * | Description | Total |
|-----------------|---|-------------------|--------|
| Resources | | Operating | 35,518 |
| | | SDC | 36,969 |
| Resources Total | | | 72,487 |
| Expenses | | Design/Const Admi | 14,681 |
| | | Construction | 48,848 |
| | | Admin (14%) | 8,958 |
| Expenses Total | | | 72,487 |
| | | | |

912300: Pipe Replacements – N. 181st

Description: Replace pipe segments along 181st Avenue starting north of I-84 and extending to the outfall of the 181st Avenue pipe system. Project elements are as follows: 1) Replace 42" Dia pipe with 48" Dia pipe, 375' Long. 2) Replace 48" Dia pipe with 54" Dia pipe, 1276' Long. 3) Replace 42" Dia pipe with 48" Dia pipe, 368' Long. 4) Replace 42" Dia pipe with 60" Dia pipe, 314' Long. Based on impervious percentages for existing and future conditions, 23% of the project would be funded by SDCs. This project is located in the North Gresham and Wilkes East Neighborhoods and the West Gresham Drainage Basin. SDC project #WG-3.

Justification: This capital project will provide increased capacity to alleviate expected flooding problems on 181st Ave north of I-84.

Type of Project: Construction of facilities related to growth and to correct deficiencies.



| 5: | Funds | • | Description | Total |
|----|-----------------|---|-------------------|-----------|
| | Resources | | Operating | 1,061,368 |
| | | | SDC | 317,033 |
| | Resources Total | | | 1,378,401 |
| | Expenses | | Design/Const Admi | 279,066 |
| | | | Construction | 930,004 |
| | | | Admin (14%) | 169,331 |
| | Expenses Total | | | 1,378,401 |

912500: Pipe Replacements – 181st (50 year fix)

Description: Replace pipe segments along 181st Avenue starting just south Glisan Street and extending to I-84. Project elements are as follows: 1) Replace 21" Dia pipe with 24" Dia pipe, 250' Long. 2) Replace 27" Dia pipe with 36" Dia pipe, 1661' Long. 3) Replace 30" Dia pipe with 48" Dia pipe, 725' Long. 4) Replace 30" Dia pipe with 42" Dia pipe, 600' Long. 5) Replace 36" Dia pipe with 54" Dia pipe, 675' Long. 6) Replace 36" Dia pipe with 42" Dia pipe, 600' Long. Based on impervious percentages for existing and future conditions, 10% of the project would be funded by SDCs. This project is located in the North Gresham and Wilkes East Neighborhoods and the West Gresham Drainage Basin. SDC project #WG-1.

Justification: This capital project will provide increased capacity to alleviate expected flooding problems on 181st Ave. south of I-84.

Type of Project: Construction of facilities related to growth and to correct deficiencies.



| Estimated Dollars: | Fu |
|---------------------------|----|
| | _ |

| Funds | • | Description | Total |
|-----------------|----------|-------------------|-----------|
| Resources | | Operating | 1,235,586 |
| | | SDC | 137,289 |
| Resources Total | | | 1,372,875 |
| Expenses | | Design/Const Admi | 277,822 |
| | | Construction | 926,469 |
| | | Admin (14%) | 168,584 |
| Expenses Total | | | 1,372,875 |
| | | | |

912700: Pipe Replacements – South 162nd Ave.

Description: Replace pipe segment along 162nd Avenue starting just south of Thompson Street and continuing for half a block to the north of Thompson Street. Also replace segments of pipe along 162nd Avenue to the south of Halsey Street. Project elements are as follows: Replace 12" Dia pipe with 15" Dia pipe, 399' Long. Replace 15" Dia pipe with 18" Dia pipe, 241' Long. Replace 36" Dia pipe with 42" Dia pipe, 350' Long. Based on impervious percentages for existing and future conditions, 33% of the project would be funded by SDCs. SDC project #WG-5.

Justification: This capital project will provide increased capacity to alleviate expected flooding problems on 162nd Ave. just south of Halsey St. at node number 2946-W-002.

Type of Project: Construction of facilities and utilities to correct deficiencies and for future growth.



| Resources Operating | 70,868 |
|----------------------------|-----------------|
| SDC 3 | 34,906 |
| Resources Total 10 |)5,774 |
| Expenses Design/Const Admi | 21,524 |
| Construction | 71,311 |
| Admin (14%) | 12,939 |
| Expenses Total 10 |)5 <i>,</i> 774 |

913200: SW 7th St: Johnson Creek Riparian Corridor Improvements

Description: Improve natural resource functions along 16.8 riparian acres of public property located between SW Eastman Parkway and SW Overlook Ct. by: stabilizing stream banks, improving the stream bed conditions through installation of bio-engineered bendway weirs, reconnecting Johnson Creek mainstem with its floodplain, and replacing aggressive invasive plant species with native tree and shrub species. SDC project #JC-20.

Justification: Assists City in: (1) addressing habitat needs for ESA-listed salmon, and (2) responding to water quality (NPDES and Temperature TMDL) requirements by decreasing amount of bank soil eroding into creek, improving floodplain storage, reducing stream temperature through tree shade, and providing a vegetated buffer to capture nutrient and pesticide runoff.

Type of project: Stream restoration/enhancement.



| 5: | Funds | • | Description | Total |
|----|-----------------|---|-------------------|-----------|
| | Resources | | Operating | 1,695,219 |
| | | | SDC | 423,806 |
| | Resources Total | | | 2,119,025 |
| | Expenses | | Design/Const Admi | 79,627 |
| | | | Construction | 1,779,119 |
| | | | Admin (14%) | 260,279 |
| | Expenses Total | | | 2,119,025 |

913300: East Gresham Grade School

Description: Improve natural resource functions within a 5.6 acre riparian tract behind East Gresham Grade School and McCarty Middle School by using stormwater runoff from school properties to support riparian area plantings and by stabilizing slopes. SDC project #JC-24.

Justification: Assists City in complying with water quality and ESA requirements by decreasing amount of bank soil eroding into creek, reducing stream temperature, and improving aquatic habitat.

Type of Project: Stream restoration/enhancement.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | • | Description | Total |
|-----------------|---|-------------------|---------|
| Resources | | Operating | 336,662 |
| | | SDC | 84,166 |
| Resources Total | | | 420,828 |
| Expenses | | Design/Const Admi | 85,225 |
| | | Construction | 283,970 |
| | | Admin (14%) | 51,633 |
| Expenses Total | | | 420,828 |

913400: SE Dowsett St. Riparian Corridor Restoration

Description: Improve natural resource functions within a 9.35-acre riparian tract along Johnson Creek between SE Dowsett Ln. and SE Regner Rd. by replacing aggressive invasive plant species with native tree and shrub species and stabilizing slopes. SDC project #JC-25.

Justification: Assists City in complying with water quality and ESA requirements by decreasing amount of bank soil eroding into creek, reducing stream temperature, and improving aquatic habitat.

Type of Project: Stream restoration/enhancement.



| s: Funds | ; | * | Description | Total |
|----------|-------------|---|-------------------|---------|
| Resou | Resources | | Operating | 110,379 |
| | | | SDC | 27,596 |
| Resou | irces Total | | | 137,975 |
| Exper | Expenses | | Design/Const Admi | 27,869 |
| | | | Construction | 93,185 |
| | | | Admin (14%) | 16,921 |
| Exper | nses Total | | | 137,975 |

913500: Grace Community Church

Description: Improve natural resource functions within a 2.22-acre site containing the headwaters of Thom Creek, on the Grace Community Church property off Hogan Rd. The project involves daylighting a stream section currently piped under a parking lot, installing bioswales to treat property's runoff, and installing native tree and shrub species. (JC-NR04)

Justification: Assists City in complying with water quality and ESA requirements by decreasing amount of bank soil eroding into creek, reducing stream temperature, and improving aquatic habitat.

Type of Project: Stream restoration/enhancement.



| Funds | • | Description | * | Total |
|-----------------|---|------------------|----|---------|
| Resources | | Operating | | 130,062 |
| Resources Total | | | | 130,062 |
| Expenses | | Design/Const Adm | in | 26,328 |
| | | Construction | | 87,761 |
| | | Admin (14%) | | 15,973 |
| Expenses Total | | | | 130,062 |

913600: Bus Creek Restoration

Description: Improve natural resource functions along a 1.63-acre stretch of Cedar Creek, adjacent to the First Student bus yard off Hogan Rd. by installing native tree and plant species and constructing vegetated buffers to treat parking lot runoff. (JC-NR05)

Justification: Assists City in complying with water quality and ESA requirements by decreasing amount of bank soil eroding into creek, reducing stream temperature, and improving aquatic habitat.

Type of Project: Stream restoration/enhancement.



| Funds | • | Description | Total |
|------------------------|---|--------------------|--------|
| Resources | | Operating | 66,201 |
| Resources Total | | | 66,201 |
| Expenses | | Design/Const Admin | 13,401 |
| | | Construction | 44,670 |
| | | Admin (14%) | 8,130 |
| Expenses Total | | | 66,201 |

913700: West Gresham Grade School: Johnson Creek Riparian Corridor Improvements

Description: Improve natural resource functions along 2.5 riparian acres along Johnson Creek, south and east of West Gresham Grade School, by: improving side channel conditions, installing a bendway weir to reduce bank erosion caused by the Walters Rd. bridge, stabilizing areas of slope instability, and replacing aggressive invasive plant species with native tree and shrub species. (JC-NR06)

Justification: Assists City in complying with water quality (NPDES and Temperature TMDL) and ESA requirements by decreasing amount of bank eroding into creek, reducing stream temperature (through tree shade), and improving wetland function, base flow support, and aquatic habitat. This will also reduce bank slumping at the upstream edge of the south bridge abutment.

Type of project: Stream restoration/enhancement.



| Estimated Dollars: | Funds | • | Description | • | Total |
|---------------------------|-----------------|---|-------------------|---|---------|
| | Resources | | Operating | | 102,600 |
| | Resources Total | | | | 102,600 |
| | Expenses | | Design/Const Admi | n | 6,500 |
| | | | Construction | | 83,500 |
| | | | Admin (14%) | | 12,600 |
| | Expenses Total | | | | 102,600 |

913800: SW 14th Stabilization: Johnson Creek Riparian Corridor Improvements

Description: Address massive slumping and adjacent areas of bank erosion along 1.55 riparian acres between Johnson Creek and SW 14th Dr., east of SW Pleasant View. Geotechnical analysis, landowner involvement, and significant agency input will be needed, in addition to placement of instream structures, and dense re-vegetation of banks and surrounding floodplain areas with native plants. SDC project #JC-21.

Justification: Needed to prevent further additional bank slumping which is a significant source of sediment in the Johnson Creek system. Also assists City in complying with ESA and water quality (NPDES and Temperature TMDL) requirements by, reducing stream temperatures and pollutant levels in the creek, and improving aquatic habitat.

Type of project: Stream restoration/enhancement.



| Estimated Dollars: | Funds | • | Description | Total |
|---------------------------|-----------------|---|-------------------|--------|
| 1 | Resources | | Operating | 68,399 |
| | | | SDC | 17,101 |
| | Resources Total | | | 85,500 |
| Expenses | Expenses | | Design/Const Admi | 10,949 |
| | | | Construction | 64,100 |
| | | | Admin (14%) | 10,451 |
| | Expenses Total | | | 85,500 |

913900: SE Regner to Hogan: Johnson Creek Riparian Corridor Improvements

Description: Improve natural resource functions along 42.61 riparian acres on both the north and south banks of Johnson Creek between Regner and Hogan Roads by: stabilizing stream banks, enhancing wetland and floodplain function, shading numerous intermittent tributaries to Johnson Creek, and replacing aggressive invasive plant species with native tree and shrub species. SDC project #JC-22.

Justification: Assists City in complying with ESA and water quality (NPDES and Temperature TMDL) requirements by decreasing amount of bank soil eroding into creek, improving floodplain storage and wetland function, reducing stream temperatures (through tree shading), and improving aquatic habitat.

Type of project: Stream restoration/enhancement.



| 's: | Funds | * | Description | Total |
|-----|-----------------|--------------|-------------------|---------|
| | Resources | | Operating | 618,842 |
| | | | SDC | 154,712 |
| | Resources Total | | | 773,554 |
| | Expenses | | Design/Const Admi | 135,738 |
| | | Construction | 542,762 | |
| | | | Admin (14%) | 95,054 |
| | Expenses Total | | | 773,554 |

914000: Willowbrook Pond

Description: Improve natural resource functions within a 1.81-acre parcel of public property located along Butler Creek between SW 27th and SW Willow Parkway by: replacing aggressive invasive plant species with native tree and shrub species and stabilizing the creek banks. (JC-NR09)

Justification: Assists City in complying with water quality and ESA requirements by decreasing amount of bank soil eroding into creek, reducing stream temperature, and improving aquatic habitat.

Type of Project: Stream restoration/enhancement.



| Funds | • | Description | • | Total |
|-----------------|---|------------------|----|--------|
| Resources | | Operating | | 25,711 |
| Resources Total | | | | 25,711 |
| Expenses | | Design/Const Adm | in | 5,205 |
| | | Construction | | 17,349 |
| | | Admin (14%) | | 3,157 |
| Expenses Total | | | | 25,711 |

914300: Water Quality Monitoring – Fairview Creek PRF

Description: Monitor two stormwater runoff events at or just upstream of potential structural Pollution Reduction Facilities (PRF). Water quality sites to be monitored are Burnside East (CIP 911300), Burnside West (CIP 911200) and Stark West (CIP 911100).

Justification: Verification of modeling data to determine that water quality facilities are warranted to treat basin runoff and to customize design of Pollution Reduction Facility or modify city BMPs.

Type of Project: Stormwater quality monitoring.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | * | Description | • | Total |
|-----------------|---|-------------|---|--------|
| Resources | | Operating | | 22,800 |
| Resources Total | | | | 22,800 |
| Expenses | | Other | | 20,000 |
| | | Admin (14%) |) | 2,800 |
| Expenses Total | | | | 22,800 |

915200: Atherton Ave. Culvert Improvement

Description: Upsize the culvert. Existing pipe is 2 ft diameter. Suggested replacement pipe size is 4 ft. This project is located in the Atherton Ave. basin. SDC project #JC-1.

Justification: Eliminates overtopping of the roadway and localized street flooding.

Type of Project: Culvert improvement.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | • | Description | Total |
|-----------------|---|-------------------|--------|
| Resources | | Operating | 22,456 |
| | | SDC | 19,915 |
| Resources Total | | | 42,371 |
| Expenses | | Design/Const Admi | 8,585 |
| | | Construction | 28,561 |
| | | Admin (14%) | 5,225 |
| Expenses Total | | | 42,371 |

915400: Butler Creek – Groups 1A, B & C Pipe Improvement

Description: Upsize the 7 storm drain pipes. Existing pipe size varies from 1 ft to 1.25 ft (see Table 6.2). Suggested replacement pipe varies from 1.5 ft to 2 ft (see Table 6.2). This project is located in the Butler Creek basin. SDC project #JC-3.

Justification: Eliminates surcharging in the storm drain system and localized street flooding.

Type of Project: Storm drain improvement.



| Funds | _ | Description | Total |
|-----------------|--------------|-------------------|---------|
| Resources | | Operating | 198,631 |
| | | SDC | 198,632 |
| Resources Total | | | 397,263 |
| Expenses | | Design/Const Admi | 80,373 |
| | Construction | 268,119 | |
| | | Admin (14%) | 48,771 |
| Expenses Total | | | 397,263 |

915500: Butler Creek – Groups 2A & B Pipe Improvement

Description: Upsize the 5 storm drain pipes. Existing pipe varies from 1 ft to 1.25 ft (see Table 6.2). Suggested replacement pipe size varies from 1.25 ft to 1.75 ft (see Table 6.2). This project is located in the Butler Creek basin. SDC project #JC-4.

Justification: Eliminates surcharging in the storm drain system and localized street flooding.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | • | Description | Total |
|-----------------|----------|-------------------|---------|
| Resources | | Operating | 90,106 |
| | | SDC | 93,786 |
| Resources Total | | | 183,892 |
| Expenses | | Design/Const Admi | 37,201 |
| | | Construction | 124,047 |
| | | Admin (14%) | 22,644 |
| Expenses Total | | | 183,892 |

915600: Brick Creek Culvert Improvement

Description: Upsize the culvert. Existing pipe size is 2 ft diameter. Suggested replacement pipe size is 3.5 ft diameter. This project is located in the Brick Creek basin. SDC project #JC-5.

Justification: Eliminates overtopping of the roadway and localized street flooding.

Type of Project: Culvert improvement.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | • | Description | Total | |
|-----------------|---|-------------------|--------|---|
| Resources | | Operating | 22,774 | ŀ |
| | | SDC | 64,818 | ; |
| Resources Total | | | 87,592 | 2 |
| Expenses | | Design/Const Admi | 17,792 |) |
| | | Construction | 59,100 |) |
| | | Admin (14%) | 10,700 |) |
| Expenses Total | | | 87,592 |) |

915800: Butler West - Group 3 - Pipe Improvement

Description: Upsize the 5 storm drain pipes. Existing pipe size varies from 1 ft to 1.75 ft (see Table 6.2). Suggested replacement pipe size varies from 1.5 ft to 3.5 ft (see Table 6.2). This project is located in the Butler West (Bear Creek) basin. SDC project #JC-6.

Justification: Eliminates surcharging in the storm drain system and localized street flooding.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | - | Description | Total |
|-----------------|---|-------------------|---------|
| Resources | | Operating | 133,518 |
| | | SDC | 133,519 |
| Resources Total | | | 267,037 |
| Expenses | | Design/Const Admi | 53,997 |
| | | Construction | 180,194 |
| | | Admin (14%) | 32,846 |
| Expenses Total | | | 267,037 |

915900: Cedar Creek – Group 1 – Pipe Improvement

Description: Upsize the 4 storm drain pipes. Existing pipe is 1.5 ft. Suggested replacement pipe size varies from 2.5 ft to 3 ft (see Table 6.2). This project is in the Cedar Creek basin. SDC project #JC-7.

Justification: Eliminates surcharging in the storm drain system and localized street flooding.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | Υ. | Description | Total |
|-----------------|----|-------------------|---------|
| Resources | | Operating | 102,785 |
| | | SDC | 130,819 |
| Resources Total | | | 233,604 |
| Expenses | | Design/Const Admi | 47,278 |
| | | Construction | 157,586 |
| | | Admin (14%) | 28,740 |
| Expenses Total | | | 233,604 |

916000: Cedar Creek – Group 2 Culvert Improvement

Description: Upsize the 2 culverts. Existing pipe size varies from 1.75 ft to 2 ft (see Table 6.2). Suggested replacement pipe size varies from 4.5 ft to 5 ft (see Table 6.2). This project is located in the Cedar Creek basin. SDC project #JC-8.

Justification: Eliminates overtopping of the roadway and localized street flooding.

Type of Project: Culvert improvement.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | • | Description | Total |
|-----------------|---|-------------------|---------|
| Resources | | Operating | 38,278 |
| | | SDC | 81,340 |
| Resources Total | | | 119,618 |
| Expenses | | Design/Const Admi | 24,261 |
| | | Construction | 80,676 |
| | | Admin (14%) | 14,681 |
| Expenses Total | | | 119,618 |

916100: Mawcrest Dr. - Pipe Improvement

Description: Upsize the storm drain pipe. Existing pipe is 1.5 ft diameter. Suggested replacement pipe is 2 ft diameter. This project is located in the Mawcrest Dr. basin. SDC project #JC-9.

Justification: Eliminates surcharging in the storm drain system and localized street flooding.



| Estimated l | Dollars: |
|-------------|----------|
|-------------|----------|

| Funds | • | Description | Total |
|-----------------|---|-------------------|--------|
| Resources | | Operating | 38,261 |
| | | SDC | 39,824 |
| Resources Total | | | 78,085 |
| Expenses | | Design/Const Admi | 15,801 |
| | | Construction | 52,704 |
| | | Admin (14%) | 9,580 |
| Expenses Total | | | 78,085 |

916200: Miller Ct. – Pipe Improvement

Description: Upsize the storm drain pipe. Existing pipe is 1.5 ft diameter. Suggested replacement pipe is 1.75 ft diameter. This project is located in the Miller Ct. basin. SDC project #JC-10.

Justification: Eliminates surcharging in the storm drain system.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | • | Description | Тс | otal |
|-----------------|---|-------------------|----|---------|
| Resources | | Operating | 1 | .09,475 |
| | | SDC | | 61,581 |
| Resources Total | | | 1 | .71,056 |
| Expenses | | Design/Const Admi | | 34,588 |
| | | Construction | 1 | .15,442 |
| | | Admin (14%) | | 21,026 |
| Expenses Total | | | 1 | .71,056 |
| | | | | |

916300: Morlan Ave - Pipe Improvement

Description: Upsize the 3 storm drain pipes. Existing pipe is 1 ft. Suggested replacement pipe is 2 ft. This project is located in the Morlan Ave. basin. SDC project #JC-11.

Justification: Eliminates surcharging in the storm drain system and localized street flooding.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | Υ. | Description | Total |
|-----------------|----|-------------------|--------|
| Resources | | Operating | 48,950 |
| | | SDC | 48,950 |
| Resources Total | | | 97,900 |
| Expenses | | Design/Const Admi | 19,782 |
| | | Construction | 66,050 |
| | | Admin (14%) | 12,068 |
| Expenses Total | | | 97,900 |

916400: Powell Blvd East – Group 2 – Pipe Improvement

Description: Upsize the 2 storm drain pipes. Existing pipe size varies from 1 ft to 1.25 ft. (see Table 6.2). Suggested replacement pipe size varies from 1.5 ft to 1.75 ft (see Table 6.2). This project is located in the Powell East Blvd. basin. SDC project #JC-12.

Justification: Eliminates surcharging in the storm drain system and localized street flooding.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | • | Description | Total |
|-----------------|----------|-------------------|---------|
| Resources | | Operating | 23,851 |
| | | SDC | 125,218 |
| Resources Total | | | 149,069 |
| Expenses | | Design/Const Admi | 30,233 |
| | | Construction | 100,547 |
| | | Admin (14%) | 18,289 |
| Expenses Total | | | 149,069 |

916500: Powell Loop – Group 1 – Pipe Improvement

Description: Upsize the 4 storm drain pipes. Existing pipe sizes varies from 1.75 ft to 2 ft (see Table 6.2). Suggested replacement pipe varies from 2 ft to 2.5 ft (see Table 6.2). This project is located in the Powell Loop basin. SDC project #JC-13.

Justification: Eliminates surcharging in the storm drain system and localized street flooding.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| IOtai |
|---------|
| 132,823 |
| 236,130 |
| 368,953 |
| 74,650 |
| 249,015 |
| 45,288 |
| 368,953 |
| |

916600: Powell Loop – Group 2 – Pipe Improvement

Description: Up size the 4 storm drain pipes. Existing pipe size varies from 1 ft to 1.25 ft (see Table 6.2). Suggested replacement pipe size varies from 1.5 ft to 2.5 ft (see Table 6.2). This project is located in the Powell Loop basin. SDC project #JC-14.

Justification: Eliminates surcharging in the storm drain system and localized street flooding.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | • | Description | Total |
|-----------------|---|-------------------|---------|
| Resources | | Operating | 131,299 |
| | | SDC | 136,658 |
| Resources Total | | | 267,957 |
| Expenses | | Design/Const Admi | 54,246 |
| | | Construction | 180,865 |
| | | Admin (14%) | 32,846 |
| Expenses Total | | | 267,957 |

916700: Roberts Drive - Pipe Improvement

Description: Upsize the 2 storm drain pipes. Existing pipe size is 1.25 ft. Suggested replacement pipe size varies from 1.75 ft to 6 ft. (see Table 6.2). This project is located in the Roberts Dr. basin. SDC project #JC-15.

Justification: Eliminates surcharging in the storm drain system and localized street flooding.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | Υ. | Description | Total |
|-----------------|----|-------------------|---------|
| Resources | | Operating | 255,870 |
| | | SDC | 7,072 |
| Resources Total | | | 262,942 |
| Expenses | | Design/Const Admi | 53,250 |
| | | Construction | 177,344 |
| | | Admin (14%) | 32,348 |
| Expenses Total | | | 262,942 |

916900: Towle Ave East - Group 1 - Pipe Improvement

Description: Upsize the 2 storm drain pipes. Existing pipe size is 1.25 ft. Suggested replacement pipe size is 2 ft. This project is located in the Towle Av. basin. SDC project #JC-16.

Justification: Eliminates surcharging in the storm drain system and localized street flooding.

Type of Project: Storm drain improvement.



| - | Description | Total |
|---|-------------------|---|
| | Operating | 70,440 |
| | SDC | 46,960 |
| | | 117,400 |
| | Design/Const Admi | 23,764 |
| | Construction | 79,204 |
| | Admin (14%) | 14,432 |
| | | 117,400 |
| | • | Description Operating SDC Design/Const Admin Construction Admin (14%) |

917000: Towle Ave East - Group 2 - Pipe Improvement

Description: Upsize the 4 storm drain pipes. Existing pipe size varies from 1.25 ft to 1.75 ft (see Table 6.2). Suggested replacement pipe size varies from 3.5 ft to 5 ft (see Table 6.2). This project is located in the Towle Ave. east basin. SDC project #JC-17.

Justification: Eliminates surcharging in the storm drain system and localized street flooding.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | • | Description | Total |
|-----------------|----------|-------------------|---------|
| Resources | | Operating | 256,934 |
| | | SDC | 99,919 |
| Resources Total | | | 356,853 |
| Expenses | | Design/Const Admi | 72,286 |
| | | Construction | 240,772 |
| | | Admin (14%) | 43,795 |
| Expenses Total | | | 356,853 |

917100: Towle Ave South - Pipe Improvement

Description: Upsize the 3 storm drain pipes. Existing pipe size is 1.5 ft. Suggested replacement pipe size varies from 1.75 ft to 3 ft. (see Table 6.2). This project is in the Towle Ave. south basin. SDC project #JC-18.

Justification: Eliminates surcharging in the storm drain system and localized street flooding.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | • | Description | Total |
|-----------------|---|-------------------|---------|
| Resources | | Operating | 71,486 |
| | | SDC | 80,611 |
| Resources Total | | | 152,097 |
| Expenses | | Design/Const Admi | 30,731 |
| | | Construction | 102,704 |
| | | Admin (14%) | 18,662 |
| Expenses Total | | | 152,097 |

917200: Walters Drive - Culvert Improvement

Description: Upsize the culvert. Existing pipe size is 1.5 ft diameter. Suggested replacement pipe size is 2.5 ft diameter. This project is located in the Walters Dr. basin. SDC project #JC-19.

Justification: Eliminates overtopping of the roadway and localized street flooding.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | • | Description | Total |
|-----------------|---|-------------------|--------|
| Resources | | Operating | 35,540 |
| | | SDC | 22,723 |
| Resources Total | | | 58,263 |
| Expenses | | Design/Const Admi | 11,820 |
| | | Construction | 39,227 |
| | | Admin (14%) | 7,216 |
| Expenses Total | | | 58,263 |

917300: Hogan Place Regional PRF

Description: Construct a regional water quality treatment system (structural pollution reduction facility) in the vacant land between Hogan Drive and Hogan Place. This facility will treat both the dual 36" pipes draining north from Burnside Ave as well as the 30" pipe draining Division St. via a new diversion manhole and pipe. This facility will treat nearly the entire upper Burlingame basin, approximately 1000 acres of mainly residential and commercial lands. (KC-2)

Justification: There is very little water quality treatment being provided in the Burlingame Creek watershed and this facility would remove TSS and associated pollutants from the water quality flow event.

Type of Project: Structural pollutant reduction facility.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | * | Description | Total |
|-----------------|---|-------------------|---------|
| Resources | | Operating | 783,938 |
| Resources Total | | | 783,938 |
| Expenses | | Design/Const Admi | 138,370 |
| | | Property Acq | 65,000 |
| | | Construction | 461,233 |
| | | Other | 23,062 |
| | | Admin (14%) | 96,273 |
| Expenses Total | | | 783,938 |

917500: Ironwood Access Road Culvert Removal

Description: Remove the existing CMP culvert beneath the cities access road and restore the channel. The stream improvements consist of reshaping the channel, laying back the slope to 3:1 and adding woody debris. Removal of invasive species and replanting with natives is suggested. SDC project #KC-8.

Justification: Eliminates a failing and unnecessary culvert and reduces upstream flood levels.

Type of Project: Culvert / channel improvement.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | — | Description | Total |
|-----------------|----------|-------------------|---------|
| Resources | | Operating | 131,691 |
| | | SDC | 5,488 |
| Resources Total | | | 137,179 |
| Expenses | | Design/Const Admi | 26,750 |
| | | Construction | 93,633 |
| | | Admin (14%) | 16,796 |
| Expenses Total | | | 137,179 |

917600: NE Hale Place Bank Stabilization

Description: Remove ineffective bank stabilization project. Re-establish channel geometry (bank, in particular) and multi-story vegetated riparian community. Relocate stormwater outfall below outside meander bank. Obtain necessary authorization(s) for in-stream work from regulatory agencies (i.e., US Army Corp of Engineers, Oregon Department of State Lands). SDC project #KC-4.

Justification: A private party installed a stormwater outfall and rip-rip apron on an outside meander bank. The outfall was installed higher than accepted engineering standards. Adverse bank erosion processes are affecting down stream properties. This project is just downstream of the proposed SE 17th Street project, which includes similar implementation elements. As such, if the City pursues this and the NE 17th Street projects, early coordination is recommended to maximize cost efficiencies such as mobilization, equipment operation, material hauling.

Type of Project: Creek bank, channel geometry and riparian vegetation corridor improvement.



| Estimated Dollars: | Funds | • | Description | Total |
|---------------------------|-----------------|---|-------------------|---------|
| | Resources | | Operating | 138,484 |
| | | | SDC | 5,770 |
| | Resources Total | | 144,254 | |
| | Expenses | | Design/Const Admi | 6,221 |
| | | | Construction | 120,366 |
| | | | Admin (14%) | 17,667 |
| | Expenses Total | | | 144,254 |
917800: NE 7th Ct. Channel Modification

Description: Relocate Kelly Creek's channel to alleviate the persistent bank instability point to upstream basin-wide land use changes. Establish multi-story vegetated riparian community. Obtain necessary authorization(s) for in-stream work from regulatory agencies (i.e., USACE, DSL). SDC project #KC-9.

Justification: Private party constructed an inadequate retaining wall on city-and privately owned property to address localized bank instability associated with a multi-unit residence constructed neat an outside meander bank. Said wall partially failed during Spring 2005. Current channel location, in conjunction with seasonal and storm event flows, will continue to compromise the wall's stability and residence's long-term structural integrity. The retaining wall was repaired in fall 2005: however, said efforts are temporary. The city-owned parcel adjacent to the west provides sufficient acreage to re-route the channel towards and undeveloped, blackberry dominated reach and alleviate current and future channel instability points.

Type of Project: Channel geometry and riparian vegetation corridor improvement.



| Estimated Dollars: | Funds | • | Description | Total |
|---------------------------|-----------------|---|-------------------|---------|
| | Resources | | Operating | 131,549 |
| | | | SDC | 5,482 |
| | Resources Total | | | 137,031 |
| | Expenses | | Design/Const Admi | 25,754 |
| | | | Construction | 94,481 |
| | | | Admin (14%) | 16,796 |
| | Expenses Total | | | 137,031 |

CORRECTED: March 21, 2024

917900: Riparian Enhancements near Gr. Golf Course

Description: Improve riparian corridor's structural diversity to increase stream bank shading and reduce Burlingame Creek temperatures. (KCN-7)

Justification: Burlingame Creek is water quality limited for temperature and E. coli per the Department of Environmental Quality's (DEQ) 303(d) list. This portion of Burlingame Creek supports limited woody riparian vegetation and typically slow-moving flows. Although base flow data is not currently available, velocities observed during late summer indicate that established riparian plantings (particularly along the south bank) would significantly reduce water temperatures before its confluence with Kelly Creek. Additional, per conversations with City staff, course owners are supportive of a riparian enhancement project, as long as the course's playable areas are not affected. As such Burlingame Creek's location within the course layout should provide sufficient acreage for project implementation. The plantings would also contribute to long-term bank stability. Additionally, this project directly addresses the DEQ temperature mandate.

Type of Project: Riparian vegetation corridor and water quality improvement.



| Estimated Dollars: | Funds | • | Description | | Total |
|---------------------------|-----------------|---|--------------------|---|---------|
| | Resources | | Operating | | 154,851 |
| | Resources Total | | | | 154,851 |
| | Expenses | | Design/Const Admir | ۱ | 1,778 |
| | | | Property Acq | | 120,000 |
| | | | Construction | | 5,928 |
| | | | Other | | 8,128 |
| | | | Admin (14%) | | 19,017 |
| | Expenses Total | | | | 154,851 |

918100: Highway 26 Ecology Embankment

Description: Construct an ecology embankment on the east and west sides of Highway 26. This facility will treat runoff from the highway and water a surrounding right-of-way. (KC-1)

Justification: There is very little water quality treatment being provided in this area of the basin and this facility would remove TSS and other pollutants associated with heavy traffic.

Type of Project: Water quality improvement.



| Funds | • | Description | * | Total |
|-----------------|---|--------------------|---|---------|
| Resources | | Operating | | 664,633 |
| Resources Total | | | | 664,633 |
| Expenses | | Design/Const Admin | | 129,558 |
| | | Construction | | 431,860 |
| | | Other | | 21,593 |
| | | Admin (14%) | | 81,622 |
| Expenses Total | | | | 664,633 |

918200: Vista Way PRF

Description: Construct a regional water quality treatment system (structural pollution reduction facility) at Vista Way and Hogan Dr. This facility will treat mainly residential lands that drain into Burlingame Creek. SDC project #KC-1.

Justification: There is very little water quality treatment being provided in the Kelly Creek watershed and this facility would remove TSS and associated pollutants from the water quality flow event

Type of Project: Water quality improvement.



| Funds | * | Description | Total |
|-----------------|---|-------------------|---------|
| Resources | | Operating | 154,397 |
| | | SDC | 6,435 |
| Resources Total | | | 160,832 |
| Expenses | | Design/Const Admi | 31,353 |
| | | Construction | 104,596 |
| | | Other | 5,101 |
| | | Admin (14%) | 19,782 |
| Expenses Total | | | 160,832 |

918300: 23rd Ave and Hale Street PRF

Description: Install a PRF at 23rd Street and Hale to prevent untreated stormwater runoff from entering Kelly Creek. (KC-4)

Justification: There is very little water quality treatment being provided in the this and this facility would remove TSS and associated pollutants from the water quality flow event from entering the creek.

Type of Project: Water quality improvement.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | • | Description | • | Total |
|-----------------|---|--------------------|---|---------|
| Resources | | Operating | | 151,597 |
| Resources Total | | | | 151,597 |
| Expenses | | Design/Const Admin | | 29,551 |
| | | Construction | | 98,504 |
| | | Other | | 4,925 |
| | | Admin (14%) | | 18,617 |
| Expenses Total | | | | 151,597 |

918600: Major Outfall Rehabilitation (NE Scott, SW Condor, SE Laura)

Description: SE Condor - Remove riprap in channel also cut back pipe and replace outfall: 3557-k-603. At SE Laura Ln. - Cut back pipe and install riprap apron: 3557-k-108. At NE Scott - Cut back pipe and install riprap apron and install 200' swale. SDC project #KC-3.

Justification: Eliminates surcharging in the storm drain system and localized street and property flooding.

Type of Project: Storm drain and outfall improvement.



| Estimated | Dollars: |
|-----------|-----------------|
| Louinacea | Domai S. |

| Funds | • | Description | Total |
|-----------------|---|-------------------|---------|
| Resources | | Operating | 135,894 |
| | | SDC | 2,774 |
| Resources Total | | | 138,668 |
| Expenses | | Design/Const Admi | 26,998 |
| | | Construction | 90,146 |
| | | Other | 4,479 |
| | | Admin (14%) | 17,045 |
| Expenses Total | | | 138,668 |

919000: SE Powell Valley Road

Description: Remove invasive species and replace with native riparian vegetation. SDC project #KC-6.

Justification: Improve habitat quality, bank stability, and enhance aesthetics.

Type of Project: Invasive species removal.



| Funds | • | Description | Total |
|-----------------|---|-------------------|---------|
| Resources | | Operating | 198,387 |
| | | SDC | 8,266 |
| Resources Total | | | 206,653 |
| Expenses | | Design/Const Admi | 41,804 |
| | | Construction | 139,468 |
| | | Admin (14%) | 25,381 |
| Expenses Total | | | 206,653 |

919100: Bell Acres Trailer Park

Description: Reestablish a natural, stable stream condition through this reach of Kelly Creek. Existing channel is highly down-cut with near vertical unstable stream banks. Actively plant with native riparian vegetation. SDC project #KC-7.

Justification: Improve bank stability, habitat quality, and aesthetics.

Type of Project: Stream corridor enhancement.



| 5: | Funds | • | Description | Total |
|----|-----------------|---|-------------------|-----------|
| | Resources | | Operating | 1,126,027 |
| | | | SDC | 46,919 |
| | Resources Total | | | 1,172,946 |
| | Expenses | | Design/Const Admi | 80,249 |
| | | | Property Acq | 248,833 |
| | | | Construction | 699,790 |
| | | | Admin (14%) | 144,074 |
| | Expenses Total | | | 1,172,946 |

Estimated Dollars:

919300: Gresham Golf Course Creek Meandering

Description: Reestablish representative natural channel morphology by constructing/grading a new channel alignment and cross-section. Enhance riparian vegetation with diverse plantings. Channel complexity will also be improved upon through the placement of woody debris. (KCN-8)

Justification: Burlingame Creek is water quality limited for temperature and E. coli per the Department of Environmental Quality's (DEQ) 303(d) list. This portion of Burlingame Creek supports limited woody riparian vegetation and typically slow-moving flows. Although base flow data is not currently available, velocities observed during late summer indicate that established riparian plantings (particularly along the south bank) would significantly reduce water temperatures before its confluence with Kelly Creek. Additionally, per conversations with City staff, course owners are supportive of a riparian enhancement project, as long as the course's playable areas are not affected. As such, Burlingame Creek's location within the course layout should provide sufficient acreage for project implementation. The plantings would also contribute to long-term bank stability. Additionally, this project directly addresses the DEQ temperature mandate.

Type of Project: Stream corridor enhancement, water quality improvement.



| Estimated Dollars: | Funds | + | Description | Total |
|---------------------------|-----------------|---|--------------------|---------|
| | Resources | | Operating | 557,374 |
| | Resources Total | | | 557,374 |
| | Expenses | | Design/Const Admin | 40,484 |
| | | | Property Acq | 300,000 |
| | | | Construction | 134,946 |
| | | | Other | 13,495 |
| | | | Admin (14%) | 68,449 |
| | Expenses Total | | | 557,374 |

919400: SE 24th Street to SE Salquist Road

Description: Regrade the existing channel to emphasize flood protection and bank stability. SDC project #KC-5.

Justification: Overbank flooding is occurring and the channel morphology is compromised. There is little riparian vegetation and structural diversity.

Type of Project: Stream corridor enhancement, water quality improvement.



| Funds | • | Description | Total |
|-----------------|-----------|-------------------|---------|
| Resources | Resources | | 323,419 |
| | | SDC | 13,477 |
| Resources Total | | | 336,896 |
| Expenses | | Design/Const Admi | 53,984 |
| | | Property Acq | 55,987 |
| | | Construction | 185,494 |
| | | Admin (14%) | 41,431 |
| Expenses Total | | | 336,896 |

Estimated Dollars:

919500: Johnson Creek Restoration at Main City Park

Description: This project addresses degraded stream bank and channel conditions along the stretch of Johnson Creek that meanders through Main City Park. Channel dredging in the side channel, removal of a grade control structure, and installation of bendway weirs/large wood will provide fish habitat and reduce velocities in the main channel during storm events. Bank erosion will be addressed by installation of bio-engineered structures, removal of invasive weeds, and installation of native vegetation throughout the entire stretch.

Justification: Johnson Creek provides stormwater conveyance for the City of Gresham, and is designated critical habitat for ESA-listed salmon. Stream bank erosion and sediment accumulation have changed the nature of this reach, leading to continuing loss of: bank, riparian trees, and fish habitat. This project is also part of the City's response to the Clean Water Act requirements to improve water quality parameters (such as temperature, nutrients, and sediment). It will be conducted in conjunction with implementation of Phase II of the Main City Park master plan.



| Estimated Dollars: | Funds | • | Description 🔄 | Total |
|---------------------------|-----------------|---|--------------------|---------|
| | Resources | | Operating | 179,556 |
| | Resources Total | | | 179,556 |
| | Expenses | | Design/Const Admin | 47,618 |
| | | | Construction | 109,887 |
| | | | Admin (14%) | 22,051 |
| | Expenses Total | | | 179,556 |

CIPSW00007: Fujitsu Ponds Restoration

Description: Improve and restore natural resource conditions for the Fairview Creek & Columbia Slough Watershed within a 64-acre public parcel commonly referred to as Fujitsu Ponds. Two large quarry ponds will be partially filled to create a diverse wetland complex, and create a discrete Fairview Creek channel to alleviate high water temperatures, as required by to address the City's State-administered Temperature TMDL plan. The City's Natural Resources Master Plan reflects the full scope of the improvements needed at this site, and the project will be implemented in phases. This cost estimate reflects initial phase improvements to alleviate flooding on NE Glisan Road. The overall project cost for design, permitting, acquiring ownership or construction easement rights on abutting parcels needed to accommodate construction, and construction of the project will be brought forward in future years.

Justification: The larger project will provide multiple benefits, including economic development, increased flood storage, water quality and temperature improvements, habitat diversity, and reduction in ongoing vandalism and fire hazards (by altering lands now used for camping, dumping, etc.). The initial phase reflected here will remedy and reduce localized street flooding and include data collection and design studies needed to inform the larger project.

Type of Project: Design and construction of facilities to correct existing system deficiencies and improve water quantity and quality.

| 2 | | AF 1981H AVE | | Fairview | 1 1 | Can Can | Wood Village |
|----------------------------|---------------|--------------|---------------|----------|------|-----------|-----------------|
| E 191ST AVE E 192ND AVE | E 194TH AVE | ENERETT LA | TAP CIPSW0000 | | | E219THAVE | 223RD AVE |
| | AVEN | NE DAVIS ST | | Gresham | | | ST ST |
| | 1,000 Feet | 2,000 | Soft BL | SEAS | H ST | YST | |

| ars: | Funds | - | Description | Total |
|------|----------------------------|--------------|-------------------|---------|
| | Resources Operating | | Operating | 248,000 |
| | Resources Total | | 248,000 | |
| | Expenses | | Design/Const Admi | 30,800 |
| | | Property Acq | 25,000 | |
| | | Construction | 161,700 | |
| | | | Admin (14%) | 30,500 |
| | Expenses Total | | | 248,000 |

Estimated Dollars:

CIPSW00014: Johnson Creek Stormwater LID Retrofit

Description: This project modifies an existing conveyance system with a functional LID retrofit. Project includes design, permitting, and construction of a site-specific treatment facility intended to introduce treatment in a catchment area where minimal water quality mechanisms currently exist.

Justification: The Johnson Creek watershed is a high value target for strategic LID retrofits both for its relative lack of treatment facilities and the criticality of the downstream habitat conditions. This project leverages potential SRF opportunities and City-owned property.

Type of Project: Design and construction of facilities to improve water quality and quantity, and to correct deficiencies.

GRESHAM City Wide Project

Estimated Dollars:

| Funds | • | Description | Total |
|-----------------|---|-------------------|---------|
| Resources | | Debt-Operating | 702,000 |
| Resources Total | | | 702,000 |
| Expenses | | Design/Const Admi | 50,000 |
| | | Construction | 565,800 |
| | | Admin (14%) | 86,200 |
| Expenses Total | | | 702,000 |

CIPSW00017: Chastain Creek Improvements and Fill Remediation

Description: This effort will remove the relic landfill overburden placed in the 1950s-60s over a failing stormwater pipe that conveys butte-generated spring flow and introduced stormwater to a stormwater collection point in Towle. The project also improves water quality treatment while aggregating stormwater flows into the piped infrastructure and aggregates natural butte drainage into the historic Chastain Creek tributary to its confluence with Johnson Creek. Effort includes fate and transport of landfill materials, improvement of critical fish habitat, resolution of a past fill violation, bank stabilization, and improved riparian conditions. Project will require water, soil, and air quality testing, title research, and purchase of easement rights.

Justification: The City is currently without any feasible mechanism to respond to inevitable pipe failure in the project area given the landfill materials currently above the stormwater infrastructure. The site generates frequent nuisance flooding and an associated high water traffic hazard on a major arterial. Landfill leachate and untreated stormwater currently discharge to Johnson Creek while clean butte discharge is directed into the stormwater system.

Type of Project: Solid waste (landfill and associate pollutants) removal, stormwater infrastructure improvements, nuisance flood resolution, illegal fill resolution, stream stabilization, and critical habitat improvement.



| Estimated Dollars: | Funds | • | Description | Total | | |
|---------------------------|-----------------|---|-------------------|-----------|--|--|
| | Resources | | Debt-Operating | 5,500,000 | | |
| | | | Operating | 2,000,000 | | |
| | Resources Total | | 7,500,0 | | | |
| | Expenses | | Design/Const Admi | 1,050,000 | | |
| | | | Construction | 5,529,000 | | |
| | | | Admin (14%) | 921,000 | | |
| | Expenses Total | | | 7,500,000 | | |

CIPSW00018: SW 7th Street: Johnson Creek Corridor Improvements

Description: An incised Johnson Creek, constrained by SW 4th Avenue, the Springwater Trail and the SW 7th Street bridge, flows through a 16-acre public parcel in this project area. Ongoing bank erosion near SW 4th and the Springwater Trail will be alleviated by constructing stream structure improvements and reconnecting the floodplain. Footing scour under the 7th Street will be addressed in cooperation with the Transportation Division, included consolidated permitting to cover both projects, and with stream, habitat, and floodplain improvements provided by this project serving as the mitigation for impacts related to rebuilding the pile caps on the bridge footings. Bridge related construction costs to be reflected in the funded Transportation CIP on a parallel schedule with this effort. Water quality improvements for the adjacent arterials and neighborhood will also be included.

Justification: The Road and trail infrastructure constraints have reduced stream complexity in this reach resulting in higher velocities, erosive flows, and loss of flood storage and other floodplain functions along a critical habitat stream. This poses an ongoing risk to road bed and trail bed support. The project provides an opportunity to collaborate with Transportation on the bridge element, reducing costs for the City compared to addressing the stream and floodplain improvements separately from the transportation infrastructure components.

Type of Project: Infrastructure protection coupled with stream, critical fish habitat, floodplain, and water quality improvements.



| Estimated Dollars: Fun | Funds | • | Description | Total | | |
|------------------------|-----------------|----------|-------------------|-----------|--|--|
| | Resources | | Operating | 1,978,174 | | |
| | | | SDC | 581,816 | | |
| | Resources Total | 2,559,99 | | | | |
| | Expenses | | Design/Const Admi | 358,399 | | |
| | | | Construction | 1,887,294 | | |
| | | | Admin (14%) | 314,297 | | |
| | Expenses Total | | | 2,559,990 | | |

CIPSW00019: SE Hogan to Regner: Johnson Creek Corridor Improvements

Description: An incised Johnson Creek, constrained by the Springwater Trail, tiled stream banks and a small once-private drive bridge, flows through a 41 acres of public lands in this project area. The project will reconnect the floodplain, alleviating erosive pressure that is undermining the support for the Springwater Trail, and will remove a small wooden bridge and gravel road, resulting in an improved stream, floodplain, and riparian conditions, and will stabilize the Springwater Trail and associated infrastructure. The project addresses imminent bank failure at the end of SE Liberty Avenue where a convergence of stormwater outfalls has resulted in major bank movement. The project also improves the Cedar Creek/Johnson Creek confluence area.

Justification: Urban development and the old railroad bed below the Springwater Trail have constrained Johnson Creek and reduced stream complexity in this reach resulting in higher velocities, erosive flows, and loss of flood storage and other floodplain functions along a critical habitat stream. This poses an ongoing risk to the Springwater Trail and associated infrastructure. The project will help fulfill the City's Temperature TMDL obligations. Potential for addressing other water quality improvement obligations will be assessed during the design stage of the project.

Type of Project: Infrastructure protection coupled with stream, critical fish habitat, floodplain, and water quality improvements.



| Estimated Dollars: | Funds | * | Description | Total |
|---------------------------|-----------------|---|-------------------|-----------|
| | Resources | | Operating | 996,069 |
| | | | SDC | 247,854 |
| | Resources Total | | | 1,243,923 |
| | Expenses | | Design/Const Admi | 174,079 |
| | | | Construction | 917,059 |
| | | | Admin (14%) | 152,785 |
| | Expenses Total | | | 1,243,923 |

CIPSW00020: SE 252nd Avenue: Johnson Creek Corridor Improvements

Description: Johnson Creek has incised significantly in this privately owned reach where the critical habitat creek has significantly impinged on a large section of the Springwater Trail where City of Gresham installed temporary stabilization measures in 2007. Ongoing active bank failure adjacent to the temporary fix is further jeopardizing the Springwater Trail and associated infrastructure. This project will reconnect the stream to the floodplain on the south bank to alleviate the high velocity and erosive forces on the north bank. This will greatly improve critical habitat for salmonids, improve flood storage and floodplain function, and assist the city in meeting state/federal Temperature TMDL obligations for Johnson Creek.

Justification: Trail infrastructure constraints have reduced stream complexity in this reach resulting in higher velocities, erosive flows, and loss of flood storage and other floodplain functions along a critical habitat stream. This poses an ongoing risk to the Springwater Trail and associated infrastructure, including key wastewater infrastructure within the Springwater Trail alignment.

Type of Project: Infrastructure protection coupled with stream, critical fish habitat, floodplain, and water quality improvements.



| lars: | Funds | • | Description | Total |
|-------|-----------------------------|---|-------------------|---------|
| | Resources | | Operating | 215,272 |
| | | | SDC | 495,707 |
| | Resources Total Expenses | | | 710,979 |
| | | | Design/Const Admi | 99,491 |
| | | | Construction | 524,216 |
| | | | Admin (14%) | 87,272 |
| | Expenses Total | | | 710,979 |

Estimated Dol

CIPSW00025: NE Halsey Street Pipe Improvements

Description: This project includes replacing three segments of the piped storm system: Segment 1, along NE Halsey Street (approximately 1,400 LF), and Segments 2 and 3, along NE 192nd Avenue (approximately 2,000 LF). Along NE Halsey the existing pipes range in diameter from 2.25' to 3.5', while Segment 2 pipes are 2.25', and Segment 3 pipes are 4' in diameter. 14 manholes will likely have to be replaced throughout this stretch of proposed pipes, as currently available GIS information lists manholes as 48" diameter and larger diameter manholes would be needed. An alternatives evaluation included considering including a water quality/infiltration facility in Kirk Park and whether this could reduce the need for pipe replacements. This alternative is described in the CIP fact sheet for WG-2-C-WQ. Master plan project WG-2-C. SDC Project #WG-2.

Justification: The main drainage line along NE Halsey Street is undersized and the City has reported flooding at this location. This location has been flagged in previous drainage master plans and a previous version of this project is in the adopted CIP for fiscal years 2019-2023, listed as "Unfunded and Future Project 912200", which has since been replaced with this CIP.

Type of Project: Construction of facilities related to growth and to correct deficiencies. Implementation would include either CIP WG-2-C or CIP WG-2-C-WQ.



| Estimated Dollars: Funds | Funds | • | Description | Total | |
|--------------------------|-----------------|-------|-------------------|-----------|--|
| | Resources | | Operating | 3,049,806 | |
| | | | SDC | 1,370,202 | |
| | Resources Total | 4,420 | | | |
| | Expenses | | Design/Const Admi | 442,001 | |
| | | | Construction | 3,435,150 | |
| | | | Admin (14%) | 542,857 | |
| | Expenses Total | | | 4,420,008 | |

CIPSW00026: Halsey Capacity Improvements and Water Quality Facility

Description: This project includes the installation of two water quality/infiltration basins on the properties of Kirk Park and Hartley Elementary School. An infiltration rate of 2"/hr was assumed for this facility. CIP WG-2-C was then resized to take into account the benefits of this facility in reducing flows. Two areas were identified as the potential locations for the water quality/infiltration facilities, and if implemented together could provide a storage area of approximately 0.9 acres. Approximately 1,600 LF of pipe are planned to be replaced with this CIP. Implementation of only one or the other of these two CIP's is recommended. Master plan project WG-2-C-WQ. SDC Project #WG-2.

Justification: Initial analysis of the system showed the need for significant pipe upsizing, and so an analysis of the system assuming an upstream infiltrating water quality facility was conducted to estimate whether any of the pipe upgrade needs identified in CIP WG-2-C could be reduced or eliminated.

Type of Project: Construction of water quality infiltration facilities and upsized pipe to correct deficiencies and provide a significant amount of storage to drainage basin. Implementation would include either CIP WG-2-C or CIP WG-2-C-WQ.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | • | Description | Total |
|-----------------|----------|-------------------|-----------|
| Resources | | Operating | 1,564,547 |
| | | SDC | 702,913 |
| Resources Total | | | 2,267,460 |
| Expenses | | Design/Const Admi | 226,746 |
| | | Construction | 1,762,258 |
| | | Admin (14%) | 278,456 |
| Expenses Total | | | 2,267,460 |

CIPSW00027: NE Kirk Park Water Quality Facility

Description: This project recommends placing several water quality facilities on the properties of Kirk Park and Hartley Elementary School. Four areas were identified as potential locations for a facility, and if implemented together could provide a storage area of approximately 1.8 acres. Master plan project WG-2-WQ.

Justification: Kirk Park and Hartley Elementary school were identified as possible locations for storage/detention facilities to alleviate flows and eliminate expected flooding in pipes along NE Halsey. Upon analysis of this system, flood detention alone was not found to be sufficient to eliminate the need for pipe replacements, but this site does offer an opportunity to address water quality. Proposed here are two sites for treating the water quality event. If water quality facilities could also infiltrate, some flow alleviation would be also be provided.

Type of Project: Construction of large water quality/storage facilities to add water quality mitigation to area currently lacking treatment.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | * | Description | Total |
|-----------------|---|-------------------|---------|
| Resources | | Operating | 666,000 |
| Resources Total | | | 666,000 |
| Expenses | | Design/Const Admi | 66,600 |
| | | Construction | 517,600 |
| | | Admin (14%) | 81,800 |
| Expenses Total | | | 666,000 |

CIPSW00028: NW 1st Street/Ava Avenue Pipe Improvements

Description: The existing 12" and 15" lateral pipes along NW 1st St. and Ava Ave. and the existing 18" main pipe along Powell Blvd. will be replaced with approximately 1,040 LF of 24" HDPE pipes. The proposed alignment will follow the existing piping, but with lower pipe invert elevations along NW 1st St. to improve hydraulics and comply with current Public Works Pipe Cover Standards (minimum 30" from the top of pipe to finished grade in paved areas). A new manhole is proposed along Ava Ave to comply with Public Works manhole spacing requirements (maximum 500 ft.). The new 24"piping will tie into the existing stormwater main line along Powell Blvd. at two existing manholes. This new pipe system is proposed to alleviate pipe surcharging and surface flooding during the 10-yr design storm. The existing piping is to be removed to allow space for the replacement piping along the alignment. Master plan project JC-1-C. SDC Project #JC-2.

Justification: The segment of stormwater piping along NW 1st St. and Ava Ave. is undersized and causes flooding at the northern catch basin located at the intersection of NW 1st St. and Ava Ave. Historically this catch basin has overflowed and caused street flooding along 1st St. prior to draining into the adjacent catch basin to the south. The current pipe system in this area is old and contains minimal pipe cover.

Type of Project: Replace existing pipes with larger diameter pipes to add capacity to the conveyance system. Lower pipe inverts to comply with current PWS cover requirements.

| 3RD ST NW | W6TH ST | NW MILLER AVE | EI7TH ST |
|-----------------------|------------|---------------|---|
| | Sileret MS | CIPSW00028 | E POWELL BLVD |
| 0 1,000 2,000 Feet | Gresham | ST | SE ELLIOTT AVE SE ELLIOTT AVE SE 2.UNIPER AVE |

| Funds | - | Description | Total |
|-----------------|---|-------------------|---------|
| Resources | | Operating | 127,751 |
| | | SDC | 652,009 |
| Resources Total | | | 779,760 |
| Expenses | | Design/Const Admi | 77,976 |
| | | Construction | 606,058 |
| | | Admin (14%) | 95,726 |
| Expenses Total | | | 779,760 |

Estimated Dollars:

CIPSW00029: Elliot Avenue Pipe Improvements

Description: New stormwater infrastructure is proposed along the Linden Ave. right-of-way to convey stormwater to the south and away from the observed flooding area. Approximately 480 LF of 24" HDPE pipe will connect the existing manhole on 6th St. to a proposed manhole at the intersection of Linden Ave and 4th St. Existing 12" and 18" piping along 4th St and Elliot Ave. is proposed for replacement with approximately 770 LF of new 24" HDPE pipe. This pipe replacement will help to alleviate predicted surcharging during the 10-year storm event for the existing pipe segment. The replacement piping along Elliot Ave. reconnects with existing infrastructure at manhole at the intersection of 2nd St. before discharging to the south to Johnson Creek. This project also includes the replacement of the existing inlet structure at 5th and Elliot to help alleviate current debris accumulation issues. Master plan project JC-11-C.

Justification: This area along 6th St. has a history of surface flooding due to debris accumulation at inlets and outfalls adjacent to the industrial and commercial properties along 6th St. This location currently has a combination of public and private infrastructure, with unclear drainage patterns.

Type of Project: Replace existing pipes with larger diameter pipes to add capacity to the conveyance system.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | • | Description | Total |
|-----------------|---|-------------------|---------|
| Resources | | Operating | 863,000 |
| Resources Total | | | 863,000 |
| Expenses | | Design/Const Admi | 86,300 |
| | | Construction | 670,700 |
| | | Admin (14%) | 106,000 |
| Expenses Total | | | 863,000 |

CIPSW00030: Elliot Avenue Green Street

Description: The proposed project provides 2,800 SF of stormwater water quality facilities along Elliot Ave from 3rd St. to 5th St. These facilities will provide stormwater treatment for residential properties located on both sides of Elliot Ave. As part of this project 940 LF of curbing will also be needed for this unimproved section of Elliot Ave. Each facility will include two curb inlets, one to convey drainage into the facilities, and the other to function as an outlet overflow. Overflow from these facilities will return to the street and be collected in the trunk line via existing curb and gutter system. Master plan project JC-1-WQ.

Justification: This area has a history of surface flooding, caused by debris accumulation at inlets and outfalls to the north. A water quality opportunity exists in this area to provide stormwater treatment to runoff that currently does not receive any treatment prior to discharge to Johnson Creek.

Type of Project: Construction of water quality facilities and associated drainage infrastructure to improve water quality in drainage basin.



| Funds | • | Description | Total |
|-----------------|---|-------------------|---------|
| Resources | | Operating | 341,000 |
| Resources Total | | | 341,000 |
| Expenses | | Design/Const Admi | 34,100 |
| | | Construction | 265,000 |
| | | Admin (14%) | 41,900 |
| Expenses Total | | | 341,000 |

CIPSW00031: Channel Replacement Southeast of Division and Cleveland

Description: The open channel will be replaced by 760 LF of 60-inch CMP pipe to alleviate flooding. Piping this entire section will decrease energy losses associated with transitions between the open channel and piped network and significantly reduce the possibility of blockage. Some excavation will be necessary for the pipe alignment that will follow the existing open channel alignment. Four new manholes will be installed along the new pipe along with an additional 2 ft. of fill over the pipe alignment. While this project helps to reduce surface flooding, it does not meet the current Public Works Standards for pipe design. Since drainage to this location is greater than 250 acres, the pipe should be designed for the 50-yr design storm without allowing surcharging. Since this project location is constrained by existing infrastructure on the upstream and downstream ends, this pipe was sized to maximize capacity within the site constraints which resulted in adequate conveyance of the 50-yr design storm, despite pipe surcharging. Master plan project KC-2-C. SDC Project #KC-2.

Justification: City staff have reported this is a location where trash collects (from dumping) and there is debris in the channel. The inlet pipe at the west end of the open channel is a protruding corrugated metal pipe with poor safeguards to prevent blockage. Debris accumulates at this existing inlet pipe. This area experienced significant flooding during the December 2015 storm event. Water levels overtopped the banks of the open channel and flooded nearby businesses and a portion of the roadway along Division Street.



| NW 14TH PL WAR NE DIVISION ST W NE DIVISION ST W | VE COUNTRY CLUB | ILLAGE SQUIRE CT |
|--|-----------------|------------------|
| NE 9TH ST CIPSW00031 | | NEV |
| | OCHRAN | |
| 0 1,000 2,000 Feet NE 3RD ST | NEC | |

Estimated Dollars:

| Funds | • | Description | Total |
|-----------------|---|-------------------|-----------|
| Resources | | Operating | 1,570,242 |
| | | SDC | 82,644 |
| Resources Total | | | 1,652,886 |
| Expenses | | Design/Const Admi | 165,289 |
| | | Construction | 1,284,654 |
| | | Admin (14%) | 202,943 |
| Expenses Total | | | 1,652,886 |

CIPSW00032: Hogan Drive Outfall Extension

Description: The proposed project would include piping of open channel flow beginning at the existing ditch on the east side of Hogan Road. The drainage ditch would be replaced with 450 LF of 72" pipe which would connect to a new vault structure. From the new structure to the outfall on the Gresham Golf course, the open channel will be replaced with 390 LF of 75" by 115" arch pipe or equivalent. A wingwall structure with headwalls is to be installed at the outlet. The existing sedimentation between NE Hogan Road and the golf course will be excavated to remove invasive vegetation, and replanted with appropriate riparian/wetlands vegetation. While this project helps to reduce surface flooding at this location, it does not meet the current Public Works Standards for pipe design. Since drainage to this location is greater than 250 acres, the pipe should be designed for the 50-yr design storm without allowing surcharging. The proposed pipe was sized to maximize capacity and minimize future surface flooding at the junction along Hogan Dr. given the site constraints. Concept planning will be completed in FY24-25. Construction schedule is dependent on available funding. Master plan project KC-10-C.

Justification: Burlingame Creek exits the piped system along the east side of Hogan Road and discharges into an eroded open channel adjacent to the Country Club Estate Condominiums. At the northern end of this ditch, three pipes discharge into an open channel that drains east between the Country Club Estate Condominiums, which continues flowing east through the Gresham Golf Course. Nearby residents have experienced repeated flooding of the wetlands area adjacent to structures. During the December 2015 storm event, the water level reached Hogan Road, covering one lane of the roadway.



Type of Project: Construction of larger pipe to correct deficiencies within existing open channel.

CIPSW00033: 17th and 18th Street Green Streets Improvements

Description: The proposed project provides 6,800 SF of stormwater water quality facilities within the residential neighborhood on 17th and 18th Street. These facilities will provide stormwater treatment for drainage prior to entering Burlingame Creek. Each facility will include two curb inlets, one to convey drainage into the facilities, and the other to function as an outlet overflow. Master plan project KC-10-WQ.

Justification: The residential neighborhood northwest of Hogan Dr. at the Country Club Estates Condominiums drains to the open channel section of Burlingame Creek that flows east through the Gresham Golf course. This area has historically had flooding issues, especially during the December 2015 storm event, where the water level overtopped Hogan Dr. This residential neighborhood provides an opportunity to reduce the amount of drainage to this downstream system and provide a water quality benefit through treatment and infiltration.

Type of Project: Construction of facilities in existing developed area to improve water quality and dampen runoff surges to downstream system.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | * | Description | Total |
|-----------------|---|-------------------|---------|
| Resources | | Operating | 644,000 |
| Resources Total | | | 644,000 |
| Expenses | | Design/Const Admi | 64,400 |
| | | Construction | 500,500 |
| | | Admin (14%) | 79,100 |
| Expenses Total | | | 644,000 |

CIPSW00034: Division Street Pipe Improvements

Description: The existing 15" and 24" pipes along Division St. and Hogan are proposed to be replaced with new upsized HDPE piping. The new piped system will consist of 2,540 LF of 36" pipe and connect to existing manhole structures. Revised pipe invert elevations are proposed to maintain a consistent 1% slope along the majority of the piping run. An additional manhole is proposed along Hogan Drive per Public Works structure standards at all changes in pipe alignment. This new pipe system is proposed to reduce surcharging and eliminate surface flooding during the 10-yr design storm. Existing piping is to be removed to allow space for the replacement piping along the alignment. Master plan project KC-12-C.

Justification: This piped system along Hogan Dr. and Division St. has previously been identified as having insufficient capacity in the previous Master Plan. The model predicts pipe surcharging and flooding at manhole at the intersection of Francis and Division.

Type of Project: Construction of facilities related to correct existing capacity deficiencies.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | • | Description | Total |
|-----------------|---|-------------------|-----------|
| Resources | | Operating | 2,464,000 |
| Resources Total | | | 2,464,000 |
| Expenses | | Design/Const Admi | 246,400 |
| | | Construction | 1,915,000 |
| | | Admin (14%) | 302,600 |
| Expenses Total | | | 2,464,000 |

CIPSW00035: Powell and Hwy 26 Pipe Improvements

Description: This project provides capacity relief to the Powell and Hwy 26 intersection by upsizing a portion of the downstream piped system. Upsizing includes the installation of 2,390 LF of 84" HDPE pipe within the existing pipe alignment. With the installation of larger diameter pipe, installation of replacement manholes along this alignment will be required. Note that while this project improves surcharging during the 10-yr event and eliminates the predicted flooding, this project does not meet the current Public Works Standards for pipe design. Since drainage to this location is greater than 250 acres, the pipe should be designed for the 50-yr design storm without allowing surcharging. Master plan project KC-19-C.

Justification: An open channel section of Burlingame Creek transitions to a piped system at Powell prior to continuing north along Hwy 26 (Burnside Rd.). This transition consists of a large inlet grate (approximately 20 ft long by 10 ft wide) to the east of Chang's Mongolian Grill. Historically this inlet and piped system that conveys flows north across Powell has been a bottleneck and resulted in reported issues at this intersection. Modeling of the Burlingame system has indicated that the downstream pipe system (along Hwy 26) of this problem area becomes surcharged during storm events, resulting in the predicted flooding indicated at Powell and Hwy 26. This location receives drainage from approximately 750 acres. of the Burlingame Creek watershed.

Type of Project: Construction of facilities to correct existing capacity deficiencies.

| NE 3RD ST WE WE E POWELL BLVD WE WE E POWELL BLVD WE WE W | SE 1ST ST SE 3RD | 2ND |
|---|--|-------|
| SE 5TH ST | Gresham | ų |
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| Feet G | FRANC | SEB |

| Estimated Dollars: | Funds | • | Description | Total |
|---------------------------|-----------------|---|-------------------|-----------|
| | Resources | | Operating | 7,149,000 |
| | Resources Total | | | 7,149,000 |
| | Expenses | | Design/Const Admi | 714,900 |
| | | | Construction | 5,556,200 |
| | | | Admin (14%) | 877,900 |
| | Expenses Total | | | 7,149,000 |

UNFUNDED and FUTURE PROJECT

Stormwater

CIPSW00036: SE Salquist Road Pipe Improvements

Description: This project consists of new and replacement pipe infrastructure to separate and reroute flows from the piped systems that currently all converge underneath Salquist Rd. The existing 21" pipe that currently conveys flows to the northwest is undersized, runs through private property and is proposed to be abandoned. Flow from the Salquist Rd piped system and Burlingame Creek will now continue west beyond Paloma Dr. with the replacement of 120 LF of 24" HDPE pipe, 80 LF of 48" HDPE pipe, and 210 LF of 48" HDPE pipe. This flow will continue north at the intersection of Salquist Rd. and Barnes Rd. before discharging at a new outfall structure adjacent to the existing outfall. The pipe system from the north (Paloma Ave.) will tie into this 280 LF section of 48" pipe at a manhole via 175 LF of new 18" HDPE pipe section. This project eliminates predicted surface flooding in the model for the 10-yr design storm, however it does not meet the current Public Works Standards as surcharging within these pipes is still predicted. Master plan project KC-24-C.

Justification: The intersection of Salquist Rd. and Paloma Dr. is a previously identified capacity deficiency within the Burlingame Creek system. This capacity issue is further exacerbated due to this intersection being a confluence of several piped systems and a localized low spot. This intersection has had a history of flooding/ponding. Flooding at this intersection causes water to back up in the two piped systems (from the East and North) that enter the Burlingame Creek system at this location.

Type of Project: Construction of facilities to correct existing capacity deficiencies.



| Estimated Dollars: | Funds | • | Description | Total |
|---------------------------|-----------------|---|-------------------|-----------|
| | Resources | | Operating | 1,000,000 |
| | Resources Total | | | 1,000,000 |
| | Expenses | | Design/Const Admi | 100,000 |
| | | | Construction | 777,200 |
| | | | Admin (14%) | 122,800 |
| | Expenses Total | | | 1,000,000 |

CIPSW00037: Wendy Ave. and 16th St. Green Street Improvements

Description: The proposed project provides 5,800 SF of stormwater water quality facilities within the residential neighborhood along 16th St. and Wendy Ave. These facilities will provide stormwater treatment for drainage prior to entering Burlingame Creek. Each facility will include two curb inlets, one to convey drainage into the facilities, and the other to function as an outlet overflow. Master plan project KC-24-WQ.

Justification: The residential neighborhood along Wendy Ave. and 16th St. is upstream from an observed capacity issue at Burlingame Creek (KC-24-C). This capacity issue is located at the confluence of two piped systems that enter a piped section of Burlingame Creek at Salquist Rd. A water quality opportunity exists in this neighborhood to provide treatment and flow reduction downstream.

Type of Project: Construction of facilities to improve water quality treatment in existing untreated developed area.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | • | Description | Tot | al |
|-----------------|---|-------------------|-----|-------|
| Resources | | Operating | 55 | 6,000 |
| Resources Total | | | 55 | 6,000 |
| Expenses | | Design/Const Admi | 5. | 5,600 |
| | | Construction | 43 | 2,100 |
| | | Admin (14%) | 6 | 8,300 |
| Expenses Total | | | 55 | 6,000 |

CIPSW00038: Fairview Creek Stark Street Culvert

Description: The proposed project involves replacing the existing 20-ft long, 60" diameter culvert with a 25 ft long, 60" diameter culvert. This project would raise the downstream invert elevation by 2.54 ft, but still result in a downstream invert elevation below the downstream invert elevation in the box culvert. The project also includes costs for a headwall to prevent future channel erosion from blocking the outfall and to facilitate maintenance. The goal of the project is to maintain a clear flow path from the storm drain in Stark Street to Fairview Creek. Concept planning will be completed in FY24-25. Construction schedule is dependent on available funding. Master plan project FC-1-C.

Justification: City staff have observed standing water in the stormwater conveyance system for several hundred feet to the east and west of the existing 60" diameter Stark Street Culvert. Fairview creek crosses under Stark Street in an 82 ft long, 3 ft tall by 8 ft wide concrete box culvert. A parallel 60" diameter culvert receives flow from the storm pipe in Stark Street at a manhole structure and discharges to Fairview Creek immediately to the east of the box culvert. The parallel culvert is 20 ft long and discharges below the bottom elevation of Fairview Creek, accumulating sediment, which causes standing water in the surrounding system.

Type of Project: Construction of new, larger culvert at higher grades to alleviate existing capacity deficiencies.



| Estimated Dollars: | Fund |
|---------------------------|------|
| | _ |

| Funds | • | Description | Total |
|-----------------|---|-------------------|---------|
| Resources | | Operating | 401,000 |
| Resources Total | | | 401,000 |
| Expenses | | Design/Const Admi | 40,100 |
| | | Construction | 311,700 |
| | | Admin (14%) | 49,200 |
| Expenses Total | | | 401,000 |

CIPSW00039: Stark St. Water Quality Swale

Description: The proposed project involves installing a shallow 780-foot water quality swale on the north side of Stark Street. The project would provide water quality treatment to runoff from the west bound lanes of Stark Street and remove some flow from the existing 36" storm drain which has standing water due to the elevation of the storm drain system relative to Fairview Creek. Concept planning will be completed in FY24-25. Construction schedule is dependent on available funding. Master plan project FC-1-WQ.

Justification: Runoff from Stark Street, an arterial within the Fairview Creek basin that generates a large amount of pollutant loading, currently does not receive water quality treatment.

Type of Project: Construction of facilities to provide water quality treatment for existing untreated developed area.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | • | Description | Total |
|-----------------|---|-------------------|---------|
| Resources | | Operating | 671,000 |
| Resources Total | | | 671,000 |
| Expenses | | Design/Const Admi | 67,100 |
| | | Construction | 521,500 |
| | | Admin (14%) | 82,400 |
| Expenses Total | | | 671,000 |

CIPSW00040: Wallula Ave. Open Channel

Description: This project includes installation of 142 LF of parallel 48-inch pipe between two existing manholes on the west side of NW Wallula Avenue. This project also includes a 75 LF engineered overflow channel to convey flow through the natural area from the new manhole to a new inlet 190 linear feet to the west side of NW Wallula Avenue. The overflow channel is 750 linear feet in length and designed with a 3-foot bottom width, 3:1 side slopes and 3-foot minimum depth. Master plan project FC-3a-C. SDC Project #FC-9.

Justification: FC-3 covers a large segment of the City's storm drain system from Red Sunset Park down to the Birdsdale Water Quality Facility. This CIP addresses the lower portion of this storm drain system that is subject to the 50-year design storm event. Minor flooding was indicated in the future condition scenario model, at a manhole located in the sidewalk on the southeast corner of the Trimet Tracks and NW Civic Drive. A CIP was developed at this location because upstream projects including CIP FC-3f-C at Civic Drive and CIP-3g-C at K-Mart and projects FC-3b-C and FC-3c-C will alleviate upstream flooding by increasing peak conveyance capacity without adding storage to the system, thereby increasing peak flows in this location.

Type of Project: Construction of facilities to correct existing deficiencies and prepare for impacts from upstream projects that will increase conveyance capacity of stormwater to this location.

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| Feet NW 8TH ST | F |

| Estimated Dollars: | Funds | • | Description | Total | |
|--|-------------------------|---|-------------------|---------|--|
| Resources Resources Total Expenses | Resources | | Operating | 347,141 | |
| | | | SDC | 64,285 | |
| | Resources Total 411,426 | | | | |
| | Expenses | | Design/Const Admi | 41,143 | |
| | | | Construction | 319,804 | |
| | | | Admin (14%) | 50,479 | |
| | Expenses Total | | | 411,426 | |

CIPSW00041: NE Burnside Road Pipe Replacements

Description: This project includes replacing 1,090 LF of existing 48" diameter pipe between two existing manhole locations with 72" diameter pipe. The project includes installation of three manholes along the right-hand eastbound lane of NE Burnside Road and one manhole at NW Eastman Parkway to meet the minimum 500 ft. spacing. Master plan project FC-3b-C. SDC Project #FC-14.

Justification: FC-3 covers a large segment of the City's storm drain system from Red Sunset Park down to the Birdsdale Water Quality Facility. One challenge with addressing capacity limitations in this area is that many of the pipes shown to be at or over capacity in the model are located through private property and have low burial depths. This CIP addresses the middle portion of this storm drain system that is subject to the 50-year design storm event. The flooding occurs at the southwest corner of the intersection of NE Burnside Road and NW Fairview Drive and in the existing K-mart parking lot just west of NW Eastman Parkway. This is a model identified flooding, though City staff do not recall receiving many flooding complaints in this area.

Type of Project: Construction of facilities to correct existing capacity deficiencies.



| : Fund | S | • | Description | Total |
|----------|-------------|-------------------|-------------|-----------|
| Reso | Resources | | Operating | 2,167,528 |
| | | | SDC | 1,445,018 |
| Reso | urces Total | | | 3,612,546 |
| Expenses | | Design/Const Admi | 361,255 | |
| | | Construction | | 2,807,649 |
| | | | Admin (14%) | 443,642 |
| Expe | nses Total | | | 3,612,546 |

Estimated Dollars:

CIPSW00042: NE 19th Ave. Parallel Pipe

Description: The existing 48" pipe will remain in place and 2,120 LF of 48" parallel pipe will be installed between two existing manhole locations on NE 19th Street. A new manhole will be installed at this location at the existing 18" main. 220 feet of existing 18" pipe will be replaced with 48" to a manhole at the intersection of N Main Avenue and NE 18th Street. The project includes installation of four manholes along NE 19th Street, two to meet the minimum 500-foot spacing requirement, one to collect local drainage from NE Hood Ct., and one to collect local drainage from NE Roberts Avenue. The project also includes installation of a new manhole at N Main Ave and NE 19th Street and a new manhole at the intersection of N Main Avenue and NE 18th Street. Master plan project FC-3c-C.

Justification: FC-3 covers a large segment of the City's storm drain system from Red Sunset Park down to the Birdsdale Water Quality Facility. One challenge with addressing capacity limitations in this area is that many of the pipes shown to be at or over capacity in the model are located through private property and have low burial depths. This CIP addresses the uppermost portion of this storm drain system that is subject to the 50-year design storm event. Flooding addressed by this CIP occurs in backyards between N Main Avenue to just past NE 20th Drive and also near NW 22nd Street. The most significant flooding occurs in the model where the storm drain crosses NE Beech Ave., though City staff do not recall receiving many flooding complaints in this area.

Type of Project: Construction of facilities to correct existing capacity deficiencies.



| Estimated Dollars: | Funds | • | Description | Total |
|---------------------------|-----------------|---|-------------------|-----------|
| | Resources | | Operating | 2,196,000 |
| | Resources Total | | | 2,196,000 |
| | Expenses | | Design/Const Admi | 219,600 |
| | | | Construction | 1,706,700 |
| | | | Admin (14%) | 269,700 |
| | Expenses Total | | | 2,196,000 |

CIPSW00043: Liberty Ave. Green Street

Description: The proposed project provides 4,000 SF of stormwater water quality facilities along Liberty Avenue from 19th Street to 23rd Street within existing grassed planter strips between the existing sidewalk and curb. The existing planter strips are approximately 4 ft. wide and there is 500 LF of available space on each side of the street once existing driveways are accounted for. This project opportunistically utilizes available space. Master plan project FC-3e-WQ.

Justification: The model predicts flooding along the 18" storm drain in Liberty Avenue between 19th Street and 23rd Street. Given localized nature of flooding and flooding in the 42" main that this system flows to, a combined water quality and volume reduction strategy is proposed. This area currently does not receive any treatment or volume reduction.

Type of Project: Construction of facilities to improve water quality treatment and some storage in an existing untreated developed area.



| Estimated | Dollars: |
|-----------|-----------------|
|-----------|-----------------|

| Funds | * | Description | Total |
|-----------------|---|-------------------|---------|
| Resources | | Operating | 505,000 |
| Resources Total | | | 505,000 |
| Expenses | | Design/Const Admi | 50,500 |
| | | Construction | 392,500 |
| | | Admin (14%) | 62,000 |
| Expenses Total | | | 505,000 |
UNFUNDED and FUTURE PROJECT Stormwater

CIPSW00044: Civic Drive Improvements

Description: This project includes the installation of 322 LF of 84" HDPE pipe to bypass a portion of an existing 66" concrete pipe that crosses a currently vacant property. 300 LF of existing 66" pipe will be abandoned, and the current public drainage easement will be vacated. At the downstream connection of the proposed 84" HDPE pipe, a vault structure will be installed to connect to the parallel 48" pipes that continue to the southwest. The vault structure will tie directly into the northern 48" pipe and tie into the southern 48" pipe via 40 LF of new 48" HDPE pipe. SDC Project #FC-10.

Justification: FC-3 covers a large segment of the City's storm drain system from Red Sunset Park down to the Birdsdale Water Quality Facility. One challenge with addressing capacity limitations in this area is that many of the pipes shown to be at or over capacity in the model are located on private property and have low burial depths. This CIP addresses the lower portion of this storm drain system that is subject to the 50-year design storm event. This project is within close proximity of two other Fairview Creek CIPs; downstream is FC-3a-C (Wallula Avenue) and upstream is FC-3b-C (NE Burnside Road). The combination of these projects helps to alleviate upstream flooding by increasing peak flow capacity.

Type of Project: Construction of facilities to correct existing capacity deficiencies.



| Estimated Dollars: | Fun |
|---------------------------|-----|
| | _ |

| Funds | • | Description | Total |
|-----------------|---|-------------------|-----------|
| Resources | | Operating | 1,022,000 |
| Resources Total | | | 1,022,000 |
| Expenses | | Design/Const Admi | 102,200 |
| | | Construction | 794,300 |
| | | Admin (14%) | 125,500 |
| Expenses Total | | | 1,022,000 |

UNFUNDED and FUTURE PROJECT Stormwater

CIPSW00045: K-Mart Pipe Improvements

Description: This project includes replacing 1,630 LF of existing 54" diameter pipe with 84" diameter pipe. Replacement and upsizing of this existing pipe helps to reduce predicted surface flooding, although surcharging for this alignment is still predicted for the 50-year event. The project includes installation of five manhole vaults along the alignment to accommodate the increased pipe size. SDC Project #FC-11, FC-12, FC-13.

Justification: FC-3 covers a large segment of the City's storm drain system from Red Sunset Park down to the Birdsdale Water Quality Facility. One challenge with addressing capacity limitations in this area is that many of the pipes shown to be at or over capacity in the model are located through private property and have low burial depths. This CIP addresses the middle portion of this storm drain system that is subject to the 50-year design storm event. The existing 54" piping from is undersized with predicted surcharging and flooding during the 50-year storm event. While the model indicates this area as a flooding problem, City staff do not recall receiving flooding complaints for this area.

Type of Project: Construction of facilities to correct existing capacity deficiencies.



| Estimated Dollars: | Funds | • | Description | Total |
|---------------------------|-----------------|-----------|-------------------|-----------|
| | Resources | | Operating | 2,969,039 |
| | | | SDC | 1,979,359 |
| | Resources Total | 4,948,398 | | |
| | Expenses | | Design/Const Admi | 494,840 |
| | | | Construction | 3,845,858 |
| | | | Admin (14%) | 607,700 |
| | Expenses Total | | | 4,948,398 |