



Surface Water Improvement Program

2019-2024



Pierce County

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Introduction

Surface Water Management Utility Mission and Goals Mission:

We deliver excellent services that reduce flood damage, and protect and improve water quality and natural resources for the benefit of our communities.

Goals:

- Protect people and infrastructure by reducing impacts of flooding
- Protect people and the environment by reducing impacts of water pollution
- Execute sound financial management to meet current and emerging needs
- Promote broader understanding of the functions and values of Pierce County's water resources and services provided by SWM
- Foster highly-effective employees and teams

Purpose of the Surface Water Improvement Program

Pierce County Ordinance No. 2006-115s directed the Surface Water Management (SWM) Utility to produce an annual six-year Surface Water Improvement Program (SWIP). The SWIP is the primary budget work plan for surface water capital projects in Pierce County. The 2019 – 2024 SWIP includes 41 capital projects with a total estimated six-year project cost of nearly \$105 million. The SWIP outlines Pierce County's 2018 accomplishments and a six-year plan for capital projects.

The program also informs the County Council, their staff, other departments, and the public about the scope, cost, funding and status of surface water improvement projects.

SWM Overview

The Pierce County Council created the SWM Utility in 1988 to be primarily responsible for reducing polluted runoff flowing into streams, rivers, lakes and Puget Sound, and reducing flood damage to people and property in unincorporated Pierce County. SWM is funded by a dedicated utility service charge paid by unincorporated property owners. Annually, the service charge generates approximately \$22.2 million. SWM also actively pursues state and federal grants to fund capital projects, improve water quality and salmon habitat. To learn more, visit: <http://www.piercecountywa.org/1827/Our-Projects>

Frequently Asked Questions

1. There are many projects listed in the SWIP. How does SWM determine which projects are on the six-year SWIP?

The nine Pierce County basin plans and the Pierce County Rivers Flood Hazard Management Plan (RFHMP) serve as the foundation of capital improvement projects and programs to protect people, infrastructure and the environment from the impacts of flooding and water pollution. The projects within these plans were ranked for their ability to address flooding, water quality, habitat and other factors. Limited available funding and new mandatory obligations now drive capital project priorities. Additional information can be found under the Regulatory Obligations section.

2. Once on the SWIP, are these projects automatically funded?

No. Current levels of funding through SWM fees, the Real Estate Excise Tax, and the Flood Control Zone District provide a small fraction of the revenue to complete projects. Many are large, multi-year projects dependent on grant funding. Often, the SWM capital project's budget only allows for feasibility studies and initial design work. Grant funds significantly contribute to revenue for SWM projects, but it often directs the type of projects funded and constructed. The 2015 SWM rate study identified a "Level of Service" (LOS) 2 as the level of funding needed to implement projects with a smaller reliance on grants. In 2019, approximately 70 percent of capital project funding is sourced from grants — a 14 percent increase from 2018.

3. Do grants support projects which align with SWM obligations and priorities?

SWM strives to design and construct multi-benefit projects that meet several federal and state obligations simultaneously.

Several state and federal entities support SWM obligations including:

- US Army Corps of Engineers
- Environmental Species Act
- Floodplain management
- Washington Culvert Replacement Program
- Clean Water Act (see page 3)

4. Are all grants in the six-year SWIP awarded?

No. Both awarded and pending grants are included in the CFP. If pending grants are not awarded, project implementation will be effected. While SWM continues to actively apply for grants, and relies heavily on grant funding, securing more local revenue would allow SWM to deliver consistent top priority outcomes.

5. Why do some projects stay on the SWIP more than six years?

Due to the size, complexity, and lack of project funding, many SWM capital projects take more than six years to complete. When a project receives grant funding, it becomes a priority over a non-funded project. The timing of projects, permits needed and other factors also influence how long a project takes to complete. Land acquisition takes time to accommodate willing seller timelines. When a project has property owners who are unwilling to sell, the County may have to consider condemnation.

6. How many projects are normally added to the six-year SWIP each year?

SWM adds five or six projects each year depending on funding.

7. Are the projects equitably distributed throughout the County?

Not always. There are tremendous needs throughout the County and equitable distribution is preferred. Project selection is driven by mandated obligations and available funding to address flooding, water quality and habitat concerns throughout the County.

8. Where can I find the SWIP on the website?

The SWIP can be found at: www.piercecountywa.org/swmcapital

Surface Water Management Capital Project Funding

SWM funds the feasibility, engineering and construction of capital projects through local and external funding sources. SWM local funding sources are the SWM Utility Service Charge, Real Estate Excise Tax and Flood Control Zone District. External funds consist of grants and partnerships from state, local and federal agencies and jurisdictions.

Local Funding

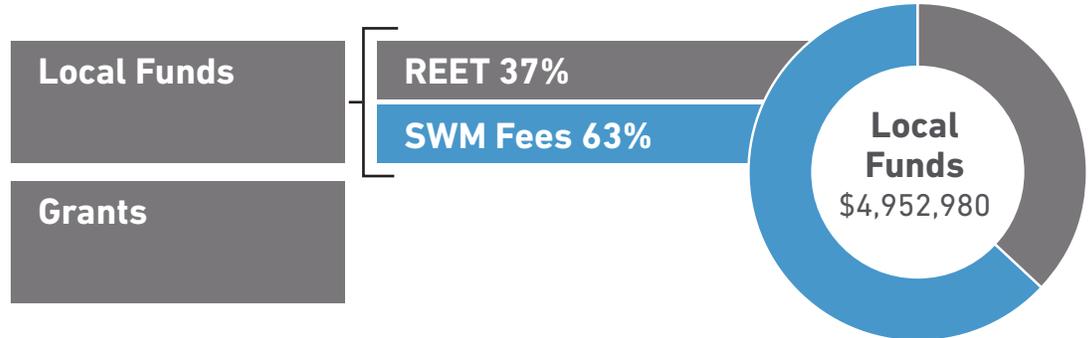
- SWM Utility Service Charge (SWM Fees)**
 SWM Utility Service Charges are collected annually from property owners. The current single-family residence rate is \$127.32 per parcel. In 2019, \$3.7 million of the SWM service charges will be directed toward capital projects. This includes \$1.7 million of SWM's cash reserve.
- Real Estate Excise Tax (REET)**
 REET is a tax collected when real estate is sold. A portion of REET collected is directed to SWM capital projects. Approximately \$1.2 million a year, depending on home sales, is directed toward SWM capital projects. In 2018, the projected REET revenue is almost \$2 million.
- Pierce County Flood Control Zone District (FCZD)**
 FCZD is a special purpose district created by the County Council in 2012 to address flood management needs in the County. In 2019, SWM will receive \$4.4 million for capital projects to reduce flood risk. SWM competes with other jurisdictions for FCZD funding and is treated like another grant source.

Grants account for approximately 70 percent of SWM's 2019 Capital Budget.

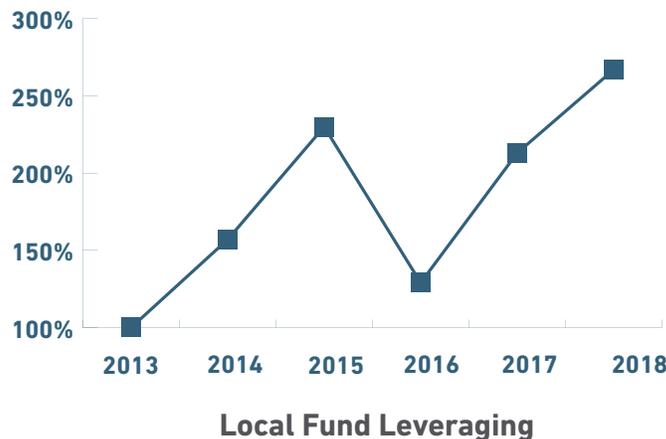
Leveraging Internal Resources through Grants and Partnerships

In 2018, the SWM Capital Improvement Program (CIP) received over \$13 million in grant funding. Grants account for almost 70 percent of SWM's 2018 Capital Budget compared to a near \$5 million of local funds. This is a 3:1 multiplier of grant dollars stemming from local funds being leveraged for match. This ratio is often increased when the grant funds are leveraged for additional grants from various agencies. Some of SWM's larger capital projects, such as Alward Road (1701) and Clear Creek Acquisition and Floodplain Restoration (1416) received millions of dollars from multiple grants simultaneously. Leveraging of local funds is the only way SWM can sustain over 30 capital projects simultaneously to meet obligations. If local funding was reduced and not able to match the amount of grants obtained in 2018 SWM would only be able to support less than half of capital projects identified in the Capital Facilities Plan (CFP).

Total Capital Funding
\$18,160,060



In 2018 SWM turned every dollar of local funds into three dollars of grants.



Regulatory Obligations

Surface Water Management (SWM) constructs capital projects to meet current and projected future local, state and federal legal and regulatory obligations. Obligations include the National Pollutant Discharge Elimination System (NPDES) permit, a Clean Water Act (CWA) requirement, the federal Endangered Species Act (ESA), USACE, and floodplain management obligations through the National Flood Insurance Program (NFIP) and Pierce County Code. These obligations are reflected in the 2015 Surface Water Management Rate Study. Not anticipated in the Rate Study was the 2017 was the determination of the US Court of Appeals that Washington State is responsible for the replacement of infrastructure that are barriers for fish passage. Below are the primary drivers for SWM capital projects and a list of projects and their associated drivers:

Clean Water Act (CWA) Obligations

SWM constructs new and retrofits existing stormwater facilities to comply with the county's NPDES permit. The Clarks Creek TMDL and Clover Creek Straight to Implementation Plan (SIP), an alternative TMDL, require capital projects to reduce water pollutants and flow off of impervious surfaces.

Endangered Species Act (ESA) Obligations

SWM is developing a Habitat Conservation Plan (HCP). An HCP is a required part of an Incidental Take Permit issued under the ESA for projects that might result in the destruction of endangered or threatened species. The HCP will require mitigation for SWM's levee maintenance and flood emergency activities.

USACE Obligations

SWM is developing a System Wide Improvement Framework Plan (SWIF) to guide levee maintenance and improvements. The SWIF is necessary to continue receiving federal funds to repair levees under the USACE's Public Law 84-99 program. The SWIF will help prioritize high risk areas to address, as funding is available.

Floodplain Management Obligations (FM)

Pierce County must take actions to reduce flood risks in order to remain in the NFIP program. Pierce County Code, Titles 11 and 18E include actions to protect public safety and infrastructure from flood risks. Includes projects in the RFHMP and Setback Study.

Culvert Replacement Program (CRP)

The US Court of Appeals determined that Washington State is responsible for replacing infrastructure which is a barrier to fish passage. In anticipation that this ruling will have a direct effect on Pierce County, Planning & Public Works has reprioritized existing fish passage barrier projects in unincorporated Pierce County.

Primary Benefit

SWM designs capital projects to meet as many primary benefits as possible. Multi-benefit-projects meet more regulatory objectives, making them more likely to receive grant funding than single-benefit projects.

Water Quality Improvement



Habitat Improvement



Agriculture



Flood Risk Reduction



When prioritizing which project to construct first, Pierce County Planning & Public Works assesses of how each potential project either protects or enhances previous capital investments, public safety, the economy of Pierce County, and the environment.

Capital Funding Summary

Non-River Projects

Project		2019 Phase	Funded	2019 Proposed	2020-2024	Total Project Cost	
1	D442	Brookdale Road and N. Fork Clover Creek Retrofit	Final Engineering	\$120,037	\$38,020	\$703,550	\$861,607
2	D232	Centers and Corridors Facility	Preliminary Engineering	\$-	\$13,060	\$380,000	\$393,060
3	D227	Clear Creek Flood Gate	Preliminary Engineering	\$-	21,370	\$400,000	\$421,370
4	D228	Clear Creek Habitat Restoration	Preliminary Engineering	\$-	35,110	\$780,000	\$815,110
5	D816	Clarks Creek TMDL Project Monitoring	Final Engineering	\$189,000	\$192,310	\$607,000	\$988,310
6	D812	Diru Creek Bank Stabilization at 72nd St E.	Construction	\$81,044	\$537,510	\$-	\$618,554
7	D811	Diru Creek Water Quality Retrofit at 64th Ave. Ct. E.	Final Engineering	\$11,744	\$15,990	\$190,323	\$206,313
8	D810	Diru Creek Water Quality Retrofit at 67th Ave. Ct. E.	Construction	\$57,165	\$183,890	\$-	\$241,054
9	D230	Horsehaven Creek Culvert at 150th Ave. E.	Preliminary Engineering	\$-	\$18,380	\$460,000	\$478,380
10	D231	Horsehaven Creek Culvert at 188th St. E.	Preliminary Engineering	\$-	\$13,060	\$380,000	\$393,060
11	D441	Huge Creek Culvert Replacement at 160th St. NW.	Final Engineering	\$168,881	\$53,260	\$765,000	\$987,141
12	D229	Minter Creek Culvert Replacement at 118th Ave. NW.	Preliminary Engineering	\$-	\$41,650	\$700,000	\$741,650
13	D192	Purdy Creek Culvert Replacement at 144th Street NW	Preliminary Engineering	\$419,922	\$20,270	\$8644,922	\$8,665,192
14	D199	Purdy Creek Culvert Replacement at 160th Street NW	Preliminary Engineering	\$165,695	\$89,790	\$12,800	\$238,285
15	D191	Rody Creek Improvements SW of Pioneer Way	Preliminary Engineering	\$1,100,935	\$87,330	\$800,000	\$1,988,265
16	D190	Rody Creek Channel Stabilization at 80th Street East	Final Engineering	\$202,600	\$30,000	\$815,000	\$1,047,600
17	D225	South Prairie Creek Floodplain and Off-Channel Restoration	Construction	\$57,469	\$105,850	\$-	\$163,319
18	D212	Sprinker Parking Lot Stormwater Retrofit Phase III	Preliminary Engineering	\$1,448	\$23,390	\$706,448	\$729,838
19	D460	Swan Creek Streambank Stabilization at 64th St E.	Preliminary Engineering	\$92,960	\$64,300	\$3,994,960	\$4,059,260
20	D411	Woodland Creek Stormwater Treatment System	Construction	\$892,068	\$1,663,590	\$-	\$2,556,198
Totals			\$3,560,968	\$3,248,130	\$20,340,003	\$26,593,566	

These summary tables are representative of the draft 6-year Capital Facilities Plan which can be found online for further reference.

www.piercecountywa.org/1878/Library

Capital Funding Summary

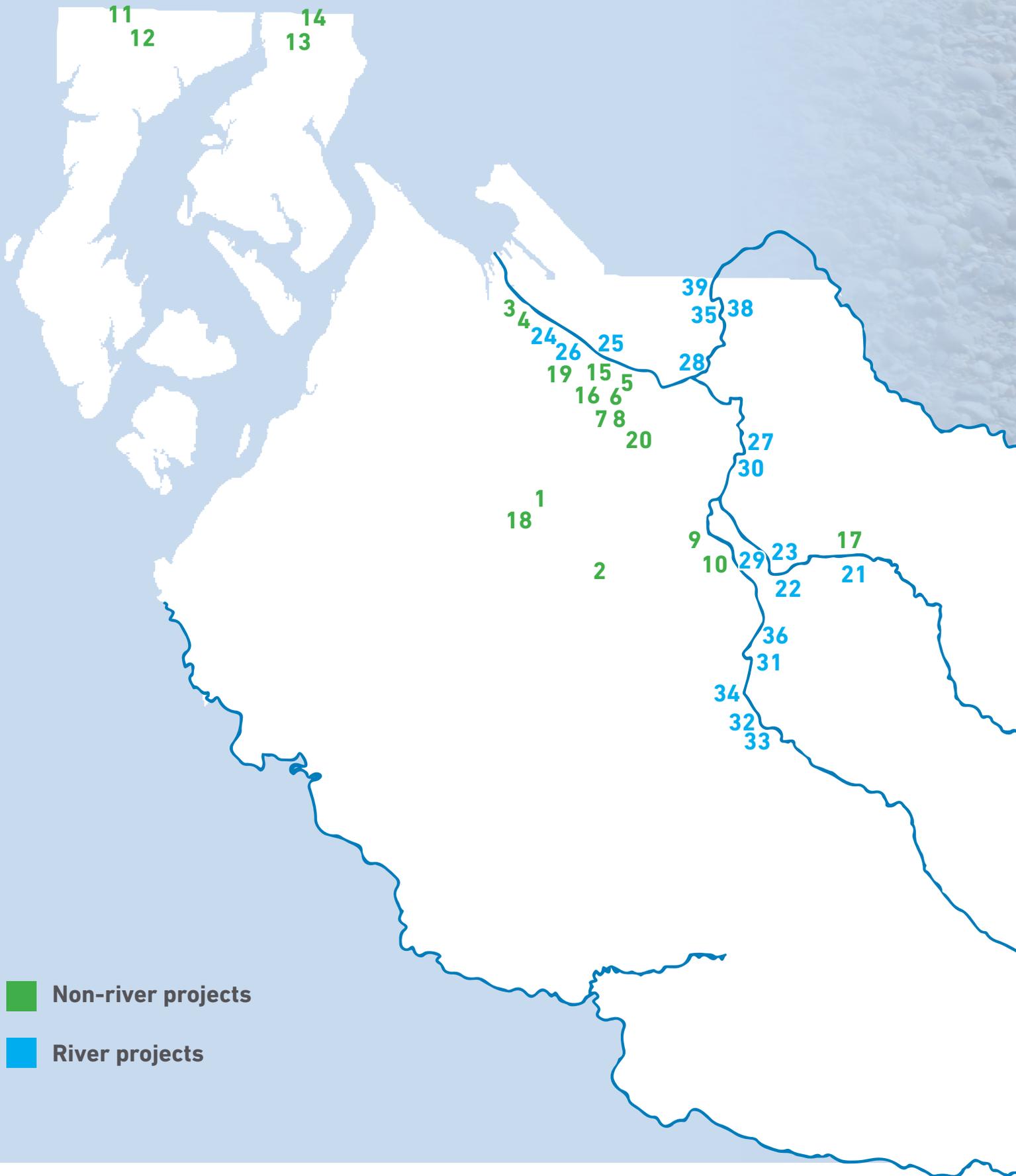
River Projects

Project			2019 Phase	Funded	2019 Proposed	2020-2024	Total Project Cost
21	1701	Alward Road Acquisition & Setback Levee	Preliminary Engineering	\$4,015,523	\$1,401,730	3,000,000	\$27,517,187 (\$18 million unfunded)
22	1711	Carbon River Floodplain Connection Right Bank	Final Engineering	\$67,258	\$182,780	\$-	\$334,780
23	1702	Carbon River Setback Levee Left Bank	Preliminary Engineering	\$89,818	\$369,960	\$3,039,000	\$3,498,778
24	1416	Clear Creek Acquisition and Floodplain Reconnection	Preliminary Engineering	\$7,254,084	\$1,390,700	\$5,000,000	\$55,744,043 (\$42 million unfunded)
25	1419	FEMA FMA (Flood Mitigation Assistance) 2016 Clarks Creek	Construction	\$712	\$1,378,110	\$-	\$1,378,822
26	1416	FEMA HMGP DR 4242-4243 Clear Creek Wheel Inn Mobile Home Park Property Acquisition	Final Engineering	\$-	\$953,480	\$700,000	\$1,653,480
27	1710	Fennel Creek Restoration Phase 3	Construction	\$406,413	\$22,870	\$1,423,632	\$1,852,915
28	1379	Habitat and Flood Capacity Creation Project	Final Engineering	\$2,278,281	\$240,270	\$2,000,000	\$4,528,751
29	1385	Jones Setback Levee	Preliminary Engineering	\$158,208	\$157,010	\$5,900,000	\$6,215,218
30	1421	Middle Puy 128th St Comp Study	Final Engineering	\$1,538,020	\$772,930	\$12,390,000	\$14,700,950
31	1708	Neadham Road Floodplain Reconnection	Preliminary Engineering	\$6,398,112	\$692,410	\$2,400,000	\$10,490,522
32	1423	Orville Road Revetment Phase 2b	Preliminary Engineering	\$3,216,902	\$1,067,010	\$-	\$4,283,912
33	1425	Orville Road Revetment Phase 2c	Preliminary Engineering	\$230,000	\$115,310	\$4,040,000	\$4,385,310
34	1418	Orville Road Revetment at Kapowsin Creek	Final Engineering	\$1,530,076	\$43,810	\$5,200,000	\$6,773,886
35	1426	Pacific Point Bar Setback Levee	Preliminary Engineering	\$-	\$175,350	\$10,450,000	\$10,625,350
36	1422	Puyallup River Ford Setback	Construction	\$-	\$25,960	\$960,000	\$985,960
37	1411	Upper Nisqually Channel Migration Protection	Preliminary Engineering	\$305,591	\$1,406,880	\$-	\$1,712,471
38	1430	White River 3.85, Right Bank - Capital Maintenance	Preliminary Engineering	\$54,530	\$54,530	\$1,440,000	\$1,494,530
39	1424	White River Butte Pit Setback	Construction	\$-	\$57,770	\$6,000,000	\$6,334,770
Totals				\$27,543,528	\$11,894,340	\$60,502,632	\$164,511,635

These summary tables are representative of the draft 6-year Capital Facilities Plan which can be found online for further reference.

www.piercecountywa.org/1878/Library

Project Map



■ Non-river projects

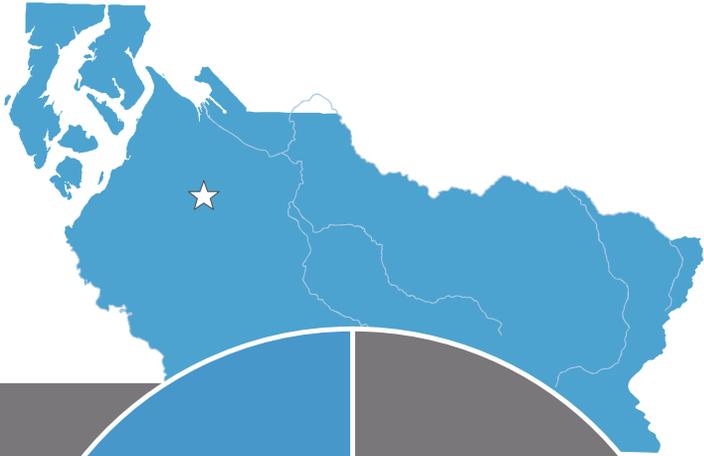
■ River projects



37

1

Brookdale Road and N. Fork Clover Creek Retrofit D442



Description

Retrofitting an older stormwater system that outfalls directly to Clover Creek without water quality treatment.

Location

Within a residential neighborhood south of the intersection of Brookdale and Golden Given Road.

Obligation

Clean Water Act
Clover Creek SIP

Benefit



Current Phase:

Final Engineering

Notes

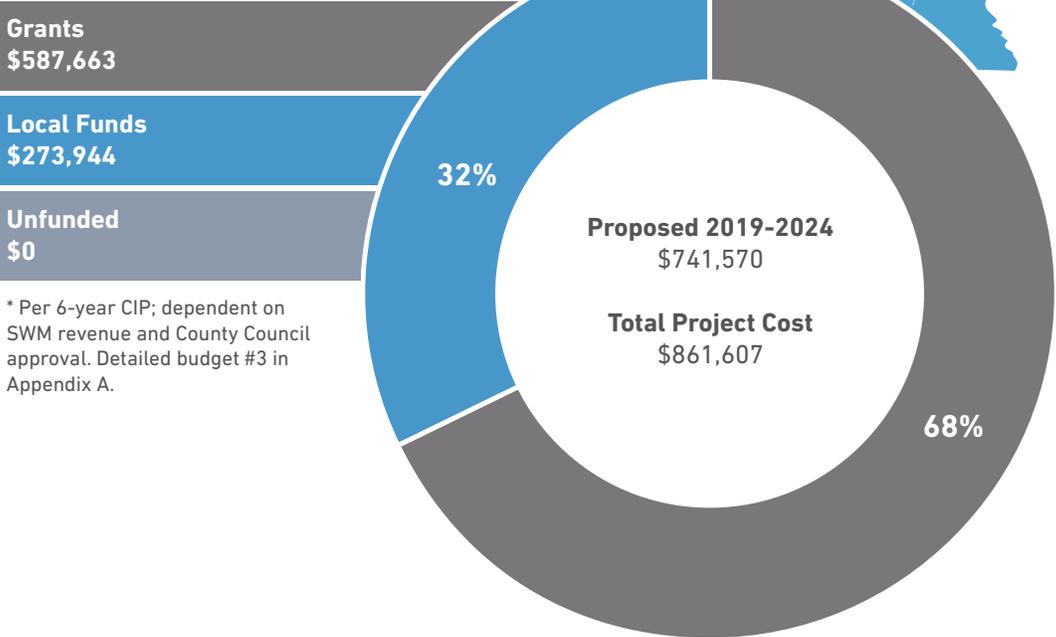
This project received grant funding from DOE for the 2019-2021 biennium.

Council District

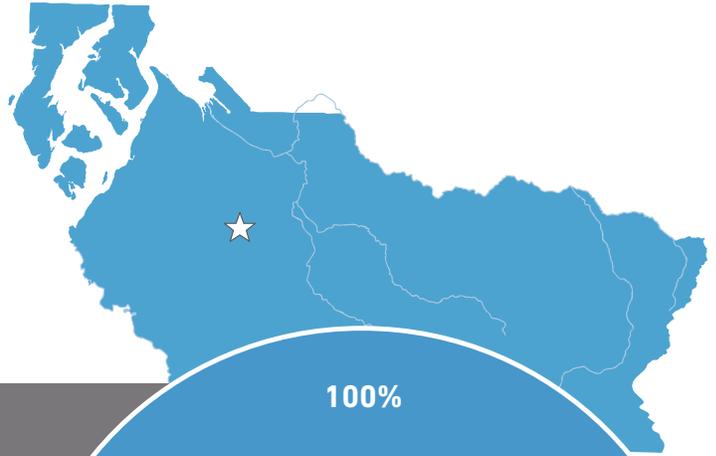
2

Contact—Harold Smelt

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(253) 798-2952



2 Centers and Corridors Facility D232



Description
Evaluate all existing regional stormwater facilities for potential improvements in advance of planned growth in service area

Location
Centers and Corridors Planning Area

Obligations
Clean Water Act



Current Phase
Preliminary Engineering

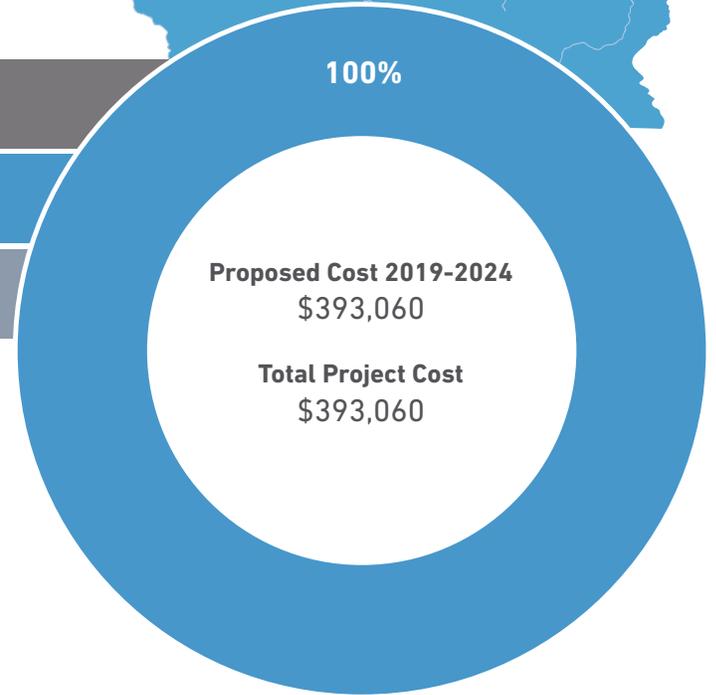
Notes
Anticipated to lead to at least one construction project enhancing current level of service.

Council District
1, 3, 5

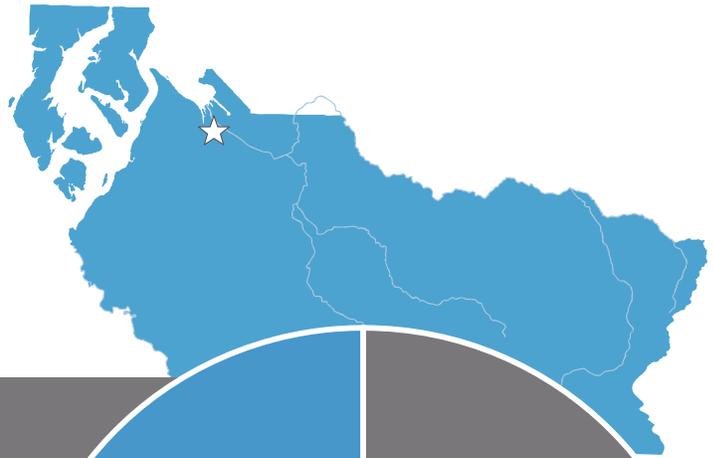
Contact—Harold Smelt
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(253) 798-2952

Grants	\$0
Local Funds	\$393,060
Unfunded	\$0

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



3 Clear Creek Flood Gate D227



Description
To replace the existing flood gate at the mouth of Clear Creek with a fish passable gate and more reliable mechanical gate.

Location
Clear Creek mouth near Lower Puyallup River RM 2.9.

Obligation
Culvert Case
Clean Water Act

Benefit

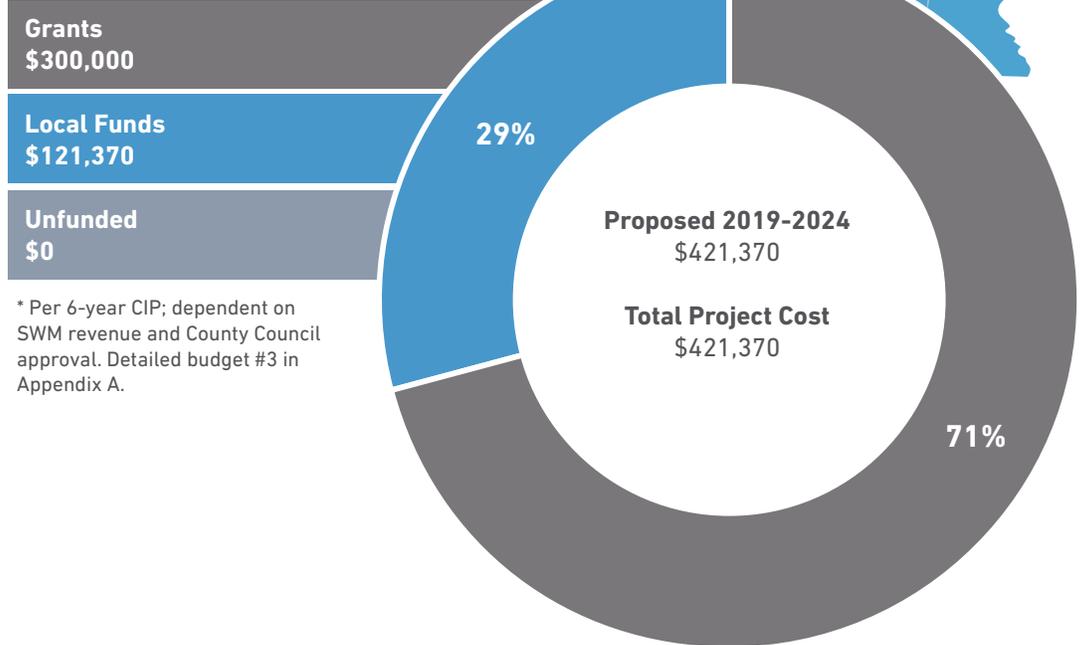


Current Phase:
Preliminary Engineering

Notes
There are two gates of different types, ages and states of repair. The intent of the project is to design and implement a system that functions as one unit. Project funded by Natural Resource Damage Assessment funds.

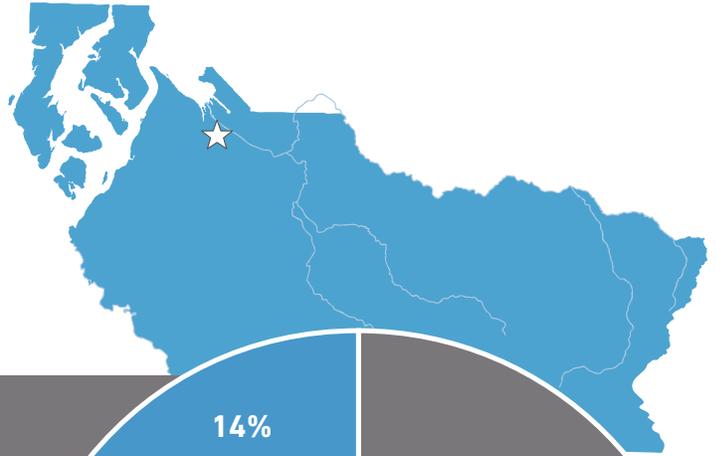
Council District
5

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4

Clear Creek Habitat Restoration D228



Description
Design and implement restoration actions to restore channel form and wetland function to sections of Clear Creek on County-owned properties.

Location
Clear Creek mouth near Lower Puyallup River RM 2.9.

Obligation
Clean Water Act

Benefit

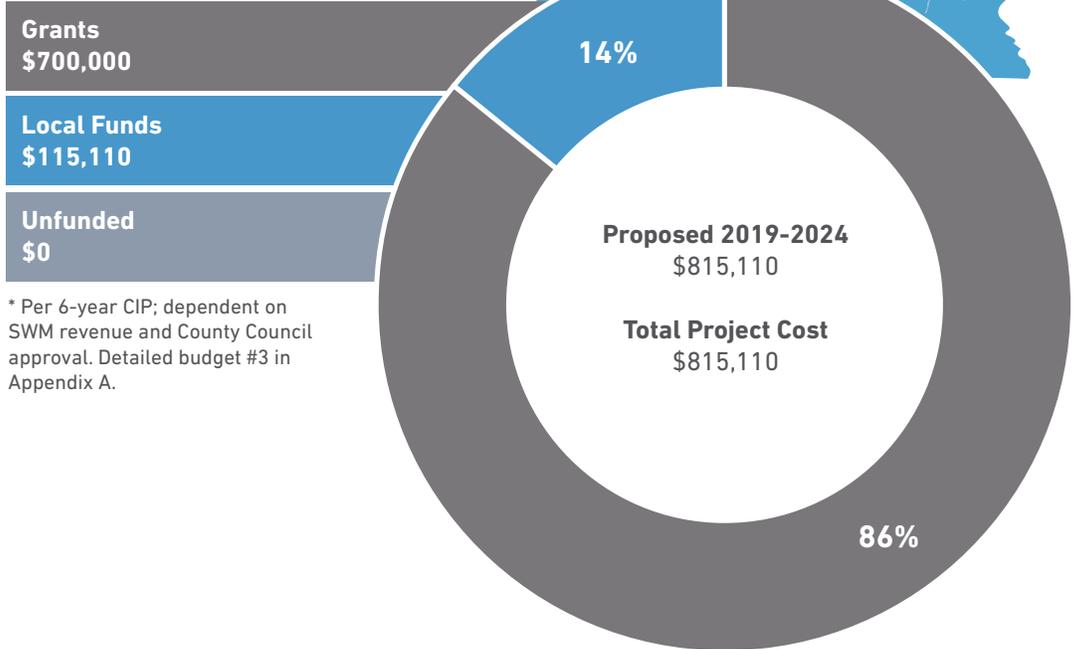


Current Phase
Preliminary Engineering

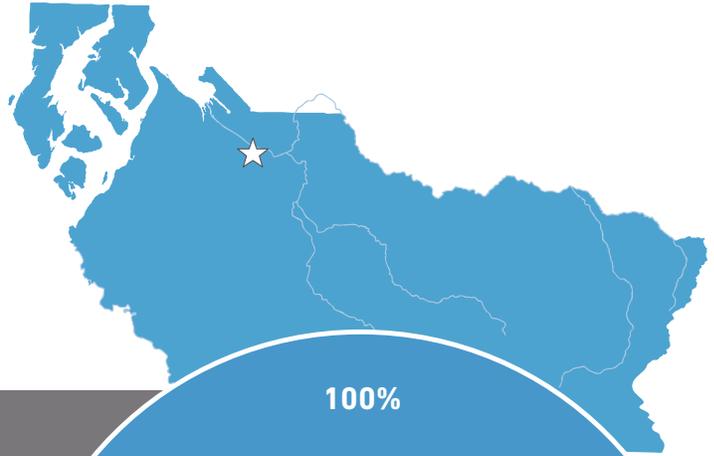
Notes
Project funded by Natural Resource Damage Assessment funds.

Council District
5

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5 Clarks Creek TMDL Project Monitoring D816



Description
Monitoring of the Clarks Creek water quality retrofit projects.

Location
Various locations along Clarks Creek.

Obligation
Clean Water Act
Clarks Creek TMDL

Benefit

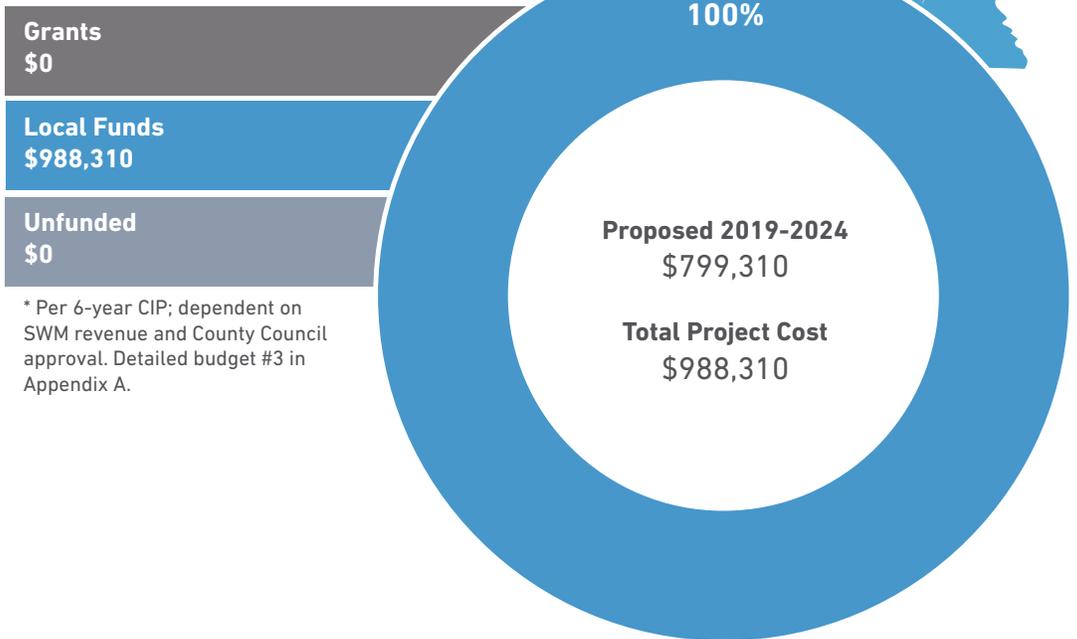


Current Phase:
Final Engineering

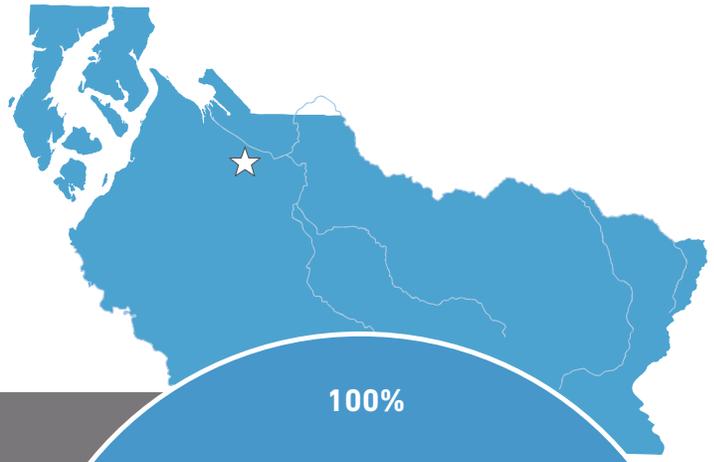
Notes
Project is needed for Clarks Creek TMDL which will reduce storm flows and sediment.

Council District
2

Contact—Harold Smelt
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6 Diru Creek Bank Stabilization at 72nd St E. D812



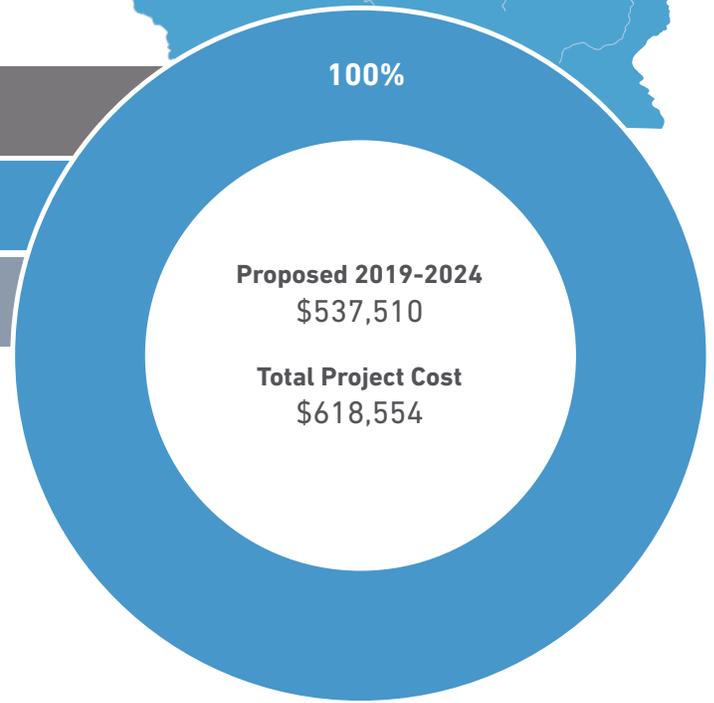
Description
Stabilize the creek banks for approximately 1,100 feet to reduce erosion and downstream sedimentation to address Clarks Creek TMDL.

Location
Upstream of 72nd Street E.

Obligation
Clean Water Act
Clarks Creek TMDL

Grants	\$0
Local Funds	\$618,554
Unfunded	\$0

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #1 in Appendix A.



Benefit



Current Phase:
Final Engineering and Construction

Notes
Project is needed for Clarks Creek TMDL which will reduce storm flows and sediment in lower creek.

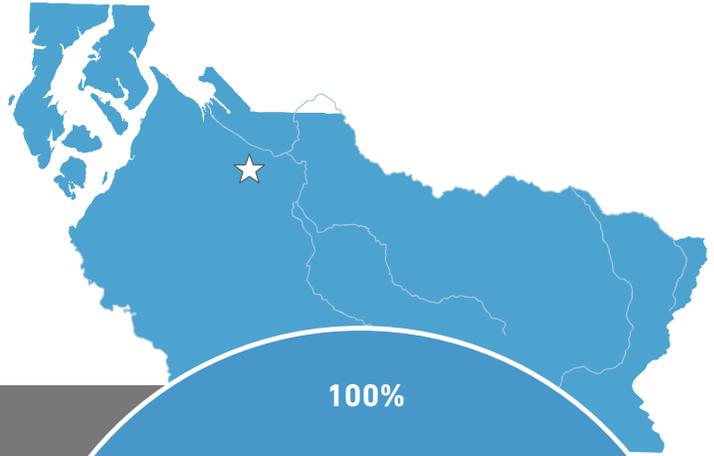
Council District
5

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7

Diru Creek Water Quality Retrofit at 64th Ave. Ct. E. D811



Description
Install Water Quality Vault to address Clarks Creek TMDL.

Location
64th Ave. Ct. E between 104th St. E. and Pipeline Rd

Obligation
Clarks Creek TMDL
Clean Water Act

Benefit



Current Phase
Construction

Notes
Project is needed for Clarks Creek TMDL which will reduce storm flows and sediment in lower creek.

Council District
5

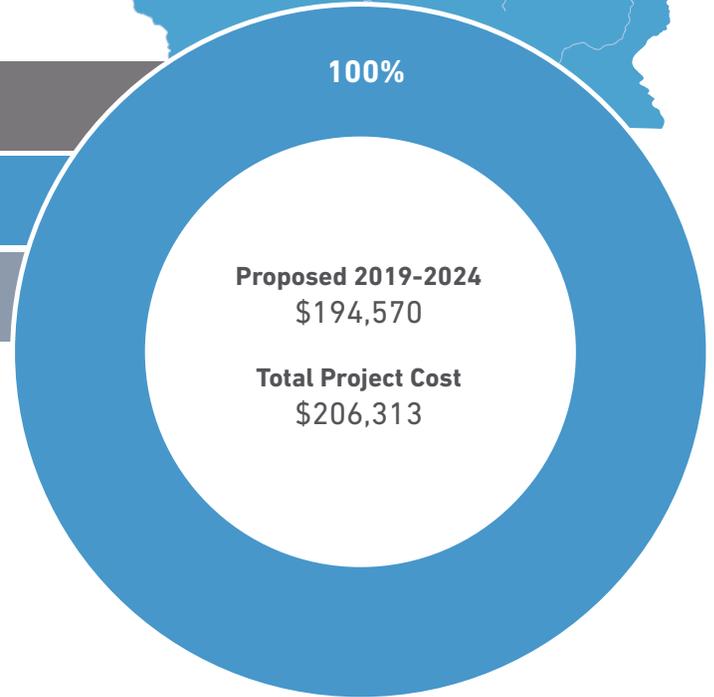
Contact—Harold Smelt
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(253) 798-2952

Grants
\$0

Local Funds
\$206,313

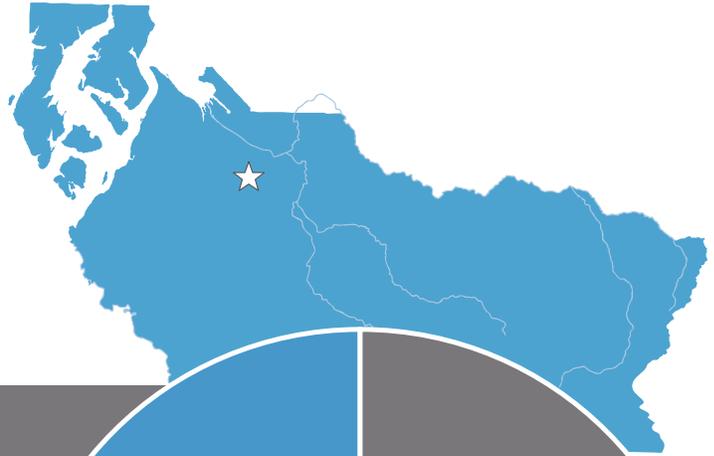
Unfunded
\$0

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #1 in Appendix A.



8

Diru Creek Water Quality Retrofit at 67th Ave. Ct. E. D810



Description
Install Water Quality Vault to address Clarks Creek TMDL.

Location
67th Ave. Ct. E between 104th St. E. and Pipeline Rd

Obligation
Clarks Creek TMDL Clean Water Act

Benefit

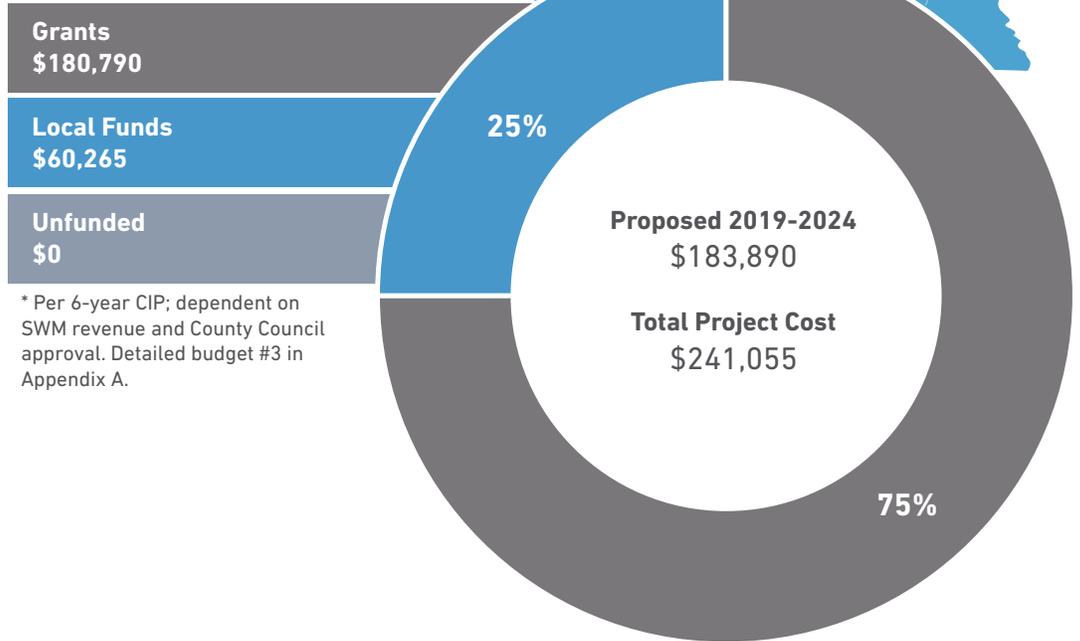


Current Phase
Construction

Notes
Project is needed for Clarks Creek TMDL which will reduce storm flows and sediment in lower creek.

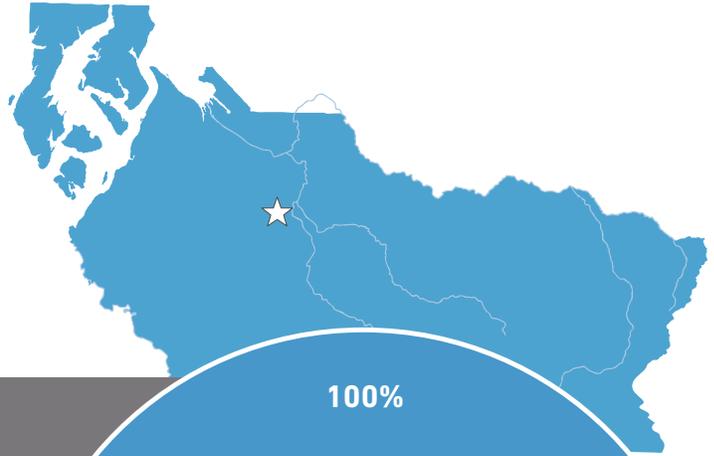
Council District
5

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9

Horsehaven Creek Culvert at 150th Ave. E. D230



Description

Relieve local flooding and provide fish passage

Location

150th Ave. E. north of 183rd St Ct. E.

Obligations

Fish Passage
Clean Water Act

Benefit



Current Phase

Preliminary Engineering

Notes

Twin 36-inch PCC culverts are a partial fish passage barrier for chum, coho and cutthroat trout

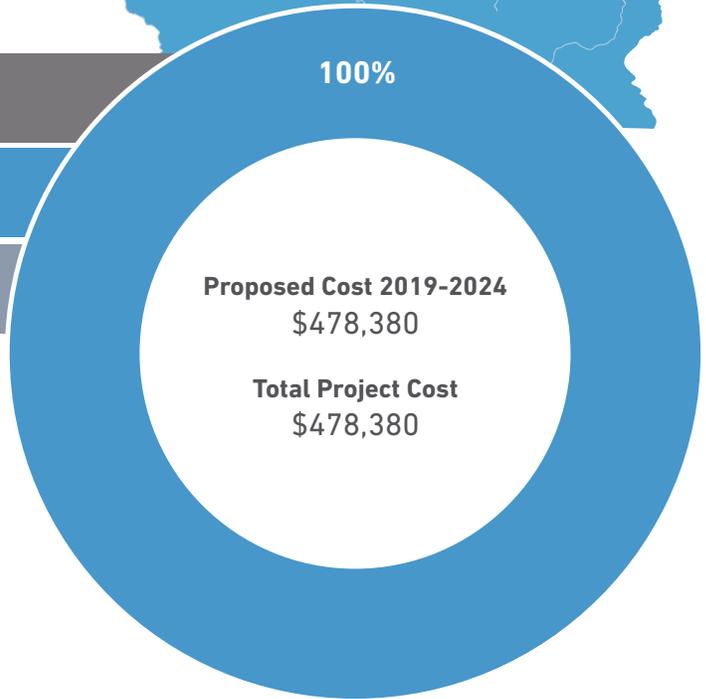
Council District

1

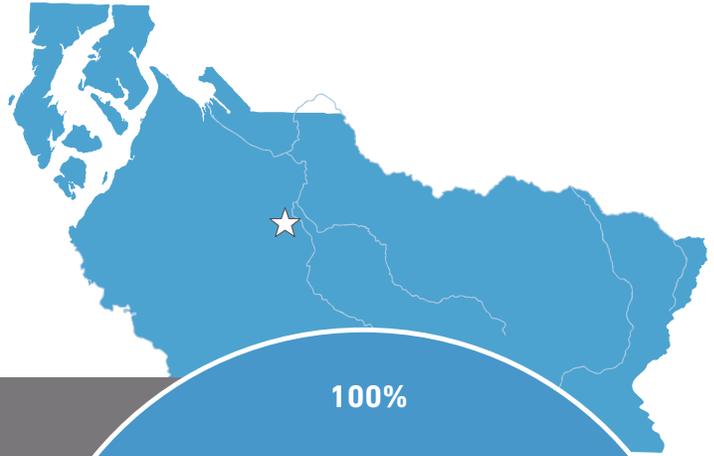
Contact—Harold Smelt
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Grants \$0
Local Funds \$478,380
Unfunded \$0

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



10 Horsehaven Creek Culvert at 188th St. E. D231



Description
Retrofitting a stormwater system that directly discharges treated water in to Puget Sound

Location
188th Street East west of Orting-Kapowsin Highway

Obligations
Fish Passage
Clean Water Act

Benefit



Current Phase
Preliminary Engineering

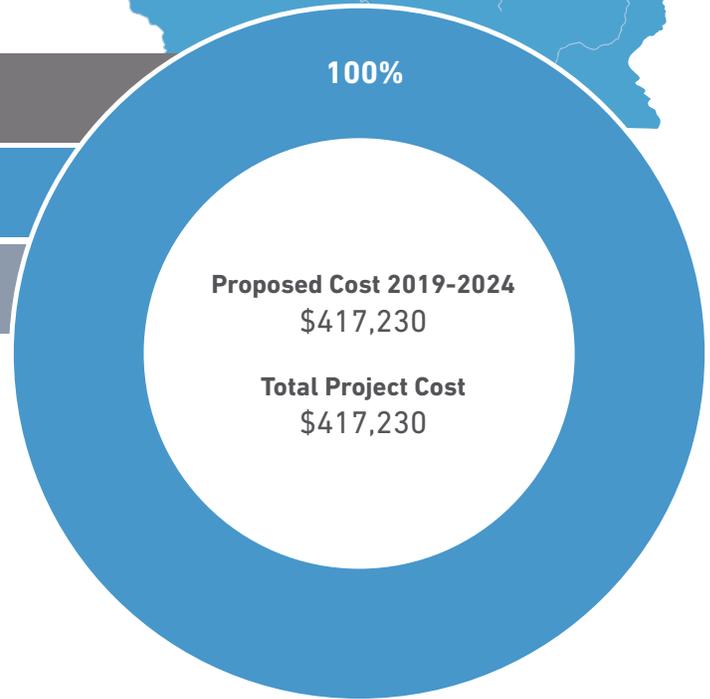
Notes
Twin 36-inch PCC culverts under 188th is undersized causing local flooding at <10-year event and is a partial fish passage barrier to chum, coho and cutthroat trout.

Council District
1

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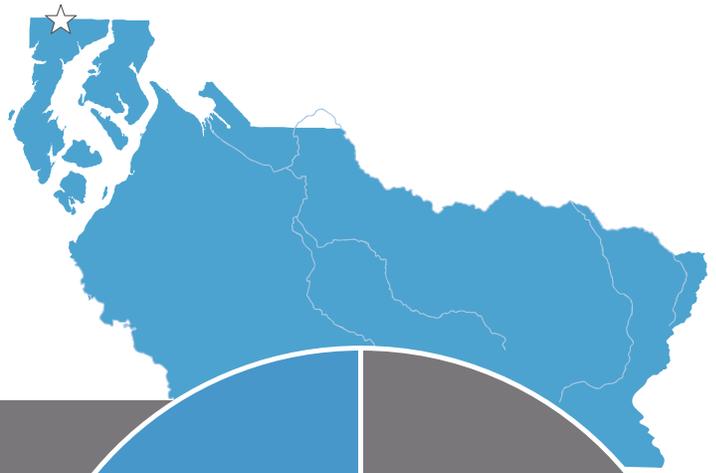
Grants	\$0
Local Funds	\$417,230
Unfunded	\$0

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



11

Huge Creek Culvert Replacement at 160th St. NW. D441



Description

Pierce County proposes to replace the Huge Creek 5' x 6' concrete box culvert with a clear span bridge to provide fish passage to over 10 miles of habitat upstream.

Location

160th Street crossing of Huge Creek between Pierce and Kitsap Counties.

Obligation

Fish Passage
Floodplain Management

Benefit



Current Phase

Final Engineering

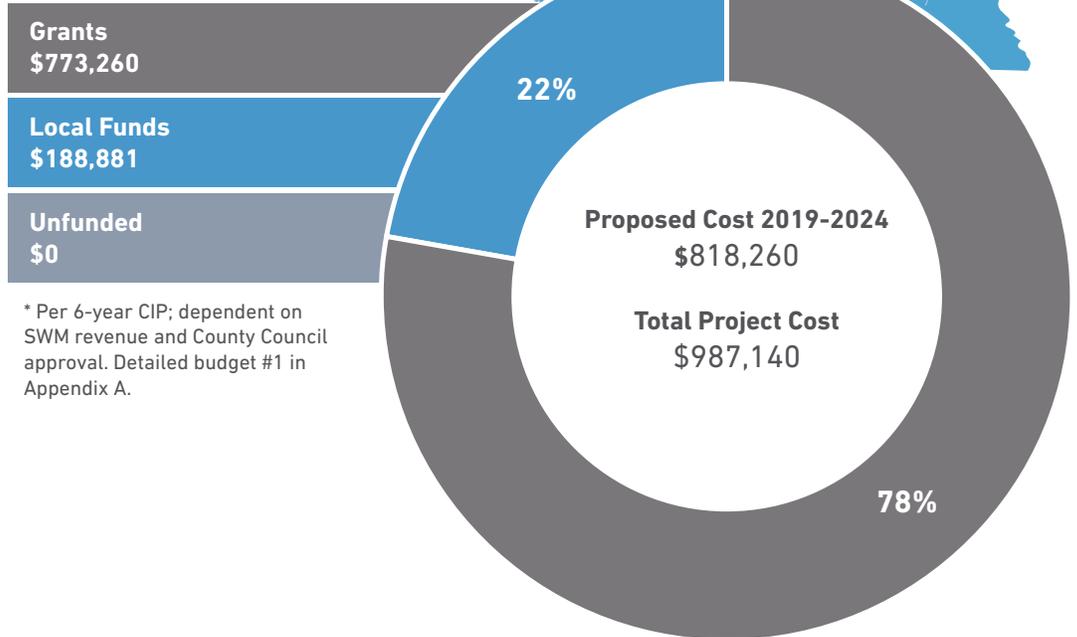
Notes

\$45,000 of total local funds is provided by Kitsap County. Received grant from SRFB for the 2019-2024 biennium.

Council District

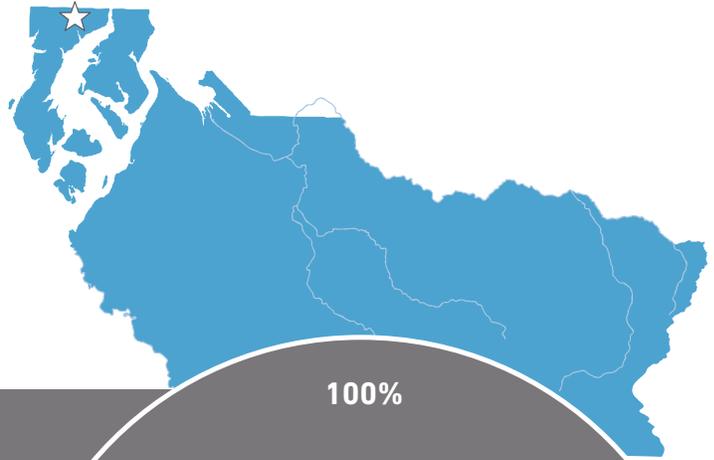
7

Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952



12

Minter Creek Culvert Replacement at 118th Ave. NW. D229



Description
Two culverts previously identified as partial fish barriers will be replaced in Minter Creek.

Location
118th Ave. NW stream crossing.

Obligation
Fish Passage
Floodplain Management

Benefit



Current Phase
Preliminary Engineering

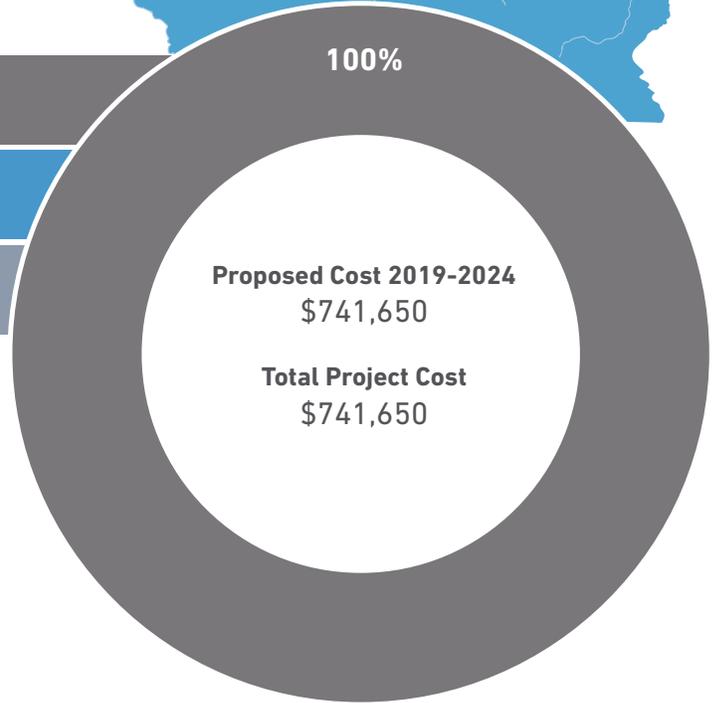
Notes
Fully by the FCZD Opportunity Fund.

Council District
7

Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952

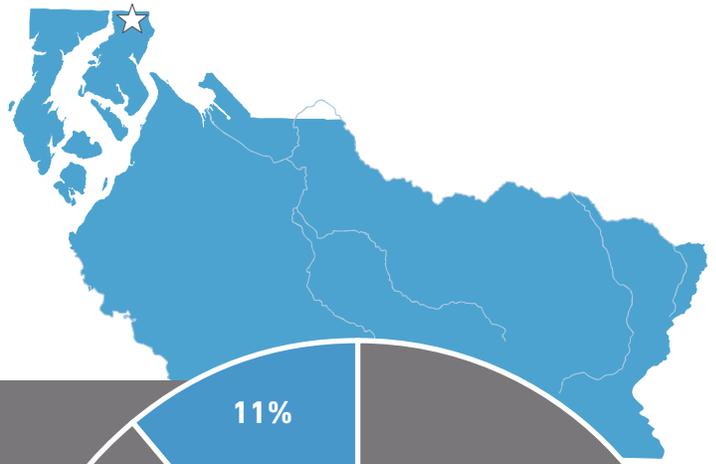
Grants	\$741,650
Local Funds	\$0
Unfunded	\$0

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #1 in Appendix A.



13

Purdy Creek Culvert Replacement at 144th Street NW D192



Description
Culvert replacement under 144th Street NW. This work is to do a near shore feasibility study to see if the estuary can be restored.

Location
Purdy Creek at 144th Street NW and NW crossing of Purdy Creek East of SR 302.

Obligation
Fish Passage

Benefit



Current Phase
Preliminary Engineering

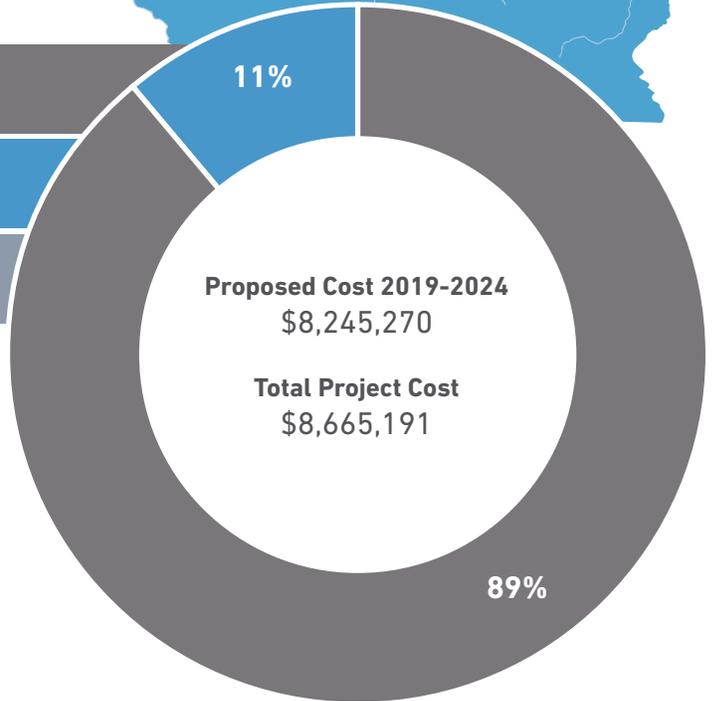
Notes
Creek goes directly underneath a gas station, then through another culvert which goes under SR302.

Council District
7

Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952

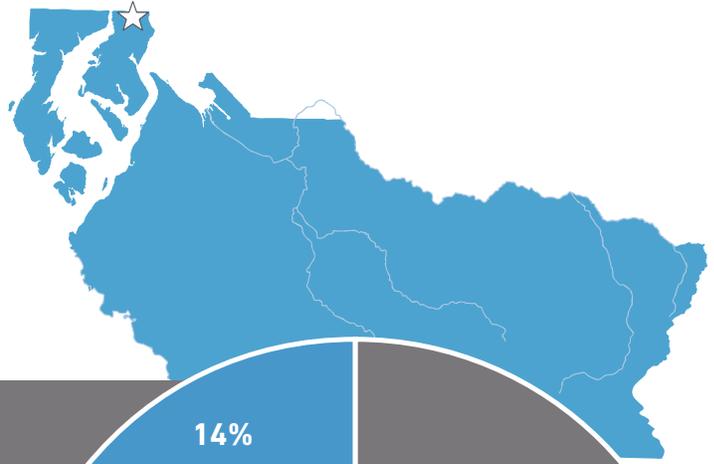
Grants \$7,700,240
Local Funds \$964,951
Unfunded \$0

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



14

Purdy Creek Culvert Replacement at 160th Street NW D199



Description

A feasibility study of a culvert replacement project at Purdy Creek at 160th St NW.

Location

Purdy Creek at 160th Street NW

Obligation

Fish Passage

Benefit



Current Phase

Preliminary Engineering

Notes

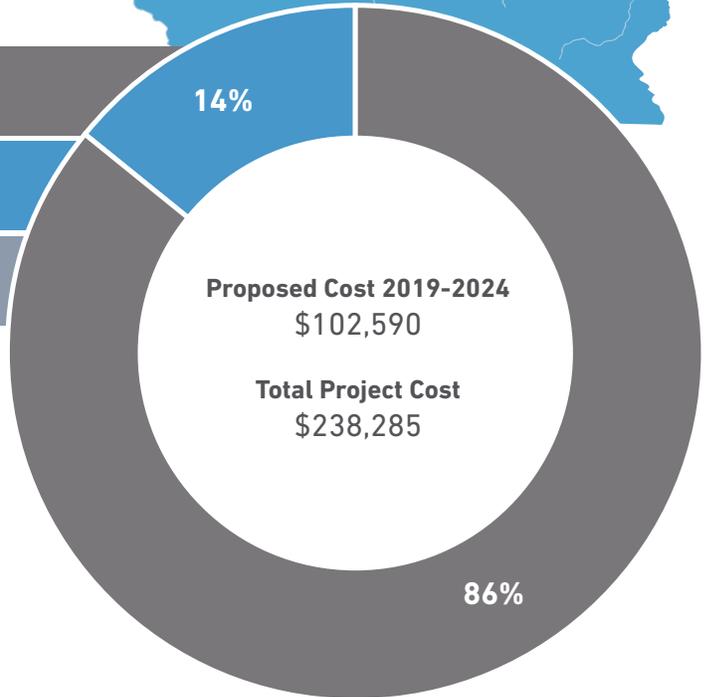
A partnership between Kitsap and Pierce County. Kitsap provided \$5,000 in funding for 2019-2024.

Council District

7

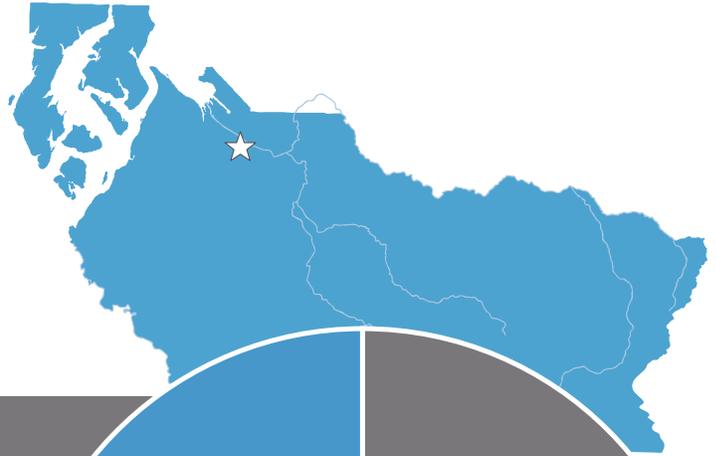
Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952

Grants \$205,340
Local Funds \$32,945
Unfunded \$0



15

Rody Creek Improvements SW of Pioneer Way D191



Description

Lower the sediment transport rate to significantly reducing sediment deposition frequency and volume.

Location

At the crossing between 64th St. E and Pioneer Way E

Obligations

Clean Water Act
Clarks Creek TMDL

Benefit



Current Phase

Final Engineering and Land Acquisition

Notes

Project is needed for Clarks Creek TMDL which will reduce storm flows and sediment in Clarks Creek.

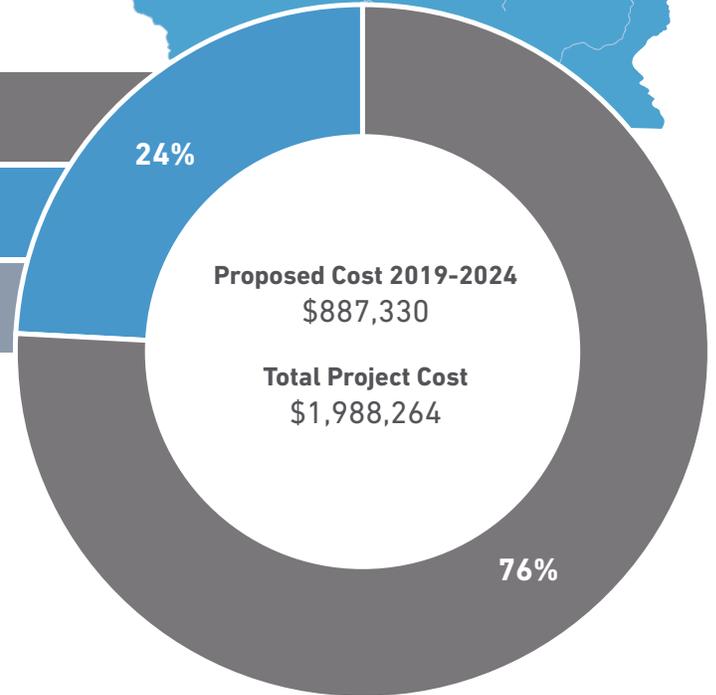
Council District

5

Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952

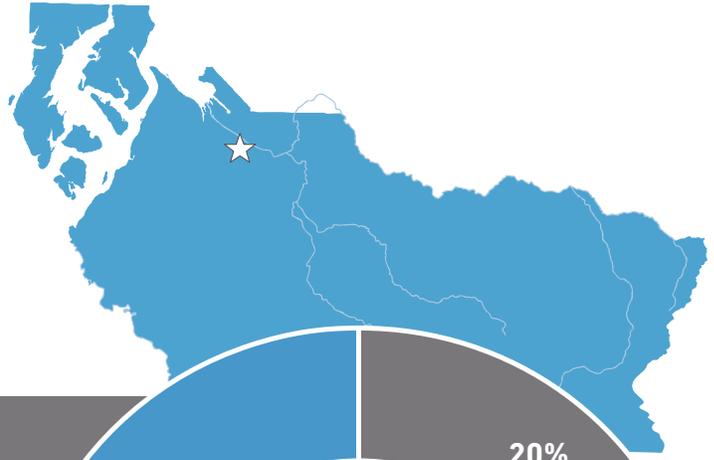
Grants \$390,000
Local Funds \$1,598,265
Unfunded \$0

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



16

Rody Creek Channel Stabilization at 80th Street East D190



Description
Channel stabilization to reduce mass erosion occurring in ravine portion of Rody Creek.

Location
Rody Creek at 80th St. E.

Obligations
Clean Water Act
Clarks Creek TMDL

Benefit



Current Phase
Final Engineering

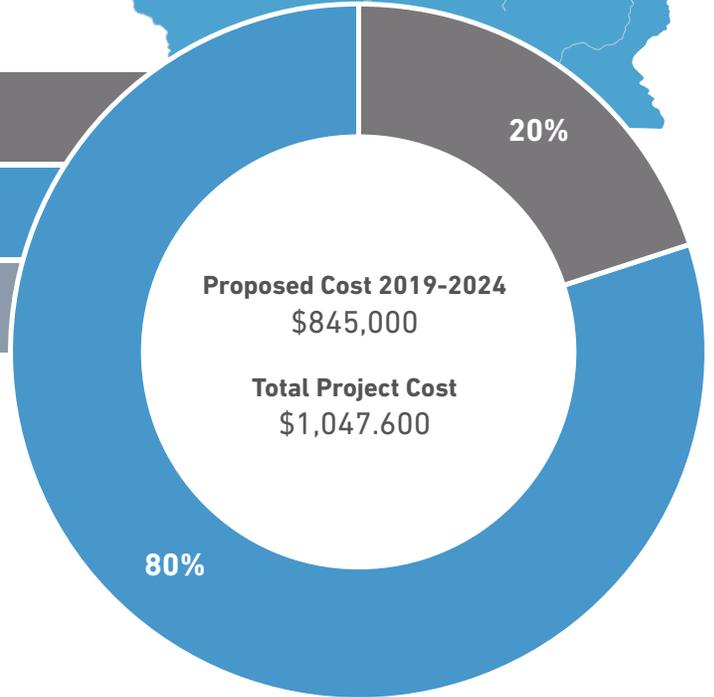
Notes
Project is needed for Clarks Creek TMDL which will reduce storm flows and sediment in Clarks Creek.

Council District
5

Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952

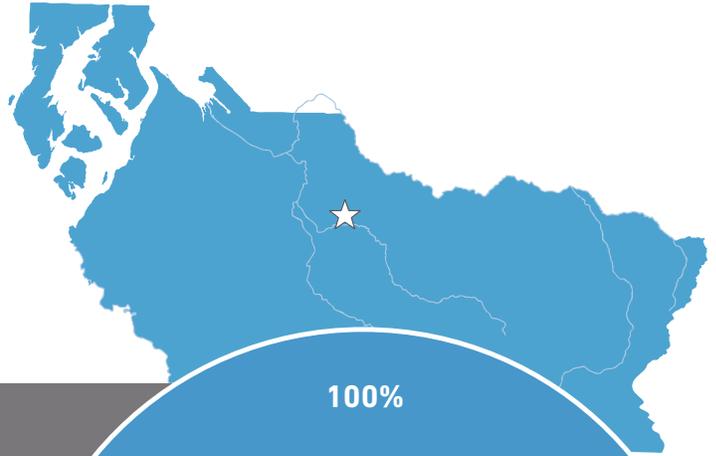
Grants	\$800,000
Local Funds	\$247,600
Unfunded	\$0

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



17

South Prairie Creek Floodplain and Off-Channel Restoration D225



Description
Overall the project will reconnect over a half mile of side channel habitat along a half mile of mainstem South Prairie Creek.

Location
South Prairie Creek RM 4.0-4.5

Obligation
Endangered Species Act

Benefit



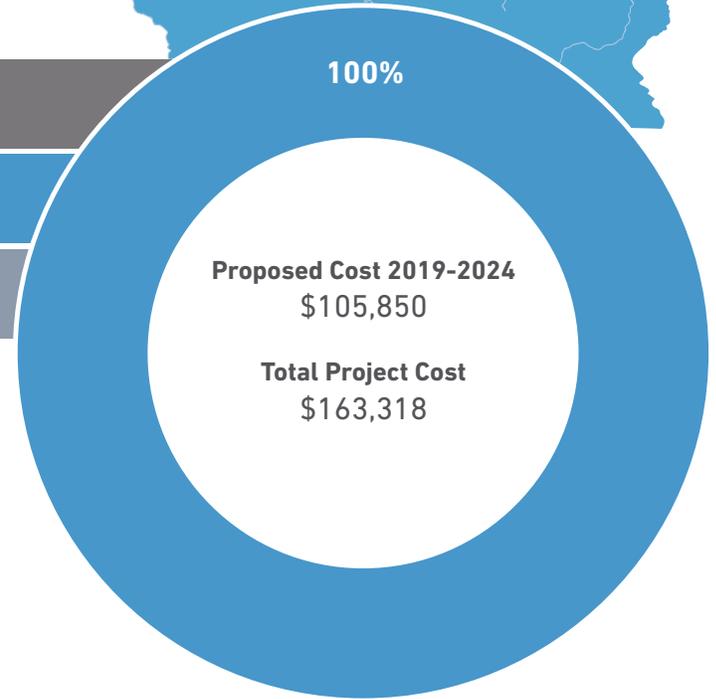
Current Phase
Partnership (Final Engineering and Construction)

Council District
1

Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952

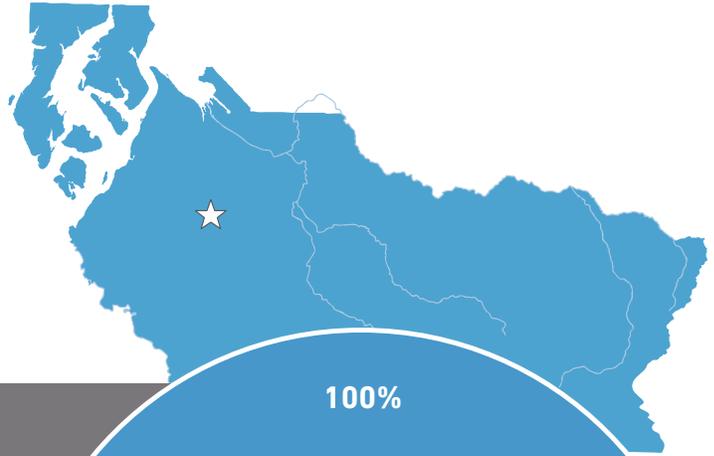
Grants	\$0
Local Funds	\$163,318
Unfunded	\$0

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



18

Sprinker Parking Lot Stormwater Retrofit Phase III D212



Description
Replace portion of porous surfaces from the previous pilot project that were not performing as expected. This will improve water quality in Spanaway Creek and recharge groundwater.

Location
Sprinker Recreation Center at the corner of Military Road South and G Street South.

Obligations
Clean Water Act

Benefit



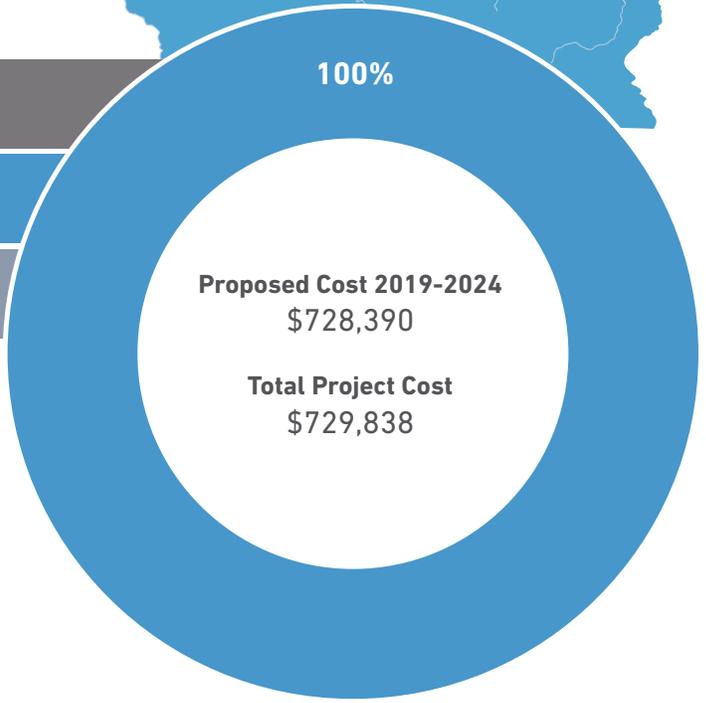
Current Phase
Preliminary Engineering

Notes
Phase III of the Sprinker Parking Lot LID Retrofit project.

Council District
6

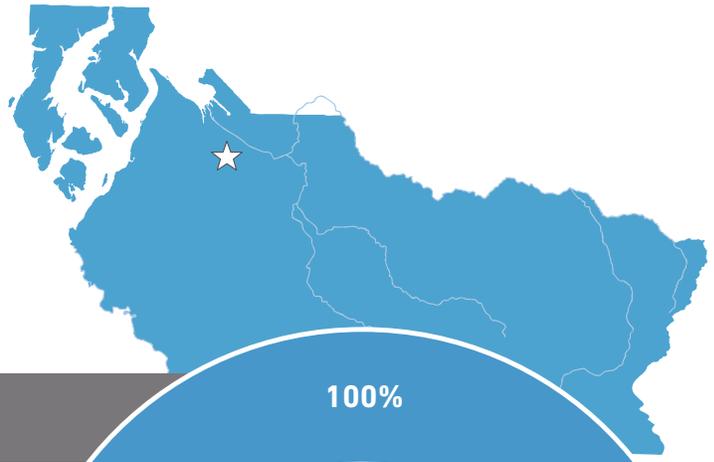
Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952

Grants \$0
Local Funds \$729,838
Unfunded \$0



19

Swan Creek Streambank Stabilization at 64th St E. D460



Description
Install stormwater filter system to address the Clarks Creek TMDL.

Location
67th Ave E between 104th St E and Pipeline Rd E County

Obligations
Clean Water Act
Clarks Creek TMDL

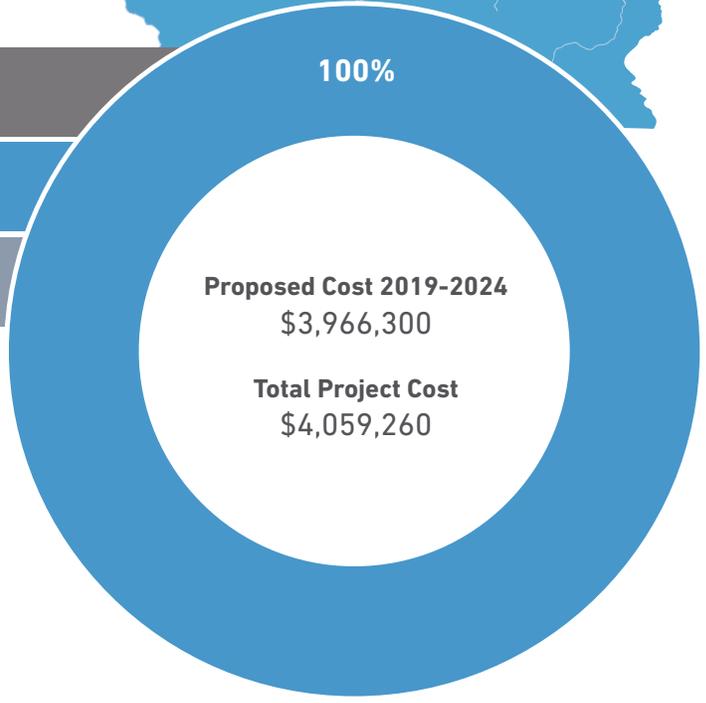


Current Phase
Preliminary Engineering

Council District
5

Grants	\$0
Local Funds	\$4,059,260
Unfunded	\$0

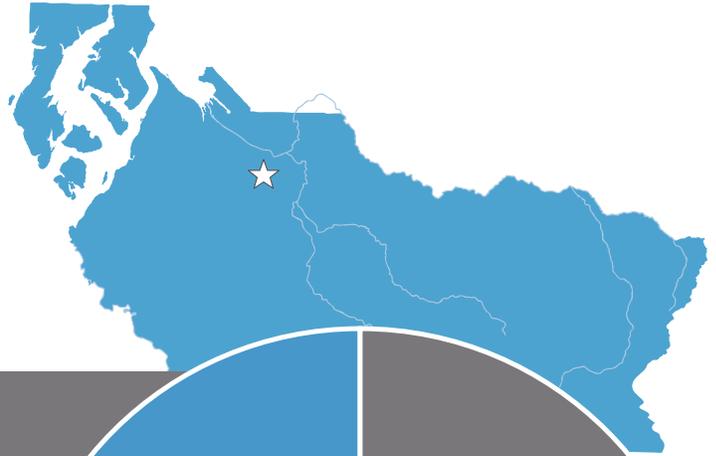
* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952

20

Woodland Creek Stormwater Treatment System D411



Description
Stormwater treatment pond that will treat a large contributing area that first enters Woodland Creek and then empties into Clarks Creek.

Location
Woodland Creek at 104th Street East and Woodland Avenue East.

Obligations
Clarks Creek TMDL
Clean Water Act

Benefit

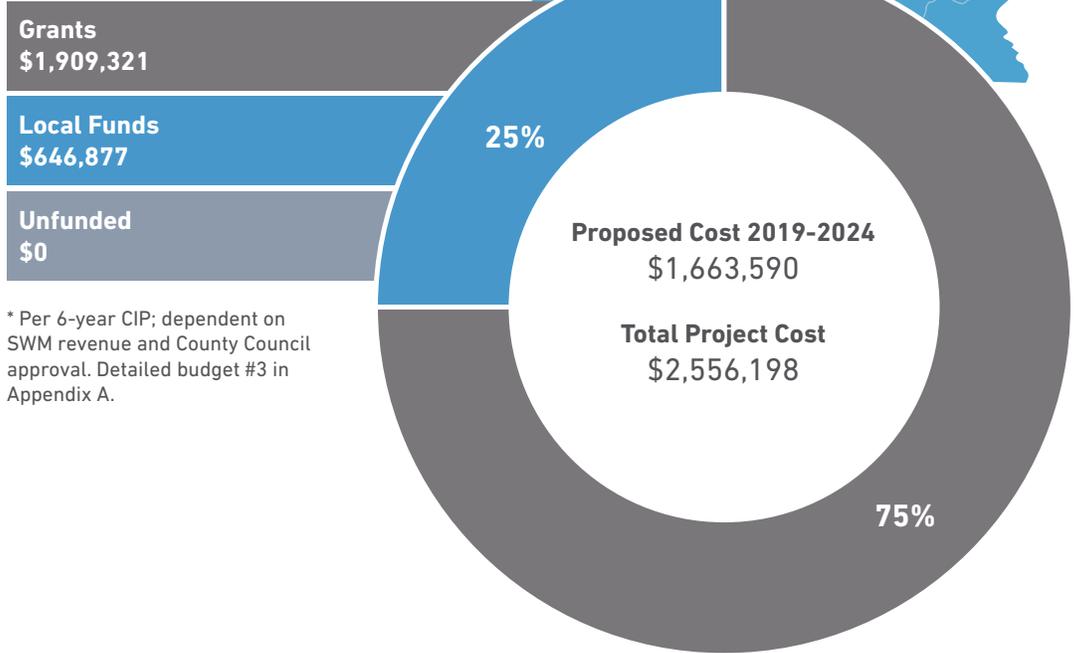


Current Phase
Construction

Notes
Project is needed for Clarks Creek TMDL which will reduce storm flows and sediment in lower creek.

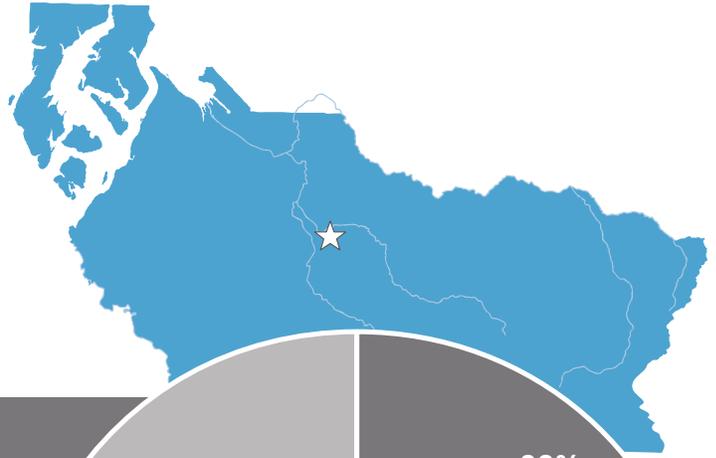
Council District
2

Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952



21

Alward Road Acquisition and Setback Levee 1701



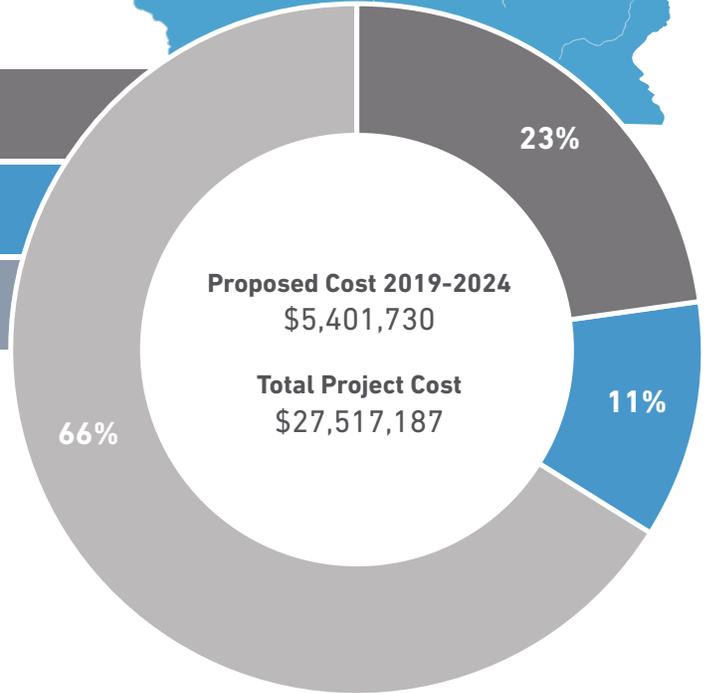
Description
Continuing acquisition along Alward Road

Location
Left bank Carbon River SE of the City of Orting

Obligations
US Army Corps of Engineers
Floodplain Management
Endangered Species Act

Grants \$6,459,701
Local Funds \$2,957,552
Unfunded \$18,099,934

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



Benefit



Current Phase
Preliminary Engineering and Land Acquisition

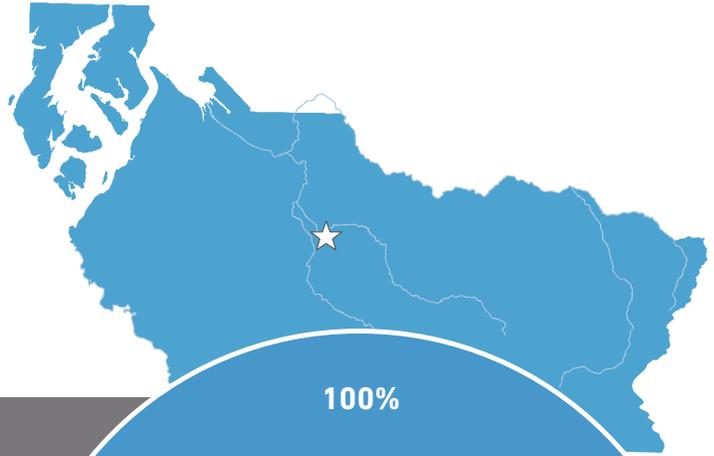
Council District
1

Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952



22

Carbon River Floodplain Connection (Right Bank) 1711



Description
Project will place ELJs to move river flow into disconnected floodplain on opposite bank.

Location
Right bank of Carbon River on the Orting side, near Bridge Street.

Obligations
US Army Corps of Engineers
Floodplain Management
Endangered Species Act



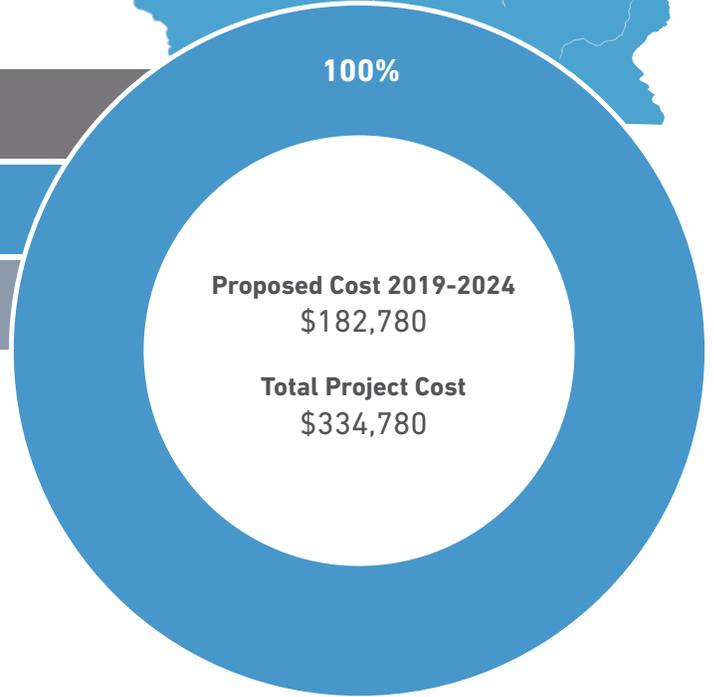
Current Phase
Preliminary Engineering

Council District
1

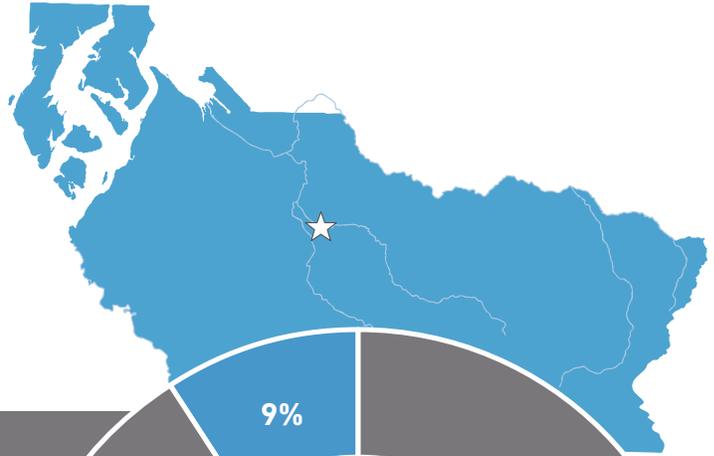
Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952

Grants	\$0
Local Funds	\$334,780
Unfunded	\$0

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



23 Carbon River Setback Levee (Left Bank) 1702



Description
Project will place ELJs to move river flow into disconnected floodplain on opposite bank. This project will also set back a levee along the left bank of the river on the Orting side.

Location
Left bank of Carbon River on the Orting side, near Bridge Street.

Obligations
US Army Corps of Engineers
Floodplain Management
Endangered Species Act

Benefit



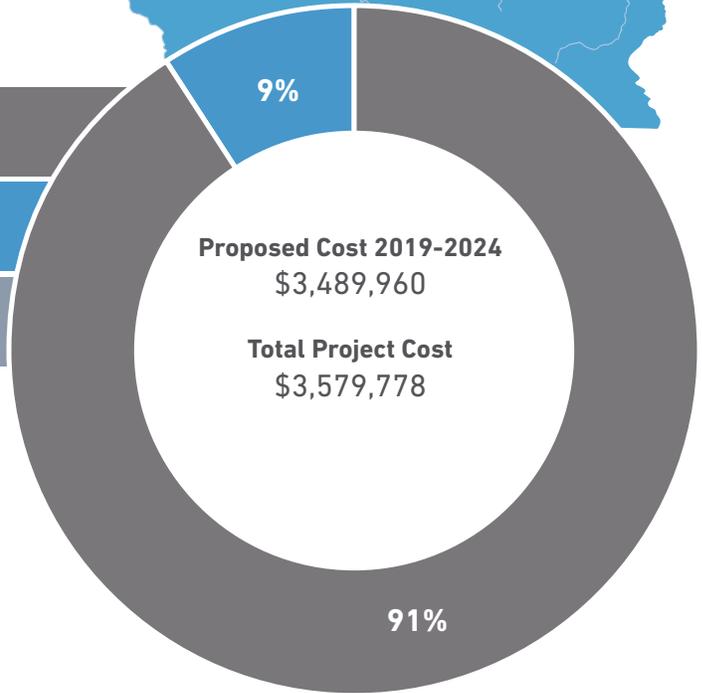
Current Phase
Preliminary Engineering

Council District
1

Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952

Grants \$3,249,941
Local Funds \$329,837
Unfunded \$0

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



24

Clear Creek Acquisition and Floodplain Reconnection 1416



Description
Buying out homes, removing tide gates and constructing flood protection.

Location
Lower 2.9 miles of Clear Creek between Pioneer and River Road.

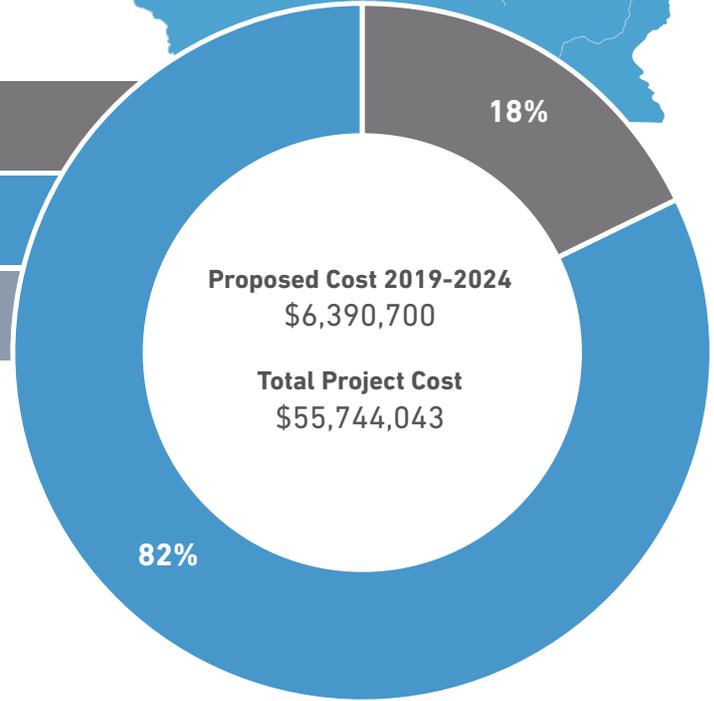
Obligations
Floodplain Management

Grants
\$9,925,778

Local Funds
\$3,719,006

Unfunded
\$42,099,259

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



Benefit



Current Phase
Preliminary Engineering and Land Acquisition

Notes
Project costs include all 1416 project grants associated with Clear Creek in Appendix A.

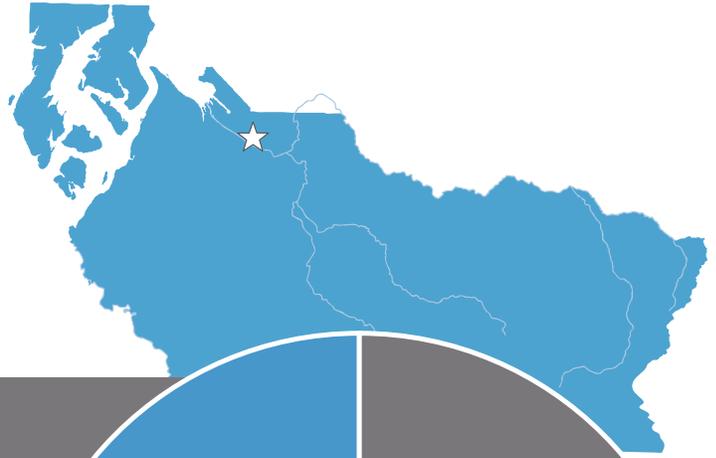
Council District
5



Contact—Harold Smelt
harold.smelt@piercecounitywa.gov
(253) 798-2952

25

FEMA Flood Mitigation Assistance Clarks Creek 1419



Description
Acquiring a flood prone repetitive loss property in the Clarks Creek area.

Location
Clarks Creek

Obligation
Clean Water Act

Benefit



Current Phase
Final Engineering and Land Acquisition

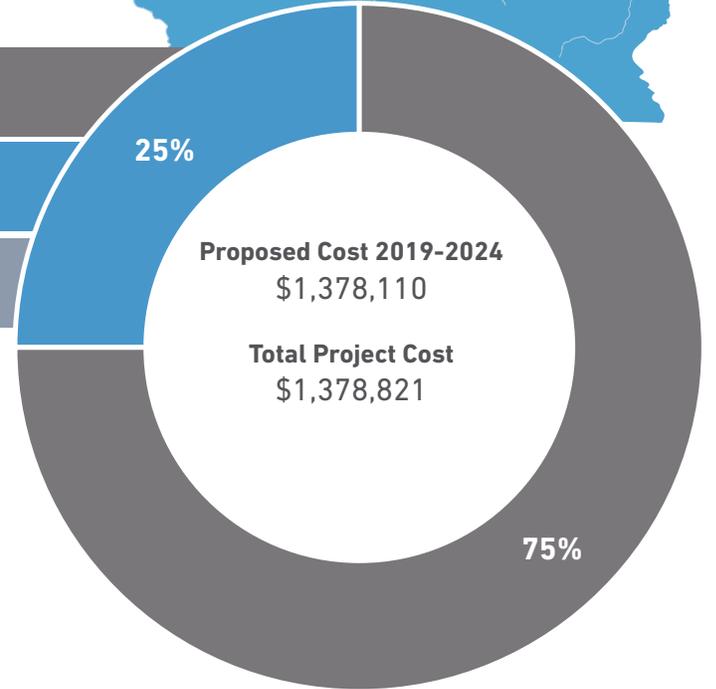
Council District
2

Grants
\$1,033,580

Local Funds
\$345,242

Unfunded
\$0

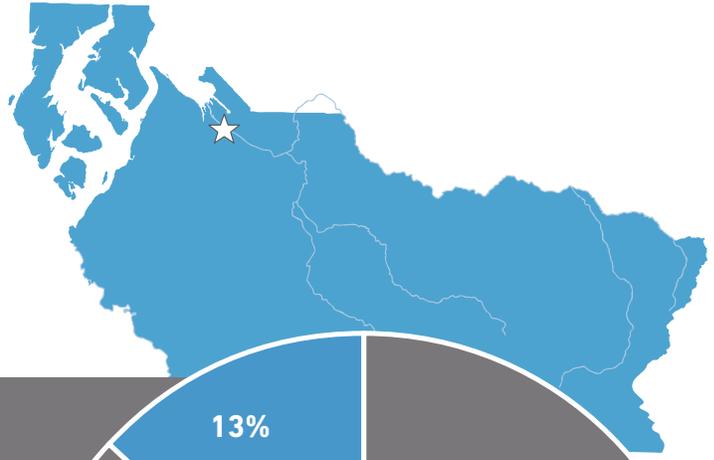
* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952

26

FEMA Clear Creek Wheel Inn Mobile Home Park Acquisition 1416



Description
Acquire a small mobile home park within the larger 1416 project area.

Location
River Road, SR167.

Obligations
Floodplain Management
Endangered Species Act

Benefit

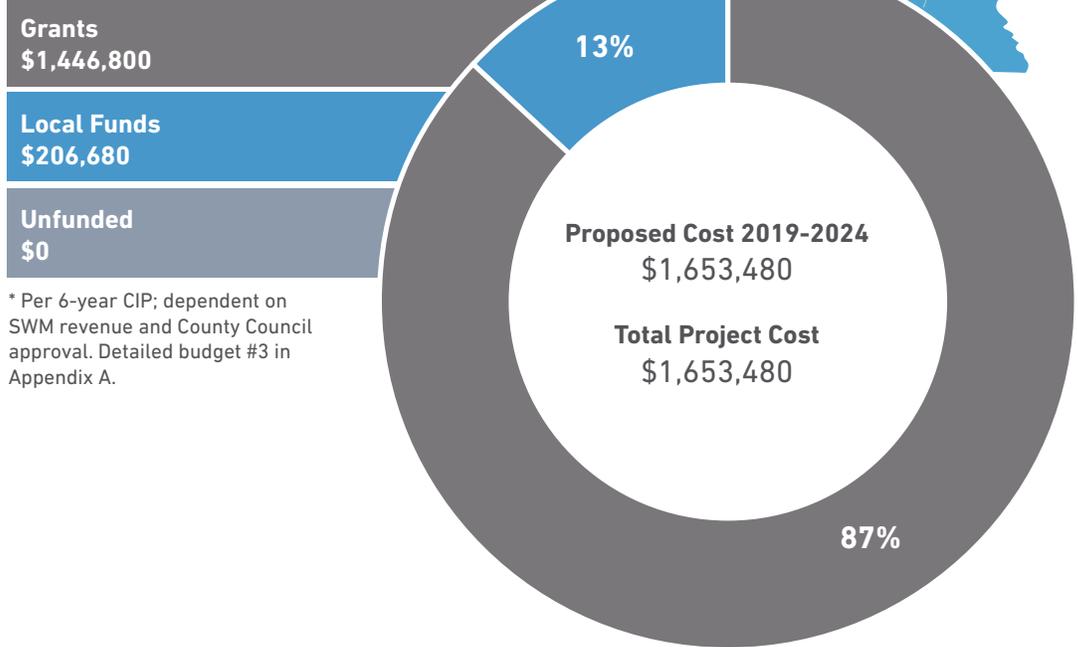


Current Phase
Land Acquisition

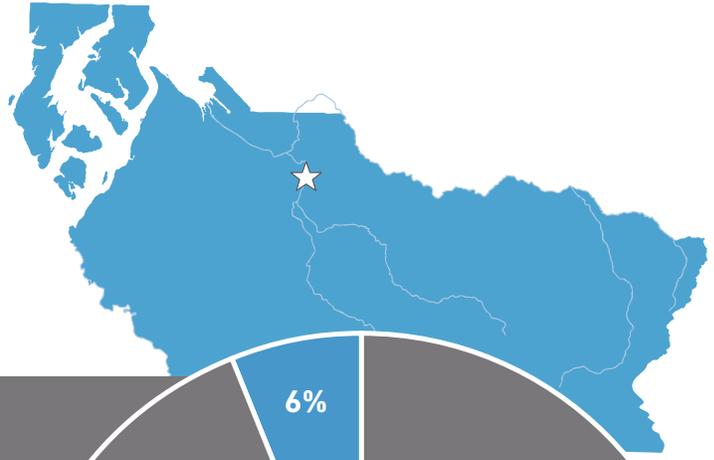
Notes
FEMA HMGP grant funded.

Council District
5

Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952



27 Fennel Creek Restoration Phase 3 1710



Description
 Acquisition and design will begin at the Fennel Creek Site; including removal of existing levees and revetments and construction of new levees farther back from the Puyallup River.

Location
 Right bank of the Puyallup River between Puyallup RM 15.2 and RM 16

Obligations
 Floodplain Management
 US Army Corps of Engineers

Benefit



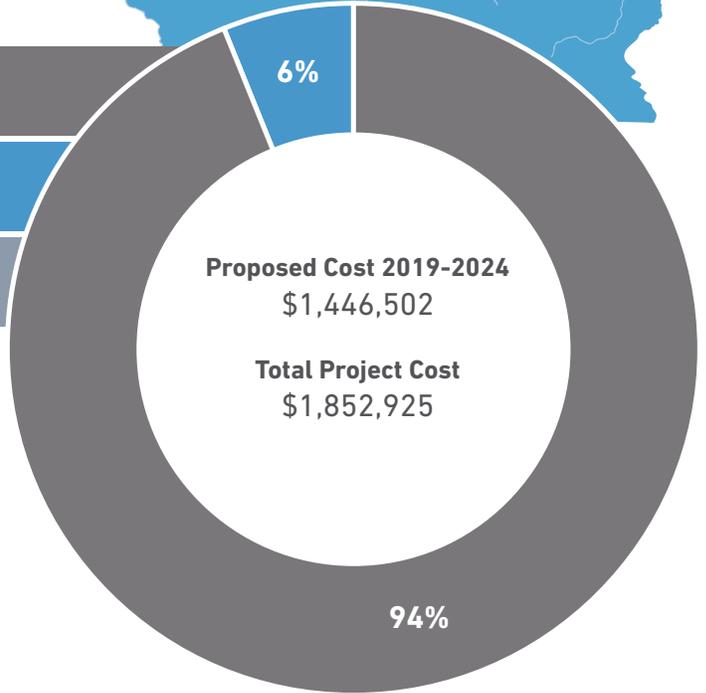
Current Phase
 Land Acquisition

Notes
 In partnership with Forterra, the Muckleshoot Tribe and Puyallup Tribe of Indians.

Council District
 2

Contact—Harold Smelt
 harold.smelt@piercecountywa.gov
 (253) 798-2952

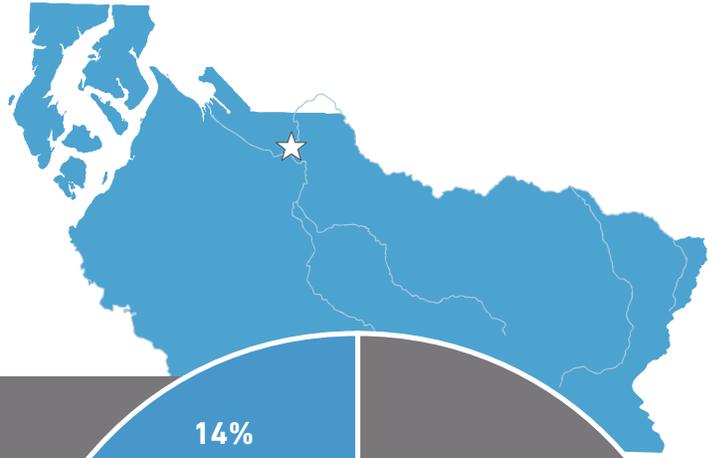
Grants \$1,748,931
Local Funds \$103,984
Unfunded \$0



* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



28 Habitat and Flood Capacity Creation Project 1379



Description
Pilot project study to determine if targeted sediment removal is feasible and effective.

Location
Puyallup River Watershed in Sumner and Puyallup, specific reach TBD.

Obligations
Floodplain Management

Benefit

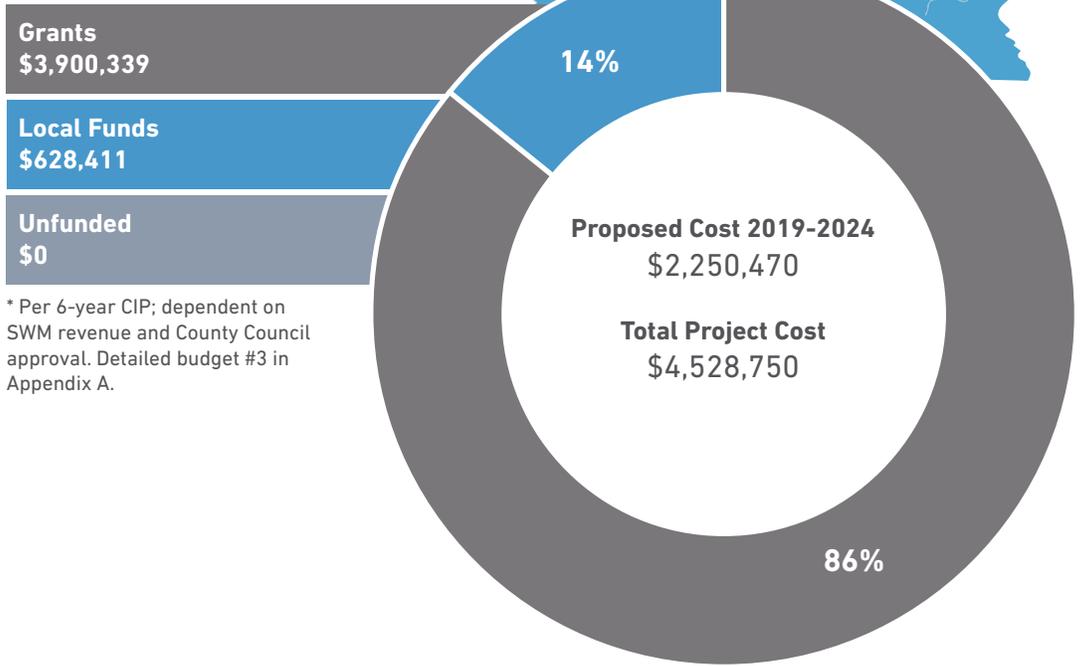


Current Phase
Final Engineering

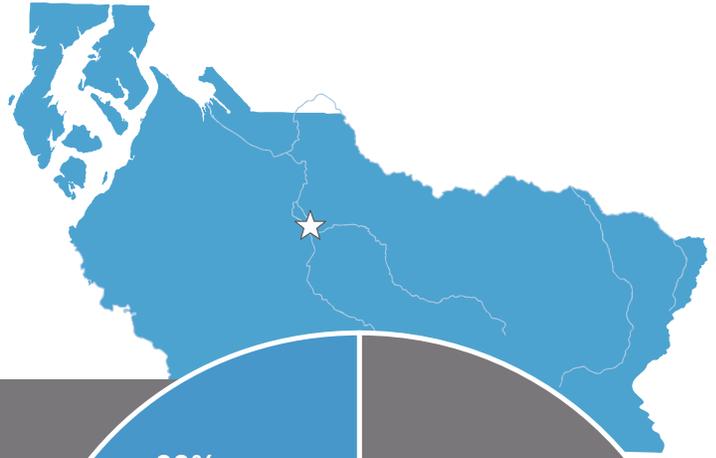
Notes
Continuing technical and environmental analysis of preferred reach selection for pilot project.

Council District
2

Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952



Jones Setback Levee 1385



Description
Replace section of existing levee with new setback.

Location
Right bank of the Puyallup River south of the City of Orting

Obligations
Floodplain Management
US Army Corps of Engineers

Benefit



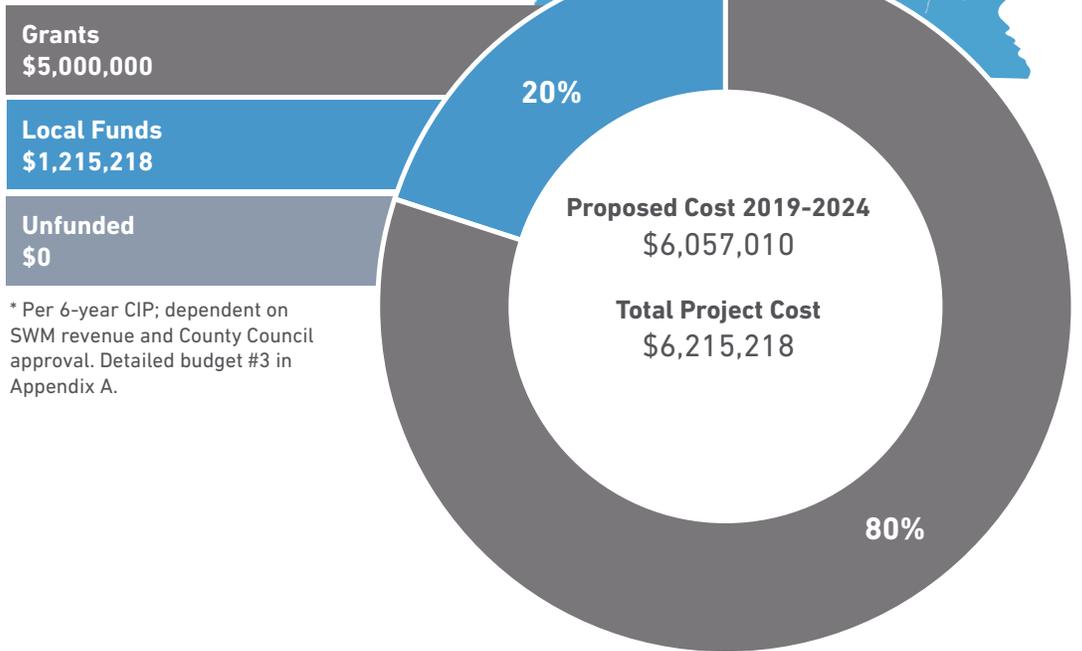
Current Phase
Preliminary Engineering

Notes

This project is a high priority in the Corps of Engineer's General Investigation report (draft). Potential exists for Corps financial assistance identified under grants.

Council District
1

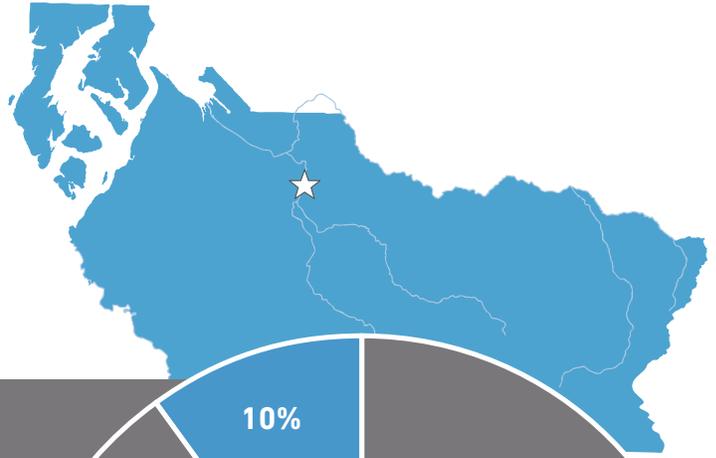
Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952



* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



30 Middle Puyallup 128th Comprehensive Study 1421



Description
Coordinated analysis for four planned setback levee projects in close proximity.

Location
128th St. E. crossing of the Puyallup River, McMillan

Obligations
Floodplain Management
Endangered Species Act

Benefit

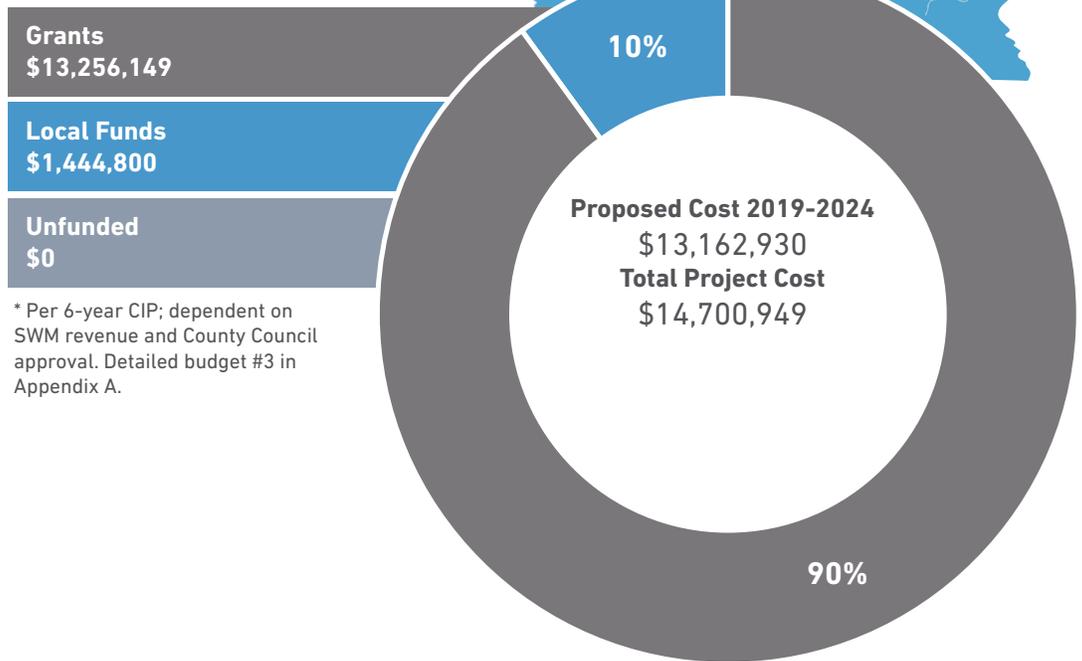


Current Phase
Preliminary Engineering and Land Acquisition.

Notes
Will include detailed alternatives analysis for one setback levee project.

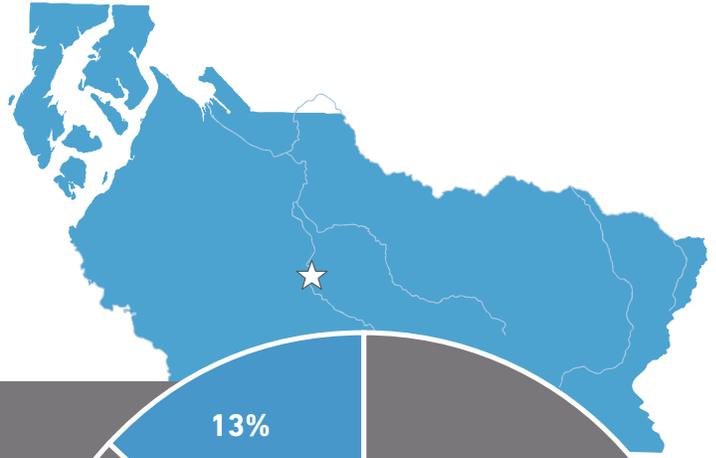
Council District
1, 2

Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952



31

Neadham Road Floodplain Reconnection 1708



Description
Acquisition of homes and reconnecting floodplain of the Puyallup River

Location
Neadham Road parallels the Puyallup River in Orting.

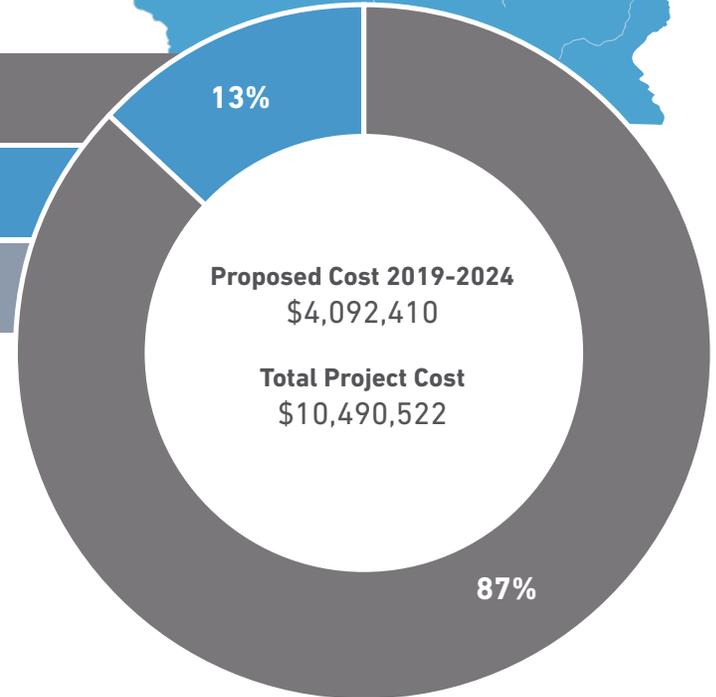
Obligations
US Army Corps of Engineers Floodplain Management Endangered Species Act

Grants
\$9,113,164

Local Funds
\$1,377,358

Unfunded
\$0

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



Benefit



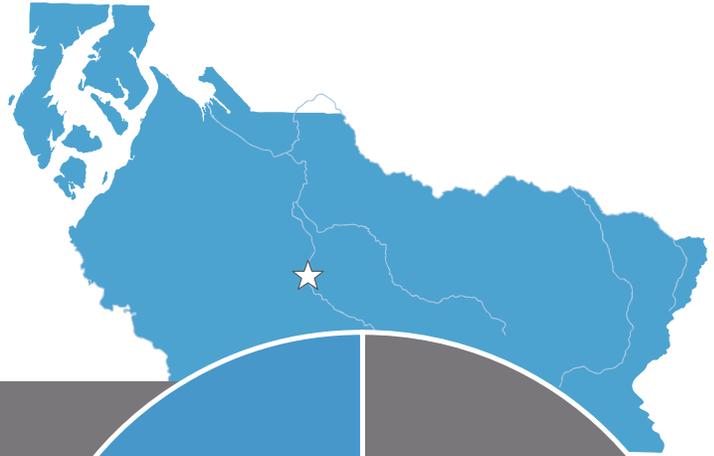
Current Phase
Preliminary Engineering and Land Acquisition

Council District
1



Contact—Harold Smelt
harold.smelt@piercecounywa.gov
(253) 798-2952

Orville Road Revetment Phase 2B 1423



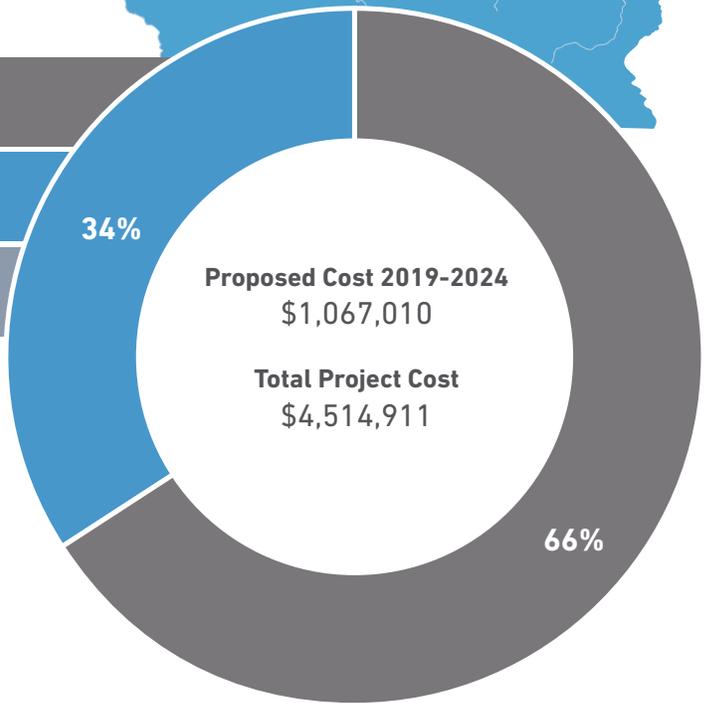
Description
 This phase of the project is projected to be constructed in the spring of 2019. This will complete the log jam revetment and access road on the left bank of the Puyallup river between river mile 27.6 and 27.8. The revetment will protect Orville Road from channel migration.

Location
 RM 27.6 to RM 27.8 left bank

Obligations
 Floodplain Management
 US Army Corps of Engineers

Grants	\$2,962,759
Local Funds	\$1,552,153
Unfunded	\$0

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



Benefit



Current Phase
 Construction

Notes
 Funded by the Floodplains by Design grant and Flood Control Zone District funds.

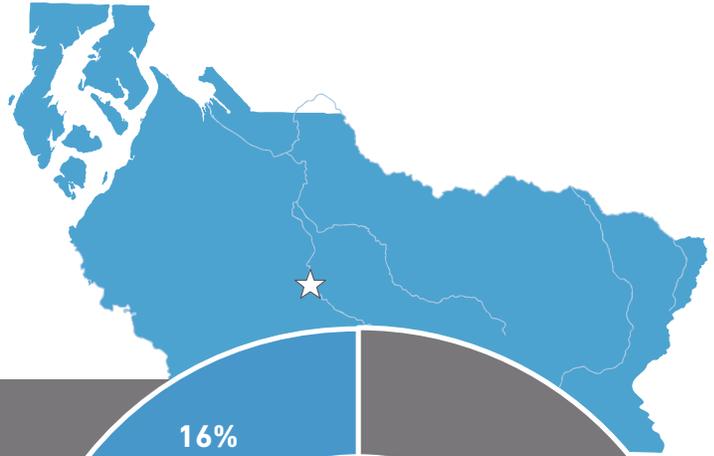
Council District
 3

Contact—Harold Smelt
 harold.smelt@piercecountywa.gov
 (253) 798-2952



33

Orville Road Revetment Phase 2C 1425



Description

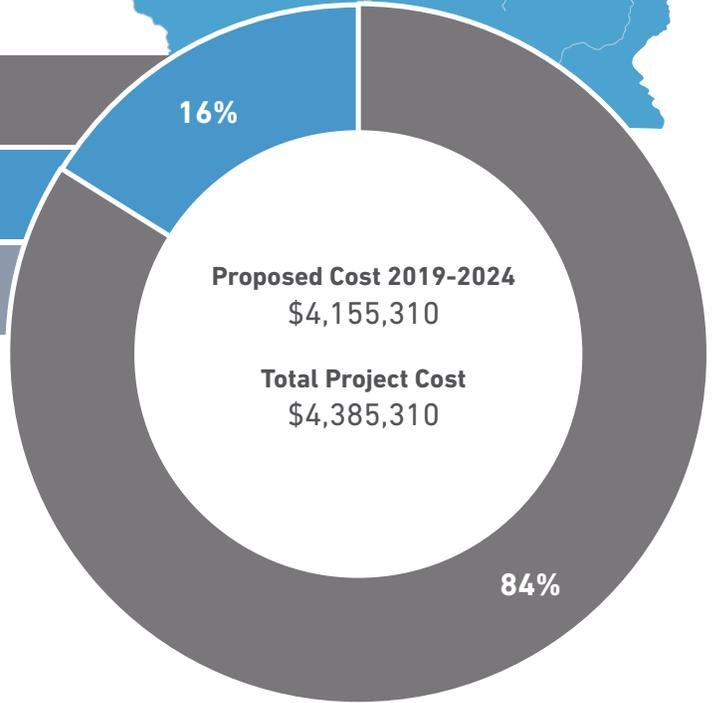
The project will construct approximately 30 Type 3 ELJs in the floodplain between the ELJ revetment and the Puyallup River (RM 27.6-27.8). The ELJs will be placed in three arrays between the ELJ revetment and the Puyallup river. The intent of these ELJ arrays is to defuse the flow and reduce the potential for channel migration.

Grants
\$3,680,310

Local Funds
\$705,000

Unfunded
\$0

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



Location

Upper Puyallup River, RM 27.6 to 27.8 Left Bank.

Obligations

Floodplain Management
Endangered Species Act

Benefit



Current Phase

Construction

Notes

Funded by the Floodplains by Design grant and Flood Control Zone District funds.

Council District

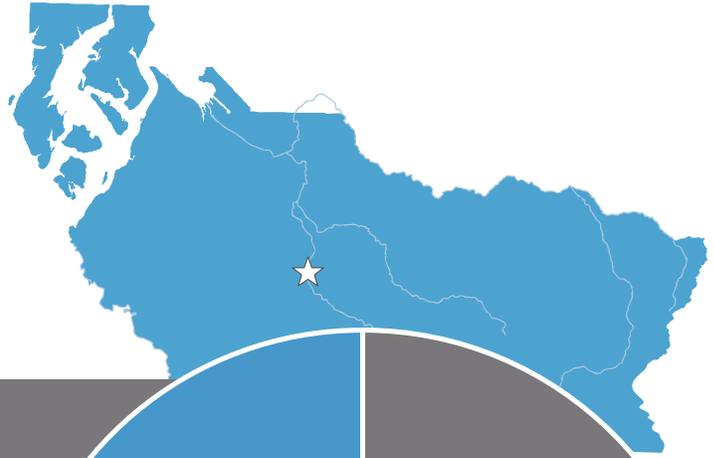
3

Contact—Harold Smelt

harold.smelt@piercecountywa.gov
(253) 798-2952



Orville Road Revetment at Kapowsin Creek 1418



Description
Setback levees on the Upper Puyallup River to protect Orville Road..

Location
Setback levee on the upper Puyallup River, near river mile 26.3 to protect Orville Road.

Obligations
Endangered Species Act
Floodplain Management

Benefit

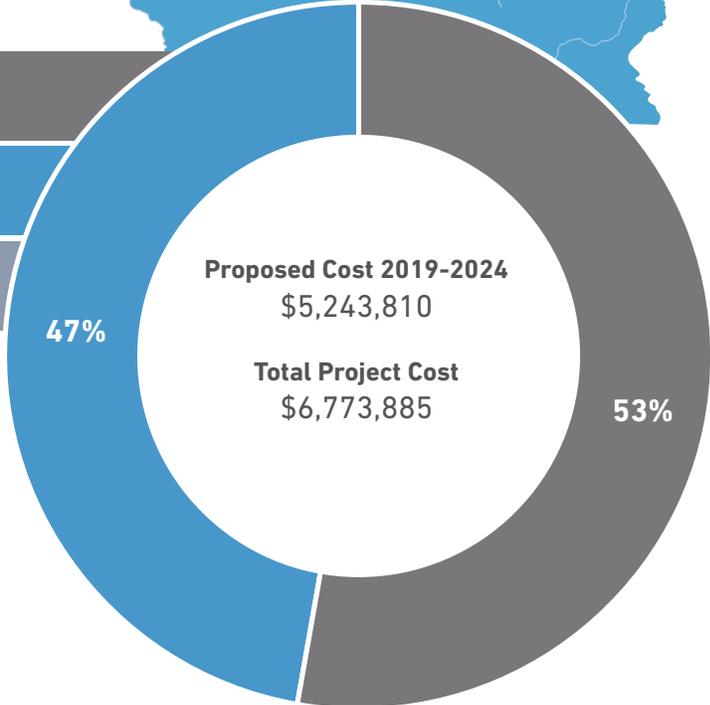


Current Phase
Preliminary Engineering

Council District
3

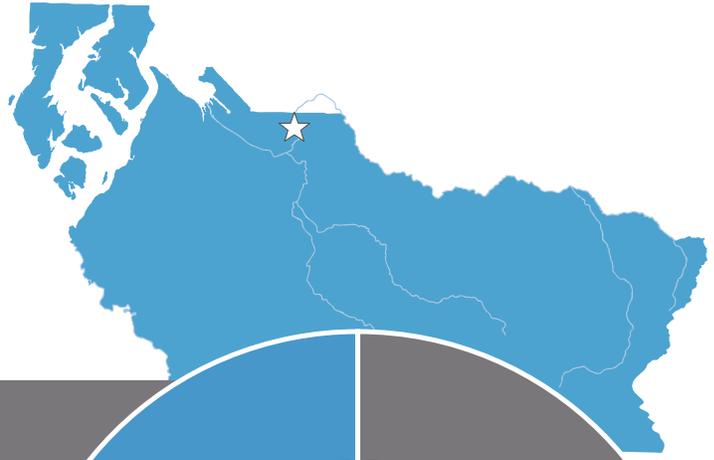
Grants	\$3,581,555
Local Funds	\$3,192,331
Unfunded	\$0

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



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Pacific Point Bar Setback Levee 1426



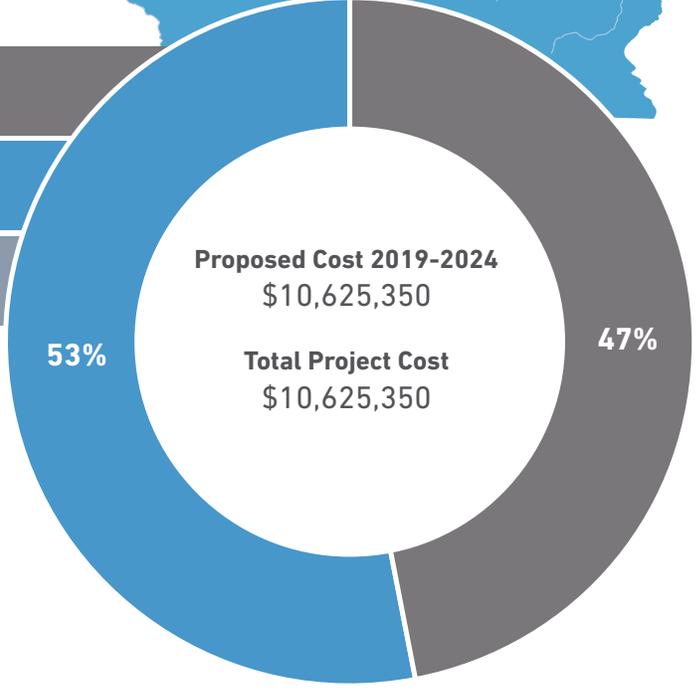
Description
Setback levee to enhance flood control and fish habitat on the lower White River

Location
City of Sumner, between the Stewart Bridge downstream to approximately the tailrace along the right bank of the White River.

Obligations
US Army Corps of Engineers
Floodplain Management
Endangered Species Act

Grants	\$5,000,000
Local Funds	\$5,625,350
Unfunded	\$0

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



Benefit



Current Phase
Preliminary Engineering

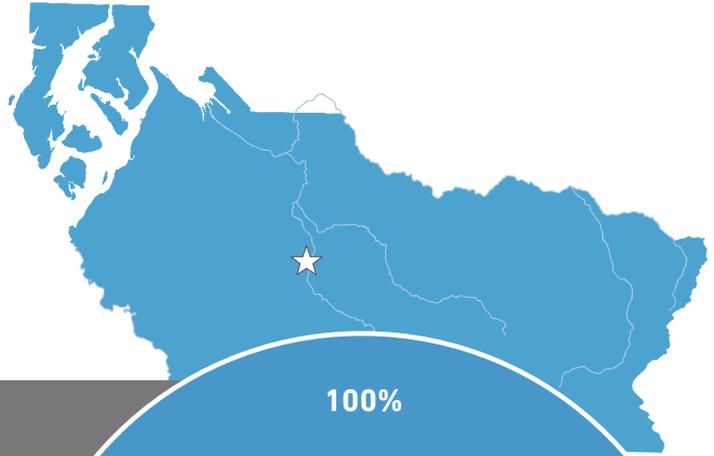
Notes
This project is a high priority in the Corps of Engineer’s General Investigation report (draft). The project reach overlaps with improvements defined in the GI study. Potential exists for Corps financial assistance. Also, coordination with the City of Sumner is essential because the project reach is included in their comprehensive plan.

Council District
2

Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952



36 Puyallup Ford Setback Levee 1422



Description
To improve the existing setback levee and reduce flood risk as well as extending the useful service life of the levee.

Location
Upper Puyallup river along Orville Road between river miles 23.4 and 24.6 right bank.

Obligations
Floodplain Management

Benefit



Current Phase
Preliminary Engineering

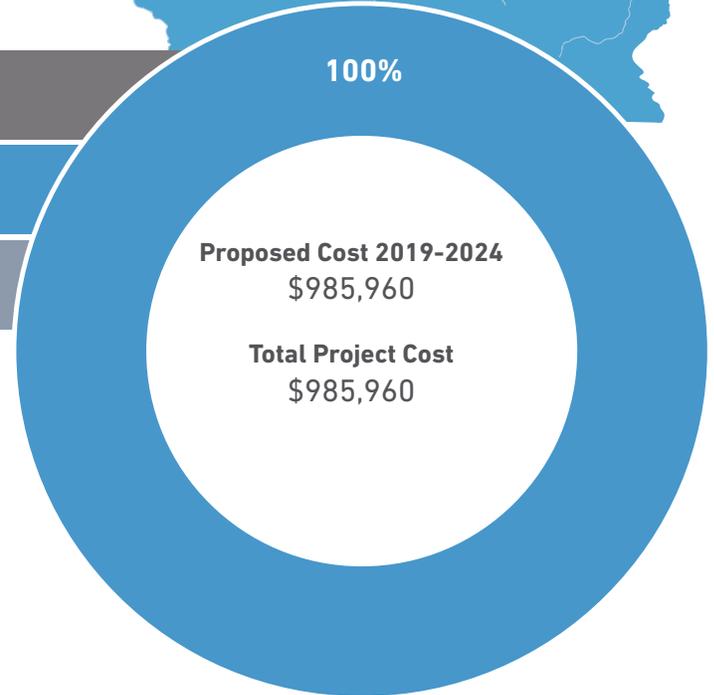
Notes
This is a capital maintenance project to extend the useful life of this facility.

Council District
1

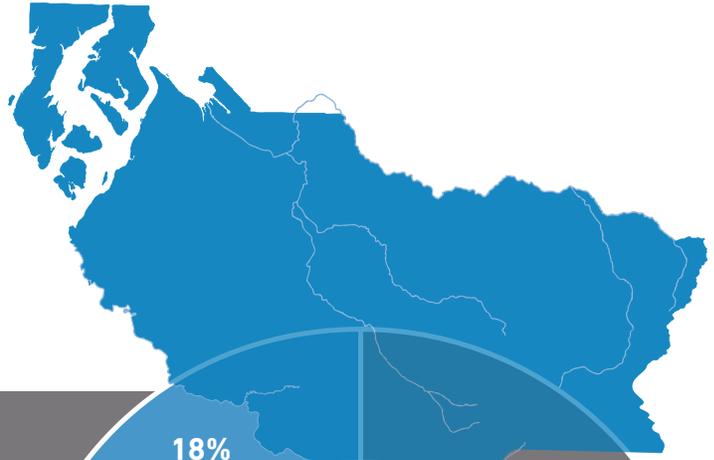
Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952

Grants	\$0
Local Funds	\$985,960
Unfunded	\$0

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



37 Upper Nisqually Channel Migration Protection 1411



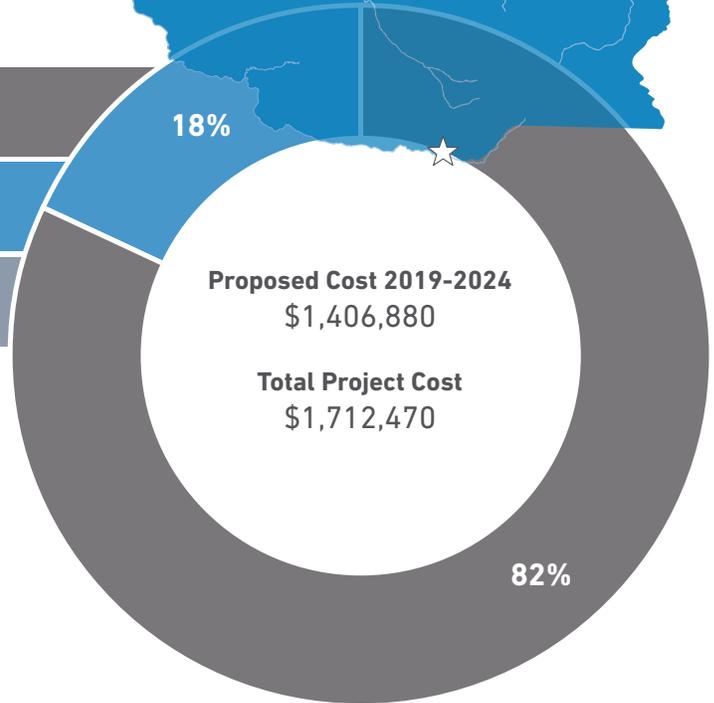
Description
Construct 28 deflectors adjacent to a revetment and levee to deflect flows from SR 706 entrance to Mt. Rainier National Park.

Location
SR 706 entrance to Mt. Rainier National Park

Obligations
Floodplain Management
US Army Corps of Engineers

Grants	\$1,555,283
Local Funds	\$157,188
Unfunded	\$0

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



Benefit



Current Phase
Construction

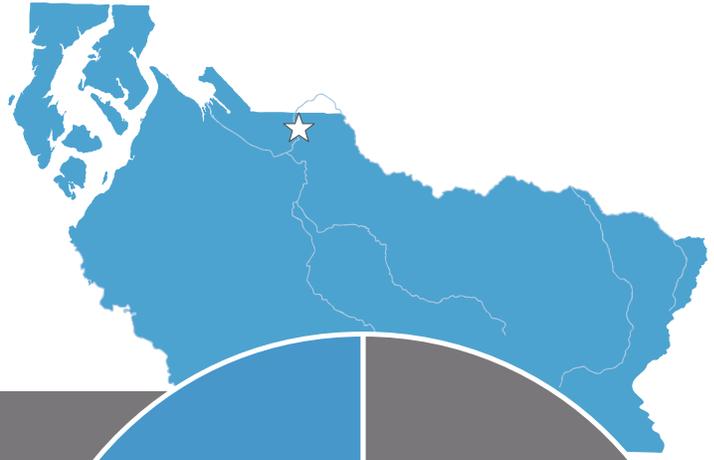
Notes
This is a partnership between Mt. Rainier National Park and SWM.

Council District
3

Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952



38
White River 3.85 (Right Bank)
1430



Description
 Proposed preservation of an existing flood risk reduction facility that requires improvements above that typically addressed through the annual maintenance and repair program.

Location
 City of Sumner, between 16th St E & 20th St E along the right bank of the White River.

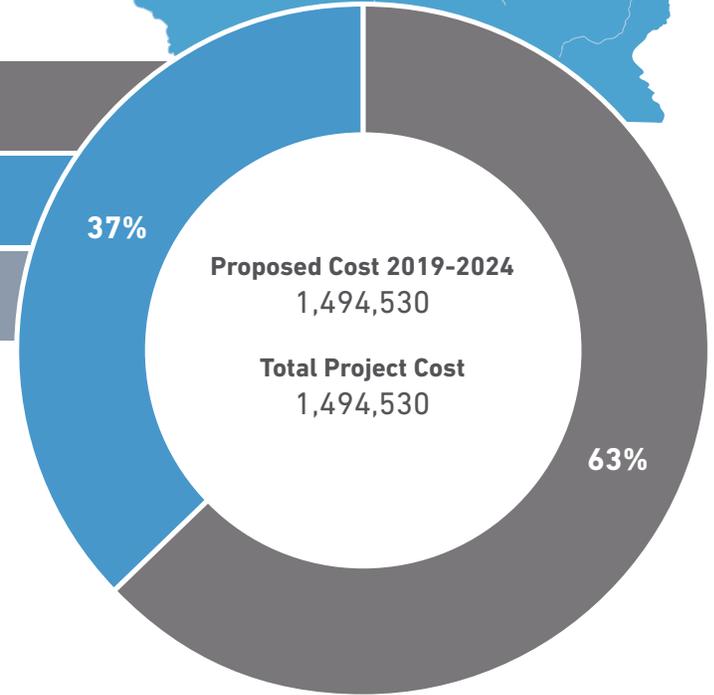
Obligations
 US Army Corps of Engineers
 Floodplain Management
 Endangered Species Act

Grants
 \$940,000

Local Funds
 \$554,530

Unfunded
 \$0

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



Benefit



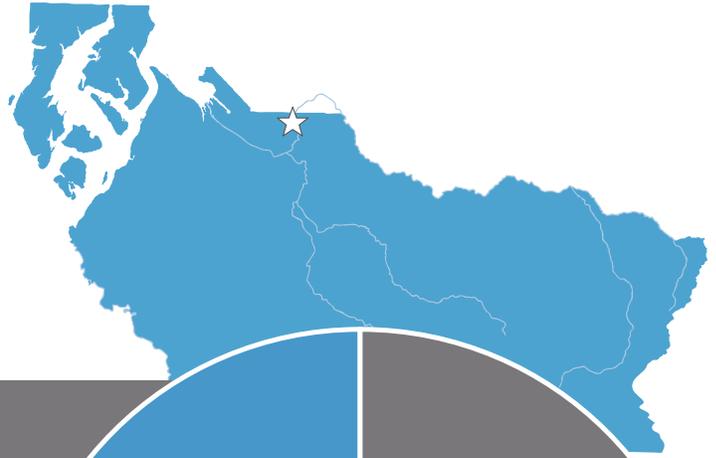
Current Phase
 Preliminary and Final Engineering

Notes
 This project location is within the Corps of Engineer's General Investigation report (draft). The reach has been rated as a high priority. Potential exists for Corps financial assistance. This project reach is also included in the City of Sumner's comprehensive plan for flood risk reduction. Coordination with these agencies is essential.

Contact—Harold Smelt
 harold.smelt@piercecountywa.gov
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39 White River Butte Pit Setback 1424



Description
Increased Level of Service in coordination with King County, Cities of Sumner and Pacific efforts.

Location
White River, right bank between County Line Road SE and Stewart Road SE

Obligations
Floodplain Management
US Army Corps of Engineers

Benefit

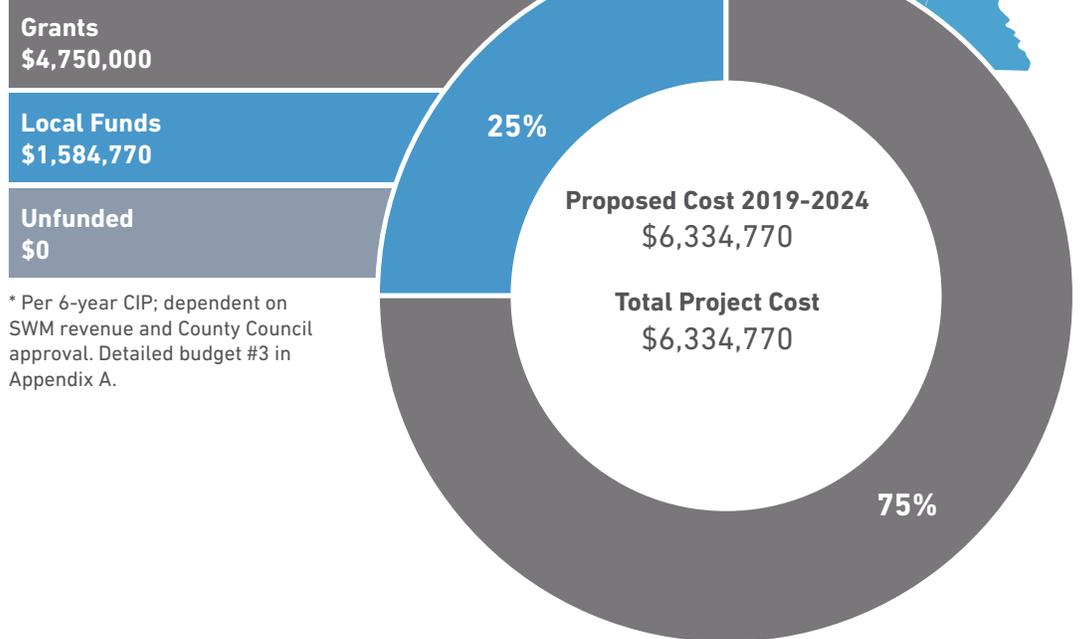


Current Phase
Preliminary Engineering

Notes
This project requires close coordination with King County and the City of Pacific in the planning and design of their proposed flood risk reduction measures.

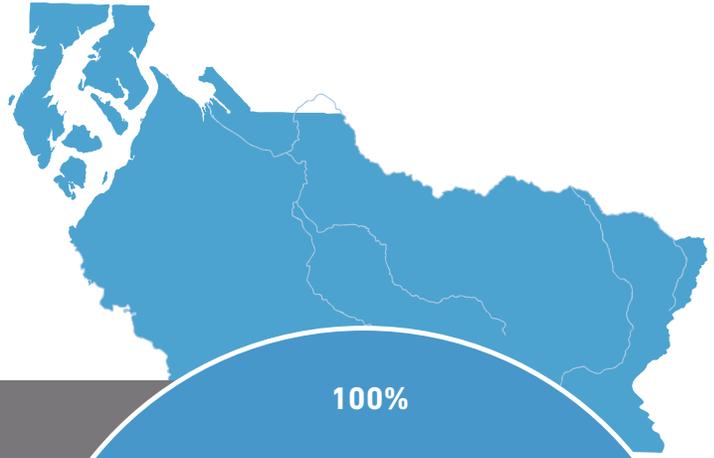
Council District
2

Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952



40 Drainage Network Analysis

Project Number _____



Description
Conduct a systematic drainage network analysis for lands used for agricultural production in Pierce County to identify high-priority local drainage issues that are an impediment to agricultural production.

Location
Countywide Agricultural Areas

Obligations
Agriculture

Benefit



Current Phase
Preliminary Engineering

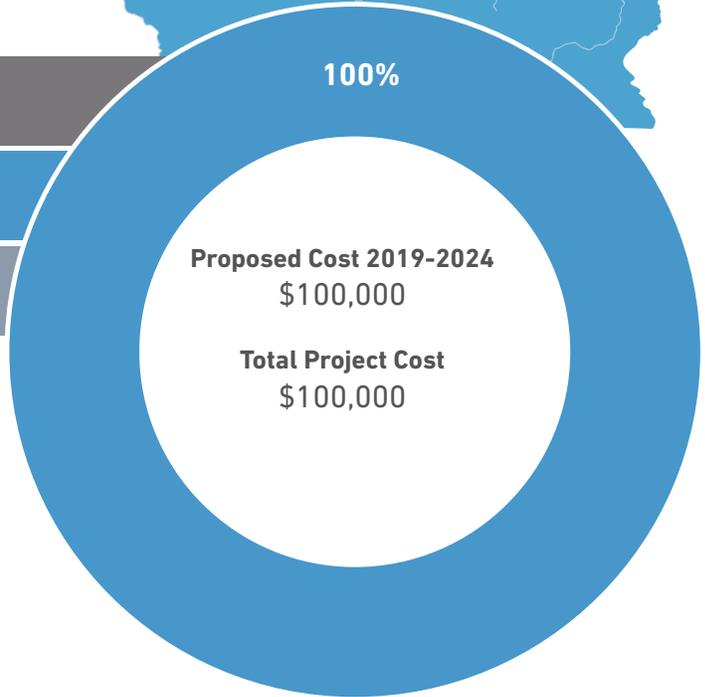
Notes
The outcome of this analysis is a map indicating priority drainage planning areas and an actionable improvement plan to systematically and objectively address chronic and critical agricultural drainage problems.

Council District
Countywide

Contact—Harold Smelt
harold.smelt@piercecountywa.gov
(253) 798-2952

Grants \$0
Local Funds \$100,000
Unfunded \$0

* Per 6-year CIP; dependent on SWM revenue and County Council approval. Detailed budget #3 in Appendix A.



2018 Accomplishments

Ball Creek Floodplain Reconnection

(2013-2018):
\$1.1 million

This project removed three fish barrier culverts and constructed 1,000' of new creek featuring a fish-friendly logjam at the confluence of the Creek at the Puyallup River. This project was instrumental in Pierce County's integrated floodplain management efforts to preserve agriculture and enhance habitat. The final phase of construction is underway and is on track to be on time and underbudget by the end of the Summer.



**South Fork Road
Floodplain Restoration
Phase 2B
(2016-2018)
\$2.5 million**

This project created a 2,000' side channel on the Puyallup River which greatly benefits all species of salmonids with significant flood reduction benefits. Construction is underway and will be completed by the end of the Summer.



