

City of Sequim, Washington  
Resolution No. R2016-20

**A Resolution Established by the City Council of the City of Sequim, Washington  
Approving the 2017-2022 6-year Capital Improvement Program**

**WHEREAS**, the City Council held a public hearing regarding the 2017-2022 6-year Capital Improvement Program on July 11, 2016; and

**WHEREAS**, those projects which directly support the achievement of the City's Comprehensive and Master Plans are considered for funding support; and

**WHEREAS**, the City Council is committed to continuously improving the efficiency and effectiveness of City government and expects the City Manager and City staff to focus on achieving service outcomes and providing reliable and affordable infrastructure that benefits the community and its residents; and

**WHEREAS**, the City Council is committed to continue providing core services expected of a municipal government including the provision and maintenance of the City's capital infrastructure; and

**WHEREAS**, it is in the City's interest to avoid capital budgetary changes that may threaten the City's 'AA-' General Obligation bond ratings; and

**WHEREAS**, a combination with various funding sources have been identified to fund capital projects;

**NOW, THEREFORE**, be it resolved by the City Council of the City of Sequim, Washington does resolve as follows:

**Section 1.** The attached 2017-2022 Capital Improvement Program (CIP) is hereby adopted as the Capital Improvement Program for the City of Sequim

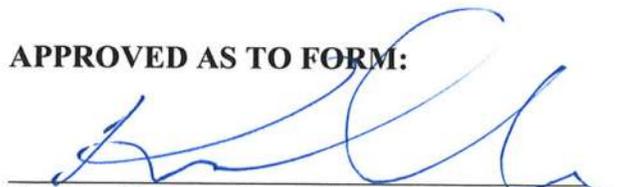
Adopted by the City Council this 25th day of July, 2016.

  
Dennis Smith, Mayor

**ATTEST:**

  
Karen Kuznek-Reese, MMC, City Clerk

**APPROVED AS TO FORM:**

  
Kristina Nelson-Gross, City Attorney



2017 – 2022

Capital Improvement Program

City of Sequim, Washington



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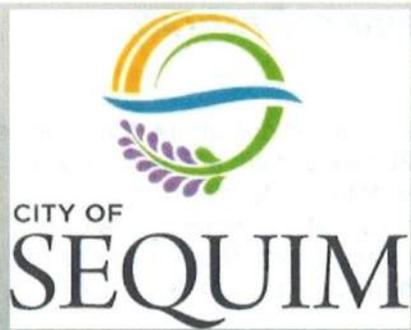
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- Purpose of the CIP
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# **CAPITAL IMPROVEMENT PROGRAM 2017 – 2022**

***A Reader's Guide to the  
Capital Improvement Program***

# ***A Reader's Guide to the Capital Improvement Program***

## **Purpose of the CIP**

The Capital Improvement Program (CIP) is both a planning and financial document. It prioritizes capital investments the City intends to make in the 2017 to 2022 time period, and proposes a plan for how to pay for these investments. The CIP does not appropriate funds; instead, it functions as a budgeting tool, supporting the actual appropriations that are made by the City Council through adoption of the budget. It is an important filter through which Sequim officials demonstrate that the Capital Facilities Element of the Comprehensive Plan and its related Capital Facilities Plans are financially realistic.

The CIP describes funding strategies for major construction, land acquisition and equipment purchases that will improve the cultural environment, capital infrastructure and recreational opportunities for the citizens of Sequim. Capital expenditures are described in the context of how much each project will cost to complete, and the ongoing impact that the project will have on the City's operating budget after it goes into service.

## **Sequim's Approach to Developing the Six-Year CIP**

The CIP is one of the vital implementation tools that works in concert with the Comprehensive Plan's Capital Facilities and Transportation Elements, and the City's Long Range Financial Plan to fulfill the goals and visions of the Land Use Element of the Comprehensive Plan. All of these policy documents must be coordinated and consistent with each other. While the Comprehensive Plan articulates the vision and goals for how Sequim will develop over the next 20 years, it is the CIP that makes the critical link between the City's physical planning policy and the financial resources needed to maintain or improve public services, facilities and infrastructure.

Adjunct to the Capital Facilities Element of the Comprehensive Plan, Sequim has adopted four Capital Facilities Plans (CFP) to provide long range policy guidance for the development of capital improvements. They are: The Parks and Recreation Master Plan (2015), Transportation Master Plan (2013), General Sewer Master Plan (2013), and the Water System Comprehensive Plan (2013). Each CFP contains an inventory of existing publicly-owned capital facilities describing their locations and capacities; a forecast of schedule and costs for new or refurbished capital facilities; and the proposed locations and capacities of new or expanded capital facilities. Each CFP also recommends a strategy to finance those facilities with public funds.

Sequim's policy of concurrency requires that the extension of, or upgrades to public facilities and services necessary to support new development shall be adequate to serve that development at the time that it is approved for occupancy or use, without decreasing current service levels below established standards. The concurrency policy is applied in the CIP<sup>1</sup> according to the Level of Service standards stated in the City's respective CFPs.

The capital improvement budget is enacted annually based on the latest revision of the CIP. It encompasses City Council-approved appropriations for the projects that are usually requested in the year of a capital project's inception. As stated in (Section C) of the City's Capital Improvement Program Policy (Chapter 1), the CIP is to be updated annually as part of the City's budget process to reflect changes in the availability of revenues and the costs of approved capital projects. The City Council may also initiate changes to the CIP inventory of projects at any other time.

## **Navigating the CIP**

The CIP is divided into seven sections:

- Chapter 1 - Introduction;
- Chapter 2 - CIP Summary;
- Chapter 3 - Water Restricted Fund Projects;
- Chapter 4 - Sewer Restricted Fund Projects;
- Chapter 5 - Streets Restricted Fund Projects;
- Chapter 6 - Parks Restricted Fund Projects; and
- Chapter 7 - Capital/Building Facilities Restricted Fund Projects; and
- Chapter 8 - Stormwater Restricted Fund Projects; and

The CIP is organized by chapter for each of the Restricted Funds. Each project is described briefly as to the activity that will be undertaken, the year in which it will be started, subsequent years of continuing activity for long-term projects, the amount expected to be spent in each year by project expenditure category: Preliminary Engineering; Property Acquisition; and Construction, (explained below) and where the money will come from to pay for them. The CIP also describes the benefit that will result from the advanced studies, major construction, land acquisition and equipment procurement actions intended to improve the City's capital infrastructure.

### **Expenditure Categories**

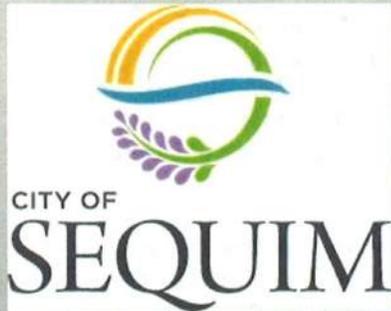
***Preliminary Engineering:*** Includes costs required to design and manage the project from scoping through construction close-out. This category accounts for both city staff effort and contract project management services. Typical tasks that occur in the Preliminary Engineering phase include: completion of environmental reviews and permit acquisition; surveying; development of plans, specifications, and cost estimates; project management; construction management and inspection.

***Real Estate Acquisition:*** When real property or right-of-way is needed to implement a capital project, such costs are tracked separately from other project costs. Typical expenses include staff activity, consultant costs and payment for the easement or fee simple real property acquired by means other than dedication. Title reports, appraisals, and recording costs are commonly associated with property acquisition as well.

***Construction:*** Construction costs include direct charges for work performed by a contractor; including materials, equipment usage, labor, utility relocations, and spoils disposal. Direct city costs such as staff salaries are not included in this component.

Certain projects within the CIP, such as the exploration of acquiring new water rights, are proposed as preliminary studies only. The purpose of these studies is to provide a basis for determining if the capital initiative should be pursued within the six-year CIP planning horizon. If so, these studies will help to estimate future project timing and costs and the proposed method of financing those expenditures. From these details, summaries of capital activity in each year can be prepared as well as summaries of financial requirements such as the amounts of general obligation bonds to be issued, amounts of general operating funds required to sustain new or refurbished capital investments after they are placed in service, and any anticipated intergovernmental support, such as state gas tax funds and grants.

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- Capital Improvement Planning Under the Washington State Growth Management Act
- Advantages of Capital Improvement Planning
- Capital Improvement Program Impact on Operating Budgets
- Capital Improvement Fund Descriptions
- Capital Budget Criteria
- Capital Improvement Planning Policy
- City of Sequim Debt Policy
- Capital Project Criteria

# **CAPITAL IMPROVEMENT PROGRAM 2017 – 2022**

## *Chapter 1*

### *INTRODUCTION*

### **Capital Improvement Planning under the Washington State Growth Management Act**

Following decades of mounting concern by Washington citizens about the impacts of uncoordinated and unplanned growth on the state's environment and economic prosperity, the Legislature adopted the Growth Management Act (GMA) of 1990 (RCW 36.70A et sup). The basic objective of the GMA is to guide local governments in assessing their goals, evaluating their community assets, and preparing Comprehensive Plans to fulfill a carefully-considered vision for their communities' future.

Among its many provisions, the GMA challenges jurisdictions state-wide to examine the question: how they can afford the future that they envision for themselves? The Comprehensive Plan that the GMA requires a jurisdiction to adopt should guide its orderly development over a twenty-year planning horizon. To help fulfill that intention, a Capital Facilities Element is designated as a mandatory component of the Comprehensive Plan, and includes:

- An inventory describing the location and capacity of the jurisdiction's existing capital facilities;
- A forecast of future needs for new or expanded capital facilities, their proposed locations, and their capacities;
- A requirement to reassess the Comprehensive Plan Land Use Element if capital facility funding is predicted to fall short of meeting forecast needs, and to ensure that the Comprehensive Plan's Land Use and Capital Facilities Elements are consistent in terms of policy and financial reality, and
- A program of six-year duration (or longer) demonstrating that the costs of new or expanded capital facilities are within the funding capability of the jurisdiction, and identifies the source(s) of public funds to be spent for such purposes.

Implementation of the Comprehensive Plan within the scope of the Capital Facilities Element is described through:

- level of service standards for public facilities and services;
- analysis of how the extension of public facilities will influence undeveloped areas;
- policies to guide the extension of new public services, or to upgrade existing services, within the jurisdiction's boundaries; and
- policies to guide coordination with adjacent jurisdictions regarding provision of public facilities and services.

### **Advantages of Capital Improvement Planning**

The GMA establishes the purposes of Capital Improvement Planning as: providing adequate public services to existing development; managing the cost of serving future development; and, ensuring that public services will be in place when future development occurs. Beyond compliance with the GMA, however, many benefits accrue to a community that takes a sound approach to Capital Improvement Planning:

- Capital planning anticipates repair or replacement of existing facilities before they fail. Failure is more costly and more disruptive than planned repair or replacement;
- Capital planning requires the community and City leaders to consciously set priorities between competing projects and interests. There are always more needs and competing projects than available funds to accommodate them;
- Long-range planning for infrastructure allows the community to finance growth without being overwhelmed by unanticipated costs or time constraints;
- Coordination of capital projects reduces scheduling conflicts between related projects, resulting in more efficient government operations;

- Capital planning provides adequate lead-time to seek outside financial assistance for infrastructure project through grants and inter-governmental assistance; and
- Capital planning serves as public education tool for elected officials to ensure the community that they are pro-actively guiding future development in accordance with adopted policy.

### **Capital Improvement Program and Impact on Operating Budgets**

Many capital projects, when completed, carry ongoing maintenance and operating costs that need to be reflected in the City's annual budget. For example, when a new park or ball field is developed, the City will need to add the ongoing cost of maintaining that new facility to the annual operating budget. Where appropriate, the individual projects listed in the 2017-2022 CIP include estimated future operating costs. Those costs were estimated based on the fullest knowledge of the respective projects at the time that this CIP was published. Future amendments to the CIP will likely result in change to their respective operating budget impacts.

### **Capital Budget Criteria**

Sequim's capital improvement programming and budgeting sequence involves the development of a long-term plan for capital expenditures. Capital expenditures include payments for buildings, land, major equipment, and other assets that are of significant value (greater than \$50,000) and have a useful life of at least five years.

Recognizing that the need for infrastructure development and major equipment acquisition exceeds the reality of Sequim's annual financial resources, the City Council established the following equally-weighted criteria to establish funding and scheduling priorities in the CIP:

1. Projects that preserve existing capital infrastructure;
2. Projects with low life-cycle costs;
3. Projects that have a high percentage of project costs funded by non-city sources or that have a dedicated funding source;
4. Projects that generate revenue or reduce operations and maintenance costs;
5. Projects that have identified funding for operations and maintenance costs; and
6. Projects that have a high level of community support.

Although the following criteria are not officially-adopted policy, they are also considered by city staff in developing their recommendations for CIP project priorities:

**Regulatory Mandates:** State or Federal law may require that a particular project be implemented within a prescribed time period. Court orders and judgments concerning annexation, property owner's rights, environmental protection, and other judgments may also affect local CIP project priorities.

**Health and Safety:** The benefit of a project to community safety, public health and protection of environmental resources from documented hazards may be recommended for higher priority treatment.

**Comprehensive Plan Advancement:** Because capital projects may directly or indirectly implement the goals stated in the comprehensive plan, priorities should reflect consistency with those community goals.

**Funds:** The extent to which outside funding is available for the project or purchase should be evaluated and quantified.

**Project Synergy:** Projects in one Restricted Fund category are essential to the success of those in other categories. Careful coordination of funding and scheduling of related projects may affect substantial long-term infrastructure cost savings. Likewise, opportunities for interagency cooperation in carrying-out related capital spending initiatives should be investigated.

**Government Efficiency:** Projects that substantially improve the quality of service at the same operating cost, or eliminate obsolete and inefficient facilities should be identified using this category. Opportunity purchases are also considered under this criterion. Early purchase of available land for park expansion, for example, may result in substantial future costs savings, even if development of that parkland expansion is delayed several years.

**Economic Impact:** A project may have a favorable effect on local economic activity, increase property values, or encourage growth in public revenues if carried out sooner, rather than later.

Once the Capital project priority is established, those projects are funded through the issuance of General Obligation debt, grants, general tax allocation, utility fees, Transportation Benefit District collections, Real Estate Excise Taxes, and by transfers from other funds as approved by the City Council. Annual contributions may be used in whole or in part to fund capital projects as cash assets are accumulated. Alternatively, annual contributions may be allowed to remain in reserve until those funds, along with accrued interest have grown sufficiently to permit larger projects to be undertaken.

### **Capital Improvement Planning Policy**

The City Council adopted its Capital Improvement Planning Policy in February 2013. Its purpose is to manage development of the CIP, and thus ensure that the City preserves, maintains, and improves buildings, parks, roads, sewers, equipment and other capital investments. This policy is also intended to guard against unplanned major capital costs in future years.

- A. Policy Scope: The Capital Improvement Planning Policy shall apply to capital projects that meet all of the following criteria:
  - 1. Projects that exceed \$50,000 in total cost;
  - 2. Projects that involve the purchase of land, buildings, building improvements or building components;
  - 3. Projects where the City is responsible for the purchase and/or development thereof; and
  - 4. Projects included in the City's Comprehensive Plan or related capital plans.
  
- B. Capital Asset Inventory
  - 1. The City shall develop and maintain an inventory of all infrastructure assets over \$100,000 including water, sewer, roads, buildings, park improvements and other infrastructure to include their condition, expected life span and original cost.
  - 2. The Administrative Services Director shall establish policies and appropriate procedures to account for infrastructure and non-infrastructure capital/fixed assets, including establishing the threshold dollar amount for which capital project and capital/fixed asset records are maintained and how often physical inventories are taken.

C. Capital Improvement Program

1. The City shall prepare a Capital Improvement Plan (CIP) that complies with the State Growth Management Act and related statutes.
2. The CIP shall include all projects anticipated for the long-range financial plan which is based on a six year planning horizon while the Comprehensive Plan or other related capital plans such as the City's Parks, Recreation and Open Space Plan or Pavement Management (Street) Plan may include projects with planning horizons greater than six years.
3. The CIP shall include, at a minimum, the following information for each project:
  - i) Project type and description for a six year planning horizon;
  - ii) Estimated acquisition and development costs by year;
  - iii) Estimated funding sources by type and year;
  - iv) Estimated annual operations and maintenance costs upon completion;
  - v) Projected source of operations and maintenance costs upon completion; and
  - vi) Project priority within project type.
4. The CIP shall be updated annually as part of the City's budget process to reflect changes in the revenues and expenses of approved projects.
5. The City Council shall approve the CIP and may amend the CIP at any time.

D. Capital Projects Funding Criteria. The City shall prioritize use of City funding for capital projects. Priority will be given to projects that meet the following criteria:

1. Projects that preserve existing capital infrastructure;
2. Projects with low life-cycle costs;
3. Projects that have a high percentage of project costs funded by non-city sources or that have a dedicated funding source;
4. Projects that generate revenue or reduce operations and maintenance costs;
5. Projects that have identified funding for operations and maintenance costs; and
6. Projects that have a high level of community support.

E. Capital Projects Fund

1. The City has established several capital projects funds to be used to accrue moneys for the construction and/or completion of approved CIP projects.
2. All funds identified as funding sources for approved CIP projects shall be transferred to the appropriate capital projects fund. Currently the City has the following restricted funds for capital projects:
  - i) Water Restricted
  - ii) Sewer Restricted
  - iii) Streets Restricted
  - iv) Parks Restricted
  - v) Capital/Building Facilities Fund
3. All expenses related to approved CIP projects shall be made out of the appropriate capital projects fund.
4. The Administrative Services Director shall account for the revenues and expenditures of each project separately.
5. Interest on the appropriate capital projects fund cash balances shall be credited to each individual fund based on their annual average cash balance.

F. Use of Debt

1. The City may use debt to pay for capital projects included in the CIP subject to the City's Debt Management Policy; and
2. Any use of debt to fund capital projects must be approved by the City Council.

- G. Project Approval
  - 1. The City Manager shall recommend CIP projects for funding in the Capital budget; and
  - 2. The City Council shall approve all current CIP projects through its approval of the City budget.
- H. Sustainability
  - 1. The City shall include financial sustainability principles in the development of capital projects.

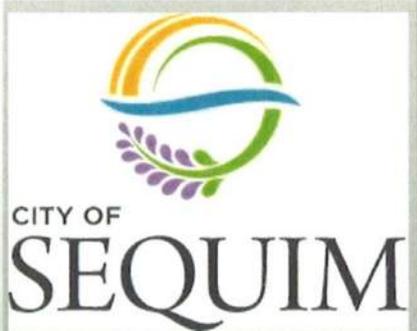
**City of Sequim Debt Policy**

The purpose of the City's Debt Policy is to define its approach to managing debt. Adherence to the policy is essential to ensure that the City maintains a sound debt position and protects the credit quality of its obligations.

- A. Policy Scope: This policy shall apply to all debt issued by the City of Sequim
- B. Statutory Limitations
  - 1. All City debt management policies and practices shall comply with Washington State law;
  - 2. The general obligation debt of the City shall not exceed 7.5 percent of the assessed value of taxable property within the City;
    - i) The City Council can approve debt up to 1.5 percent of the city's total assessed value
    - ii) The public may vote to approve debt for general government purposes in an amount not to exceed 2.5 percent of assessed valuation, inclusive of any City Council approved debt
    - iii) The public may vote to approve debt up to an additional 2.5 percent of assessed valuation for open space, park facilities, and capital facilities associated with economic development.
  - 3. The public may vote to approve debt up to an additional 2.5 percent of assessed valuation for city water or sewer utilities.
- C. Authority to Borrow
  - 1. All borrowing, including short-term debt, will be subject to Council approval; and
  - 2. Use of credit cards or vendor accounts are considered expenditures and are not considered short term obligations under this policy.
- D. Revenue Bonds
  - 1. Revenue bonds are used to finance construction or improvements to facilities of enterprise systems operated by the City and are generally payable from the enterprise. Revenue bonds are not subject to the City's statutory debt limitation and voter approval is not required.
- E. Short Term Obligations
  - 1. Short term obligations are warrants, notes, capital leases, or other evidences of indebtedness expected to be repaid in three years or less;
  - 2. The City may use short term obligations to:
    - i) Meet the immediate financing needs of a capital project for which long term financing has been secured but not yet received.
    - ii) Cover temporary cash flow shortages, which may be caused by a delay in receipting tax revenues.

3. The City may make short term loans between City funds (interfund loans) as an alternative to using short term obligations.
    - i) Interfund loans will be permitted only if an analysis of the affected fund indicates excess funds are available and the use of these funds will not impact the fund's current operations.
    - ii) All interfund loans shall bear interest based on prevailing rates and have terms consistent with state guidelines.
    - iii) All interfund loans shall be made in conformance with the City's Interfund Loan Policy.
- F. Intermediate Term Debt
1. Intermediate term debt is debt that is used to finance a specific asset or set of assets with a useful life of more than three but less than seven years;
  2. The City will only issue intermediate term debt for capital assets when the cost of borrowing or other factors make it in the City's best interest; and
  3. The term of any intermediate term debt will not exceed a conservative estimate of the useful life of the asset(s) to be financed.
- G. Long Term Debt
1. Long term debt is that debt which is seven years or more to term;
  2. The City will only issue long term debt for capital improvements that are included in the City's Capital Improvement Plan;
  3. The City will only issue long term debt for capital improvements that cannot be financed on a pay-as-you-go basis from anticipated cash flows;
  4. The term of any long term debt will not exceed a conservative estimate of the useful life of the asset to be financed;
  5. The City will include a comprehensive debt repayment plan with any proposed use of long term debt;
  6. The City will explore alternative financing mechanisms such as local improvement districts, Washington State Public Works Trust Fund Loans and the Local Option Capital Asset Lending (LOCAL) Program when planning to incur debt; and
  7. In any proposal to use debt the City shall identify the future operating and maintenance costs associated with the capital improvement to be financed and how those operating and maintenance costs will be paid.
- H. Refunding Bonds
1. Refunding bonds are issued to refinance existing bonds to take advantage of lower interest rates;
  2. The City will use refunding bonds, when appropriate, to restructure its outstanding debt; and
  3. Unless otherwise justified, such as the desire to change a bond covenant, the City shall only issue refunding bonds when the net present value of savings after expenses is at least 3 percent.
- I. Debt Reporting
1. The City shall include a summary of its outstanding debt in its budget document and annual financial report.

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- Capital Improvement Program Summary
- Water, Sewer, Streets, Parks and Capital/Building Facilities Restricted Fund Projects

## **CAPITAL IMPROVEMENT PROGRAM 2017 – 2022**

### *Chapter 2*

### *CIP Summary*

- Planned estimated expenditures
- Proposed project schedules
- Funding sources by year and percent



2017-2022 - All Funds  
Funding Summary and Estimated Cost

	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan Total
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**Capital Facilities Fund**

Facility Improvement Improvements							
CFL-003FI	Guy Cole Remodel	336		150	150		636
CFL-007FI	Public Works Facilities Property Development	68	55	57			180
<b>Capital Facilities Fund Total</b>		<b>404</b>	<b>55</b>	<b>207</b>	<b>150</b>		<b>816</b>

**Parks Restricted Fund**

Facility Improvement Improvements							
PRK-011FI	Carrie Blake Park Access Road Relocation	274					274
PRK-015FI	Carrie Blake Park Pickleball Courts	154					154
PRK-017FI	Carrie Blake Park Tennis Courts	60	230				290
PRK-045FI	City Wide Park Land Acquisition					200	200
PRK-044FI	Gerhart Park Building Removal and Restoration			75	75	75	300
PRK-047FI	Gerhart Park Child Play Equipment				60		60
PRK-013FI	Guy Cole Parking Lot Overlay and Drainage Improvements			312			312
PRK-018FI	Keeler Park Access and Parking				599		599
PRK-019FI	Keeler Park Pedestrian Boardwalk					187	187
PRK-020FI	Pioneer Park Sewer Connection	55					55
PRK-046FI	Reuse Demo Site Band Shell Tiered Seating						196
<b>Parks Restricted Fund Total</b>		<b>543</b>	<b>230</b>	<b>387</b>	<b>734</b>	<b>262</b>	<b>2,627</b>

**Sewer Restricted Fund**

Collection System Improvements							
SRR-001CS	Cedar Street Sewer Improvement			308	1,289		1,597
SRR-003CS	Doe Run Lift Station	261					261
SRR-014CS	East Fir Street Sewer Replacement			262	1,323	713	2,298
SRR-002CS	Etta Street Sewer Improvements		195				195
SRR-013CS	North Blake Avenue Sewer Improvements				213		213
SRR-009CS	Sunnyside Sewer Improvement	517					517
SRR-040CS	Upgrade sewer system in 4th Avenue from Washington Street to Cedar Street	164					164
SRR-008CS	West Fir Street Sewer Improvement	204	426	223			853
SRR-007CS	WRF Influent Trunk Line Pipeline Repair/Replacement			201	166	1,572	1,939
Miscellaneous Improvements							
SRR-041MI	General Sewer Plan Update		75				75
Reclaim Water System Improvements							



2017-2022 - All Funds

Funding Summary and Estimated Cost

	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan Total
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### Sewer Restricted Fund

Reclaim Water System Improvements							
SRR-024RW	Reclaimed Water Network Expansion					373	373
SRR-042RW	Reclaimed Water Storage Feasibility Study		109				109
SRR-025RW	WRF Reclaimed Water Pumping Facility Improvements			733			733
Waste Treatment Improvements							
SRR-035W	Aerobics Digester Capacity Upgrades	157		1,977			2,134
SRR-034W	Class A Biosolids Handling & Distribution Center			273	999	1,044	2,316
SRR-004W	Outfall Pipeline Repair/Replc					1,551	1,551
SRR-036W	WRF Headworks Modifications No 2			372			372
SRR-038W	WRF Odor Control	137					137
<b>Sewer Restricted Fund Total</b>		<b>1,440</b>	<b>805</b>	<b>3,343</b>	<b>3,997</b>	<b>3,284</b>	<b>15,837</b>

### Stormwater Restricted Fund

Collection System Improvements							
SMR-003CS	7th Ave and Washington Upgrade		206				206
SMR-010CS	Bell Creek Basin Hydrologic/Hydraulic Assessment		25	75	75	25	200
SMR-009CS	Bell Creek Culvert Under Blake Ave					478	478
SMR-004CS	Emerald Highlands Pond/Clara Crest Abatement			125			125
SMR-005CS	North 5th Ave and Cedar Street Structure Upgrade					156	156
SMR-011CS	Retrofit Discharge to Bell Creek on North Brown			42	81		123
SMR-008CS	Seal Street Drainage Improvements			137			137
SMR-002CS	South 3rd Ave Drainage Improvements			84			84
<b>Stormwater Restricted Fund Total</b>			<b>231</b>	<b>463</b>	<b>156</b>	<b>181</b>	<b>1,509</b>

### Streets Restricted Fund

City Wide Pavement Rehab Improvements							
STR-041PR	City-wide Pavement Rehabilitation	384		562	587	614	2,789
STR-064PR	North Sequim Ave Pavement Rehabilitation					268	268
STR-065PR	Washington St Pavement Rehabilitation				499	6,892	7,391
City Wide Safety Projects Improvements							
STR-039SP	City-wide Safety Projects	60	62	65	68	71	401
Facility Improvement Improvements							
STR-061FI	East Fir St Rehabilitation from Sequim Ave to Blake Ave			86	717	749	1,552



2017-2022 - All Funds  
Funding Summary and Estimated Cost

		2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan Total
<b>Streets Restricted Fund</b>								
<b>Facility Improvement Improvements</b>								
STR-034FI	East Washington St. Bus Turn-Outs from Sequim Ave to Rhodefer Rd			26	123			149
STR-027FI	North Kendall Rd and West Hendrickson Rd Intersection Improvements				48			48
STR-052FI	Washington Street Signal Timing & Coordination	150						150
STR-030FI	West Fir Street Rehabilitation from Sequim Ave and 5th Ave	793	1,596	2,079				4,468
STR-031FI	West Prairie Complete Street Revitalization from Sequim Ave to 5th Ave		77	480	502	525	503	2,087
STR-063FI	West Sequim Bay Rd Shoreline Revetment Repair		546					546
STR-032FI	West Washington Eastbound Auxiliary Lane from River Rd Modification				16	77		93
STR-029FI	Whitefeather Way and US 101 Intersection Improvements			261	205			466
<b>Miscellaneous Improvements</b>								
STR-060MI	Transportation Master Plan Update			50				50
<b>Pedestrian Improvement Improvements</b>								
STR-003PI	3rd Ave Bicycle Accommodation from Hwy 101 to Fir St	71						71
STR-014PI	Etta Street Active Alleyway	90	718					808
STR-062PI	ODT East Hendrickson Extension from Sequim Ave to Brown Rd	52	164	171				387
STR-016PI	Seal Street Active Alleyway			23	85			108
STR-015PI	Sunnyside Avenue Sidewalk				68	564		632
STR-020PI	Upper Bell Creek Trail				20	86		106
STR-012PI	Whitefeather Way Multi-user Trail			110	377			487
<b>Road Connectivity Improvements</b>								
STR-066RC	North Blake Ave to North Rhodefer Rd Extension					85	321	406
STR-037RC	West Brownfield Rd Realignment from Sequim Ave 3rd Ave					171	1,298	1,469
STR-038RC	West Maple St Extension from 5th Ave to 4th Ave					561	291	852
<b>Streets Restricted Fund Total</b>		<b>1,600</b>	<b>3,163</b>	<b>3,913</b>	<b>2,816</b>	<b>4,002</b>	<b>10,290</b>	<b>25,784</b>

**Water Restricted Fund**

<b>Booster Station Improvements</b>								
WTR-003BS	5th & McCurdy Booster Station Improvement	745						745
WTR-004BS	Simdars Road Booster Station		62	411	68			541
<b>Distribution System Improvements</b>								
WTR-059DS	4th Ave Water Line	140						140
WTR-007DS	5th Avenue Water Main					255		255
WTR-006DS	Brown Road Water Main - Pt Williams to Hendrickson				233	976		1,209
WTR-017DS	Brown Road Water Main from East Fir Street to East Washington Street			692				692



2017-2022 - All Funds

Funding Summary and Estimated Cost

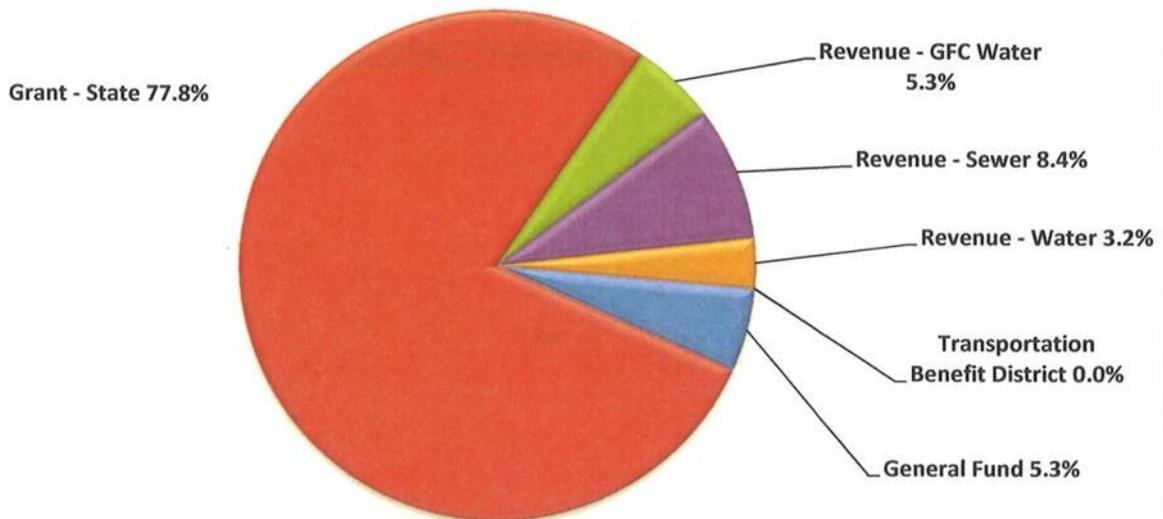
		2017	2018	2019	2020	2021	2022	6-Year
		Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan Total
<b>Water Restricted Fund</b>								
<b>Distribution System Improvements</b>								
WTR-024DS	Craftsman Court PRV Station						75	75
WTR-019DS	East Etta Street Water Main		156					156
WTR-016DS	East Fir Street Water Main			208	560	228		996
WTR-061DS	New Water Line at New CB Park Entrance	209						209
WTR-056DS	North and South Sunnyside - Bell to Fir	481						481
WTR-023DS	Pressure Relief Valve	107						107
WTR-015DS	West Fir Street Transmission Main Replacement	200	373	194				767
WTR-032DS	West Prairie from S Sequim to S 5th		22	309	323	337	326	1,317
WTR-031DS	West Washington Street Isolation Valves			20	175			195
<b>Miscellaneous Improvements</b>								
WTR-036MI	Fixed Base Automatic Meter Reading System		574					574
WTR-060MI	General Water System Plan Update		75					75
WTR-034MI	SCADA Upgrade Report		57					57
WTR-062MI	Utility Rate Study - Water AND Sewer			50				50
<b>Source Improvements</b>								
WTR-044SC	Infiltration Gallery Improvements					903		903
WTR-045SC	New Water Rights Analysis	50						50
WTR-040SC	New Well - Silberhorn Deep Well	52	164		1,015			1,231
WTR-039SC	Port Williams Well No.4						1,089	1,089
<b>Storage Improvements</b>								
WTR-050ST	Repurpose the 500,000 Gallon Reservoir			239				239
<b>Water Restricted Fund Total</b>		<b>1,984</b>	<b>1,483</b>	<b>2,123</b>	<b>2,374</b>	<b>2,699</b>	<b>1,490</b>	<b>12,153</b>
<b>Project Total By Year</b>		<b>5,971</b>	<b>5,967</b>	<b>10,436</b>	<b>10,227</b>	<b>10,428</b>	<b>15,697</b>	<b>58,726</b>

## Capital Facilities Fund - Funding Sources by Year 6-Year Capital Improvement Plan 2017-2022



Funding Amounts in Thousands Inflated \$

## Capital Facilities Fund - Funding Source Percent 6-Year Capital Improvement Plan 2017-2022

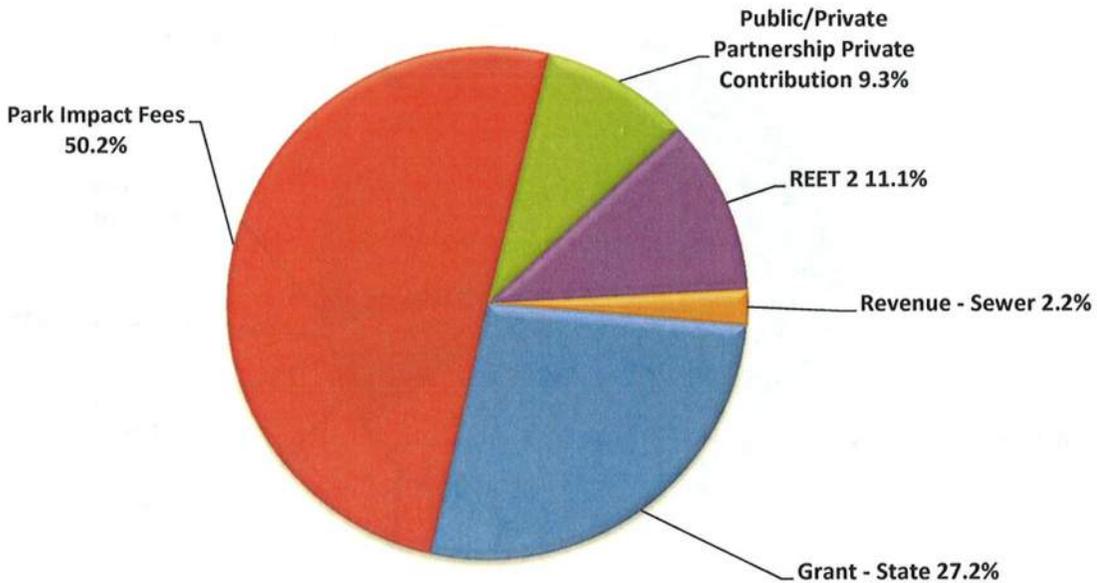


## Parks Restricted Fund - Funding Sources by Year 6-Year Capital Improvement Plan 2017-2022

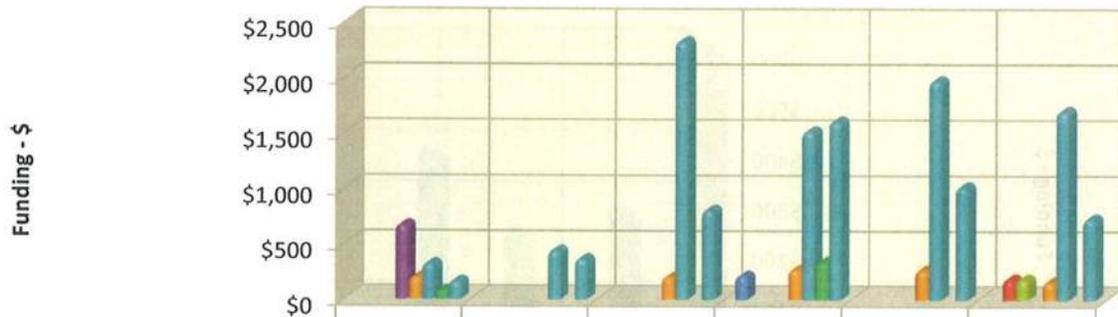


Funding Amounts in Thousands Inflated \$

## Parks Restricted Fund - Funding Source Percent 6-Year Capital Improvement Plan 2017-2022



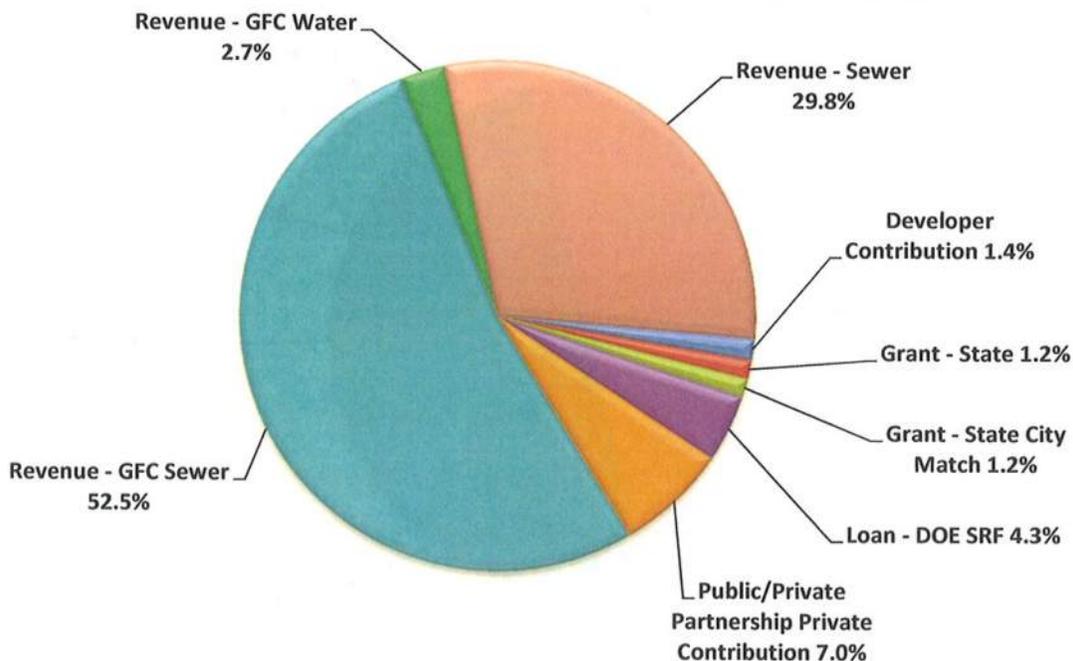
## Sewer Restricted Fund - Funding Sources by Year 6-Year Capital Improvement Plan 2017-2022



	2017	2018	2019	2020	2021	2022
Developer Contribution				\$213		
Grant - State						\$186
Grant - State City Match						\$186
Loan - DOE SRF	\$672					
Public/Private Partnership Private Contribution	\$198		\$200	\$272	\$269	\$163
Revenue - GFC Sewer	\$321	\$441	\$2,327	\$1,517	\$1,973	\$1,700
Revenue - GFC Water	\$82			\$344		
Revenue - Sewer	\$166	\$365	\$807	\$1,609	\$1,019	\$732

Funding Amounts in Thousands Inflated \$

## Sewer Restricted Fund - Funding Source Percent 6-Year Capital Improvement Plan 2017-2022

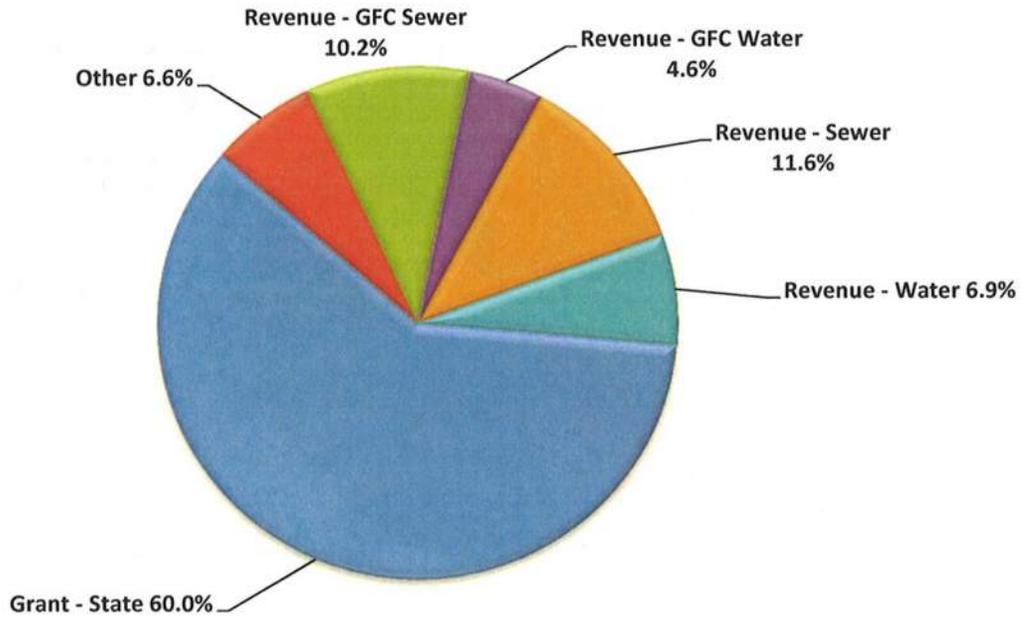


### Stormwater Restricted Fund - Funding Sources by Year 6-Year Capital Improvement Plan 2017-2022

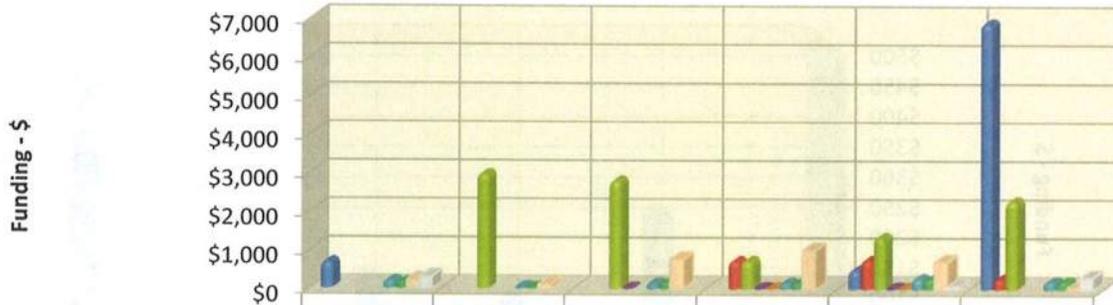


Funding Amounts in Thousands Inflated \$

### Stormwater Restricted Fund - Funding Source Percent 6-Year Capital Improvement Plan 2017-2022



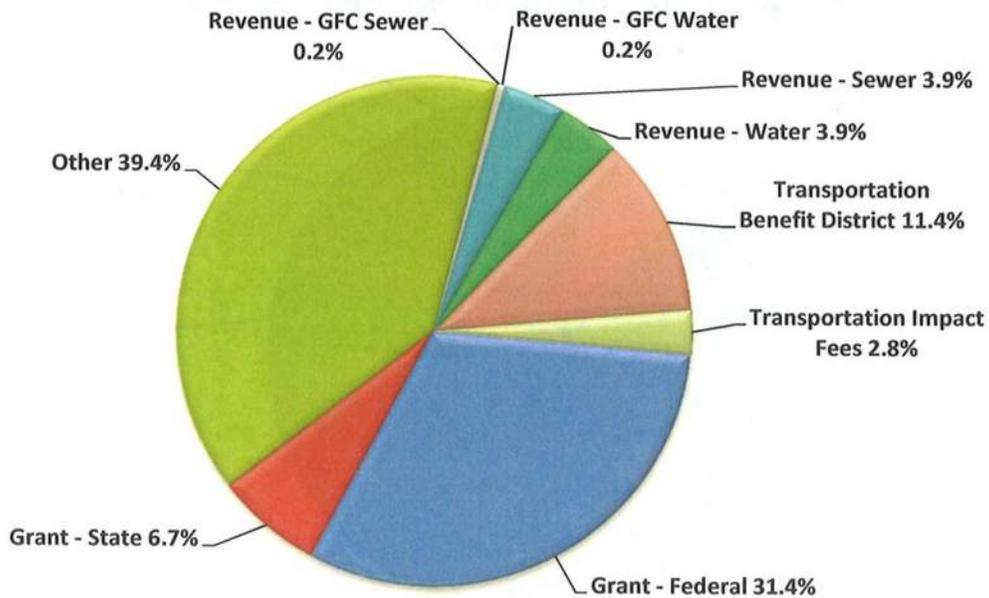
### Streets Restricted Fund - Funding Sources by Year 6-Year Capital Improvement Plan 2017-2022



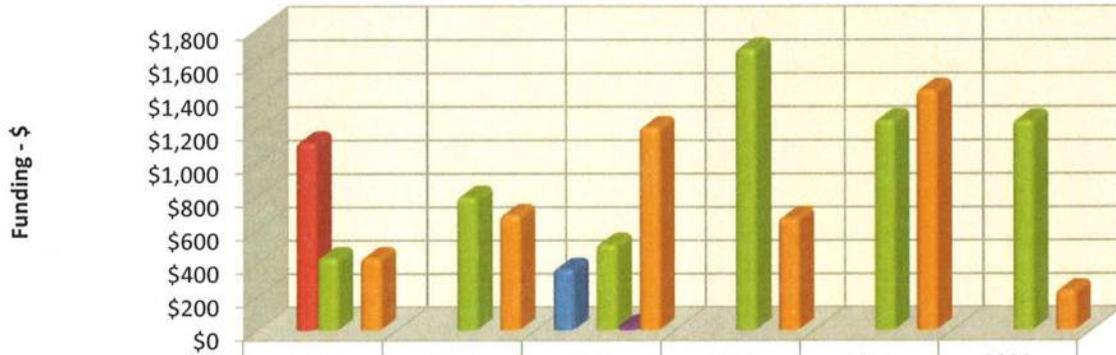
	2017	2018	2019	2020	2021	2022
Grant - Federal	\$688				\$499	\$6,892
Grant - State				\$717	\$749	\$268
Other		\$2,974	\$2,794	\$729	\$1,341	\$2,280
Revenue - GFC Sewer			\$21	\$20	\$23	
Revenue - GFC Water				\$22	\$20	
Revenue - Sewer	\$200	\$38	\$153	\$157	\$270	\$196
Revenue - Water	\$170	\$38	\$172	\$157	\$270	\$196
Transportation Benefit District	\$235	\$113	\$775	\$1,015	\$715	\$75
Transportation Impact Fees	\$307				\$85	\$321

Funding Amounts in Thousands Inflated \$

### Streets Restricted Fund - Funding Source Percent 6-Year Capital Improvement Plan 2017-2022



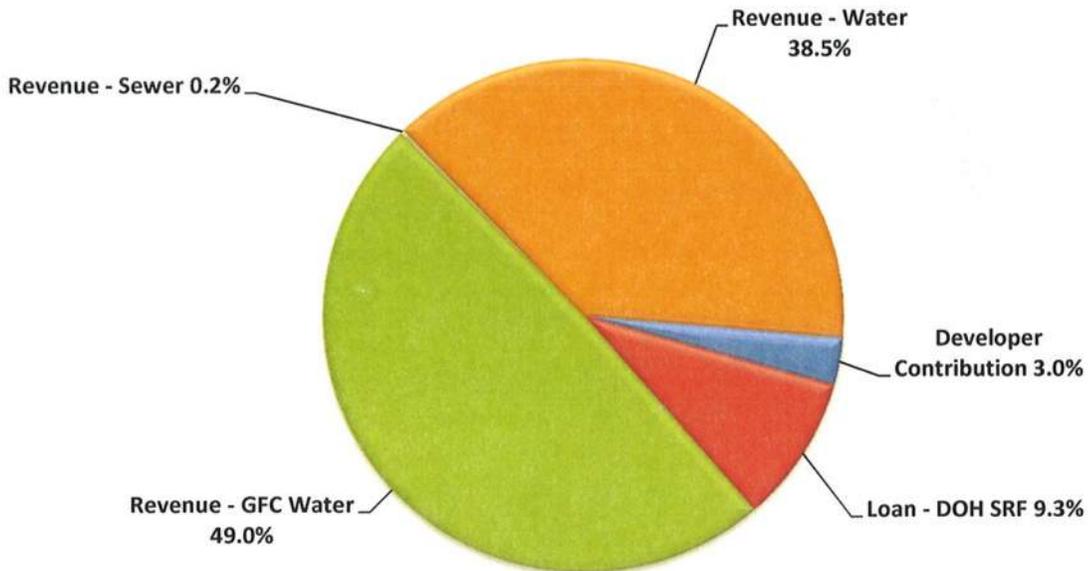
### Water Restricted Fund - Funding Sources by Year 6-Year Capital Improvement Plan 2017-2022



	2017	2018	2019	2020	2021	2022
Developer Contribution			\$366			
Loan - DOH SRF	\$1,122					
Revenue - GFC Water	\$433	\$797	\$513	\$1,681	\$1,256	\$1,253
Revenue - Sewer			\$25			
Revenue - Water	\$430	\$687	\$1,211	\$670	\$1,436	\$237

Funding Amounts in Thousands Inflated \$

### Water Restricted Fund - Funding Source Percent 6-Year Capital Improvement Plan 2017-2022



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- Historical Overview of Sequim Water Utility Capital Improvements
- Sources of Water Supply and the CIP
- Distribution System Capital Improvements
- Future Water Demand
- Level of Service Standards

## **CAPITAL IMPROVEMENT PROGRAM 2017 – 2022**

### *Chapter 3*

### *Water Restricted Fund Projects*

## **Historical Overview of Sequim Water Utility Capital Improvements**

The City of Sequim's municipal water system serves most of the incorporated city boundaries and areas of unincorporated Clallam County south and east of the city limits. The water system's three sources of supply are the Infiltration Gallery, the Silberhorn Wellfield, and the Port Williams Wellfield, described in more detail below. Raw water from all three sources is disinfected with sodium hypochlorite in accordance with state Department of Health standards for contact time and chlorine residuals in the distribution system.

The City's first water system, purchased from private interests in 1922, served several blocks of the central business district and was supplied by local springs. Passage of a bond issue in 1929 allowed the city to develop surface water rights on the Dungeness River, and to build the water system's first raw water open cut reservoir. Additional water transmission mains and reservoirs were added to the system in the late 1940s and early 1950s, including an intake line from the Dungeness River.

Following recommendations of a 1973 study, capital improvements included covering the open cut reservoir, metering connections, and replacing substandard transmission mains. Another report, completed in 1983, addressed water quality, water resources, and conservation. Improvements to the system included development of the Silberhorn Wellfield, installation of a chlorination system, and construction of a new infiltration gallery along the Dungeness River. In 1995, Port Williams Well No. 1 was drilled, and the 5th and McCurdy Booster Station was built. Port Williams Well No. 2 was brought to completion in 1998. In 2008, the Solana development required addition of a 1 MG reservoir and two booster stations. In 2009, Port Williams Well No. 3 was placed in service. Since 2000, the water system has expanded northwest to serve new commercial development on West Washington Street.

## **Sources of Water Supply and the CIP**

The three raw water sources named in the previous section directly influence the scope and direction of the Six-Year Capital Improvement Program for the Sequim Water Utility because of their geographic locations and respective yields. Accordingly, a brief description of each source, and its relationship to the treated water distribution system is provided.

*Infiltration Gallery:* The City's original water right for surface water diversion from the Dungeness River was changed in 1954 to the same location as the Infiltration Gallery. The diversion works consist of a horizontal collector system made of perforated pipe buried in a gravel filter pack under the stream bank of the Dungeness River. From a central collection well, water flows by gravity siphon to the City's 420 Reservoir and thence to the distribution system. While the Infiltration Gallery has been determined to be hydraulically connected to the river, its yield is not defined as groundwater under the influence of surface water.

*Silberhorn Wellfield:* The Silberhorn Wellfield, consists of three wells operated on an alternating basis to equalize use. During high demand periods, two wells are drawn simultaneously. The Silberhorn Wellfield pumps to the City's 1.7 MG reservoir serving the 420 Pressure Zone.

*Port Williams Wellfield:* There are three wells at the Port Williams source. They are operated on an alternating schedule, except during high demand periods when all three run simultaneously. The wells pump directly to the 350 Pressure Zone. When demand conditions require, Port Williams can supply the 420 Pressure Zone by operating in tandem with the 5th and McCurdy Booster Station. Under the three-well configuration in place total withdrawal from

the Port Williams Wellfield is restricted to customer demand in the 350 Pressure Zone plus the capacity of the 5th and McCurdy Booster Station.

The City's current water right permit provides for two additional wells at Port Williams. The City of Sequim's water right for the Port Williams Wellfield is supplemental to its existing water rights. When the City proves-up its full Port Williams water right, negotiations will ensue with the state Department of Ecology to designate Port Williams as the Primary water right, with the Silberhorn Wellfield and Infiltration Gallery water rights as supplemental.

### **Distribution System Capital Improvements**

The water utility transmission and distribution network consists of about 340,000 lineal feet of pipe, ranging from 2-inch to 16-inch diameter. Analysis of the distribution system has revealed several areas with fire flow deficiencies. These include non-residential areas located in the 420 Pressure Zone north of Highway 101, East Washington Street and the mixed use zone on East Hammond Street. While fire flows in these nonresidential locations meet the Universal Fire Code requirement of 1,500gpm, they do not meet Sequim's planning requirement of 3,000gpm. Residential fire flow deficiencies were also found in the 420 and 480 Pressure Zones. Projects are included within the CIP to resolve these deficiencies through upsizing water mains and installing distribution system loops.

### **Future Water Demand**

The water utility's future service boundaries include the Urban Growth Area and adjacent territory in which Sequim may become the logical water service provider. The current Capital Facilities Element policy allows Sequim to provide water service to new developments within the UGA in areas that are not served by other purveyors. The City may also acquire private water systems if the areas that those systems now serve are annexed to the City. Certain other portions of the UGA areas outside the Sequim city limits are served by the Clallam County Public Utilities District. Extension of municipal water service to current PUD customers will be regulated by a 1995 agreement between the agencies that requires mutual participation and consensus as appropriate boundary and infrastructure adjustments.

Sequim's Water System Master Plan projected water demands within the existing system boundaries for the CIP planning period by assuming that it will increase at a rate equivalent to the population growth rate. The Water System Plan analysis assumes a modest annual growth rate of two percent for the Sequim UGA, starting from the 2010 base year US Census total population. During this time period, Sequim is anticipated to annex more of the UGA at a rate of 4 percent per year. The following Table W-1 illustrates water demand growth through the CIP planning period, and includes a long-term projection based on a 20 year planning horizon. The chart also includes the estimated number of Equivalent Residential Units (ERUs) for each annual period. ERUs provide a method to express water use by non-residential customers as an equivalent number of residential customers. ERUs are calculated by dividing total single-family residential water use by the total number of single-family residential connections, giving average single-family residential water use. The volume of water used by non-residential customer classes is then divided by average single-family residential water use to determine the number of ERUs utilized by the other water user categories.

**Table W-1**

City of Sequim 2014 - 2019 Capital Improvement Program  
Water System Demand Projections

Factor	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2032 Estimate
Population	7,054	7,744	7,990	8,244	8,505	12,989
Average Daily Demand (mgd)	0.080	0.859	0.880	0.901	0.923	1.290
Equivalent Residential Units	5,151	5,275	5,401	5,531	5,664	7,915

**Level of Service Standards<sup>1</sup>**

The below Table W-2 identifies some of the key criteria that have been identified by the Sequim Water Utility as necessary to provide a minimum level of service for existing and future customers. These design standards were applied to a rigorous analysis of the existing system facilities in the Water System Plan. Comparing existing system performance to these design standards revealed certain deficiencies that led in part to the inventory of projects that appear in the CIP.

**Table W-2**

Service Parameter	Standard
Distribution system pressure	30psi – peak hour demand 20psi – fire flow during MDD <sup>2</sup>
Transmission Main Pipeline Diameter	8 in min. serving fire hydrants
Fire Flow	3000gpm – commercial development 1000gpm – residential development
Source Capacity	MDD with 18 hours of pumping MDD plus capacity to replenish fire suppression storage in 72 hrs. ADD <sup>3</sup> with largest source out of service
Operational Storage	10% of total storage
Distribution System Leakage	10% of total source production

<sup>1</sup>Source: Water System Plan, Chapter 3; <sup>2</sup>MDD – Maximum Day Demand; <sup>3</sup>ADD – Average Day Demand



2017-2022 - Water System Projects  
Project Summary, Schedule, and Estimated Cost

	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan Total
<b>Booster Station Improvements</b>							
WTR-003BS 5th & McCurdy Booster Station Improvement	745						745
WTR-004BS Simdars Road Booster Station		62	411	68			541
<b>Distribution System Improvements</b>							
WTR-059DS 4th Ave Water Line	140						140
WTR-007DS 5th Avenue Water Main					255		255
WTR-006DS Brown Road Water Main - Pt Williams to Hendrickson				233	976		1,209
WTR-017DS Brown Road Water Main from East Fir Street to East Washington Street			692				692
WTR-024DS Craftsman Court PRV Station						75	75
WTR-019DS East Etta Street Water Main		156					156
WTR-016DS East Fir Street Water Main			208	560	228		996
WTR-061DS New Water Line at New CB Park Entrance	209						209
WTR-056DS North and South Sunnyside - Bell to Fir	481						481
WTR-023DS Pressure Relief Valve	107						107
WTR-015DS West Fir Street Transmission Main Replacement	200	373	194				767
WTR-032DS West Prairie from S Sequim to S 5th		22	309	323	337	326	1,317
WTR-031DS West Washington Street Isolation Valves			20	175			195
<b>Miscellaneous Improvements</b>							
WTR-036MI Fixed Base Automatic Meter Reading System		574					574
WTR-060MI General Water System Plan Update		75					75
WTR-034MI SCADA Upgrade Report		57					57
WTR-062MI Utility Rate Study - Water AND Sewer			50				50
<b>Source Improvements</b>							
WTR-044SC Infiltration Gallery Improvements					903		903
WTR-045SC New Water Rights Analysis	50						50
WTR-040SC New Well - Silberhorn Deep Well	52	164		1,015			1,231
WTR-039SC Port Williams Well No.4						1,089	1,089
<b>Storage Improvements</b>							
WTR-050ST Repurpose the 500,000 Gallon Reservoir			239				239
<b>Project Total By Year</b>	<b>1,984</b>	<b>1,483</b>	<b>2,123</b>	<b>2,374</b>	<b>2,699</b>	<b>1,490</b>	<b>12,153</b>



2017-2022 Capital Improvement Program - Water Restricted Fund  
 Water System Comprehensive Plan Program – Project Detail

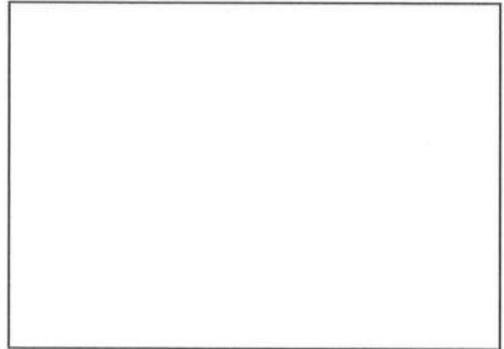
### 4th Ave Water Line

**Project Number:** WTR-059DS

**Historical Project Number**

**Project Location:**

**Project Description:**



**Project Benefit:**

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering										
Construction		140						140		140
<b>Total Project Costs - Inflated \$</b>		<b>140</b>						<b>140</b>		<b>140</b>
<b>Project Funding Sources</b>										
Revenue - GFC Water		70						70		70
Revenue - Water		70						70		70
<b>Total Project Funding - Inflated \$</b>		<b>140</b>						<b>140</b>		<b>140</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering		Q1Q2Q3								
Construction		Q1Q2Q3								

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## 5th & McCurdy Booster Station Improvement

**Project Number:** WTR-003BS

**Historical Project Number:** BS-2

**Project Location:** Near the intersection of S 5th Ave and W McCurdy Rd

**Project Description:**

This project will expand the pumping capacity of the 5th and McCurdy Booster Station thereby allowing transfer of more water from the Port Williams Wellfield to the 420 Reservoir under high demand conditions. With only a single pump in place at the time that this CIP was written, the water system does not have reliable capacity at the Booster Station. The addition of two pumps, with pitless adaptors similar to the current single pump, will double the reliable output capacity of the station to 600 gpm. A standby generator will be added to prevent service disruptions during emergencies.



**Project Benefit:**

Project BS-2 will increase the reliability of water service and improve fire flows in the 350 Pressure Zone.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering		52								52
Construction			745					745		745
<b>Total Project Costs - Inflated \$</b>		<b>52</b>	<b>745</b>					<b>745</b>		<b>797</b>
<b>Project Funding Sources</b>										
Loan - DOH SRF		50	682					682		732
Revenue - GFC Water		2	63					63		65
<b>Total Project Funding - Inflated \$</b>		<b>52</b>	<b>745</b>					<b>745</b>		<b>797</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering										
Construction			Q1Q2Q3Q4							

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



### 5th Avenue Water Main

**Project Number:** WTR-007DS      **Historical Project Number** D-3  
**Project Location:** S 5th Ave from W Reservoir Rd to W Norman St

**Project Description:**  
 This project will loop the piping in the 480 Pressure Zone and improve fire flows in that zone that do not meet the minimum 1,000 gpm requirement. Construction will include installing 650 LF of 8-inch diameter PVC water main piping and fittings along South 5th Avenue from West Reservoir Road to West Norman Street.

**Project Benefit:**  
 <div>Project D-3 will address deficient fire flows, improve water storage recovery, and aid transmission capacity in the 480 Pressure Zone. They are part of the proposed system looping improvements encompassed by Projects D-4, D-5 and D-16.</div>



	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering						51		51		51
Construction						204		204		204
<b>Total Project Costs - Inflated \$</b>						<b>255</b>		<b>255</b>		<b>255</b>
<b>Project Funding Sources</b>										
Revenue - Water						255		255		255
<b>Total Project Funding - Inflated \$</b>						<b>255</b>		<b>255</b>		<b>255</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering							Q3			
Construction							Q2			

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$





## Brown Road Water Main from East Fir Street to East Washington Street

**Project Number:** WTR-017DS      **Historical Project Number:** D-13

**Project Location:** N Brown Rd from E Fir St to E Washington St

**Project Description:**

Project D-13 will improve fire flow to commercial developments in the easterly portion of city center. Construction will include installation of approximately 1,800 LF of 12-inch diameter PVC water main piping along Brown Road from East Fir Street to East Washington Street.



**Project Benefit:**

Commercial areas on East Washington St in the 350 Pressure Zone have been identified in the Water System Master Plan as among locations that meet minimum UFC required fire flows, but are not able to meet the City's more rigorous standard. Project D-13, in concert with CIP Projects D-1, D-8, and D-28, will help meet the proposed system-wide commercial standard flow of 3000gpm at 20psi.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering				83					83	83
Construction				609					609	609
<b>Total Project Costs - Inflated \$</b>				<b>692</b>					<b>692</b>	<b>692</b>
<b>Project Funding Sources</b>										
Developer Contribution				366					366	366
Revenue - GFC Water				164					164	164
Revenue - Water				162					162	162
<b>Total Project Funding - Inflated \$</b>				<b>692</b>					<b>692</b>	<b>692</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q1						
Construction				Q1Q2Q3						

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



### Craftsman Court PRV Station

**Project Number:** WTR-024DS **Historical Project Number** D-20

**Project Location:** From the intersection of Miller Rd and Craftsman Ct, East to a point on Miller Rd. approximately 270 feet

**Project Description:**

The City will install a pressure reducing valve station between the water main on Miller Road and Craftsman Court to facilitate the intertie between the Clallam County PUD's system and the Sequim Water Utility described in Project D-18.



**Project Benefit:**

This project would also allow the City to serve customers along Miller Road, and create a wholesale water vending exchange with the PUD.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering							15	15		15
Construction							60	60		60
<b>Total Project Costs - Inflated \$</b>							<b>75</b>	<b>75</b>		<b>75</b>
<b>Project Funding Sources</b>										
Revenue - Water							75	75		75
<b>Total Project Funding - Inflated \$</b>							<b>75</b>	<b>75</b>		<b>75</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering							Q4			
Construction							Q4			

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## East Etta Street Water Main

**Project Number:** WTR-019DS      **Historical Project Number:** D-15

**Project Location:** Etta St from N Sequim Ave to S Sunnyside Ave

**Project Description:**

Project D-15 will complete a loop along East Etta Street. Construction will consist of approximately 550 LF of 8-inch water main along East Etta Street from South Sequim Avenue to South Sunnyside Avenue.

**Project Benefit:**

This project is part of a suite of proposed CIP improvements, including Projects D-24 and D-27, to improve fire flows in the 420 Pressure Zone. It was started in 2013.



	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering			31						31	31
Construction			125						125	125
<b>Total Project Costs - Inflated \$</b>			<b>156</b>						<b>156</b>	<b>156</b>
<b>Project Funding Sources</b>										
Revenue - GFC Water			85						85	85
Revenue - Water			71						71	71
<b>Total Project Funding - Inflated \$</b>			<b>156</b>						<b>156</b>	<b>156</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering			Q3Q4							
Construction			Q2Q3							

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



### East Fir Street Water Main

**Project Number:** WTR-016DS

**Historical Project Number** D-12

**Project Location:** E Fir St from N Sequim Ave to N Brown Rd

**Project Description:**

Project D-12 will result in replacement of an existing 6-inch diameter AC distribution main with approximately 2,650 LF of 10-inch diameter PVC piping along East Fir Street from North Sequim Avenue to North Brown Road.



**Project Benefit:**

The project, in conjunction with other CIP improvements, will provide additional fire flow capacity to residents in the 350 Pressure Zone.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering				208					208	208
Construction					560	228		788		788
<b>Total Project Costs - Inflated \$</b>				<b>208</b>	<b>560</b>	<b>228</b>		<b>996</b>		<b>996</b>
<b>Project Funding Sources</b>										
Revenue - GFC Water				101	270	110		481		481
Revenue - Water				99	267	110		476		476
<b>Total Project Funding - Inflated \$</b>				<b>200</b>	<b>537</b>	<b>220</b>		<b>957</b>		<b>957</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q4						
Construction					Q2Q3Q4	Q3Q4				

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Fixed Base Automatic Meter Reading System

**Project Number:** WTR-036MI

**Historical Project Number** MI-3

**Project Location:** City-wide

**Project Description:**

Project MI-3 will create an automatic meter reading system that will provide near real-time usage data for the utility's water connections. The City will install the hardware over several years. The cost estimate presented in the table below represents the water utility's share of the system's total cost.



**Project Benefit:**

Completion of Project MI-3, in conjunction recommended SCADA improvements resulting from the study in Project MI-2, will increase meter reading efficiency, reduce overhead costs and enhance water utility customer service.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering			574						574	574
<b>Total Project Costs - Inflated \$</b>			<b>574</b>						<b>574</b>	<b>574</b>
<b>Project Funding Sources</b>										
Revenue - GFC Water			314						314	314
Revenue - Water			260						260	260
<b>Total Project Funding - Inflated \$</b>			<b>574</b>						<b>574</b>	<b>574</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering			Q3Q4	Q1Q2Q3Q4						

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



2017-2022 Capital Improvement Program - Water Restricted Fund  
 Water System Comprehensive Plan Program – Project Detail

## General Water System Plan Update

**Project Number:** WTR-060MI

**Historical Project Number**

**Project Location:**

**Project Description:**

**Project Benefit:**

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Study			75						75	75
Total Project Costs - Inflated \$			75						75	75
<b>Project Funding Sources</b>										
Revenue - GFC Water			38						38	38
Revenue - Water			38						38	38
Total Project Funding - Inflated \$			76						76	76
<b>Project Timeline Phase</b>										
Study			Q1Q2Q3Q4							

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Infiltration Gallery Improvements

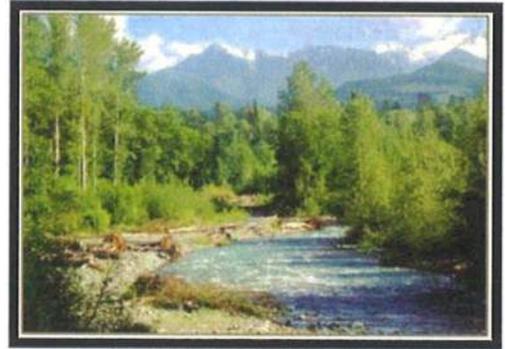
**Project Number:** WTR-044SC

**Historical Project Number:** S-6

**Project Location:** 179 Kincaid Road

**Project Description:**

Dungeness River surface water taken through the Infiltration Gallery flows has an instantaneous yield that is approximately half of the quantity allowed under Sequim’s current water right. Potential improvements under Project S-6 would include additional collectors and installation of one or more 350gpm pumps to allow reliable withdrawals up to the water right limit. This project will also include installation of an on-site generator. Potential limitations to the project include restrictive permitting along the river bank, potential construction damage to the existing 12-inch asbestos cement (AC) transmission line, and seasonal turbidity.



**Project Benefit:**

Before design or construction of this project, a study would be needed to determine the feasibility of the improvements. A significant concern in this regard is the Department of Ecology’s linking of full use of Sequim’s Port Williams Wellfield water rights permit to discontinuance of the Infiltration Gallery as a water source. However, if aquifer level declines at Port Williams continue to reduce the final capacity available under that water right portfolio, the City may have a case for expansion of the Infiltration Gallery capacity as an emergency water source.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering						128		128		128
Construction						775		775		775
<b>Total Project Costs - Inflated \$</b>						<b>903</b>		<b>903</b>		<b>903</b>
<b>Project Funding Sources</b>										
Revenue - Water						903		903		903
<b>Total Project Funding - Inflated \$</b>						<b>903</b>		<b>903</b>		<b>903</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering							Q3Q4			
Construction						Q1Q2Q3				

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



2017-2022 Capital Improvement Program - Water Restricted Fund  
 Water System Comprehensive Plan Program – Project Detail

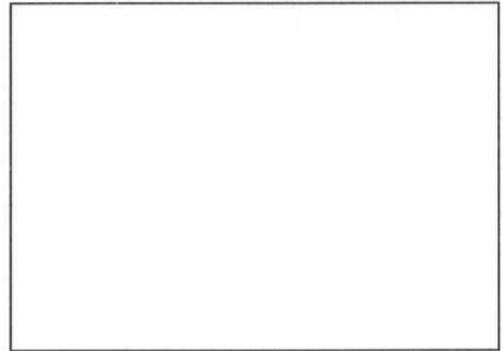
### New Water Line at New CB Park Entrance

**Project Number:** WTR-061DS

**Historical Project Number**

**Project Location:**

**Project Description:**



**Project Benefit:**

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering		52							52	52
Construction		157							157	157
<b>Total Project Costs - Inflated \$</b>		<b>209</b>							<b>209</b>	<b>209</b>
<b>Project Funding Sources</b>										
Revenue - GFC Water		105							105	105
Revenue - Water		105							105	105
<b>Total Project Funding - Inflated \$</b>		<b>210</b>							<b>210</b>	<b>210</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering		Q1Q2								
Construction		Q2Q3Q4								

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



### New Water Rights Analysis

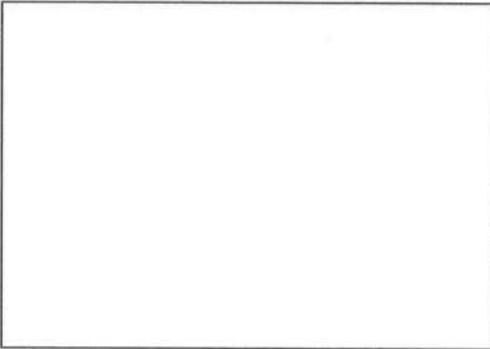
**Project Number:** WTR-045SC

**Historical Project Number** S-7

**Project Location:**

**Project Description:**  
No Description

**Project Benefit:**  
No Benefit



	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Other		50						50		50
<b>Total Project Costs - Inflated \$</b>		<b>50</b>						<b>50</b>		<b>50</b>
<b>Project Funding Sources</b>										
Revenue - Water		50						50		50
<b>Total Project Funding - Inflated \$</b>		<b>50</b>						<b>50</b>		<b>50</b>
<b>Project Timeline Phase</b>										
Other										

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## New Well - Silberhorn Deep Well

**Project Number:** WTR-040SC

**Historical Project Number:** S-2

**Project Location:** TBD

**Project Description:**

The City plans to drill and develop an additional well within the water system, although the location of that well was not identified at the time that this CIP was prepared.



**Project Benefit:**

The City's water rights provide sufficient instantaneous withdrawal to meet forecast demands through the 20-year horizon of the Sequim Comprehensive Plan. The City's current sources do not have the capacity to supply the entire instantaneous water right entitlement. The proposed well addition would offset this potential shortfall.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering		52	164					216		216
Construction					1,015			1,015		1,015
<b>Total Project Costs - Inflated \$</b>		<b>52</b>	<b>164</b>		<b>1,015</b>			<b>1,231</b>		<b>1,231</b>
<b>Project Funding Sources</b>										
Revenue - GFC Water		52	164		1,015			1,231		1,231
<b>Total Project Funding - Inflated \$</b>		<b>52</b>	<b>164</b>		<b>1,015</b>			<b>1,231</b>		<b>1,231</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering		Q3Q4	Q1Q2Q3Q4							
Construction					Q1Q2Q3					

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



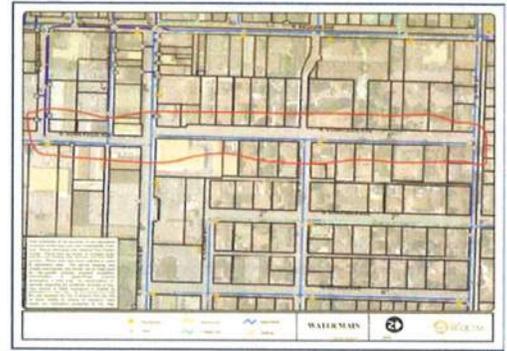
### North and South Sunnyside - Bell to Fir

**Project Number:** WTR-056DS **Historical Project Number**

**Project Location:** North and South Sunnyside from Bell to Fir

**Project Description:**  
 Replacement of a 10" water main.

**Project Benefit:**  
 Replaces AC/Galvanized pipe with a 10" PVC.



	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering	53									53
Construction	157	481						481		638
<b>Total Project Costs - Inflated \$</b>	<b>210</b>	<b>481</b>						<b>481</b>		<b>691</b>
<b>Project Funding Sources</b>										
Loan - DOH SRF	201	440						440		641
Revenue - GFC Water	9	41						41		50
<b>Total Project Funding - Inflated \$</b>	<b>210</b>	<b>481</b>						<b>481</b>		<b>691</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering										
Construction		Q1Q2Q3Q4								

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Port Williams Well No.4

**Project Number:** WTR-039SC

**Historical Project Number** S-1

**Project Location:** A point from the intersection of Port Williams Rd and N Brown Rd, West approximately 450 feet, and then North approximately 175 feet

**Project Description:**

Development of a fourth well at the Port Williams Wellfield is part of the long term development of that facility in accordance with the City's current Port Williams water rights.

**Project Benefit:**

Port Williams Well No. 4 will help Sequim to gradually eliminate use of surface water from the Dungeness River as a source of supply, except on an emergency basis.



	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering							871	871		871
Construction							218	218		218
<b>Total Project Costs - Inflated \$</b>							<b>1,089</b>	<b>1,089</b>		<b>1,089</b>
<b>Project Funding Sources</b>										
Revenue - GFC Water							1,089	1,089		1,089
<b>Total Project Funding - Inflated \$</b>							<b>1,089</b>	<b>1,089</b>		<b>1,089</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering							Q1			
Construction							Q2Q3			

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Pressure Relief Valve

**Project Number:** WTR-023DS

**Historical Project Number:** D-19

**Project Location:** From the intersection of Sequim-Dungeness Wy and Rainview Ln, North on Sequim-Dungeness Wy approximately 560 feet

**Project Description:**

Project D-19, the City will install pressure relief valve stations at yet-to-be-determined locations in the 500 Pressure Zone, the 420 Pressure Zone, and the 350 Pressure Zone to provide protection from overpressure if a PRV in a higher Pressure Zone is stuck open. It is anticipated that the PRVs will be located near the lowest elevation points in the 500 and 350 Pressure Zones. The PRV station for the 420 Zone will be located at the 420 Reservoir site.

**Project Benefit:**

The project will reduce the risk of damage to water mains, water meters and to customer-owned plumbing that could result from over-pressurization of a gravity-fed distribution system.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Construction		107						107		107
<b>Total Project Costs - Inflated \$</b>		<b>107</b>						<b>107</b>		<b>107</b>
<b>Project Funding Sources</b>										
Revenue - Water		107						107		107
<b>Total Project Funding - Inflated \$</b>		<b>107</b>						<b>107</b>		<b>107</b>
<b>Project Timeline Phase</b>										
Construction		Q3								

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Repurpose the 500,000 Gallon Reservoir

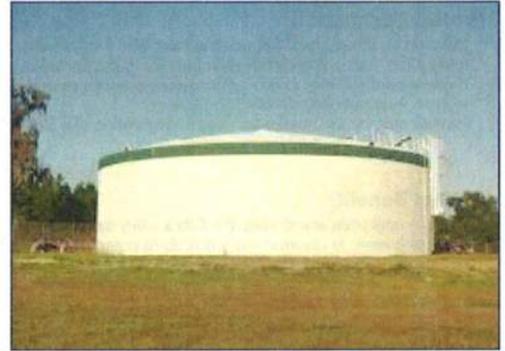
**Project Number:** WTR-050ST

**Historical Project Number** ST-4

**Project Location:** TBD

**Project Description:**

Under Project ST-4, Sequim water managers will commission a study on potential uses for the currently idle 500,000 gallon reservoir located on the site of the 420 Reservoir. It is a partially-buried concrete tank with a floating cover. The existing reservoir has significant leaks and its overflow elevation is below the 1.7 MG Reservoir. Potential uses that will be studied include rehabilitation of the existing reservoir with operation below system grade, construction of a new reservoir on the site, and use of the existing reservoir for storage of reclaimed water.



**Project Benefit:**

Resumption of service for the 0.5MG reservoir would expand total storage against future growth in demand with the service area.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Study	24									24
Final Report	3									3
Construction				239				239		239
<b>Total Project Costs - Inflated \$</b>	<b>27</b>			<b>239</b>				<b>239</b>		<b>266</b>
<b>Project Funding Sources</b>										
Revenue - Water	26			239				239		265
<b>Total Project Funding - Inflated \$</b>	<b>26</b>			<b>239</b>				<b>239</b>		<b>265</b>
<b>Project Timeline Phase</b>										
Study										
Final Report										
Construction				Q2Q3Q4						

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## SCADA Upgrade Report

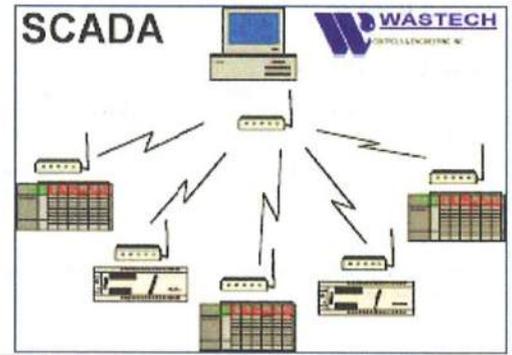
**Project Number:** WTR-034MI

**Historical Project Number** MI-1

**Project Location:** City-wide

**Project Description:**

Develop an inventory of the existing telemetry for the water and sewer utilities, recommend a plan for their integration, and prepare cost estimates for implementation.  
 Explore potential methods of communications with remote sites, including fiber optics, cellular and integration with an Automatic Meter Reading System.  
 Review options for the location and configuration of a SCADA Master Control Center.



**Project Benefit:**

SCADA upgrades would keep the City's utility systems current with available monitoring technology. It would allow operators to respond more quickly to potential problems, promote efficient use of energy resources, and reduce operation and maintenance costs for utilities.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Study			57						57	57
Final Report										
<b>Total Project Costs - Inflated \$</b>			<b>57</b>						<b>57</b>	<b>57</b>
<b>Project Funding Sources</b>										
Revenue - Water			57						57	57
<b>Total Project Funding - Inflated \$</b>			<b>57</b>						<b>57</b>	<b>57</b>
<b>Project Timeline Phase</b>										
Study				Q4	Q1					
Final Report					Q1					

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Simdars Road Booster Station

**Project Number:** WTR-004BS      **Historical Project Number:** BS-3

**Project Location:** Simdars Rd North of Solana Pky approximately 350 feet

**Project Description:**

This project will improve capacity to transfer water from the Port Williams Wellfield in the 350 Pressure Zone to the 420 Pressure Zone under high demand conditions. The proposed Simdars Road Booster Station would have a reliable capacity of 600gpm with three booster pumps.



**Project Benefit:**

The City has identified concerns with water age and lack of turnover in the Solana Reservoir, resulting in a low chlorine residuals in water withdrawn from the reservoir. The Solana area is located at a dead end with supply coming from a single direction. The booster station would provide redundant supply to the Solana development, which is currently served by a single line along Brownfield Road. This project would also improve water quality in the Solana Reservoir by allowing the City to deliver water more directly from the Port Williams Wellfield.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering			62						62	62
Construction				411	68				479	479
<b>Total Project Costs - Inflated \$</b>			<b>62</b>	<b>411</b>	<b>68</b>				<b>541</b>	<b>541</b>
<b>Project Funding Sources</b>										
Revenue - Water			62	411	68				541	541
<b>Total Project Funding - Inflated \$</b>			<b>62</b>	<b>411</b>	<b>68</b>				<b>541</b>	<b>541</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering			Q3							
Construction				Q3Q4	Q1					

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



2017-2022 Capital Improvement Program - Water Restricted Fund  
 Water System Comprehensive Plan Program – Project Detail

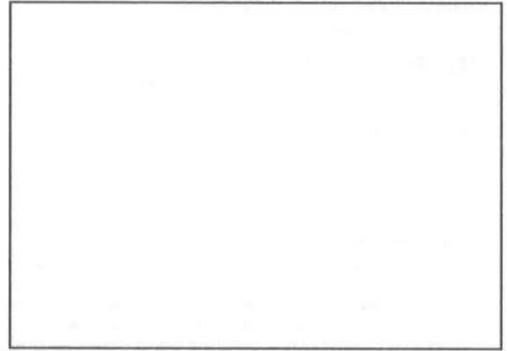
### Utility Rate Study - Water AND Sewer

**Project Number:** WTR-062MI

**Historical Project Number**

**Project Location:**

**Project Description:**



**Project Benefit:**

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Study				50					50	50
<b>Total Project Costs - Inflated \$</b>				<b>50</b>					<b>50</b>	<b>50</b>
<b>Project Funding Sources</b>										
Revenue - Sewer				25					25	25
Revenue - Water				25					25	25
<b>Total Project Funding - Inflated \$</b>				<b>50</b>					<b>50</b>	<b>50</b>
<b>Project Timeline Phase</b>										
Study				Q1Q2Q3Q4						

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$





## West Prairie from S Sequim to S 5th

**Project Number:** WTR-032DS

**Historical Project Number:** D-27

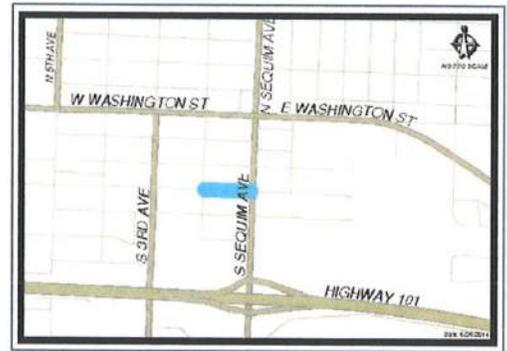
**Project Location:** W Prairie St from S 2nd Ave to S Sequim Ave

**Project Description:**

<div>Relplace and upsize water line on Prairie Street from South Sequim Ave to 5th Ave as part of the complete street revitalization project</div>

**Project Benefit:**

No Benefit



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering			22	23	24	25		94		94
Construction				286	299	312	326	1,223		1,223
<b>Total Project Costs - Inflated \$</b>			<b>22</b>	<b>309</b>	<b>323</b>	<b>337</b>	<b>326</b>	<b>1,317</b>		<b>1,317</b>
<b>Project Funding Sources</b>										
Revenue - GFC Water			11	151	162	170	164	658		658
Revenue - Water			11	157	160	167	162	657		657
<b>Total Project Funding - Inflated \$</b>			<b>22</b>	<b>308</b>	<b>322</b>	<b>337</b>	<b>326</b>	<b>1,315</b>		<b>1,315</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering			Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4				
Construction				Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4			

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## West Washington Street Isolation Valves

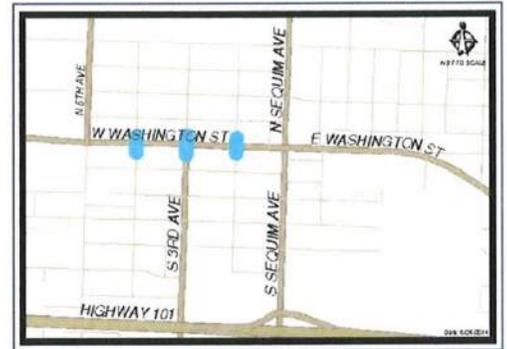
**Project Number:** WTR-031DS

**Historical Project Number:** D-26

**Project Location:**

**Project Description:**

Under Project D-26, the City will add isolation valves to the existing 10 inch diameter water main on West Washington Street, at its intersections with 2nd Avenue, 3rd Avenue and 4th Avenues. This project will add four-way gate valve clusters on the existing 6 inch diameter cross-street mains to allow future upsizing.



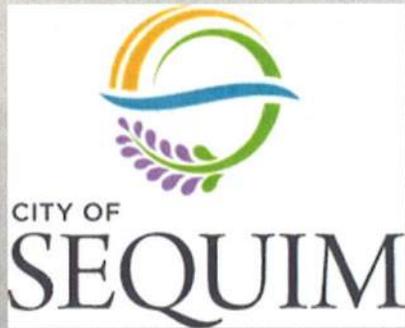
**Project Benefit:**

Future iterations of the Sequim CIP may include project funding to repave the reach of West Washington Street pavement patching done in conjunction with Project D-26.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Engineering				20					20	20
Construction					175				175	175
<b>Total Project Costs - Inflated \$</b>				<b>20</b>	<b>175</b>				<b>195</b>	<b>195</b>
<b>Project Funding Sources</b>										
Revenue - Water				20	175				195	195
<b>Total Project Funding - Inflated \$</b>				<b>20</b>	<b>175</b>				<b>195</b>	<b>195</b>
<b>Project Timeline Phase</b>										
Engineering							Q2			
Construction						Q3	Q4	Q1		

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$

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- Historical Overview of Sequim Wastewater Utility Capital Improvements
- Wastewater Capital Facility Inventory
- Capital Improvement Planning and the General Sewer Master Plan
- Future Water Demand
- Level of Service Standards

## **CAPITAL IMPROVEMENT PROGRAM 2017 – 2022**

### *Chapter 4*

### *Sewer Restricted Fund Projects*

### **Historical Overview of Sequim Wastewater Utility Capital Improvements**

Construction of the City's wastewater collection system, including the main trunk line to the wastewater treatment plant, began in the 1930s. Expansion of the collection system intensified between 1950 and mid-1970s and continues today. The wastewater treatment plant was constructed at the current site of the City's Water Reclamation Facility (WRF) in 1966. Its capacity was expanded further in 1983. As part of a 1994 settlement agreement with the state, Sequim agreed to upgrade its treatment process to produce Class A reclaimed water<sup>1</sup>, and to advocate for local application of reclaimed water for non-potable applications.

The City received beneficial aid toward meeting its water reuse goals through a special state appropriation in 1997. The subsequent agreement with the Department of Ecology required the City to implement its water reuse program by:

- 1) completing construction of the WRF;
- 2) demonstrating progress toward 100 percent beneficial use of reclaimed water;
- 3) improving stream flows in the Dungeness River; and
- 4) developing a sustainable supply of reclaimed water for irrigation.

Extensive improvements in the WRF's disinfection processes allowed the City to meet its Class A reclaimed water production obligations in 1998. Sequim's Water Reuse Demonstration Site, was developed on an adjacent 29-acre parcel north of Carrie Blake Park and provides a public example of how reclaimed water works on a variety of irrigation equipment and plant types. Beginning in 2010, the WRF was upgraded further to increase its treated wastewater output.

### **Wastewater Capital Facility Inventory**

Sequim's wastewater collection system includes about seventy-three miles of sewer line, three City owned and operated pump stations, a privately-owned but City-operated pump station and force main serving Sequim Bay Lodge and Sequim Bay State Park, the Water Reclamation Facility, the outfall pipe from the WRF to the Strait of Juan de Fuca, and the aforementioned Water Reuse Demonstration Site that includes about 4 miles of reclaimed water distribution system piping.

### **Capital Improvement Planning and the General Sewer Master Plan**

The Sequim General Sewer Plan is one of four adopted Capital Facility Plans that provide long range policy guidance for the development of capital improvements. It reveals a long-term strategy for the City's sewer during a 6-year and 20-year planning period.

The Master Plan includes project recommendations that would allow Sequim to become a regional wastewater treatment service provider. The Master Plan evaluates the conveyance and treatment improvements that would be required to accept wastewater flows from Sun Land, Blyn, and Carlsborg collectively.

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<sup>1</sup> Class A reclaimed water is oxidized, coagulated, filtered, and disinfected wastewater. Such wastewater is considered adequately disinfected if the median number of total coliform organisms does not exceed 2.2 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed, and the number of total coliform organisms does not exceed 23 per 100 milliliters in any sample. (Washington State Dept. of Health, *Water Reclamation and Reuse Standards*. 1997.)

### **Level of Service Standards**

The wastewater utility's performance standards are established in its current National Pollutant Discharge Elimination System (NPDES) permit. The NPDES was established in Section 402 of the Federal Clean Water Act (CWA). The Washington State Department of Ecology administers NPDES permits on behalf of the US Environmental Protection Agency.

Among its many provisions, the NPDES permit sets the wastewater discharge standards that are shown in the table below. These standards are consistent with the treatment processes necessary to produce Class A reclaimed water. The permit also allows discharge of the treated effluent to either Bell Creek in Carrie-Blake Park or to the Strait of Juan de Fuca.

In addition to Federal and State regulatory standards, Sequim Municipal Code sections 13.28 through 13.80 prescribe further regulations for the City's sewer system. This multi-layered regulatory framework is the primary driver defining the six-year CIP project inventory, thus ensuring the continued NPDES compliance.

**Table WW-1  
Sequim Wastewater Utility  
NPDES Permit Discharge Standards**

<b>Parameter</b>	<b>Average Monthly Standard</b>
Biochemical Oxygen Demand (Bod5)	30mg/L 200lbs/day 85% removal
Total Suspended Solids	30mg/L 200lbs/day 85% removal
Turbidity	2 NTU
Ammonia - N	3.3mg/L
Nitrogen	10mg/L
	<b>Daily Maximum</b>
pH	<9
	<b>7-Day Median</b>
Total Coliform Bacteria	2.2/100 mL
Total Maximum Flow – 0.8mgd	

### **Future Wastewater Treatment Capacity Requirements**

Wastewater facility capital improvements have been identified by first determining the quantity of wastewater generated by the system's contributing sources. Wastewater comes primarily from single and multifamily homes, permanent mobile homes and group housing such as nursing homes. Lesser amounts come from commercial, industrial and public facility land uses.

To estimate future system demand, the average annual flow contributed by a single-family household is expressed as an Equivalent Residential Unit (ERU) in gallons per day (gpd). Non-residential wastewater generation is calculated by dividing the total flow per land use category by the average flow per ERU. Thus, the ERU allows sewer flows from all sources to be expressed in comparable terms.

Infiltration and inflow entering the sewer system during periods of high groundwater levels also contribute to the wastewater treatment burden. Infiltration is groundwater that enters the sanitary sewer through leaking pipes, pipe joints and manhole walls. Infiltration rates vary seasonally in response to groundwater levels. The highest rates of infiltration occur after significant storm events. Inflow is surface water that enters the sewer system from yard, roof and footing drains, from cross connections with storm drains and through manhole covers. Peak inflow also occurs during heavy storm events. Inflow and Infiltration (I/I) are usually

combined and measured in gallons per acre per day. Sequim's winter residential water consumption data for the period of 2009 to 2011 were used to estimate the baseline and projected discharge to the sewer system. Winter water use omits the effects of irrigation runoff, giving a more accurate reflection of annualized average daily flow.

For 2011, the average daily dry weather flow of approximately 564,000gpd was adjusted to exclude 14,000gpd of I/I. Using the values of 550,000 gpd for base flow and 110 gpd per ERU, there were about 5,000 total sewer system ERUs in 2011. With an estimated 2011 population of 6,740 sewer-system customers and average of 1.9 persons per residence, the total number of single-family residential ERUs is approximately 3,550. Non-residential ERUs, therefore, equaled about 1,450.

The projected population to be served by the Sequim wastewater utility for 2020 and for 2035 assumed:

- population will increase at an annual rate of 2 percent in the incorporated area and in the UGA;
- homes with on-site septic systems within the city limits will connect to the sewer system at an annual rate of 1 percent; and
- Sequim will annex additional regions of the UGA at an annual rate of 4 percent, and all such annexed areas will connect to the sewer utility.

Table WW-2 summarizes the sewer service population and flow projections for the Six-Year CIP period and Comprehensive Plan 20-year periods.

**Table WW-2  
Baseline and Projected Wastewater Population and Flow**

Parameter	2011 Baseline	2020 Projection	2035 Projection
Population (city limits)	6,740	8,770	12,990
Sewer Service Population	6,743	9,100	14,120
Total ERUs	5,000	6,550	9,900
Average Annual Flow (mgd)	0.66	0.83	1.22

These projections support the reasoning behind the selection of CIP scheduled for the 2017-2022 period:

- 1) upgrades to the WRF and pump stations are needed to replace equipment that is near the end of its life-cycle, or lags current technology;
- 2) collection system upgrades are needed to replace deteriorated materials and thus reduce I/I; and
- 3) improvements to the reclaimed water distribution network are needed to expand application of reclaimed water for irrigation and non-potable use. Capital Improvement initiatives with the six-year program are not intended primarily to support new development in the UGA or to advance Sequim's potential position as a regional provider of wastewater treatment services.



2017-2022 - Sewer and Waste Water System Projects  
 Project Summary, Schedule, and Estimated Cost

	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan Total
<b>Collection System Improvements</b>							
SRR-001CS Cedar Street Sewer Improvement			308	1,289			1,597
SRR-003CS Doe Run Lift Station	261						261
SRR-014CS East Fir Street Sewer Replacement			262	1,323	713		2,298
SRR-002CS Etta Street Sewer Improvements		195					195
SRR-013CS North Blake Avenue Sewer Improvements				213			213
SRR-009CS Sunnyside Sewer Improvement	517						517
SRR-040CS Upgrade sewer system in 4th Avenue from Washington Street to Cedar Street	164						164
SRR-008CS West Fir Street Sewer Improvement	204	426	223				853
SRR-007CS WRF Influent Trunk Line Pipeline Repair/Replacement			201	166	1,572		1,939
<b>Miscellaneous Improvements</b>							
SRR-041MI General Sewer Plan Update		75					75
<b>Reclaim Water System Improvements</b>							
SRR-024RW Reclaimed Water Network Expansion						373	373
SRR-042RW Reclaimed Water Storage Feasibility Study		109					109
SRR-025RW WRF Reclaimed Water Pumping Facility Improvements				733			733
<b>Waste Treatment Improvements</b>							
SRR-035W Aerobics Digester Capacity Upgrades	157		1,977				2,134
SRR-034W Class A Biosolids Handling & Distribution Center				273	999	1,044	2,316
SRR-004W Outfall Pipeline Repair/Replc						1,551	1,551
SRR-036W WRF Headworks Modifications No 2			372				372
SRR-038W WRF Odor Control	137						137
<b>Project Total By Year</b>	<b>1,440</b>	<b>805</b>	<b>3,343</b>	<b>3,997</b>	<b>3,284</b>	<b>2,968</b>	<b>15,837</b>



2017-2022 Capital Improvement Program - Sewer Restricted Fund  
 Sewer System Comprehensive Plan Program – Project Detail

## Aerobics Digester Capacity Upgrades

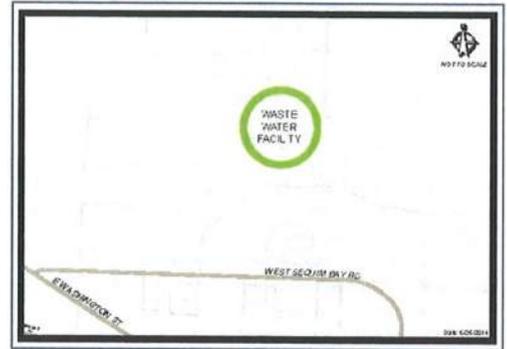
**Project Number:** SRR-035W

**Historical Project Number:** W-8

**Project Location:** 247 Schmuck Road

**Project Description:**

It is anticipated that two new 100,000-gallon cells will be constructed with additional blowers and diffusers for aeration, and a rotary screen thickener will be provided to thicken WAS upstream of the digester.



**Project Benefit:**

This project will increase the capacity of the existing aerobic digestion system by adding additional tank space.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering	40	157						157		197
Construction				1,977				1,977		1,977
<b>Total Project Costs - Inflated \$</b>	<b>40</b>	<b>157</b>		<b>1,977</b>				<b>2,134</b>		<b>2,174</b>
<b>Project Funding Sources</b>										
Loan - DOE SRF	40	138						138		178
Public/Private Partnership Private Contribution		12		125				137		137
Revenue - GFC Sewer		6		1,852				1,858		1,858
<b>Total Project Funding - Inflated \$</b>	<b>40</b>	<b>156</b>		<b>1,977</b>				<b>2,133</b>		<b>2,173</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering		Q1Q2								
Construction				Q2Q3Q4						

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



## Cedar Street Sewer Improvement

**Project Number:** SRR-001CS                      **Historical Project Number** CS-1

**Project Location:** Alley between W. Cedar and W. Spruce between N. Seal and N. 7th

**Project Description:**

This project replaces existing sewer pipe located in the alley between West Cedar Street and West Spruce Street between North Seal Street and North 7th Avenue. This project includes installing approximately 3,900 LF of 12-inch pipe.

**Project Benefit:**

This project will equipped the City with the ability to accommodate anticipated peak hour flows increased City flows for the downtown corridor.



	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering				308					308	308
Construction					1,289				1,289	1,289
<b>Total Project Costs - Inflated \$</b>				<b>308</b>	<b>1,289</b>				<b>1,597</b>	<b>1,597</b>
<b>Project Funding Sources</b>										
Revenue - GFC Sewer				157	645				802	802
Revenue - Sewer				151	645				796	796
<b>Total Project Funding - Inflated \$</b>				<b>308</b>	<b>1,290</b>				<b>1,598</b>	<b>1,598</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q3Q4	Q1Q2					
Construction					Q1Q2Q3Q4					

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



2017-2022 Capital Improvement Program - Sewer Restricted Fund  
 Sewer System Comprehensive Plan Program – Project Detail

## Class A Biosolids Handling & Distribution Center

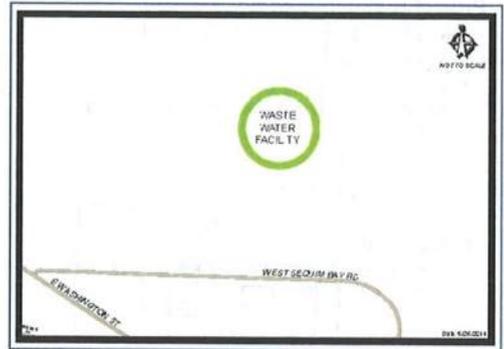
**Project Number:** SRR-034W

**Historical Project Number:** W-7

**Project Location:** 247 Schmuck Road

**Project Description:**

This project will include construction of new facilities to increase public access to the Class A biosolids produced at the WRF. Facilities will include a large, covered area for raw biosolids storage, smaller holding areas for biosolids and various amendments, and a small area for public access and biosolids loading.



**Project Benefit:**

Facilities will be designed to minimize odors and will include appropriate stormwater controls.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering					273		1,044	1,317		1,317
Construction						999		999		999
<b>Total Project Costs - Inflated \$</b>					<b>273</b>	<b>999</b>	<b>1,044</b>	<b>2,316</b>		<b>2,316</b>
<b>Project Funding Sources</b>										
Public/Private Partnership Private Contribution					17	63	66	146		146
Revenue - GFC Sewer					256	936	978	2,170		2,170
<b>Total Project Funding - Inflated \$</b>					<b>273</b>	<b>999</b>	<b>1,044</b>	<b>2,316</b>		<b>2,316</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering					Q1Q2		Q1Q2Q3			
Construction						Q2Q3Q4				

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



## Doe Run Lift Station

**Project Number:** SRR-003CS

**Historical Project Number** CS-3

**Project Location:** Doe Run Rd.

**Project Description:**

The existing Doe Run Lift Station consists of a Smith and Loveless package lift station equipped with two 100 gpm, 25-hp non-clog centrifugal pumps which pump sewage from the south and southwest areas of Bell Hill to a manhole in the gravity sewer run on Fox Hollow Road. This project would include construction of a new lift station to serve the existing service area.



**Project Benefit:**

This project fulfills elements of the General Sewer Plan. This project will provide the City with the capability to serve additional areas west or south of the Bell Hill/Bell Gates community, eliminating the risk associated with the existing lift station equipment.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering		89								89
Construction		277	261					261		538
<b>Total Project Costs - Inflated \$</b>		<b>366</b>	<b>261</b>					<b>261</b>		<b>627</b>
<b>Project Funding Sources</b>										
Loan - DOE SRF		366	223					223		589
Revenue - GFC Sewer			38					38		38
<b>Total Project Funding - Inflated \$</b>		<b>366</b>	<b>261</b>					<b>261</b>		<b>627</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering										
Construction			Q1Q2Q3							

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



## East Fir Street Sewer Replacement

**Project Number:** SRR-014CS      **Historical Project Number** CS-14

**Project Location:** E. Fir St., Sequim Ave. to Blake Ave.

**Project Description:**  
 This project will replace approximately 4,600 LF of aging sewer pipe along East Fir Street with new 18-inch-diameter PVC sewer pipe.



**Project Benefit:**  
 This project fulfills elements of the General Sewer Plan. This project will be coordinated with the East Fir St Water Main Replacement (WTR-019DS) and the East Fir St Rehabilitation (STR-061FI) projects.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering				262	181			443		443
Construction					1,142	713		1,855		1,855
<b>Total Project Costs - Inflated \$</b>				<b>262</b>	<b>1,323</b>	<b>713</b>		<b>2,298</b>		<b>2,298</b>
<b>Project Funding Sources</b>										
Public/Private Partnership				39	199	107		345		345
Private Contribution										
Revenue - GFC Sewer				110	537	291		938		938
Revenue - Sewer				104	544	292		940		940
<b>Total Project Funding - Inflated \$</b>				<b>253</b>	<b>1,280</b>	<b>690</b>		<b>2,223</b>		<b>2,223</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q4	Q1					
Construction					Q2Q3Q4	Q2Q3Q4				

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



## Etta Street Sewer Improvements

**Project Number:** SRR-002CS      **Historical Project Number** CS-2

**Project Location:** Etta St from S Sequim Ave to S Sunnyside Ave

**Project Description:**

This project will address the deteriorating concrete sewer line along Etta Street between South Sequim Avenue and South Sunnyside Avenue. This line was identified in the 2006 Comprehensive Plan to be in need of replacement due to deteriorating aggregate, however, this pipe has not been rehabilitated. This project will install approximately 550 LF of 12-inch pipe between South Sequim Avenue and South Sunnyside Avenue.



**Project Benefit:**

While the line currently has sufficient capacity, it is in the downtown corridor and is projected to need upsizing to accommodate the projected flows for the City and Carlsborg.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering			39					39		39
Construction			156					156		156
<b>Total Project Costs - Inflated \$</b>			<b>195</b>					<b>195</b>		<b>195</b>
<b>Project Funding Sources</b>										
Revenue - GFC Sewer			97					97		97
Revenue - Sewer			97					97		97
<b>Total Project Funding - Inflated \$</b>			<b>194</b>					<b>194</b>		<b>194</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering			Q1							
Construction			Q1Q2							

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



## General Sewer Plan Update

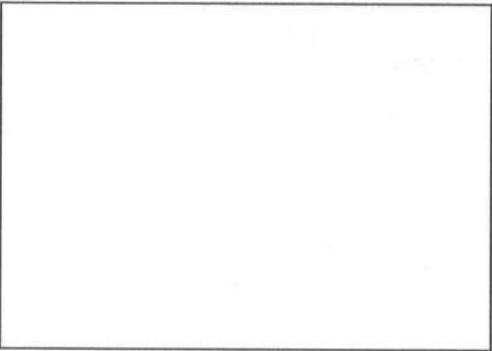
**Project Number:** SRR-041MI

**Historical Project Number**

**Project Location:**

**Project Description:**

The General Sewer Plan provides a long-term planning strategy for the City's sewer utility for the 6-year and 20-year planning periods.



**Project Benefit:**

The proposed General Sewer Plan will replace the adopted plan developed in 2012.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering			75						75	75
<b>Total Project Costs - Inflated \$</b>			75						75	75
<b>Project Funding Sources</b>										
Revenue - GFC Sewer			75						75	75
<b>Total Project Funding - Inflated \$</b>			75						75	75
<b>Project Timeline Phase</b>										
Preliminary Engineering			Q1Q2Q3Q4							

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



## North Blake Avenue Sewer Improvements

**Project Number:** SRR-013CS

**Historical Project Number:** CS-13

**Project Location:** N. Blake Ave. between E. Willow and Oak Streets

**Project Description:**

This project will replace sewer pipe along North Blake Street between East Willow and East Oak Streets. This project would install approximately 300 LF of 18-inch HDPE sewer pipe via open cut or pipe bursting methods.

**Project Benefit:**

Eliminates the lack of capacity in the existing 15-inch pipe to convey both the projected City and Carlsborg peak hour flows.



	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering					42				42	42
Construction					171				171	171
<b>Total Project Costs - Inflated \$</b>					<b>213</b>				<b>213</b>	<b>213</b>
<b>Project Funding Sources</b>										
Developer Contribution					213				213	213
<b>Total Project Funding - Inflated \$</b>					<b>213</b>				<b>213</b>	<b>213</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering										Q2
Construction										Q3

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



## Outfall Pipeline Repair/Replc

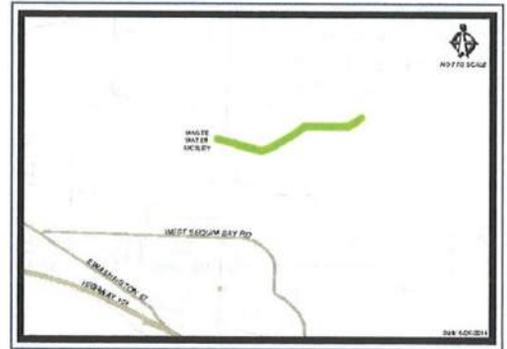
**Project Number:** SRR-004W

**Historical Project Number** CS-4

**Project Location:**

**Project Description:**

This project will first assess the condition of the existing outfall line between the WRF and the new bridge across the Sequim Bay tidal flats immediately east of the WRF. The existing concrete line was installed in 1965. If deemed in poor condition or in need of replacement, the project would include replacing the concrete outfall pipe. If replacement is required approximately 3,400 LF of 24-inch pipe will be installed and the existing pipe will be abandoned in place or wastehauled.



**Project Benefit:**

This project will replace critical infrastructure that has reached the end of its service life.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering							310	310		310
Construction							1,241	1,241		1,241
<b>Total Project Costs - Inflated \$</b>							<b>1,551</b>	<b>1,551</b>		<b>1,551</b>
<b>Project Funding Sources</b>										
Public/Private Partnership Private Contribution							98	98		98
Revenue - GFC Sewer							721	721		721
Revenue - Sewer							732	732		732
<b>Total Project Funding - Inflated \$</b>							<b>1,551</b>	<b>1,551</b>		<b>1,551</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering										
Construction										

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$





2017-2022 Capital Improvement Program - Sewer Restricted Fund  
 Sewer System Comprehensive Plan Program – Project Detail

## Reclaimed Water Storage Feasibility Study

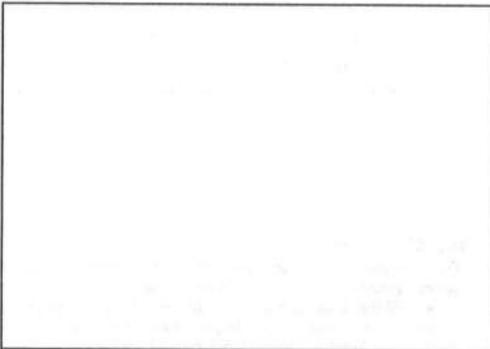
**Project Number:** SRR-042RW

**Historical Project Number**

**Project Location:**

**Project Description:**

This project is a study to evaluate the feasibility of developing a reservoir above the WRF to the north with the purpose of agricultural irrigation.



**Project Benefit:**

This project will provide help reduce dependency on irrigation water diverted and conveyed from the Dungeness River.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering			109						109	109
<b>Total Project Costs - Inflated \$</b>			<b>109</b>						<b>109</b>	<b>109</b>
<b>Project Funding Sources</b>										
Revenue - GFC Sewer			55						55	55
Revenue - Sewer			55						55	55
<b>Total Project Funding - Inflated \$</b>			<b>110</b>						<b>110</b>	<b>110</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering			Q1Q2Q3Q4							

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



## Sunnyside Sewer Improvement

**Project Number:** SRR-009CS

**Historical Project Number** CS-9

**Project Location:** Sunnyside Ave.

**Project Description:**

This project will replace the sewer line along both North Sunnyside Avenue. As part of this project, sewer pipe north of Washington Street along Sunnyside Avenue will be moved to within the Sunnyside right-of-way. Approximately 1,500 LF of 18-inch HDPE sewer pipe will be installed in the north and south Sunnyside Avenue right-of-way.

**Project Benefit:**

This project fulfills elements of the General Sewer Plan. This is a troublesome area that is undersized for existing flows, especially in an area designated for significant proposed commercial growth.



	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering		55								55
Construction		157	517					517		674
<b>Total Project Costs - Inflated \$</b>		<b>212</b>	<b>517</b>					<b>517</b>		<b>729</b>
<b>Project Funding Sources</b>										
Loan - DOE SRF		203	311						311	514
Public/Private Partnership Private Contribution			177						177	177
Revenue - GFC Sewer		9	29						29	38
<b>Total Project Funding - Inflated \$</b>		<b>212</b>	<b>517</b>					<b>517</b>		<b>729</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering										
Construction			Q1Q2Q3Q4							

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



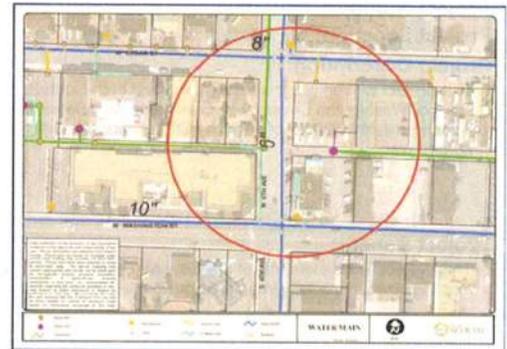
## Upgrade sewer system in 4th Avenue from Washington Street to Cedar Street

**Project Number:** SRR-040CS **Historical Project Number**

**Project Location:** N 4th Ave from E Washington St to E Cedar St

**Project Description:**  
 Replace sewer line in 4th Avenue from Washington Street to Cedar Street.

**Project Benefit:**  
 This project increases sewer collection capacity by eliminating storm water inflow and it will improved access to sewer collection system for maintenance. This project will be coordinated with the 4th Ave Water Line Replacement (WTR-059DS).



	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering		25							25	25
Construction		139							139	139
<b>Total Project Costs - Inflated \$</b>		<b>164</b>							<b>164</b>	<b>164</b>
<b>Project Funding Sources</b>										
Revenue - GFC Sewer		82							82	82
Revenue - GFC Water		82							82	82
Revenue - Sewer										
Revenue - Water										
<b>Total Project Funding - Inflated \$</b>		<b>164</b>							<b>164</b>	<b>164</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering		Q1Q2Q3Q4								
Construction		Q1Q2Q3Q4								

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



## West Fir Street Sewer Improvement

**Project Number:** SRR-008CS

**Historical Project Number:** CS-8

**Project Location:** Portions of Fir St. and alley between 4th Ave. and N. Sequim Ave.

**Project Description:**

This project includes replacing the existing sewer line along Fir Street between North 4th Avenue and North Sequim Avenue with approximately 2,800 LF of 12-inch pipe and the installation of new sewer pipe between North 5th Avenue and North 4th Avenue.

**Project Benefit:**

City staff has expressed an interest in upsizing and/or rehabilitating Fir Street between 2nd Avenue North and North Sunnyside Street.



	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Construction		204	426	223				853		853
<b>Total Project Costs - Inflated \$</b>		<b>204</b>	<b>426</b>	<b>223</b>				<b>853</b>		<b>853</b>
<b>Project Funding Sources</b>										
Revenue - GFC Sewer		102	213	112				427		427
Revenue - Sewer		102	213	111				426		426
<b>Total Project Funding - Inflated \$</b>		<b>204</b>	<b>426</b>	<b>223</b>				<b>853</b>		<b>853</b>
<b>Project Timeline Phase</b>										
Construction		Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4						

Source: General Sewer Plan  
Amounts in Thousands Inflated \$



2017-2022 Capital Improvement Program - Sewer Restricted Fund  
 Sewer System Comprehensive Plan Program – Project Detail

## WRF Headworks Modifications No 2

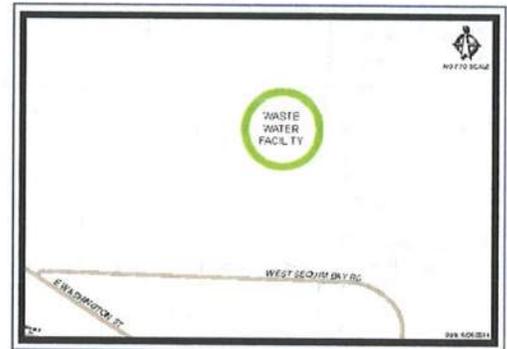
**Project Number:** SRR-036W

**Historical Project Number** W-9

**Project Location:** 247 Schmuck Road

**Project Description:**

This project will replace or potential rebuild the existing HYCOR mechanical fine screen at the WRF headworks. The existing screen was installed in 1998 and will be nearing the end of its service life. Following its installation, this new or rebuilt screen will serve as the primary headworks screen.



**Project Benefit:**

The unit will be replaced with a new mechanical fine screen model that meets the requirements set forth in WAC 173-308.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering				74					74	74
Construction				298					298	298
<b>Total Project Costs - Inflated \$</b>				<b>372</b>					<b>372</b>	<b>372</b>
<b>Project Funding Sources</b>										
Public/Private Partnership Private Contribution				23					23	23
Revenue - Sewer				349					349	349
<b>Total Project Funding - Inflated \$</b>				<b>372</b>					<b>372</b>	<b>372</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q3						
Construction				Q3Q4						

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



## WRF Influent Trunk Line Pipeline Repair/Replacement

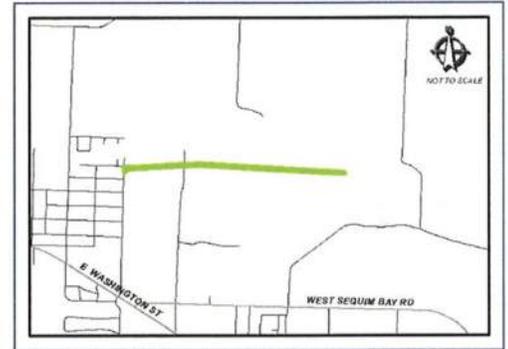
**Project Number:** SRR-007CS

**Historical Project Number:** CS-7

**Project Location:** Blake Road to 247 Schmuck Road

**Project Description:**

The existing pipeline will be removed and replaced with approximately 5,000 LF of 24-inch HDPE pipe in order to accommodate projected flows for the City and surrounding areas. The project will also include the installation of new manholes approximately every 500 feet along the new pipe section.



**Project Benefit:**

This project will improve the condition of the existing trunk line between North Blake Road and the WRF.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering				201	166				367	367
Construction						1,572		1,572		1,572
<b>Total Project Costs - Inflated \$</b>				<b>201</b>	<b>166</b>	<b>1,572</b>		<b>1,939</b>		<b>1,939</b>
<b>Project Funding Sources</b>										
Public/Private Partnership Private Contribution				13	10	99		122		122
Revenue - GFC Sewer				96	79	747		922		922
Revenue - Sewer				92	77	726		895		895
<b>Total Project Funding - Inflated \$</b>				<b>201</b>	<b>166</b>	<b>1,572</b>		<b>1,939</b>		<b>1,939</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering					Q4	Q1				
Construction							Q2Q3Q4			

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



2017-2022 Capital Improvement Program - Sewer Restricted Fund  
 Sewer System Comprehensive Plan Program – Project Detail

## WRF Odor Control

**Project Number:** SRR-038W

**Historical Project Number**

**Project Location:** 247 Schmuck Road

**Project Description:**  
 Mechanical filtering odor control.



**Project Benefit:**  
 Minimize odor pollution.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Construction		137						137		137
<b>Total Project Costs - Inflated \$</b>		<b>137</b>						<b>137</b>		<b>137</b>
<b>Project Funding Sources</b>										
Public/Private Partnership Private Contribution		9						9		9
Revenue - GFC Sewer		64						64		64
Revenue - Sewer		64						64		64
<b>Total Project Funding - Inflated \$</b>		<b>137</b>						<b>137</b>		<b>137</b>
<b>Project Timeline Phase</b>										
Construction		Q1								

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



## WRF Reclaimed Water Pumping Facility Improvements

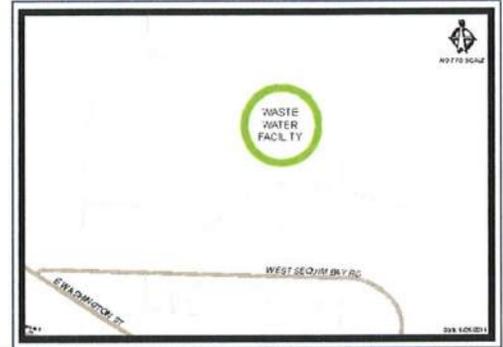
**Project Number:** SRR-025RW

**Historical Project Number:** RW-5

**Project Location:** 247 Schmuck Road

**Project Description:**

This project will reconfigure the reclaimed water pumping system at the WRF to utilize the potential storage of the existing flow through channel.



**Project Benefit:**

Facility improvements such as this one are needed to accommodate a reliable reuse water system.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering					147				147	147
Construction					586				586	586
<b>Total Project Costs - Inflated \$</b>					<b>733</b>				<b>733</b>	<b>733</b>
<b>Project Funding Sources</b>										
Public/Private Partnership Private Contribution					46				46	46
Revenue - GFC Water					344				344	344
Revenue - Sewer					344				344	344
<b>Total Project Funding - Inflated \$</b>					<b>734</b>				<b>734</b>	<b>734</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering					Q2Q3					
Construction					Q3					

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$

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- Capital Improvement Planning and the Transportation Master Plan
- CIP Project Identification Methodology
- Level of Services Standards – Vehicle Travel
- Level of Service Standards – Non-Motorized Travel

## **CAPITAL IMPROVEMENT PROGRAM 2017 – 2022**

### *Chapter 5*

### *Streets Restricted Fund Projects*

**Capital Improvement Planning and the Transportation Master Plan**

The Sequim Transportation Master Plan (TMP) is one of four adopted Capital Facility Plans that provides long range policy guidance for the development of capital improvements. It is also a coordination document, ensuring that transportation decision making is coordinated with the Land Use Element of the Sequim Comprehensive Plan and with the City's other Capital Facility Plans including the Water and Sewer Utilities. The TMP includes a proposed inventory of CIP projects that fulfill the community's intent to rethink Sequim's transportation system. The TMP's guiding principles include:

- Apply non-traditional engineering toward an effective and implementable TMP;
- Accommodate the movement of people and commerce, not just cars and trucks; and
- Develop transportation standards and infrastructure improvements to serve pedestrian, mobility scooter, and bicycle users.

The TMP informs the development of the Six-Year CIP by identifying and prioritizing projects that support future travel trends. It identified significant characteristics of the current transportation network that will influence those future trends:

- Most of Sequim's streets were designed for vehicle traffic, including freight, and transit movements. Dedicated facilities for non-motorized use (sidewalks, bike lanes, and separated trails) are incomplete.
- Midday is Sequim's 'Rush Hour' due to the city's demographic skew toward an older population and its high proportion of retail space.
- Most vehicle trips are local. Almost 95 percent of trips originate or have their destination in Sequim.

**CIP Project Identification Methodology**

To guide selection of the Six-Year CIP project inventory and define their priorities, the TMP included a set of metrics that reflect a consensus among stakeholder interests.

Measurement	Purpose
Addresses Capacity Constraints	maintain vehicular travel LOS policy
	comply with basic GMA requirements
Network Completeness	advances non-motorized travel priority network
Safety	address injury collision history
	corrects sight-distance or modal conflict
Active Living	encourages walking, biking, or use of mobility carts
	connects to city park or other public amenity
Realistic Cost	aligns with City budget constraints w/in 6 year period
Project Readiness	can be implemented within a 6 year time period
	complements water and sewer utility CIP initiatives
Economic Development	accommodates major economic generators
	encourages development of small businesses

### **Level of Service Standards – Vehicular Travel**

The TMP identifies a vehicular movement standard of LOS D (High density of motorists, but stable flow) for most roadways, LOS E (Near-capacity operation; low but uniform speed) for Washington Street outside the core area, and LOS F (Over capacity, with delays) for Washington Street within the core area (5th Avenue to Brown Road). The lower standard for Washington Street recognizes that where it passes through Downtown Sequim, capacity enhancements may be incompatible with other priorities such as providing wide sidewalks, preserving on-street parking, and minimizing distance between pedestrian crossings. As such, the Six-Year CIP includes improvement initiatives for Prairie and Fir Streets to allow these roadways to carry more east-west local traffic, thus reducing congestion along Washington Street.

### **Level of Service Standards – Non-Motorized Travel**

The Six-Year CIP also includes project initiatives to create safe routes for cyclists, along with a cohesive and ADA-compliant sidewalk network that improves safety and accessibility for pedestrians and mobility scooter users. Many of these initiatives resulted from the TMP's introduction of a layered transportation system in which individual travel modes are prioritized on different roadway types. They require specific infrastructure improvements.

Sidewalks in Sequim are shared by pedestrians and mobility scooter users. The pedestrian/mobility scooter priority layer provides connections to Sequim's downtown core, commercial and retail zones, medical facilities, schools and parks, the ODT, and residential neighborhoods. The LOS standard is a width of 5 to 12 feet with a park strip between the sidewalk and travel lane. The same LOS standard is applied to School Connector pedestrian routes.

Two additional non-roadway facility initiatives are proposed in the Six Year CIP project inventory. Active Alleyways in the downtown core will be repurposed as components of the pedestrian and mobility scooter network. Cross Circulation Easements shorten pathways for pedestrians by breaking up blocks and better connecting complementary land uses.



2017-2022 - Transportation System Projects  
Project Summary, Schedule, and Estimated Cost

	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan Total
<b>City Wide Pavement Rehab Improvements</b>							
STR-041PR City-wide Pavement Rehabilitation	384		562	587	614	642	2,789
STR-064PR North Sequim Ave Pavement Rehabilitation						268	268
STR-065PR Washington St Pavement Rehabilitation					499	6,892	7,391
<b>City Wide Safety Projects Improvements</b>							
STR-039SP City-wide Safety Projects	60	62	65	68	71	75	401
<b>Facility Improvement Improvements</b>							
STR-061FI East Fir St Rehabilitation from Sequim Ave to Blake Ave			86	717	749		1,552
STR-034FI East Washington St. Bus Turn-Outs from Sequim Ave to Rhodefer Rd			26	123			149
STR-027FI North Kendall Rd and West Hendrickson Rd Intersection Improvements				48			48
STR-052FI Washington Street Signal Timing & Coordination	150						150
STR-030FI West Fir Street Rehabilitation from Sequim Ave and 5th Ave	793	1,596	2,079				4,468
STR-031FI West Prairie Complete Street Revitalization from Sequim Ave to 5th Ave		77	480	502	525	503	2,087
STR-063FI West Sequim Bay Rd Shoreline Revetment Repair		546					546
STR-032FI West Washington Eastbound Auxillary Lane from River Rd Modification				16	77		93
STR-029FI Whitefeather Way and US 101 Intersection Improvements			261	205			466
<b>Miscellaneous Improvements</b>							
STR-060MI Transportation Master Plan Update			50				50
<b>Pedestrian Improvement Improvements</b>							
STR-003PI 3rd Ave Bicycle Accommodation from Hwy 101 to Fir St	71						71
STR-014PI Etta Street Active Alleyway	90	718					808
STR-062PI ODT East Hendrickson Extension from Sequim Ave to Brown Rd	52	164	171				387
STR-016PI Seal Street Active Alleyway			23	85			108
STR-015PI Sunnyside Avenue Sidewalk				68	564		632
STR-020PI Upper Bell Creek Trail				20	86		106
STR-012PI Whitefeather Way Multi-user Trail			110	377			487
<b>Road Connectivity Improvements</b>							
STR-066RC North Blake Ave to North Rhodefer Rd Extension					85	321	406
STR-037RC West Brownfield Rd Realignment from Sequim Ave 3rd Ave					171	1,298	1,469
STR-038RC West Maple St Extension from 5th Ave to 4th Ave					561	291	852
<b>Project Total By Year</b>	<b>1,600</b>	<b>3,163</b>	<b>3,913</b>	<b>2,816</b>	<b>4,002</b>	<b>10,290</b>	<b>25,784</b>



2017-2022 Capital Improvement Program - Streets Restricted Fund  
 Streets Comprehensive Plan Program – Project Detail

### 3rd Ave Bicycle Accommodation from Hwy 101 to Fir St

**Project Number:** STR-003PI

**Historical Project Number** 3

**Project Location:**

**Project Description:**

Stripe and size bike facilities with minor road improvements on both sides of 3rd.

**Project Benefit:**

Safer bicycle mobility and safety along a school route.



	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering		14							14	14
Construction		57							57	57
<b>Total Project Costs - Inflated \$</b>		<b>71</b>							<b>71</b>	<b>71</b>
<b>Project Funding Sources</b>										
Transportation Benefit District		72							72	72
<b>Total Project Funding - Inflated \$</b>		<b>72</b>							<b>72</b>	<b>72</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering		Q1								
Construction		Q2								

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$





### City-wide Safety Projects

**Project Number:** STR-039SP

**Historical Project Number** 40

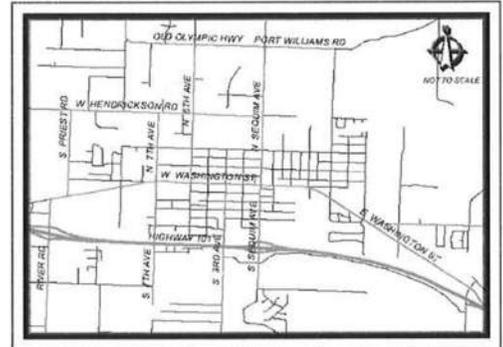
**Project Location:**

**Project Description:**

Miscellaneous minor projects that improve multi-modal safety city-wide.

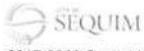
**Project Benefit:**

Safety improvement for various modes of transportation.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Construction	112	60	62	65	68	71	75	401		513
<b>Total Project Costs - Inflated \$</b>	<b>112</b>	<b>60</b>	<b>62</b>	<b>65</b>	<b>68</b>	<b>71</b>	<b>75</b>	<b>401</b>		<b>513</b>
<b>Project Funding Sources</b>										
Transportation Benefit District	112	60	62	65	68	71	75	401		513
<b>Total Project Funding - Inflated \$</b>	<b>112</b>	<b>60</b>	<b>62</b>	<b>65</b>	<b>68</b>	<b>71</b>	<b>75</b>	<b>401</b>		<b>513</b>
<b>Project Timeline Phase</b>										
Construction		Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4			

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$

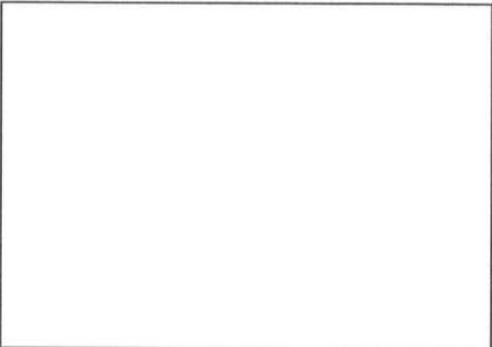


## East Fir St Rehabilitation from Sequim Ave to Blake Ave

**Project Number:** STR-061FI **Historical Project Number**

**Project Location:**

**Project Description:**  
 Rehabilitation of roadway surface from Sequim Ave to Blake Ave  
 Dependent on water and sewer projects along East Fir St.



**Project Benefit:**  
 Will improve the ride quality and safety of East Fir St.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total	
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project	
	Plan								Plan		
<b>Project Cost Phase</b>											
Preliminary Engineering				86					86	86	
Construction					717	749		1,466		1,466	
<b>Total Project Costs - Inflated \$</b>				<b>86</b>	<b>717</b>	<b>749</b>		<b>1,552</b>		<b>1,552</b>	
<b>Project Funding Sources</b>											
Grant - State					717	749		1,466		1,466	
Transportation Benefit District				86				86		86	
<b>Total Project Funding - Inflated \$</b>				<b>86</b>	<b>717</b>	<b>749</b>		<b>1,552</b>		<b>1,552</b>	
<b>Project Timeline Phase</b>											
Preliminary Engineering				Q1Q2Q3Q4							
Construction				Q1Q2Q3Q4			Q1Q2Q3Q4				

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



2017-2022 Capital Improvement Program - Streets Restricted Fund  
 Streets Comprehensive Plan Program – Project Detail

## East Washington St. Bus Turn-Outs from Sequim Ave to Rhodefer Rd

**Project Number:** STR-034FI

**Historical Project Number** 35

**Project Location:**

**Project Description:**

Construct Bus Turn-Outs with additional sidewalk, benches, trash receptacles, and modified storm water facilities.



**Project Benefit:**

Improves transit user safety, and traffic flow by getting buses away from the through lanes.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering				26					26	26
Construction					123				123	123
<b>Total Project Costs - Inflated \$</b>				<b>26</b>	<b>123</b>				<b>149</b>	<b>149</b>
<b>Project Funding Sources</b>										
Other				26	123				149	149
<b>Total Project Funding - Inflated \$</b>				<b>26</b>	<b>123</b>				<b>149</b>	<b>149</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q1						
Construction					Q1Q2Q3					

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## Etta Street Active Alleyway

**Project Number:** STR-014PI

**Historical Project Number** 15

**Project Location:**

**Project Description:**

Rehabilitate alley with new lighting, street features, traffic calming, stormwater improvements and pavers.

**Project Benefit:**

Alley becomes functionally and aesthetically improved.



	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering		90							90	90
Construction			718						718	718
<b>Total Project Costs - Inflated \$</b>		<b>90</b>	<b>718</b>						<b>808</b>	<b>808</b>
<b>Project Funding Sources</b>										
Other			718						718	718
Revenue - Sewer		60							60	60
Revenue - Water		30							30	30
<b>Total Project Funding - Inflated \$</b>		<b>90</b>	<b>718</b>						<b>808</b>	<b>808</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering		Q2								
Construction			Q3Q4							

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



2017-2022 Capital Improvement Program - Streets Restricted Fund  
 Streets Comprehensive Plan Program – Project Detail

## North Blake Ave to North Rhodefer Rd Extension

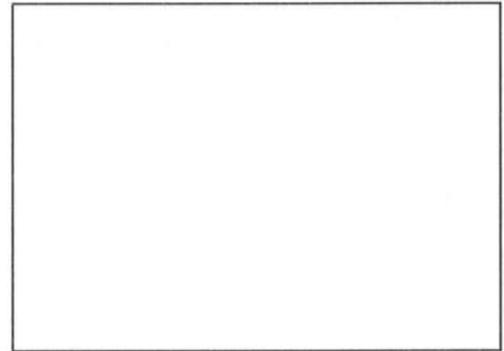
**Project Number:** STR-066RC

**Historical Project Number**

**Project Location:**

**Project Description:**

Project includes extension of road north located south of Carrie Blake Park between North Blake Ave and North Rhodefer Rd.



**Project Benefit:**

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering						85		85		85
Construction							321	321		321
<b>Total Project Costs - Inflated \$</b>						<b>85</b>	<b>321</b>	<b>406</b>		<b>406</b>
<b>Project Funding Sources</b>										
Transportation Impact Fees						85	321	406		406
<b>Total Project Funding - Inflated \$</b>						<b>85</b>	<b>321</b>	<b>406</b>		<b>406</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering						Q1Q2Q3Q4				
Construction							Q1Q2Q3Q4			

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



2017-2022 Capital Improvement Program - Streets Restricted Fund  
 Streets Comprehensive Plan Program – Project Detail

## North Kendall Rd and West Hendrickson Rd Intersection Improvements

**Project Number:** STR-027FI      **Historical Project Number** 28

**Project Location:**

**Project Description:**  
 Improve intersection with additional pavement, improved sight lines, striping, and signage.



**Project Benefit:**  
 Provide a safer access for bicyclist, pedestrians and vehicles through the intersection

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering					14				14	14
Construction					34				34	34
<b>Total Project Costs - Inflated \$</b>					<b>48</b>				<b>48</b>	<b>48</b>
<b>Project Funding Sources</b>										
Transportation Benefit District					48				48	48
<b>Total Project Funding - Inflated \$</b>					<b>48</b>				<b>48</b>	<b>48</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering										Q3
Construction										Q3Q4

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## North Sequim Ave Pavement Rehabilitation

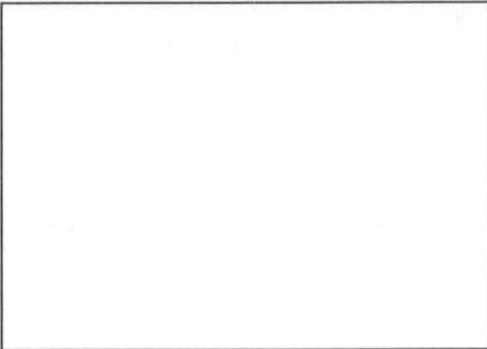
**Project Number:** STR-064PR

**Historical Project Number**

**Project Location:**

**Project Description:**

Project scope includes overlaying 7,200 linear feet of North Sequim Avenue from Washington St to the northern city limit. Also includes correction of non-ADA compliant curb ramps and driveways.



**Project Benefit:**

Project benefits include rehabilitation of pavement and improved ADA accessibility.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering							268	268		268
Construction									2,729	2,729
<b>Total Project Costs - Inflated \$</b>							<b>268</b>	<b>268</b>	<b>2,729</b>	<b>2,997</b>
<b>Project Funding Sources</b>										
Grant - State							268	268	2,729	2,997
<b>Total Project Funding - Inflated \$</b>							<b>268</b>	<b>268</b>	<b>2,729</b>	<b>2,997</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering							Q1Q2Q3Q4			
Construction										

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$

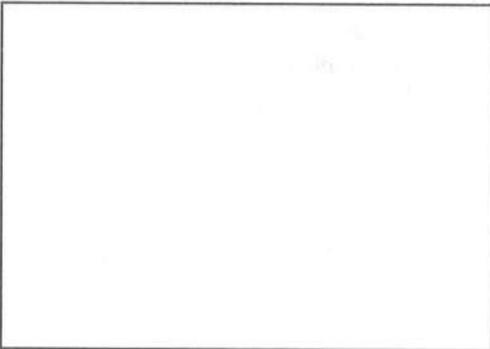


## ODT East Hendrickson Extension from Sequim Ave to Brown Rd

**Project Number:** STR-062PI **Historical Project Number**

**Project Location:**

**Project Description:**  
 This project will extend the Olympic Discovery Trail from North Sequim Ave to North Brown Road



**Project Benefit:**  
 This project will provide a separated shared-use path for pedestrians, cyclist, and motor-scooters.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering		52							52	52
Construction			164	171					335	335
<b>Total Project Costs - Inflated \$</b>		<b>52</b>	<b>164</b>	<b>171</b>					<b>387</b>	<b>387</b>
<b>Project Funding Sources</b>										
Other			164	171					335	335
Transportation Impact Fees		52							52	52
<b>Total Project Funding - Inflated \$</b>		<b>52</b>	<b>164</b>	<b>171</b>					<b>387</b>	<b>387</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering		Q1Q2Q3Q4								
Construction			Q1Q2Q3Q4		Q1Q2Q3Q4					

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## Seal Street Active Alleyway

**Project Number:** STR-016PI

**Historical Project Number** 17

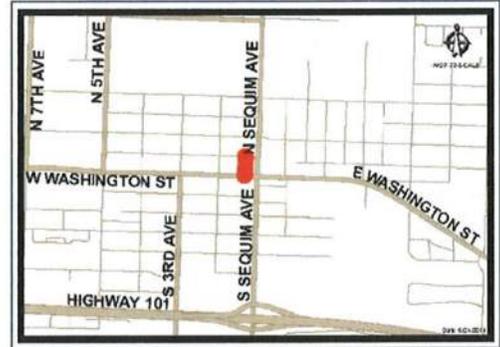
**Project Location:**

**Project Description:**

Rehabilitate alley with new lighting, street features, traffic calming, and pavers.

**Project Benefit:**

Alley becomes functionally and aesthetically improved.



	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering				23					23	23
Construction					85				85	85
<b>Total Project Costs - Inflated \$</b>				<b>23</b>	<b>85</b>				<b>108</b>	<b>108</b>
<b>Project Funding Sources</b>										
Transportation Benefit District				23	85				108	108
<b>Total Project Funding - Inflated \$</b>				<b>23</b>	<b>85</b>				<b>108</b>	<b>108</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q1Q2Q3Q4						
Construction					Q1Q2Q3Q4					

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## Sunnyside Avenue Sidewalk

**Project Number:** STR-015PI

**Historical Project Number** 16

**Project Location:**

**Project Description:**

Construct ADA compliant sidewalk, curb and gutter, and improve storm water handling.

**Project Benefit:**

Provide safe pedestrian facilities.



	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering					68				68	68
Construction						564			564	564
<b>Total Project Costs - Inflated \$</b>					<b>68</b>	<b>564</b>			<b>632</b>	<b>632</b>
<b>Project Funding Sources</b>										
Other						564			564	564
Transportation Benefit District					68				68	68
<b>Total Project Funding - Inflated \$</b>					<b>68</b>	<b>564</b>			<b>632</b>	<b>632</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering					Q1Q2Q3Q4					
Construction						Q1Q2Q3Q4				

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## Transportation Master Plan Update

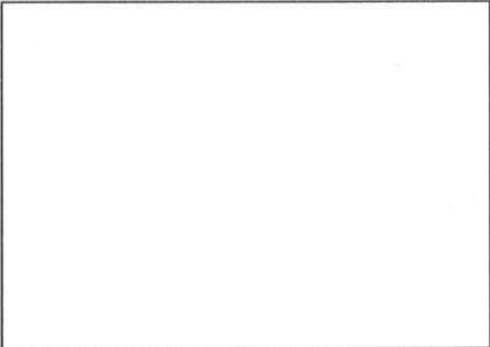
**Project Number:** STR-060MI

**Historical Project Number**

**Project Location:**

**Project Description:**

The Transportation Master Plan provides a long-term planning strategy for the City's surface transportation network for the 6-year and 20-year planning periods.



**Project Benefit:**

The proposed General Sewer Plan will replace the adopted plan developed in 2013.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Study				50					50	50
<b>Total Project Costs - Inflated \$</b>				50					50	50
<b>Project Funding Sources</b>										
Transportation Benefit District				50					50	50
<b>Total Project Funding - Inflated \$</b>				50					50	50
<b>Project Timeline Phase</b>										
Study				Q1Q2Q3Q4						

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## Upper Bell Creek Trail

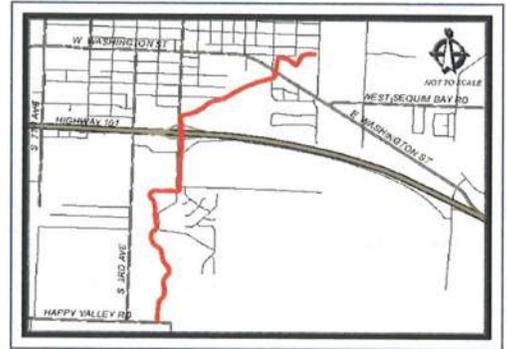
**Project Number:** STR-020PI

**Historical Project Number** 21

**Project Location:** Gerhardt to Carrie Blake Park

**Project Description:**

Construct a connection for the ODT trail to the south of HWY101 along Bell Creek right-of-way and/or easements will be required.



**Project Benefit:**

Recreational path connecting Gerhardt and Carrie Blake Park.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering					20				20	20
Construction						86			86	86
<b>Total Project Costs - Inflated \$</b>					<b>20</b>	<b>86</b>			<b>106</b>	<b>106</b>
<b>Project Funding Sources</b>										
Transportation Benefit District					20	86			106	106
<b>Total Project Funding - Inflated \$</b>					<b>20</b>	<b>86</b>			<b>106</b>	<b>106</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering					Q4					
Construction						Q1Q2				

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## Washington St Pavement Rehabilitation

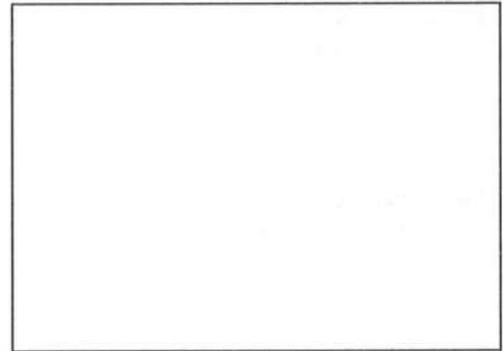
**Project Number:** STR-065PR

**Historical Project Number**

**Project Location:**

**Project Description:**

Project scope includes HMA overlay of roughly 15,000 linear feet of Washington Street between River Road and Simdars Road. The project also includes replacement of non-compliant ADA curb ramps and driveways.



**Project Benefit:**

Project benefits includes pavement rehabilitation and improved ADA accessibility.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering						499		499		499
Construction							6,892	6,892		6,892
<b>Total Project Costs - Inflated \$</b>						<b>499</b>	<b>6,892</b>	<b>7,391</b>		<b>7,391</b>
<b>Project Funding Sources</b>										
Grant - Federal						499	6,892	7,391		7,391
<b>Total Project Funding - Inflated \$</b>						<b>499</b>	<b>6,892</b>	<b>7,391</b>		<b>7,391</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering						Q1	Q2	Q3	Q4	
Construction							Q1	Q2	Q3	Q4

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## Washington Street Signal Timing & Coordination

**Project Number:** STR-052FI

**Historical Project Number**

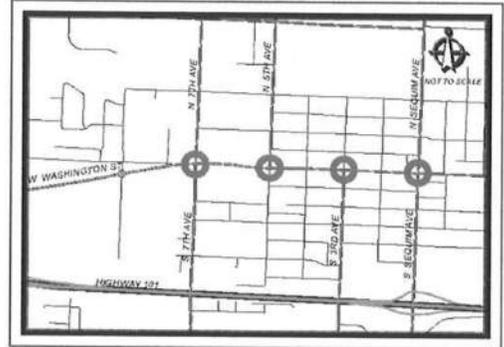
**Project Location:**

**Project Description:**

Synchronize traffic signals on Washington.

**Project Benefit:**

Better mobility through downtown.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering	13	150						150		163
Construction	39									39
<b>Total Project Costs - Inflated \$</b>	<b>52</b>	<b>150</b>						<b>150</b>		<b>202</b>
<b>Project Funding Sources</b>										
Transportation Impact Fees	52	150						150		202
<b>Total Project Funding - Inflated \$</b>	<b>52</b>	<b>150</b>						<b>150</b>		<b>202</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering		Q1Q2Q3Q4								
Construction										

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## West Brownfield Rd Realignment from Sequim Ave 3rd Ave

**Project Number:** STR-037RC

**Historical Project Number** 38

**Project Location:**

**Project Description:**

Realignment of W. Brownfield Avenue. Remove the curve, widen roadway, add sidewalks, and enhance storm water facilities.

**Project Benefit:**

Improve safety for all users.



	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering						171		171		171
Construction							1,298	1,298		1,298
<b>Total Project Costs - Inflated \$</b>						<b>171</b>	<b>1,298</b>	<b>1,469</b>		<b>1,469</b>
<b>Project Funding Sources</b>										
Other						165	1,247	1,412		1,412
<b>Total Project Funding - Inflated \$</b>						<b>165</b>	<b>1,247</b>	<b>1,412</b>		<b>1,412</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering						Q3Q4				
Construction							Q2Q3Q4			

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## West Fir Street Rehabilitation from Sequim Ave and 5th Ave

**Project Number:** STR-030FI **Historical Project Number** 31

**Project Location:**

**Project Description:**  
 Rebuild roadway with new sidewalk, curb and gutter, illumination, and stormwater handling. Repair irrigation line.



**Project Benefit:**  
 Improved east-west connectivity and pedestrian safety in a school zone; reduces vehicle pressure on Washington Street.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Land Acquisition		208							208	208
Preliminary Engineering		209							209	209
Construction		376	1,596	2,079					4,051	4,051
<b>Total Project Costs - Inflated \$</b>		<b>793</b>	<b>1,596</b>	<b>2,079</b>					<b>4,468</b>	<b>4,468</b>
<b>Project Funding Sources</b>										
Grant - Federal		688							688	688
Other			1,545	2,079					3,624	3,624
Transportation Benefit District			50						50	50
Transportation Impact Fees		105							105	105
<b>Total Project Funding - Inflated \$</b>		<b>793</b>	<b>1,595</b>	<b>2,079</b>					<b>4,467</b>	<b>4,467</b>
<b>Project Timeline Phase</b>										
Land Acquisition		Q1Q2								
Preliminary Engineering		Q1Q2								
Construction		Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4						

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## West Maple St Extension from 5th Ave to 4th Ave

**Project Number:** STR-038RC

**Historical Project Number** 39

**Project Location:**

**Project Description:**

New road connecting 5th and 4th along the Maple St. corridor.



**Project Benefit:**

Improved east-west connectivity south of US 101

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering						143		143		143
Construction						418	291	709		709
<b>Total Project Costs - Inflated \$</b>						<b>561</b>	<b>291</b>	<b>852</b>		<b>852</b>
<b>Project Funding Sources</b>										
Other						319	217	536		536
Revenue - Sewer						110	31	141		141
Revenue - Water						110	31	141		141
<b>Total Project Funding - Inflated \$</b>						<b>539</b>	<b>279</b>	<b>818</b>		<b>818</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering							Q1Q2			
Construction							Q2Q3Q4	Q2Q3		

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$





## West Sequim Bay Rd Shoreline Revetment Repair

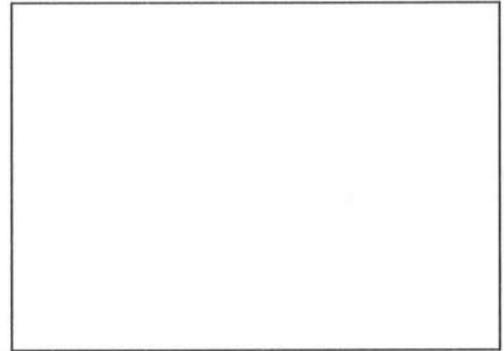
**Project Number:** STR-063FI

**Historical Project Number**

**Project Location:**

**Project Description:**

This project includes reconstructing the rock revetment supporting West Sequim Bay Rd near Pitship Bridge.



**Project Benefit:**

The rock revetment will stabilize the roadway embankment and prevent wash-out during storms.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Construction			546						546	546
<b>Total Project Costs - Inflated \$</b>			<b>546</b>						<b>546</b>	<b>546</b>
<b>Project Funding Sources</b>										
Other			546						546	546
<b>Total Project Funding - Inflated \$</b>			<b>546</b>						<b>546</b>	<b>546</b>
<b>Project Timeline Phase</b>										
Construction			Q1Q2Q3Q4							

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



2017-2022 Capital Improvement Program - Streets Restricted Fund  
 Streets Comprehensive Plan Program – Project Detail

## West Washington Eastbound Auxillary Lane from River Rd Modification

**Project Number:** STR-032FI

**Historical Project Number** 33

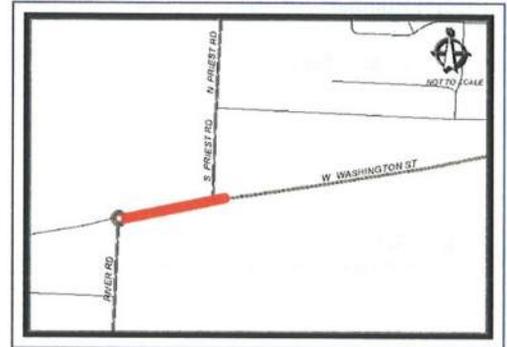
**Project Location:**

**Project Description:**

Improve merging geometries from River Rd. to Washington through lane.

**Project Benefit:**

Safety



	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering					16				16	16
Construction						77			77	77
<b>Total Project Costs - Inflated \$</b>					<b>16</b>	<b>77</b>			<b>93</b>	<b>93</b>
<b>Project Funding Sources</b>										
Transportation Benefit District					16	77			93	93
<b>Total Project Funding - Inflated \$</b>					<b>16</b>	<b>77</b>			<b>93</b>	<b>93</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering						Q4				
Construction						Q1Q2				

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## Whitefeather Way and US 101 Intersection Improvements

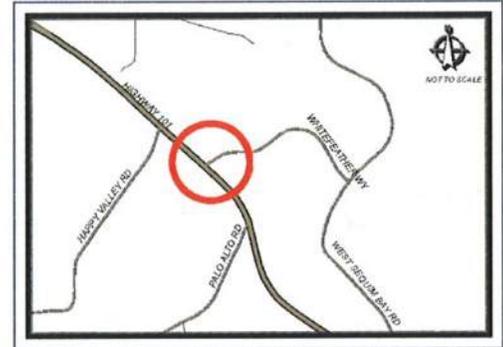
**Project Number:** STR-029FI

**Historical Project Number** 30

**Project Location:**

**Project Description:**

Intersection Improvement on US101 and Whitefeather Way to improve entering and exiting safety including acceleration and deceleration lanes.



**Project Benefit:**

Improved intersection safety.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering				91					91	91
Construction				170	205				375	375
<b>Total Project Costs - Inflated \$</b>				<b>261</b>	<b>205</b>				<b>466</b>	<b>466</b>
<b>Project Funding Sources</b>										
Other				261	205				466	466
<b>Total Project Funding - Inflated \$</b>				<b>261</b>	<b>205</b>				<b>466</b>	<b>466</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q3	Q4					
Construction				Q4	Q1	Q2	Q3	Q4		

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



### Whitefeather Way Multi-user Trail

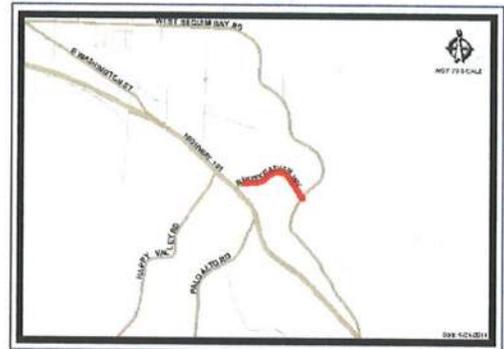
**Project Number:** STR-012PI

**Historical Project Number** 12

**Project Location:**

**Project Description:**

Construct an asphalt trail connecting the ODT to waterfront.

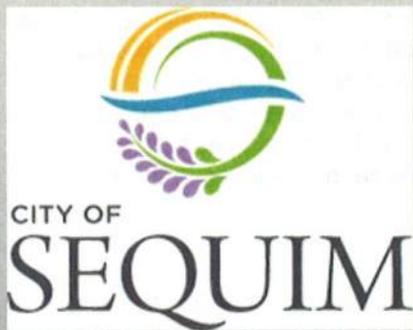


**Project Benefit:**

Provide safe pedestrian and bike access from marina area to the ODT.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering				110					110	110
Construction					377				377	377
<b>Total Project Costs - Inflated \$</b>				<b>110</b>	<b>377</b>				<b>487</b>	<b>487</b>
<b>Project Funding Sources</b>										
Other				85	295				380	380
Transportation Benefit District				24	82				106	106
<b>Total Project Funding - Inflated \$</b>				<b>109</b>	<b>377</b>				<b>486</b>	<b>486</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q4						
Construction					Q3Q4					

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



- Capital Improvement Planning and the Parks and Recreation Master Plan
- Recreational Facility Funding Policy
- Level of Service Standards

## **CAPITAL IMPROVEMENT PROGRAM 2017 – 2022**

### *Chapter 6*

### *Parks Restricted Fund*

### *Projects*

### **Capital Improvement Planning and the Parks and Recreation Master Plan**

The pursuit of leisure activities and the preservation of open space, habitat and the natural environment are essential to the quality of life enjoyed by Sequim residents and visitors. When the City Council adopted the Sequim Parks and Recreation Master Plan in 2015, it expressed as policy the community's objectives and priorities for the provision of parks and recreation space, and the capital investments needed to maintain those assets. The Parks and Recreation Master Plan outlines recommendations and guidelines for the acquisition, development, management, and funding of public parks and recreation facilities in the City's neighborhoods.

### **Parks and Recreational Facility Funding Policy**

To develop the broad range of recreational facilities envisioned in the Master Plan, the text includes a framework of goals and objectives. Among those goals and objectives are the following statements directed toward the capital improvement planning process:

#### **“(G.5) Economically Vital Community**

The City of Sequim should continue to utilize parks as an indicator for creating positive economic benefits. This is important because parks, recreation and leisure amenities enhance property values and attract homebuyers, workers, and retirees. Sequim should recognize that parks and recreation often emerge as an “engine” that drives tourism in the community by providing access to unique features, programs, and experiences such as special events and festivals. Recreation facilities provide sites for sports tournaments and athletic events, which can be major sources of tourism and an economic benefit to the City of Sequim.

##### **(O.5.1)**

Incorporate significant cultural resources in the design and development of new park and recreation facilities, and provide interpretive opportunities where appropriate.

##### **(O.5.2)**

Design and manage park and recreation facilities to maximize environmental protection and provide interpretive opportunities for ecological systems and features, and cultural resources.

##### **(O.5.3)**

Deliver measurable economic benefit to the community by providing or supporting programs, special events and facilities.

##### **(O.5.4)**

Establish an ongoing six-year Capital Improvement Plan (CIP) for parks and recreation facilities.

##### **(O.5.5)**

Providing public art in appropriate locations throughout the city and designing public spaces, such as but not limited to entry, directional and interpretive signs can contribute to Sequim's image.”

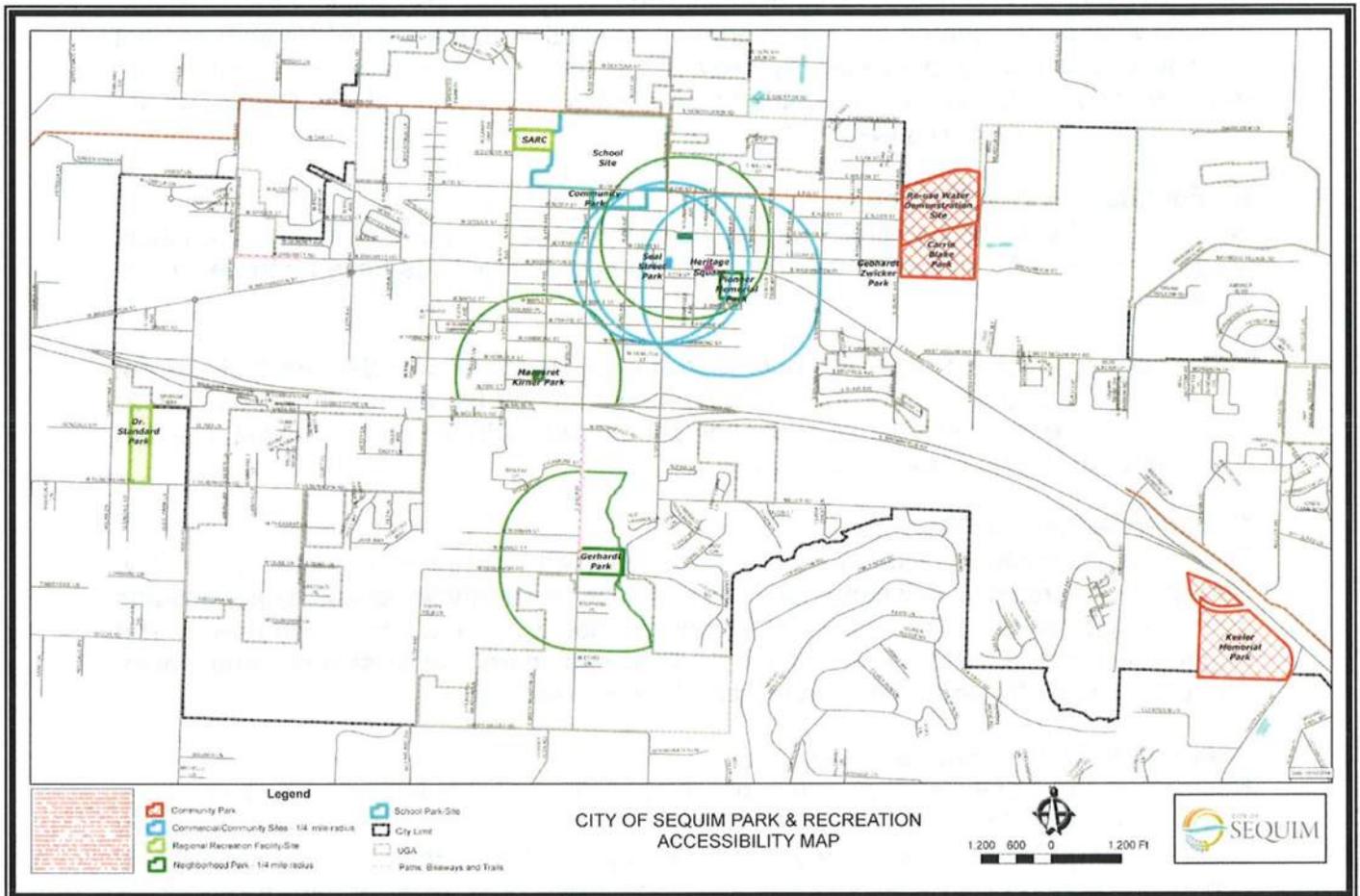
Taken from the adopted 2015 Parks and Recreation Master Plan

**Level of Service Standards**

The Level of Service standards described in the Parks and Recreation Master Plan, and summarized in the following chart, are based on historic planning principles established by the National Recreation and Park Association (NRPA). However, the Master Plan does not strictly follow the historically used NRPA guidelines because a one-size-fits-all approach is not realistic to use as a benchmark for level-of-service standards.

**TABLE P-1  
LOS STANDARDS  
PARK AND RECREATION FACILITIES**

Facility Type	LOS Standard (per capita population)	Existing Inventory	Required by 2035
Community Park	2.5ac/1000	94.08ac	0
Neighborhood Park	1.0ac/1000	8.5ac	1.5ac
School-Park/Site	2.0ac/1000	69.53ac	0
Regional Recreation Facility/Site	1.0ac/1000	15.04ac	0
Path, Bikeways and Trails	1,320LF/1000	36,980LF	0
Commercial/Community Sites	0.25ac/1000	4.28ac	0



Not only does Sequim have needs for increased access to neighborhood parks, it has needs for upgrading or improving of existing facilities, as the above Table P-1 clearly shows availability of land is supplied to Sequim residents. Neighborhood parks are the most common type of park to serve residential areas. Facilities provided at neighborhood parks are oriented to active play areas for the neighborhood residents and serve all residents living within a quarter-mile.

### **Local Service Standards - Park Function and Accessibility**

While the gross acreage level of service is a reasonable overall standard, the type of park and ease of access holds much more significance than the total park acreage. A quality park system should contain a good balance of property types and should be located geographically throughout the City. Resources must be allocated equitably throughout the community while reflecting changes in the level of demand for parks, recreation and leisure accommodations.

A service radius is recommended in planning a logical distribution of parks and open space. Park users will generally walk a limited distance to access a park. Based on NPRA's 1995 classification system this 2015 Parks and Recreation Master Plan uses a service radius of <1/4 mile for Commercial/Community Sites and Neighborhood Parks. Though streets designated as "minor arterial" or smaller in the City of Sequim are not considered boundaries to access; Highway 101, is recognized here by configuration and traffic load as a boundary for pedestrian park access, along with the Bell Creek corridor along the south side of Highway 101.

### **Residential Level of Service**

Neighborhood park service areas as well as school facilities are identified on the below Map P-2 above. As shown on the map, two types of deficiencies have been defined in Sequim.

- No access and limited neighborhood parks - The areas of Sequim that are not within one quarter mile of an existing neighborhood facility are shown on Map 2-2. There is a need for additional neighborhood parks in the Southwest, Eastern and Northwest portions of the City.

### **Commercial Level of Service**

Commercial/Community Sites are often associated with commercial zones in the City. Sequim's are provided downtown and they provide comfortable access to pedestrians and bicyclist travelling from residential neighborhoods to and from downtown. The target users are a wide variety of employees, customers, visitors/tourist and youth. There is no need for additional Commercial/Community Sites.

### **Tourism/Visitor Level of Service**

Residential and Commercial growth is not the only foreseeable impact to park services. The City's ability to provide adequate tourist facilities such as restrooms, transient parking, interpretive services, and shoreline access for pedestrians and boaters is experiencing increasing seasonal demand. Extensive promotion through the Lodging Tax Advisory Committee and the Olympic Peninsula Visitors Bureau has been effective

in promoting Sequim's events and the North Olympic Peninsula's wide-ranging recreation opportunities. Increases in tourist visits to Sequim will continue to increase demand on City park facilities and services. These demands are likely to be concentrated within Carrie Blake Park and Downtown Sequim. This increase in demand for service should continuously be analyzed and included in future park planning. Use by visitors of City facilities is not well documented although the impacts are evident in the increased maintenance hours needed by park crews for cleanup. Future analysis of impacts on the parks operations and maintenance should account for increase in use by nonresidents. Tourists are attracted to a well maintained system of parks and trails and thus, wise investment in Sequim's Parks and Recreation Facilities and Programs contribute to a healthy tourist economy.



2017-2022 - Park System Projects  
 Project Summary, Schedule, and Estimated Cost

	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan Total
<b>Facility Improvement Improvements</b>							
PRK-011FI Carrie Blake Park Access Road Relocation	274						274
PRK-015FI Carrie Blake Park Pickleball Courts	154						154
PRK-017FI Carrie Blake Park Tennis Courts	60	230					290
PRK-045FI City Wide Park Land Acquisition						200	200
PRK-044FI Gerhart Park Building Removal and Restoration			75	75	75	75	300
PRK-047FI Gerhart Park Child Play Equipment				60			60
PRK-013FI Guy Cole Parking Lot Overlay and Drainage Improvements			312				312
PRK-018FI Keeler Park Access and Parking				599			599
PRK-019FI Keeler Park Pedestrian Boardwalk					187		187
PRK-020FI Pioneer Park Sewer Connection	55						55
PRK-046FI Reuse Demo Site Band Shell Tiered Seating						196	196
<b>Project Total By Year</b>	<b>543</b>	<b>230</b>	<b>387</b>	<b>734</b>	<b>262</b>	<b>471</b>	<b>2,627</b>



## Carrie Blake Park Access Road Relocation

**Project Number:** PRK-011FI **Historical Project Number**

**Project Location:** 202 N. Blake Ave.

**Project Description:**  
 Construct New Access Road from Blake Ave (southside).



**Project Benefit:**  
 This project fulfills elements of the Park's Master Plan. The project will reduce the potential for conflicts near the playground equipment by moving vehicles away from a pedestrian area.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Construction		274							274	274
<b>Total Project Costs - Inflated \$</b>		<b>274</b>							<b>274</b>	<b>274</b>
<b>Project Funding Sources</b>										
REET 2		274							274	274
<b>Total Project Funding - Inflated \$</b>		<b>274</b>							<b>274</b>	<b>274</b>
<b>Project Timeline Phase</b>										
Construction		Q1Q2Q3								

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Carrie Blake Park Pickleball Courts

**Project Number:** PRK-015FI **Historical Project Number**

**Project Location:** Carrie Blake Park

**Project Description:**  
 Project will construct 8 pickleball courts at Carrie Blake Park.



**Project Benefit:**  
 This project fulfills elements of the Park's Master Plan.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering	51									51
Construction		154						154		154
<b>Total Project Costs - Inflated \$</b>	<b>51</b>	<b>154</b>						<b>154</b>		<b>205</b>
<b>Project Funding Sources</b>										
Public/Private Partnership Private Contribution	154									154
REET 2	51									51
<b>Total Project Funding - Inflated \$</b>	<b>205</b>									<b>205</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering										
Construction		Q1Q2Q3Q4								

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Carrie Blake Park Tennis Courts

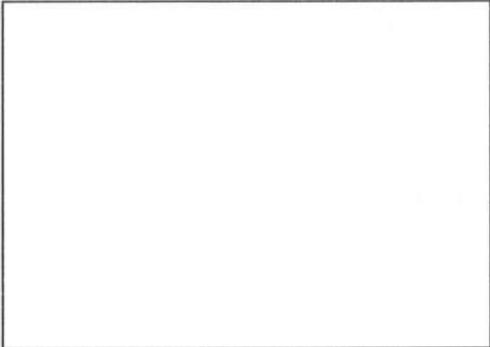
**Project Number:** PRK-017FI

**Historical Project Number**

**Project Location:**

**Project Description:**

Project will construct tennis courts at Carrie Blake Park. Project is dependent upon completion of the Carrie Blake Access Road (PRK-011FI) and the Water Line Relocation (WTR-061DS) projects.



**Project Benefit:**

This project fulfills elements of the Park's Master Plan.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Construction		60	230					290		290
<b>Total Project Costs - Inflated \$</b>		<b>60</b>	<b>230</b>					<b>290</b>		<b>290</b>
<b>Project Funding Sources</b>										
Park Impact Fees		60						60		60
Public/Private Partnership Private Contribution			230					230		230
<b>Total Project Funding - Inflated \$</b>		<b>60</b>	<b>230</b>					<b>290</b>		<b>290</b>
<b>Project Timeline Phase</b>										
Construction		Q2Q3Q4	Q1Q2Q3							

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$

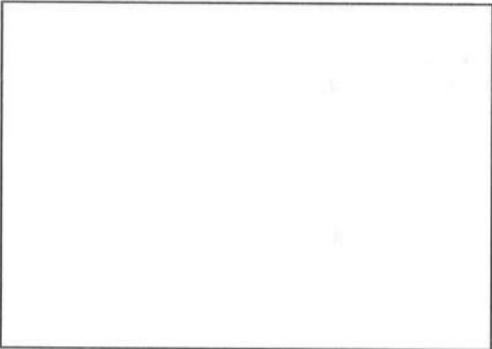


### City Wide Park Land Acquisition

**Project Number:** PRK-045FI **Historical Project Number**

**Project Location:**

**Project Description:**  
 Secure right-of-way for future Park development.



**Project Benefit:**  
 This project will provide the City of Sequim with a healthy and vibrant future.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Land Acquisition							200	200		200
<b>Total Project Costs - Inflated \$</b>							<b>200</b>	<b>200</b>		<b>200</b>
<b>Project Funding Sources</b>										
Park Impact Fees							200	200		200
<b>Total Project Funding - Inflated \$</b>							<b>200</b>	<b>200</b>		<b>200</b>
<b>Project Timeline Phase</b>										
Land Acquisition							Q1Q2Q3Q4			

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Gerhart Park Building Removal and Restoration

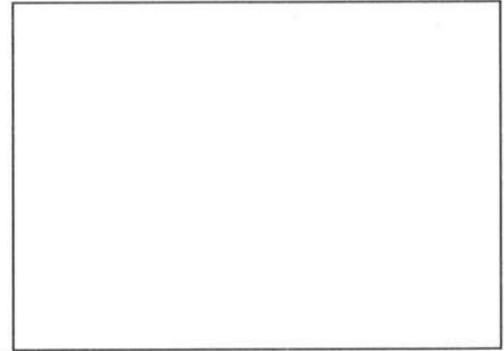
**Project Number:** PRK-044FI

**Historical Project Number**

**Project Location:**

**Project Description:**

Project includes the removal and restoration of existing building structures at Gerhart Park. The restoration scope of work will be identified through a park master planning process.



**Project Benefit:**

This project will activate the park for community recreation.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total	
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project	
	Plan								Plan		
<b>Project Cost Phase</b>											
Preliminary Engineering				75					75	75	
Construction					75	75	75	225		225	
<b>Total Project Costs - Inflated \$</b>				<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>300</b>		<b>300</b>	
<b>Project Funding Sources</b>											
Grant - State				75	75	75	75	300		300	
<b>Total Project Funding - Inflated \$</b>				<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>300</b>		<b>300</b>	
<b>Project Timeline Phase</b>											
Preliminary Engineering				Q1Q2Q3Q4							
Construction					Q1Q2Q3Q4			Q1Q2Q3Q4			

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Gerhart Park Child Play Equipment

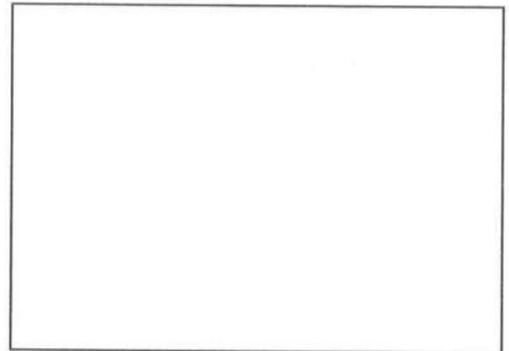
**Project Number:** PRK-047FI

**Historical Project Number**

**Project Location:**

**Project Description:**

Project includes the installation of child play ground equipment. Play equipment type will be defined through a park master planning process.



**Project Benefit:**

This project will provide for family recreational opportunities.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Construction					60			60		60
<b>Total Project Costs - Inflated \$</b>					<b>60</b>			<b>60</b>		<b>60</b>
<b>Project Funding Sources</b>										
Grant - State					60			60		60
<b>Total Project Funding - Inflated \$</b>					<b>60</b>			<b>60</b>		<b>60</b>
<b>Project Timeline Phase</b>										
Construction					Q1Q2Q3					

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$



2017-2022 Capital Improvement Program - Parks Restricted Fund  
 Parks Comprehensive Plan Program – Project Detail

## Guy Cole Parking Lot Overlay and Drainage Improvements

**Project Number:** PRK-013F1

**Historical Project Number**

**Project Location:** 202 N. Blake Ave.

**Project Description:**

Project will configure Guy Cole Parking to be coordinated with other the park facilities. Project may include asphalt overlay, sidewalk, landscaping, drainage, and lighting.



**Project Benefit:**

This project fulfills elements of the Park's Master Plan.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Construction				312					312	312
<b>Total Project Costs - Inflated \$</b>				<b>312</b>					<b>312</b>	<b>312</b>
<b>Project Funding Sources</b>										
Grant - State				312					312	312
<b>Total Project Funding - Inflated \$</b>				<b>312</b>					<b>312</b>	<b>312</b>
<b>Project Timeline Phase</b>										
Construction				Q2Q3						

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Keeler Park Access and Parking

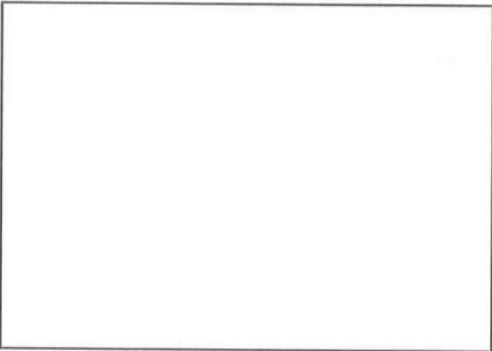
**Project Number:** PRK-018FI

**Historical Project Number**

**Project Location:**

**Project Description:**

Provide access and parking at Keeler Park. Site improvements will be identified through a park master planning process.



**Project Benefit:**

This project will activate Keeler Park for community recreation.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering					125			125		125
Construction					474			474		474
<b>Total Project Costs - Inflated \$</b>					<b>599</b>			<b>599</b>		<b>599</b>
<b>Project Funding Sources</b>										
Park Impact Fees					599			599		599
<b>Total Project Funding - Inflated \$</b>					<b>599</b>			<b>599</b>		<b>599</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering					Q1Q2					
Construction					Q2Q3Q4					

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Keeler Park Pedestrian Boardwalk

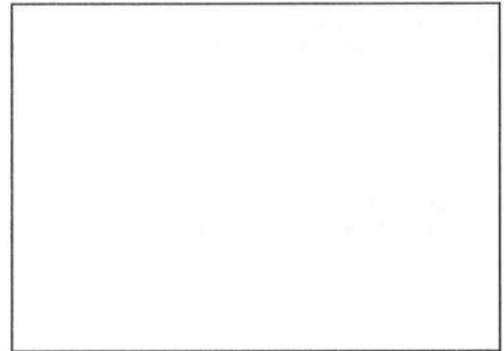
**Project Number:** PRK-019FI

**Historical Project Number**

**Project Location:**

**Project Description:**

Project includes a non-motorized route in Keeler Park. The route will be identified through a park master planning process.



**Project Benefit:**

This project will activate Keeler Park for community recreation.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering						25		25		25
Construction						162		162		162
<b>Total Project Costs - Inflated \$</b>						<b>187</b>		<b>187</b>		<b>187</b>
<b>Project Funding Sources</b>										
Park Impact Fees						187		187		187
<b>Total Project Funding - Inflated \$</b>						<b>187</b>		<b>187</b>		<b>187</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering						Q1Q2				
Construction						Q2Q3Q4				

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$

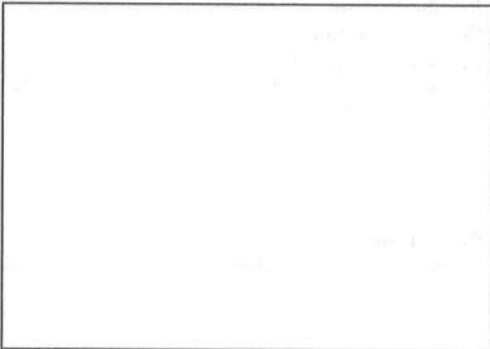


### Pioneer Park Sewer Connection

**Project Number:** PRK-020FI      **Historical Project Number**

**Project Location:**

**Project Description:**  
 Project will connect existing facilities to the City's sewer collection system.



**Project Benefit:**  
 This project provides for better reliability and maintenance of sewerage collection system at the park.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Construction		55						55		55
<b>Total Project Costs - Inflated \$</b>		<b>55</b>						<b>55</b>		<b>55</b>
<b>Project Funding Sources</b>										
Revenue - Sewer		55						55		55
<b>Total Project Funding - Inflated \$</b>		<b>55</b>						<b>55</b>		<b>55</b>
<b>Project Timeline Phase</b>										
Construction		Q1Q2Q3Q4								

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Reuse Demo Site Band Shell Tiered Seating

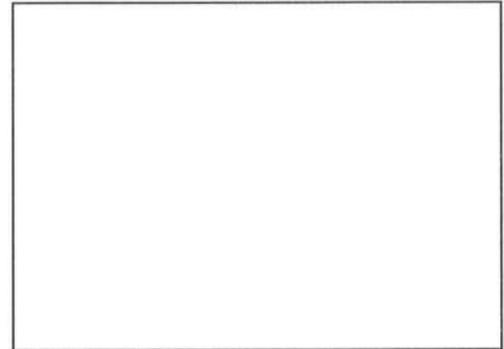
**Project Number:** PRK-046FI

**Historical Project Number**

**Project Location:**

**Project Description:**

Project includes tiered seating around the performance stage located at the water reuse demonstration site.



**Project Benefit:**

This project fulfills elements of the Park's Master Plan.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering							26	26		26
Construction							170	170		170
<b>Total Project Costs - Inflated \$</b>							<b>196</b>	<b>196</b>		<b>196</b>
<b>Project Funding Sources</b>										
Park Impact Fees							196	196		196
<b>Total Project Funding - Inflated \$</b>							<b>196</b>	<b>196</b>		<b>196</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering							Q1Q2			
Construction							Q2Q3Q4			

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$

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- Public Buildings

## **CAPITAL IMPROVEMENT PROGRAM 2017 – 2022**

### *Chapter 7*

### *Capital/Building Facilities Restricted Fund Projects*

### **Public Buildings**

Although these Six-Year CIP projects are not part of an adopted Master Plan, they represent important initiatives to enhance public access city government services. Most prominent among these projects is the construction of a new Civic Center including the Police Station. The project will centralize administrative and law enforcement functions in a single location.

### **The History of City Hall**

In 1973 the City Hall offices were built to house the Clerk's Office, the Council Chambers, the Police Station and a radio communications center (made possible because the Council had the foresight to purchase the land 15 years earlier). Additionally, in 1973 the citizens voted to change from "Town of Sequim" to "City of Sequim" and the council changed from a five-member to a seven-member body. At that time, unlike today, the City Clerk and Attorney were also elected. The City also adopted its first Uniform Building Codes that year. Research of the City archives reveals for 1974, the year we occupied the current City Hall, we had an annual budget of \$556,523, and a City Wide assessed valuation of \$10,248,781 and just one police car. Just as the current one, the new City Hall/Police Station will serve the City for decades to come.

### **The History of the City Shop**

In 1997 the City Shop was built to accommodate a modern day Public Works Operations Facility. Since the opening of the City Shop the southern breeze way has been retrofitted to be enclosed with doors on the east and west walls that provide additional heated space for valuable equipment due to increases in demands related to water, sewer, streets and park service needs. The proposed master site planning efforts included as part of this CIP will help the Public Works Department plan for future expansion needs in a logical and thoughtful manner. The modular offices proposed will accommodate a current operational need, which is to provide appropriate work space for Public Works lead personnel to conduct work that requires a desk for computer and other office work related tasks.



2017-2022 - Capital/Building Facilities Projects  
Project Summary, Schedule, and Estimated Cost

	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan Total
<b>Facility Improvement Improvements</b>							
CFL-003FI Guy Cole Remodel	336		150	150			636
CFL-007FI Public Works Facilities Property Development	68	55	57				180
<b>Project Total By Year</b>	<b>404</b>	<b>55</b>	<b>207</b>	<b>150</b>			<b>816</b>



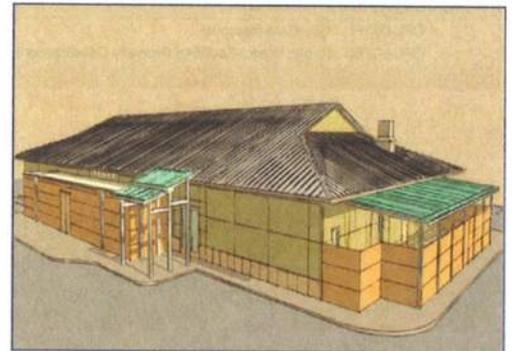
## Guy Cole Remodel

**Project Number:** CFL-003FI **Historical Project Number**

**Project Location:** Carrie Blake Park - 202 N. Blake Avenue

**Project Description:**

This project will remodel elements of Guy Cole to improve its physical appearance and functionality. The project scope may include a new roof, windows, kitchen, dropped ceiling and lighting, flooring, interior and exterior paint, and HVAC unit.



**Project Benefit:**

This project will provide the Sequim community with a great meeting space.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering	20									20
Construction	80	336		150	150			636		716
<b>Total Project Costs - Inflated \$</b>	<b>100</b>	<b>336</b>		<b>150</b>	<b>150</b>			<b>636</b>		<b>736</b>
<b>Project Funding Sources</b>										
Grant - State	100	336		150	150			636		736
<b>Total Project Funding - Inflated \$</b>	<b>100</b>	<b>336</b>		<b>150</b>	<b>150</b>			<b>636</b>		<b>736</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering										
Construction		Q1Q2Q3Q4		Q1Q2Q3Q4	Q1Q2Q3Q4					

Source: Capital Facilities Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Public Works Facilities Property Development

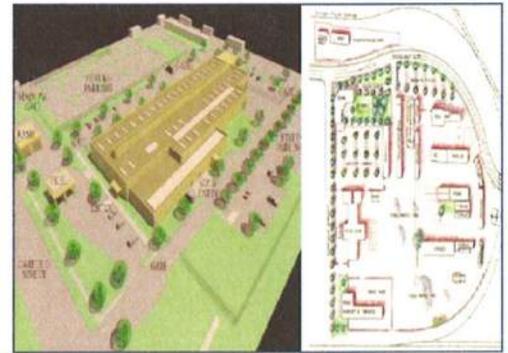
**Project Number:** CFL-007FI

**Historical Project Number**

**Project Location:** 169 W. Hemlock St.

**Project Description:**

The project includes additional facilities at the City owns 8.61 acres of land on W. Hemlock Street between Sequim Avenue and Third Avenue.



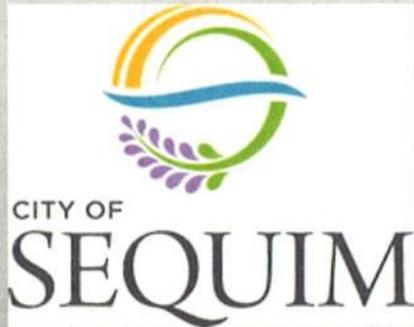
**Project Benefit:**

This project will provide adequate maintenance facilities to store equipment and supplies used during routine city wide maintenance and during emergency events.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering		16							16	16
Construction		52	55	57					164	164
<b>Total Project Costs - Inflated \$</b>		<b>68</b>	<b>55</b>	<b>57</b>					<b>180</b>	<b>180</b>
<b>Project Funding Sources</b>										
General Fund		16	13	14					43	43
Revenue - GFC Water			21	22					43	43
Revenue - Sewer		26	21	22					69	69
Revenue - Water		26							26	26
<b>Total Project Funding - Inflated \$</b>		<b>68</b>	<b>55</b>	<b>58</b>					<b>181</b>	<b>181</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering		Q1Q2Q3Q4								
Construction		Q1Q2Q3Q4			Q1Q2Q3Q4	Q1Q2Q3Q4				

Source: Capital Facilities Comprehensive Plan  
 Amounts in Thousands Inflated \$

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• Stormwater Projects

## **CAPITAL IMPROVEMENT PROGRAM 2017 – 2022**

### *Chapter 8*

### *Stormwater Restricted Fund Projects*



2017-2022 - Capital Improvement Program - Stormwater Restricted Fund  
 Total Capital Expenses Funded - Project Summary

		2017	2018	2019	2020	2021	2022	6-Year
		Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan Total
<b>Collection System Improvements</b>								
SMR-003CS	7th Ave and Washington Upgrade		206					206
SMR-010CS	Bell Creek Basin Hydrologic/Hydraulic Assessment		25	75	75	25		200
SMR-009CS	Bell Creek Culvert Under Blake Ave						478	478
SMR-004CS	Emerald Highlands Pond/Clara Crest Abatement			125				125
SMR-005CS	North 5th Ave and Cedar Street Structure Upgrade					156		156
SMR-011CS	Retrofit Discharge to Bell Creek on North Brown			42	81			123
SMR-008CS	Seal Street Drainage Improvements			137				137
SMR-002CS	South 3rd Ave Drainage Improvements			84				84
<b>Project Total By Year</b>			231	463	156	181	478	1,509



## 7th Ave and Washington Upgrade

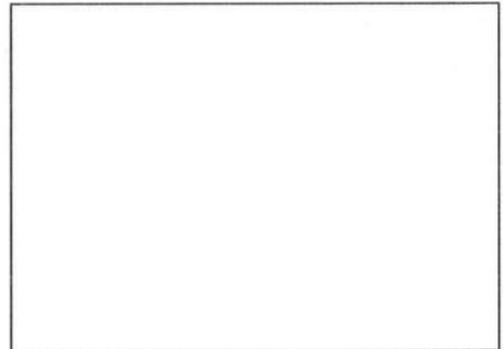
**Project Number:** SMR-003CS

**Historical Project Number**

**Project Location:**

**Project Description:**

This project installs a Filterra bio-filtration unit, ties existing catch basins into the Filterra, and extends the infiltration trench.



**Project Benefit:**

Eliminates frequent flooding at the southwest corner of the intersection and treats the runoff.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Construction			206						206	206
<b>Total Project Costs - Inflated \$</b>			206						206	206
<b>Project Funding Sources</b>										
Grant - State			206						206	206
<b>Total Project Funding - Inflated \$</b>			206						206	206
<b>Project Timeline Phase</b>										
Construction			Q1Q2Q3Q4							

Source: Stormwater Comprehensive Plan  
 Amounts in Thousands Inflated \$

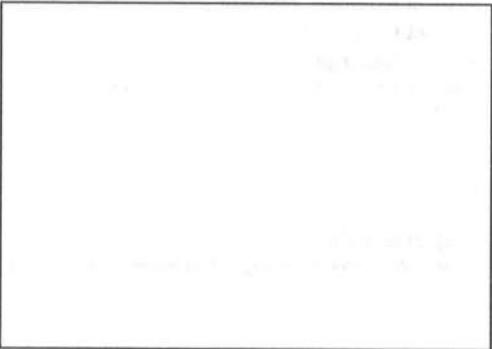


## Bell Creek Basin Hydrologic/Hydraulic Assessment

**Project Number:** SMR-010CS      **Historical Project Number** 1.00M

**Project Location:**

**Project Description:**  
 Assess storm flows given increased storm intensity and growth projections; model alternative stormwater management.



**Project Benefit:**  
 Determines runoff volumes and identifies where flows may be best infiltrated.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering			25	75	75	25		200		200
<b>Total Project Costs - Inflated \$</b>			25	75	75	25		200		200
<b>Project Funding Sources</b>										
Grant - State			12	38	38	12		100		100
Other			12	38	38	12		100		100
<b>Total Project Funding - Inflated \$</b>			24	76	76	24		200		200
<b>Project Timeline Phase</b>										
Preliminary Engineering			Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2				

Source: Stormwater Comprehensive Plan  
 Amounts in Thousands Inflated \$



2017-2022 Capital Improvement Program - Stormwater Restricted Fund  
 Capital Projects Funded - Project Detail

## Bell Creek Culvert Under Blake Ave

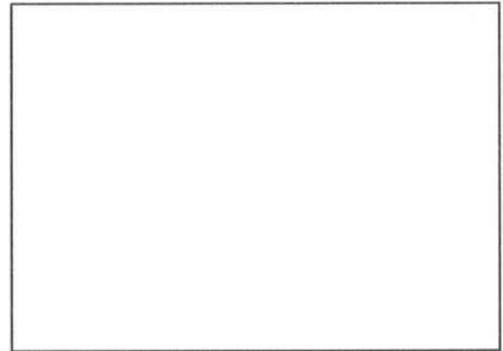
**Project Number:** SMR-009CS

**Historical Project Number** 1.06

**Project Location:**

**Project Description:**

Replace existing double culvert with larger, fish passable culvert crossing under Blake Avenue.



**Project Benefit:**

Improved fish passage, eliminate flood flows onto Blake Ave and Gebhardt-Zeicker Park.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering							205	205		205
Construction							273	273		273
<b>Total Project Costs - Inflated \$</b>							<b>478</b>	<b>478</b>		<b>478</b>
<b>Project Funding Sources</b>										
Grant - State							478	478		478
<b>Total Project Funding - Inflated \$</b>							<b>478</b>	<b>478</b>		<b>478</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering							Q1Q2			
Construction							Q2Q3Q4			

Source: Stormwater Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Emerald Highlands Pond/Clara Crest Abatement

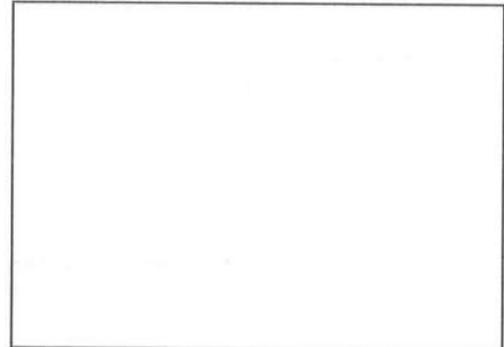
**Project Number:** SMR-004CS

**Historical Project Number**

**Project Location:**

**Project Description:**

This project removes brush, checks valves and outlets, and resotres pond capacity. It routes the drainage at Clara Crest and Miller intersection into the pond.



**Project Benefit:**

Eliminates flooding of Miller Rd and Clara Crest; provides treatment for run-off.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Construction				125					125	125
<b>Total Project Costs - Inflated \$</b>				125					125	125
<b>Project Funding Sources</b>										
Revenue - Sewer				63					63	63
Revenue - Water				63					63	63
<b>Total Project Funding - Inflated \$</b>				126					126	126
<b>Project Timeline Phase</b>										
Construction				Q1Q2Q3Q4						

Source: Stormwater Comprehensive Plan  
 Amounts in Thousands Inflated \$



2017-2022 Capital Improvement Program - Stormwater Restricted Fund  
 Capital Projects Funded - Project Detail

## North 5th Ave and Cedar Street Structure Upgrade

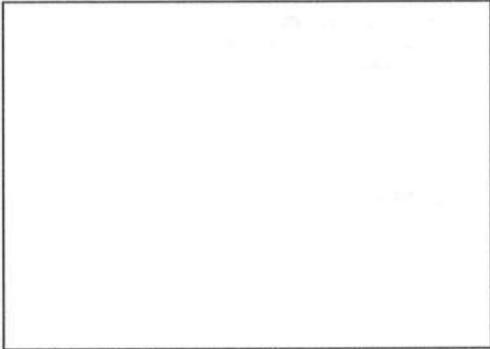
**Project Number:** SMR-005CS

**Historical Project Number**

**Project Location:**

**Project Description:**

Rehabilitates the drywell to restore capacity. May install in infiltration trench and treatment unit if needed.



**Project Benefit:**

Eliminates flooding and improves safety at corner, crosswalk, and ADA ramp.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering						39		39		39
Construction						117		117		117
<b>Total Project Costs - Inflated \$</b>						<b>156</b>		<b>156</b>		<b>156</b>
<b>Project Funding Sources</b>										
Revenue - GFC Sewer						87		87		87
Revenue - Sewer						70		70		70
<b>Total Project Funding - Inflated \$</b>						<b>157</b>		<b>157</b>		<b>157</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering						Q1Q2				
Construction						Q2Q3Q4				

Source: Stormwater Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Retrofit Discharge to Bell Creek on North Brown

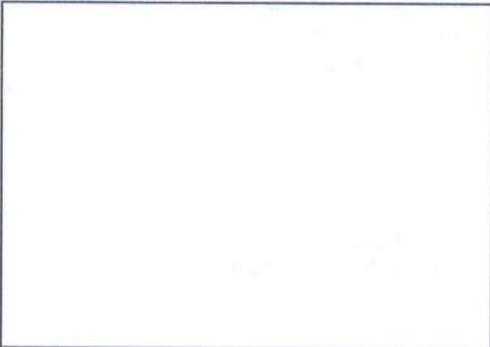
**Project Number:** SMR-011CS

**Historical Project Number** 1.18

**Project Location:**

**Project Description:**

Redirect Storm Drains from East Washington and North Brown to existing infiltration facility to the north, and add treatment device.



**Project Benefit:**

Water quality in Bell Creek by removing toxic contaminants in runoff.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total	
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project	
	Plan								Plan		
<b>Project Cost Phase</b>											
Preliminary Engineering				42					42	42	
Construction					81				81	81	
<b>Total Project Costs - Inflated \$</b>				<b>42</b>	<b>81</b>				<b>123</b>	<b>123</b>	
<b>Project Funding Sources</b>											
Grant - State				42	81				123	123	
<b>Total Project Funding - Inflated \$</b>				<b>42</b>	<b>81</b>				<b>123</b>	<b>123</b>	
<b>Project Timeline Phase</b>											
Preliminary Engineering				Q1Q2Q3Q4							
Construction					Q1Q2Q3						

Source: Stormwater Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Seal Street Drainage Improvements

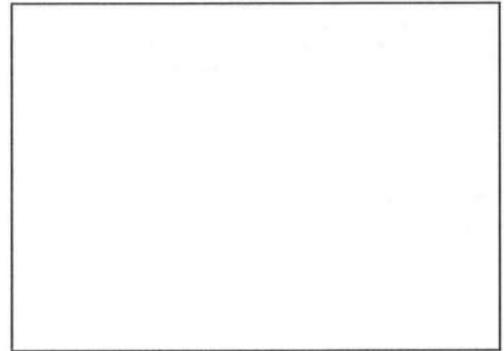
**Project Number:** SMR-008CS

**Historical Project Number**

**Project Location:**

**Project Description:**

Divert runoff to existing drywells on Seal St, rehabilitate or expand facility as needed.



**Project Benefit:**

Eliminates flooding and improve safety along alley and Seal St.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Engineering				23					23	23
Construction				114					114	114
<b>Total Project Costs - Inflated \$</b>				<b>137</b>					<b>137</b>	<b>137</b>
<b>Project Funding Sources</b>										
Revenue - GFC Sewer				67					67	67
Revenue - GFC Water				70					70	70
<b>Total Project Funding - Inflated \$</b>				<b>137</b>					<b>137</b>	<b>137</b>
<b>Project Timeline Phase</b>										
Engineering				Q1Q2						
Construction				Q3Q4						

Source: Stormwater Comprehensive Plan  
 Amounts in Thousands Inflated \$



## South 3rd Ave Drainage Improvements

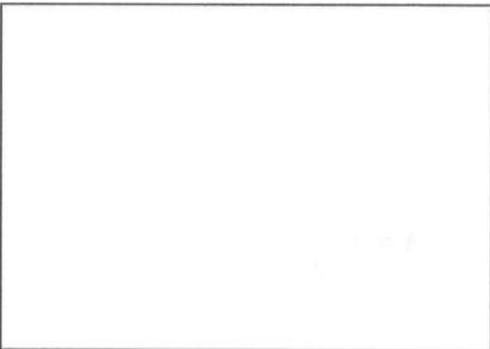
**Project Number:** SMR-002CS

**Historical Project Number**

**Project Location:**

**Project Description:**

This project pipes the flows to the base of the fill slope and routes the runoff via ditches across school property. It will install an 18-inch diameter culvert under the Hideaway Homes Park driveway and a catch basin at the discharge end of the culvert.



**Project Benefit:**

Eliminates erosion and flooding of non-City property.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years	Project
	Plan								Plan	
<b>Project Cost Phase</b>										
Preliminary Engineering				17					17	17
Construction				67					67	67
<b>Total Project Costs - Inflated \$</b>				<b>84</b>					<b>84</b>	<b>84</b>
<b>Project Funding Sources</b>										
Revenue - Sewer				42					42	42
Revenue - Water				42					42	42
<b>Total Project Funding - Inflated \$</b>				<b>84</b>					<b>84</b>	<b>84</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering					Q1Q2					
Construction					Q3Q4					

Source: Stormwater Comprehensive Plan  
 Amounts in Thousands Inflated \$

2017 – 2022

Capital Improvement Program

City of Sequim, Washington



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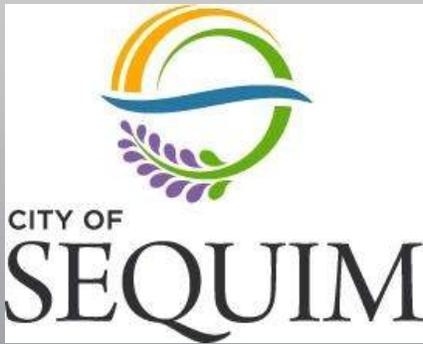
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- Purpose of the CIP
- Sequim's Approach to Developing the Six-Year CIP
- Navigating the CIP

# **CAPITAL IMPROVEMENT PROGRAM 2017 – 2022**

***A Reader's Guide to the  
Capital Improvement Program***

# ***A Reader's Guide to the Capital Improvement Program***

## **Purpose of the CIP**

The Capital Improvement Program (CIP) is both a planning and financial document. It prioritizes capital investments the City intends to make in the 2017 to 2022 time period, and proposes a plan for how to pay for these investments. The CIP does not appropriate funds; instead, it functions as a budgeting tool, supporting the actual appropriations that are made by the City Council through adoption of the budget. It is an important filter through which Sequim officials demonstrate that the Capital Facilities Element of the Comprehensive Plan and its related Capital Facilities Plans are financially realistic.

The CIP describes funding strategies for major construction, land acquisition and equipment purchases that will improve the cultural environment, capital infrastructure and recreational opportunities for the citizens of Sequim. Capital expenditures are described in the context of how much each project will cost to complete, and the ongoing impact that the project will have on the City's operating budget after it goes into service.

## **Sequim's Approach to Developing the Six-Year CIP**

The CIP is one of the vital implementation tools that works in concert with the Comprehensive Plan's Capital Facilities and Transportation Elements, and the City's Long Range Financial Plan to fulfill the goals and visions of the Land Use Element of the Comprehensive Plan. All of these policy documents must be coordinated and consistent with each other. While the Comprehensive Plan articulates the vision and goals for how Sequim will develop over the next 20 years, it is the CIP that makes the critical link between the City's physical planning policy and the financial resources needed to maintain or improve public services, facilities and infrastructure.

Adjunct to the Capital Facilities Element of the Comprehensive Plan, Sequim has adopted four Capital Facilities Plans (CFP) to provide long range policy guidance for the development of capital improvements. They are: The Parks and Recreation Master Plan (2015), Transportation Master Plan (2013), General Sewer Master Plan (2013), and the Water System Comprehensive Plan (2013). Each CFP contains an inventory of existing publicly-owned capital facilities describing their locations and capacities; a forecast of schedule and costs for new or refurbished capital facilities; and the proposed locations and capacities of new or expanded capital facilities. Each CFP also recommends a strategy to finance those facilities with public funds.

Sequim's policy of concurrency requires that the extension of, or upgrades to public facilities and services necessary to support new development shall be adequate to serve that development at the time that it is approved for occupancy or use, without decreasing current service levels below established standards. The concurrency policy is applied in the CIP according to the Level of Service standards stated in the City's respective CFPs.

The capital improvement budget is enacted annually based on the latest revision of the CIP. It encompasses City Council-approved appropriations for the projects that are usually requested in the year of a capital project's inception. As stated in (Section C) of the City's Capital Improvement Program Policy (Chapter 1), the CIP is to be updated annually as part of the City's budget process to reflect changes in the availability of revenues and the costs of approved capital projects. The City Council may also initiate changes to the CIP inventory of projects at any other time.

## **Navigating the CIP**

The CIP is divided into seven sections:

- Chapter 1 - Introduction;
- Chapter 2 - CIP Summary;
- Chapter 3 - Water Restricted Fund Projects;
- Chapter 4 - Sewer Restricted Fund Projects;
- Chapter 5 - Streets Restricted Fund Projects;
- Chapter 6 - Parks Restricted Fund Projects; and
- Chapter 7 - Capital/Building Facilities Restricted Fund Projects; and
- Chapter 8 - Stormwater Restricted Fund Projects; and

The CIP is organized by chapter for each of the Restricted Funds. Each project is described briefly as to the activity that will be undertaken, the year in which it will be started, subsequent years of continuing activity for long-term projects, the amount expected to be spent in each year by project expenditure category: Preliminary Engineering; Property Acquisition; and Construction, (explained below) and where the money will come from to pay for them. The CIP also describes the benefit that will result from the advanced studies, major construction, land acquisition and equipment procurement actions intended to improve the City's capital infrastructure.

### **Expenditure Categories**

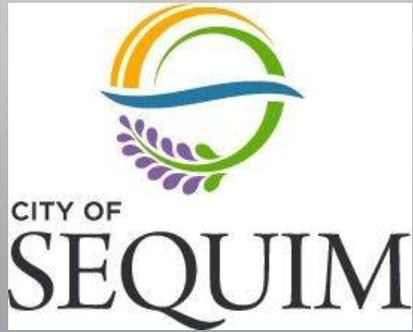
***Preliminary Engineering:*** Includes costs required to design and manage the project from scoping through construction close-out. This category accounts for both city staff effort and contract project management services. Typical tasks that occur in the Preliminary Engineering phase include: completion of environmental reviews and permit acquisition; surveying; development of plans, specifications, and cost estimates; project management; construction management and inspection.

***Real Estate Acquisition:*** When real property or right-of-way is needed to implement a capital project, such costs are tracked separately from other project costs. Typical expenses include staff activity, consultant costs and payment for the easement or fee simple real property acquired by means other than dedication. Title reports, appraisals, and recording costs are commonly associated with property acquisition as well.

***Construction:*** Construction costs include direct charges for work performed by a contractor; including materials, equipment usage, labor, utility relocations, and spoils disposal. Direct city costs such as staff salaries are not included in this component.

Certain projects within the CIP, such as the exploration of acquiring new water rights, are proposed as preliminary studies only. The purpose of these studies is to provide a basis for determining if the capital initiative should be pursued within the six-year CIP planning horizon. If so, these studies will help to estimate future project timing and costs and the proposed method of financing those expenditures. From these details, summaries of capital activity in each year can be prepared as well as summaries of financial requirements such as the amounts of general obligation bonds to be issued, amounts of general operating funds required to sustain new or refurbished capital investments after they are placed in service, and any anticipated intergovernmental support, such as state gas tax funds and grants.

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- Capital Improvement Planning Under the Washington State Growth Management Act
- Advantages of Capital Improvement Planning
- Capital Improvement Program Impact on Operating Budgets
- Capital Improvement Fund Descriptions
- Capital Budget Criteria
- Capital Improvement Planning Policy
- City of Sequim Debt Policy
- Capital Project Criteria

# **CAPITAL IMPROVEMENT PROGRAM 2017 – 2022**

## *Chapter 1*

### *INTRODUCTION*

## **Capital Improvement Planning under the Washington State Growth Management Act**

Following decades of mounting concern by Washington citizens about the impacts of uncoordinated and unplanned growth on the state's environment and economic prosperity, the Legislature adopted the Growth Management Act (GMA) of 1990 (RCW 36.70A et sup). The basic objective of the GMA is to guide local governments in assessing their goals, evaluating their community assets, and preparing Comprehensive Plans to fulfill a carefully-considered vision for their communities' future.

Among its many provisions, the GMA challenges jurisdictions state-wide to examine the question: how they can afford the future that they envision for themselves? The Comprehensive Plan that the GMA requires a jurisdiction to adopt should guide its orderly development over a twenty-year planning horizon. To help fulfill that intention, a Capital Facilities Element is designated as a mandatory component of the Comprehensive Plan, and includes:

- An inventory describing the location and capacity of the jurisdiction's existing capital facilities;
- A forecast of future needs for new or expanded capital facilities, their proposed locations, and their capacities;
- A requirement to reassess the Comprehensive Plan Land Use Element if capital facility funding is predicted to fall short of meeting forecast needs, and to ensure that the Comprehensive Plan's Land Use and Capital Facilities Elements are consistent in terms of policy and financial reality, and
- A program of six-year duration (or longer) demonstrating that the costs of new or expanded capital facilities are within the funding capability of the jurisdiction, and identifies the source(s) of public funds to be spent for such purposes.

Implementation of the Comprehensive Plan within the scope of the Capital Facilities Element is described through:

- level of service standards for public facilities and services;
- analysis of how the extension of public facilities will influence undeveloped areas;
- policies to guide the extension of new public services, or to upgrade existing services, within the jurisdiction's boundaries; and
- policies to guide coordination with adjacent jurisdictions regarding provision of public facilities and services.

## **Advantages of Capital Improvement Planning**

The GMA establishes the purposes of Capital Improvement Planning as: providing adequate public services to existing development; managing the cost of serving future development; and, ensuring that public services will be in place when future development occurs. Beyond compliance with the GMA, however, many benefits accrue to a community that takes a sound approach to Capital Improvement Planning:

- Capital planning anticipates repair or replacement of existing facilities before they fail. Failure is more costly and more disruptive than planned repair or replacement;
- Capital planning requires the community and City leaders to consciously set priorities between competing projects and interests. There are always more needs and competing projects than available funds to accommodate them;
- Long-range planning for infrastructure allows the community to finance growth without being overwhelmed by unanticipated costs or time constraints;
- Coordination of capital projects reduces scheduling conflicts between related projects, resulting in more efficient government operations;

- Capital planning provides adequate lead-time to seek outside financial assistance for infrastructure project through grants and inter-governmental assistance; and
- Capital planning serves as public education tool for elected officials to ensure the community that they are pro-actively guiding future development in accordance with adopted policy.

### **Capital Improvement Program and Impact on Operating Budgets**

Many capital projects, when completed, carry ongoing maintenance and operating costs that need to be reflected in the City's annual budget. For example, when a new park or ball field is developed, the City will need to add the ongoing cost of maintaining that new facility to the annual operating budget. Where appropriate, the individual projects listed in the 2017-2022 CIP include estimated future operating costs. Those costs were estimated based on the fullest knowledge of the respective projects at the time that this CIP was published. Future amendments to the CIP will likely result in change to their respective operating budget impacts.

### **Capital Budget Criteria**

Sequim's capital improvement programming and budgeting sequence involves the development of a long-term plan for capital expenditures. Capital expenditures include payments for buildings, land, major equipment, and other assets that are of significant value (greater than \$50,000) and have a useful life of at least five years.

Recognizing that the need for infrastructure development and major equipment acquisition exceeds the reality of Sequim's annual financial resources, the City Council established the following equally-weighted criteria to establish funding and scheduling priorities in the CIP:

1. Projects that preserve existing capital infrastructure;
2. Projects with low life-cycle costs;
3. Projects that have a high percentage of project costs funded by non-city sources or that have a dedicated funding source;
4. Projects that generate revenue or reduce operations and maintenance costs;
5. Projects that have identified funding for operations and maintenance costs; and
6. Projects that have a high level of community support.

Although the following criteria are not officially-adopted policy, they are also considered by city staff in developing their recommendations for CIP project priorities:

***Regulatory Mandates:*** State or Federal law may require that a particular project be implemented within a prescribed time period. Court orders and judgments concerning annexation, property owner's rights, environmental protection, and other judgments may also affect local CIP project priorities.

***Health and Safety:*** The benefit of a project to community safety, public health and protection of environmental resources from documented hazards may be recommended for higher priority treatment.

***Comprehensive Plan Advancement:*** Because capital projects may directly or indirectly implement the goals stated in the comprehensive plan, priorities should reflect consistency with those community goals.

**Funds:** The extent to which outside funding is available for the project or purchase should be evaluated and quantified.

**Project Synergy:** Projects in one Restricted Fund category are essential to the success of those in other categories. Careful coordination of funding and scheduling of related projects may affect substantial long-term infrastructure cost savings. Likewise, opportunities for interagency cooperation in carrying-out related capital spending initiatives should be investigated.

**Government Efficiency:** Projects that substantially improve the quality of service at the same operating cost, or eliminate obsolete and inefficient facilities should be identified using this category. Opportunity purchases are also considered under this criterion. Early purchase of available land for park expansion, for example, may result in substantial future costs savings, even if development of that parkland expansion is delayed several years.

**Economic Impact:** A project may have a favorable effect on local economic activity, increase property values, or encourage growth in public revenues if carried out sooner, rather than later.

Once the Capital project priority is established, those projects are funded through the issuance of General Obligation debt, grants, general tax allocation, utility fees, Transportation Benefit District collections, Real Estate Excise Taxes, and by transfers from other funds as approved by the City Council. Annual contributions may be used in whole or in part to fund capital projects as cash assets are accumulated. Alternatively, annual contributions may be allowed to remain in reserve until those funds, along with accrued interest have grown sufficiently to permit larger projects to be undertaken.

### **Capital Improvement Planning Policy**

The City Council adopted its Capital Improvement Planning Policy in February 2013. Its purpose is to manage development of the CIP, and thus ensure that the City preserves, maintains, and improves buildings, parks, roads, sewers, equipment and other capital investments. This policy is also intended to guard against unplanned major capital costs in future years.

- A. Policy Scope: The Capital Improvement Planning Policy shall apply to capital projects that meet all of the following criteria:
  - 1. Projects that exceed \$50,000 in total cost;
  - 2. Projects that involve the purchase of land, buildings, building improvements or building components;
  - 3. Projects where the City is responsible for the purchase and/or development thereof; and
  - 4. Projects included in the City's Comprehensive Plan or related capital plans.
  
- B. Capital Asset Inventory
  - 1. The City shall develop and maintain an inventory of all infrastructure assets over \$100,000 including water, sewer, roads, buildings, park improvements and other infrastructure to include their condition, expected life span and original cost.
  - 2. The Administrative Services Director shall establish policies and appropriate procedures to account for infrastructure and non-infrastructure capital/fixed assets, including establishing the threshold dollar amount for which capital project and capital/fixed asset records are maintained and how often physical inventories are taken.

C. Capital Improvement Program

1. The City shall prepare a Capital Improvement Plan (CIP) that complies with the State Growth Management Act and related statutes.
2. The CIP shall include all projects anticipated for the long-range financial plan which is based on a six year planning horizon while the Comprehensive Plan or other related capital plans such as the City's Parks, Recreation and Open Space Plan or Pavement Management (Street) Plan may include projects with planning horizons greater than six years.
3. The CIP shall include, at a minimum, the following information for each project:
  - i) Project type and description for a six year planning horizon;
  - ii) Estimated acquisition and development costs by year;
  - iii) Estimated funding sources by type and year;
  - iv) Estimated annual operations and maintenance costs upon completion;
  - v) Projected source of operations and maintenance costs upon completion; and
  - vi) Project priority within project type.
4. The CIP shall be updated annually as part of the City's budget process to reflect changes in the revenues and expenses of approved projects.
5. The City Council shall approve the CIP and may amend the CIP at any time.

D. Capital Projects Funding Criteria. The City shall prioritize use of City funding for capital projects. Priority will be given to projects that meet the following criteria:

1. Projects that preserve existing capital infrastructure;
2. Projects with low life-cycle costs;
3. Projects that have a high percentage of project costs funded by non-city sources or that have a dedicated funding source;
4. Projects that generate revenue or reduce operations and maintenance costs;
5. Projects that have identified funding for operations and maintenance costs; and
6. Projects that have a high level of community support.

E. Capital Projects Fund

1. The City has established several capital projects funds to be used to accrue moneys for the construction and/or completion of approved CIP projects.
2. All funds identified as funding sources for approved CIP projects shall be transferred to the appropriate capital projects fund. Currently the City has the following restricted funds for capital projects:
  - i) Water Restricted
  - ii) Sewer Restricted
  - iii) Streets Restricted
  - iv) Parks Restricted
  - v) Capital/Building Facilities Fund
3. All expenses related to approved CIP projects shall be made out of the appropriate capital projects fund.
4. The Administrative Services Director shall account for the revenues and expenditures of each project separately.
5. Interest on the appropriate capital projects fund cash balances shall be credited to each individual fund based on their annual average cash balance.

F. Use of Debt

1. The City may use debt to pay for capital projects included in the CIP subject to the City's Debt Management Policy; and
2. Any use of debt to fund capital projects must be approved by the City Council.

- G. Project Approval
  - 1. The City Manager shall recommend CIP projects for funding in the Capital budget; and
  - 2. The City Council shall approve all current CIP projects through its approval of the City budget.
- H. Sustainability
  - 1. The City shall include financial sustainability principles in the development of capital projects.

**City of Sequim Debt Policy**

The purpose of the City’s Debt Policy is to define its approach to managing debt. Adherence to the policy is essential to ensure that the City maintains a sound debt position and protects the credit quality of its obligations.

- A. Policy Scope: This policy shall apply to all debt issued by the City of Sequim
- B. Statutory Limitations
  - 1. All City debt management policies and practices shall comply with Washington State law;
  - 2. The general obligation debt of the City shall not exceed 7.5 percent of the assessed value of taxable property within the City;
    - i) The City Council can approve debt up to 1.5 percent of the city’s total assessed value
    - ii) The public may vote to approve debt for general government purposes in an amount not to exceed 2.5 percent of assessed valuation, inclusive of any City Council approved debt
    - iii) The public may vote to approve debt up to an additional 2.5 percent of assessed valuation for open space, park facilities, and capital facilities associated with economic development.
  - 3. The public may vote to approve debt up to an additional 2.5 percent of assessed valuation for city water or sewer utilities.
- C. Authority to Borrow
  - 1. All borrowing, including short-term debt, will be subject to Council approval; and
  - 2. Use of credit cards or vendor accounts are considered expenditures and are not considered short term obligations under this policy.
- D. Revenue Bonds
  - 1. Revenue bonds are used to finance construction or improvements to facilities of enterprise systems operated by the City and are generally payable from the enterprise. Revenue bonds are not subject to the City’s statutory debt limitation and voter approval is not required.
- E. Short Term Obligations
  - 1. Short term obligations are warrants, notes, capital leases, or other evidences of indebtedness expected to be repaid in three years or less;
  - 2. The City may use short term obligations to:
    - i) Meet the immediate financing needs of a capital project for which long term financing has been secured but not yet received.
    - ii) Cover temporary cash flow shortages, which may be caused by a delay in receipting tax revenues.

3. The City may make short term loans between City funds (interfund loans) as an alternative to using short term obligations.
  - i) Interfund loans will be permitted only if an analysis of the affected fund indicates excess funds are available and the use of these funds will not impact the fund's current operations.
  - ii) All interfund loans shall bear interest based on prevailing rates and have terms consistent with state guidelines.
  - iii) All interfund loans shall be made in conformance with the City's Interfund Loan Policy.

F. Intermediate Term Debt

1. Intermediate term debt is debt that is used to finance a specific asset or set of assets with a useful life of more than three but less than seven years;
2. The City will only issue intermediate term debt for capital assets when the cost of borrowing or other factors make it in the City's best interest; and
3. The term of any intermediate term debt will not exceed a conservative estimate of the useful life of the asset(s) to be financed.

G. Long Term Debt

1. Long term debt is that debt which is seven years or more to term;
2. The City will only issue long term debt for capital improvements that are included in the City's Capital Improvement Plan;
3. The City will only issue long term debt for capital improvements that cannot be financed on a pay-as-you-go basis from anticipated cash flows;
4. The term of any long term debt will not exceed a conservative estimate of the useful life of the asset to be financed;
5. The City will include a comprehensive debt repayment plan with any proposed use of long term debt;
6. The City will explore alternative financing mechanisms such as local improvement districts, Washington State Public Works Trust Fund Loans and the Local Option Capital Asset Lending (LOCAL) Program when planning to incur debt; and
7. In any proposal to use debt the City shall identify the future operating and maintenance costs associated with the capital improvement to be financed and how those operating and maintenance costs will be paid.

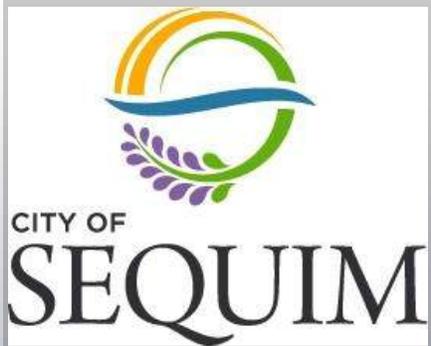
H. Refunding Bonds

1. Refunding bonds are issued to refinance existing bonds to take advantage of lower interest rates;
2. The City will use refunding bonds, when appropriate, to restructure its outstanding debt; and
3. Unless otherwise justified, such as the desire to change a bond covenant, the City shall only issue refunding bonds when the net present value of savings after expenses is at least 3 percent.

I. Debt Reporting

1. The City shall include a summary of its outstanding debt in its budget document and annual financial report.

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- Capital Improvement Program Summary
- Water, Sewer, Streets, Parks and Capital/Building Facilities Restricted Fund Projects

# **CAPITAL IMPROVEMENT PROGRAM 2017 – 2022**

## *Chapter 2*

### *CIP Summary*

- Planned estimated expenditures
- Proposed project schedules
- Funding sources by year and percent



2017-2022 - All Funds

Funding Summary and Estimated Cost

	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan Total
--	------------------	------------------	------------------	------------------	------------------	------------------	----------------------

## Capital Facilities Fund

Facility Improvement Improvements							
CFL-003FI Guy Cole Remodel	336		150	150			636
CFL-007FI Public Works Facilities Property Development	68	55	57				180
<b>Capital Facilities Fund Total</b>	<b>404</b>	<b>55</b>	<b>207</b>	<b>150</b>			<b>816</b>

## Parks Restricted Fund

Facility Improvement Improvements							
PRK-011FI Carrie Blake Park Access Road Relocation	274						274
PRK-015FI Carrie Blake Park Pickleball Courts	154						154
PRK-017FI Carrie Blake Park Tennis Courts	60	230					290
PRK-045FI City Wide Park Land Acquisition						200	200
PRK-044FI Gerhart Park Building Removal and Restoration			75	75	75	75	300
PRK-047FI Gerhart Park Child Play Equipment				60			60
PRK-013FI Guy Cole Parking Lot Overlay and Drainage Improvements			312				312
PRK-018FI Keeler Park Access and Parking				599			599
PRK-019FI Keeler Park Pedestrian Boardwalk					187		187
PRK-020FI Pioneer Park Sewer Connection	55						55
PRK-046FI Reuse Demo Site Band Shell Tiered Seating						196	196
<b>Parks Restricted Fund Total</b>	<b>543</b>	<b>230</b>	<b>387</b>	<b>734</b>	<b>262</b>	<b>471</b>	<b>2,627</b>

## Sewer Restricted Fund

Collection System Improvements							
SRR-001CS Cedar Street Sewer Improvement			308	1,289			1,597
SRR-003CS Doe Run Lift Station	261						261
SRR-014CS East Fir Street Sewer Replacement			262	1,323	713		2,298
SRR-002CS Etta Street Sewer Improvements		195					195
SRR-013CS North Blake Avenue Sewer Improvements				213			213
SRR-009CS Sunnyside Sewer Improvement	517						517
SRR-040CS Upgrade sewer system in 4th Avenue from Washington Street to Cedar Street	164						164
SRR-008CS West Fir Street Sewer Improvement	204	426	223				853
SRR-007CS WRF Influent Trunk Line Pipeline Repair/Replacement			201	166	1,572		1,939
Miscellaneous Improvements							
SRR-041MI General Sewer Plan Update		75					75
Reclaim Water System Improvements							



2017-2022 - All Funds

Funding Summary and Estimated Cost

	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan Total
<b>Sewer Restricted Fund</b>							
<b>Reclaim Water System Improvements</b>							
SRR-024RW Reclaimed Water Network Expansion						373	373
SRR-042RW Reclaimed Water Storage Feasibility Study		109					109
SRR-025RW WRF Reclaimed Water Pumping Facility Improvements				733			733
<b>Waste Treatment Improvements</b>							
SRR-035W Aerobics Digester Capacity Upgrades	157		1,977				2,134
SRR-034W Class A Biosolids Handling & Distribution Center				273	999	1,044	2,316
SRR-004W Outfall Pipeline Repair/Replc						1,551	1,551
SRR-036W WRF Headworks Modifications No 2			372				372
SRR-038W WRF Odor Control	137						137
<b>Sewer Restricted Fund Total</b>	<b>1,440</b>	<b>805</b>	<b>3,343</b>	<b>3,997</b>	<b>3,284</b>	<b>2,968</b>	<b>15,837</b>

**Stormwater Restricted Fund**

<b>Collection System Improvements</b>							
SMR-003CS 7th Ave and Washington Upgrade		206					206
SMR-010CS Bell Creek Basin Hydrologic/Hydraulic Assessment		25	75	75	25		200
SMR-009CS Bell Creek Culvert Under Blake Ave						478	478
SMR-004CS Emerald Highlands Pond/Clara Crest Abatement			125				125
SMR-005CS North 5th Ave and Cedar Street Structure Upgrade					156		156
SMR-011CS Retrofit Discharge to Bell Creek on North Brown			42	81			123
SMR-008CS Seal Street Drainage Improvements			137				137
SMR-002CS South 3rd Ave Drainage Improvements			84				84
<b>Stormwater Restricted Fund Total</b>		<b>231</b>	<b>463</b>	<b>156</b>	<b>181</b>	<b>478</b>	<b>1,509</b>

**Streets Restricted Fund**

<b>City Wide Pavement Rehab Improvements</b>							
STR-041PR City-wide Pavement Rehabilitation	384		562	587	614	642	2,789
STR-064PR North Sequim Ave Pavement Rehabilitation						268	268
STR-065PR Washington St Pavement Rehabilitation					499	6,892	7,391
<b>City Wide Safety Projects Improvements</b>							
STR-039SP City-wide Safety Projects	60	62	65	68	71	75	401
<b>Facility Improvement Improvements</b>							
STR-061FI East Fir St Rehabilitation from Sequim Ave to Blake Ave			86	717	749		1,552



2017-2022 - All Funds

Funding Summary and Estimated Cost

	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan Total
<b>Streets Restricted Fund</b>							
<b>Facility Improvement Improvements</b>							
STR-034FI East Washington St. Bus Turn-Outs from Sequim Ave to Rhodefer Rd			26	123			149
STR-027FI North Kendall Rd and West Hendrickson Rd Intersection Improvements				48			48
STR-052FI Washington Street Signal Timing & Coordination	150						150
STR-030FI West Fir Street Rehabilitation from Sequim Ave and 5th Ave	793	1,596	2,079				4,468
STR-031FI West Prairie Complete Street Revitalization from Sequim Ave to 5th Ave		77	480	502	525	503	2,087
STR-063FI West Sequim Bay Rd Shoreline Revetment Repair		546					546
STR-032FI West Washington Eastbound Auxillary Lane from River Rd Modification				16	77		93
STR-029FI Whitefeather Way and US 101 Intersection Improvements			261	205			466
<b>Miscellaneous Improvements</b>							
STR-060MI Transportation Master Plan Update			50				50
<b>Pedestrian Improvement Improvements</b>							
STR-003PI 3rd Ave Bicycle Accommodation from Hwy 101 to Fir St	71						71
STR-014PI Etta Street Active Alleyway	90	718					808
STR-062PI ODT East Hendrickson Extension from Sequim Ave to Brown Rd	52	164	171				387
STR-016PI Seal Street Active Alleyway			23	85			108
STR-015PI Sunnyside Avenue Sidewalk				68	564		632
STR-020PI Upper Bell Creek Trail				20	86		106
STR-012PI Whitefeather Way Multi-user Trail			110	377			487
<b>Road Connectivity Improvements</b>							
STR-066RC North Blake Ave to North Rhodefer Rd Extension					85	321	406
STR-037RC West Brownfield Rd Realignment from Sequim Ave 3rd Ave					171	1,298	1,469
STR-038RC West Maple St Extension from 5th Ave to 4th Ave					561	291	852
<b>Streets Restricted Fund Total</b>	<b>1,600</b>	<b>3,163</b>	<b>3,913</b>	<b>2,816</b>	<b>4,002</b>	<b>10,290</b>	<b>25,784</b>

## Water Restricted Fund

<b>Booster Station Improvements</b>							
WTR-003BS 5th & McCurdy Booster Station Improvement	745						745
WTR-004BS Simdars Road Booster Station		62	411	68			541
<b>Distribution System Improvements</b>							
WTR-059DS 4th Ave Water Line	140						140
WTR-007DS 5th Avenue Water Main					255		255
WTR-006DS Brown Road Water Main - Pt Williams to Hendrickson				233	976		1,209
WTR-017DS Brown Road Water Main from East Fir Street to East Washington Street			692				692



2017-2022 - All Funds

Funding Summary and Estimated Cost

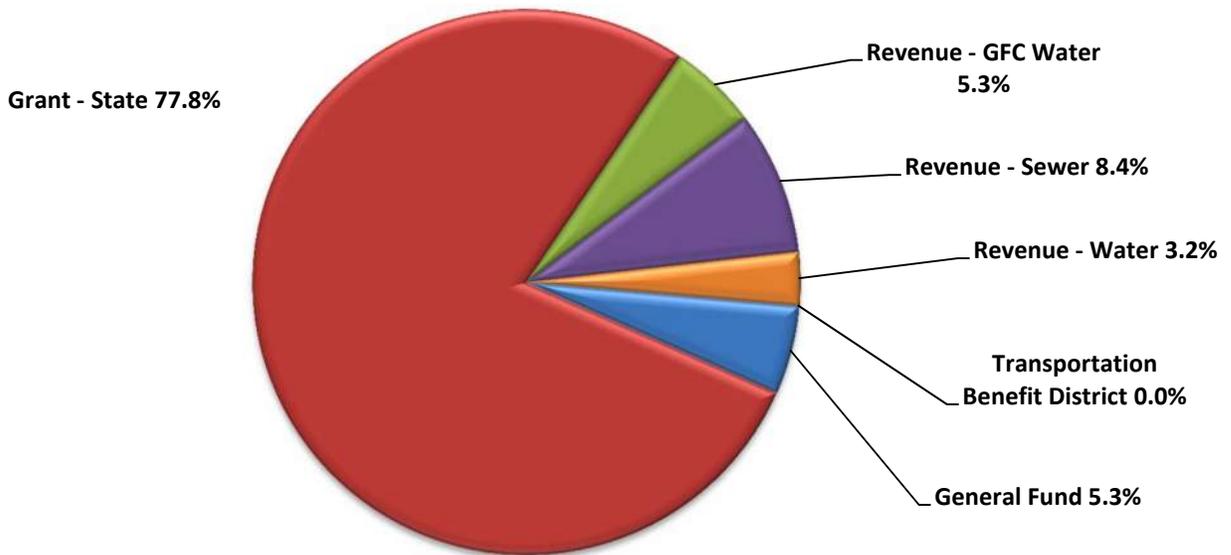
	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan Total
<b>Water Restricted Fund</b>							
<b>Distribution System Improvements</b>							
WTR-024DS Craftsman Court PRV Station						75	75
WTR-019DS East Etta Street Water Main		156					156
WTR-016DS East Fir Street Water Main			208	560	228		996
WTR-061DS New Water Line at New CB Park Entrance	209						209
WTR-056DS North and South Sunnyside - Bell to Fir	481						481
WTR-023DS Pressure Relief Valve	107						107
WTR-015DS West Fir Street Transmission Main Replacement	200	373	194				767
WTR-032DS West Prairie from S Sequim to S 5th		22	309	323	337	326	1,317
WTR-031DS West Washington Street Isolation Valves			20	175			195
<b>Miscellaneous Improvements</b>							
WTR-036MI Fixed Base Automatic Meter Reading System		574					574
WTR-060MI General Water System Plan Update		75					75
WTR-034MI SCADA Upgrade Report		57					57
WTR-062MI Utility Rate Study - Water AND Sewer			50				50
<b>Source Improvements</b>							
WTR-044SC Infiltration Gallery Improvements					903		903
WTR-045SC New Water Rights Analysis	50						50
WTR-040SC New Well - Silberhorn Deep Well	52	164		1,015			1,231
WTR-039SC Port Williams Well No.4						1,089	1,089
<b>Storage Improvements</b>							
WTR-050ST Repurpose the 500,000 Gallon Reservoir			239				239
<b>Water Restricted Fund Total</b>	<b>1,984</b>	<b>1,483</b>	<b>2,123</b>	<b>2,374</b>	<b>2,699</b>	<b>1,490</b>	<b>12,153</b>
<b>Project Total By Year</b>	<b>5,971</b>	<b>5,967</b>	<b>10,436</b>	<b>10,227</b>	<b>10,428</b>	<b>15,697</b>	<b>58,726</b>

## Capital Facilities Fund - Funding Sources by Year 6-Year Capital Improvement Plan 2017-2022

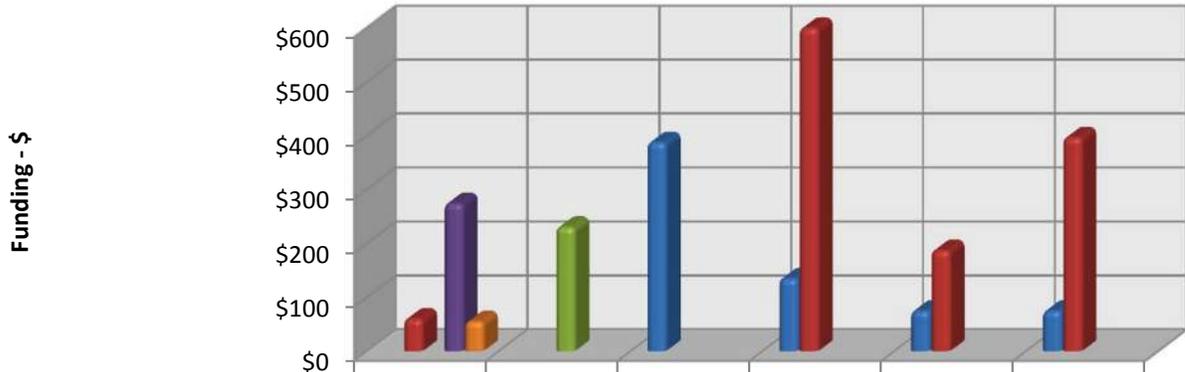


Funding Amounts in Thousands Inflated \$

## Capital Facilities Fund - Funding Source Percent 6-Year Capital Improvement Plan 2017-2022



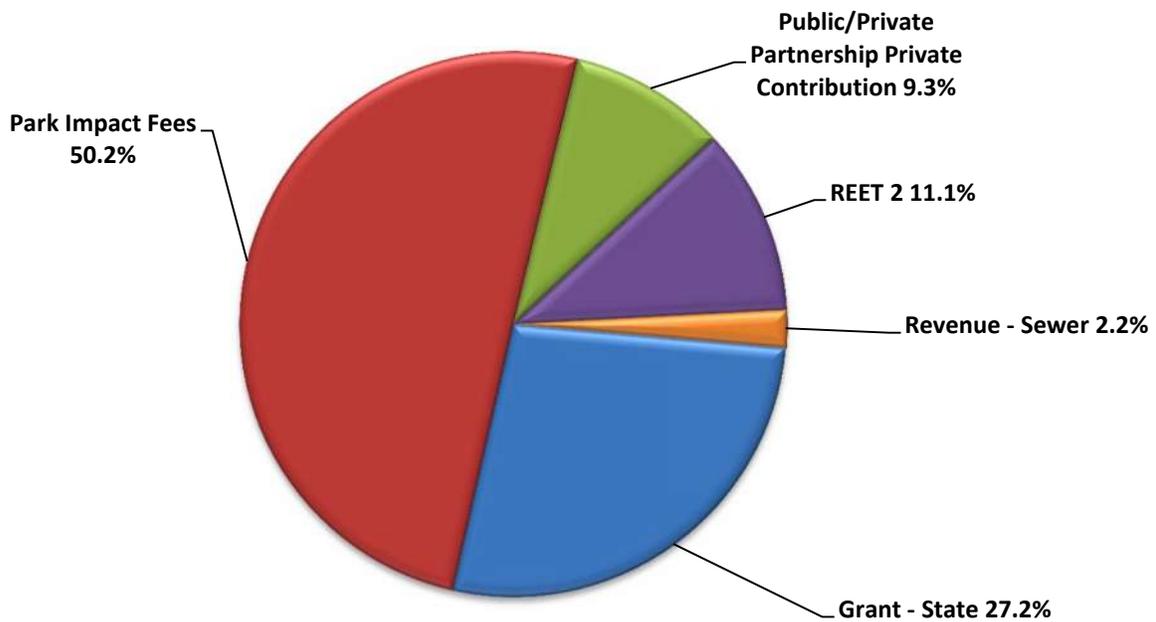
## Parks Restricted Fund - Funding Sources by Year 6-Year Capital Improvement Plan 2017-2022



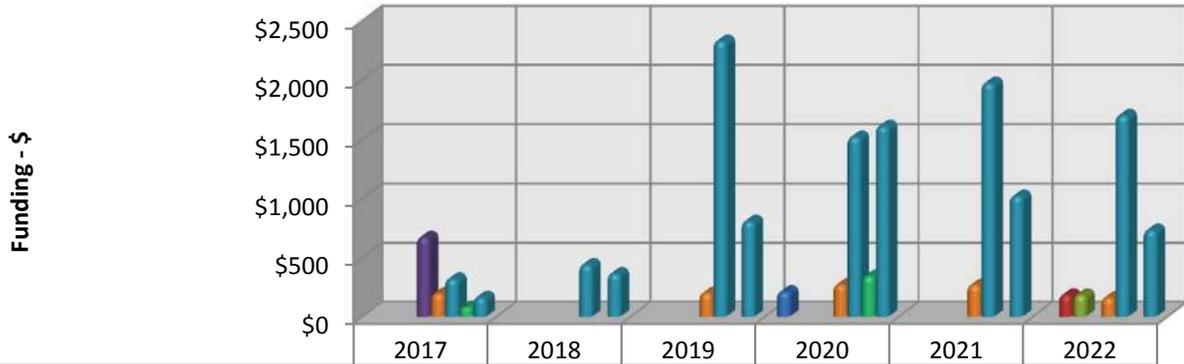
Funding Source	2017	2018	2019	2020	2021	2022
Grant - State			\$387	\$135	\$75	\$75
Park Impact Fees	\$60			\$599	\$187	\$396
Public/Private Partnership Private Contribution		\$230				
REET 2	\$274					
Revenue - Sewer	\$55					

Funding Amounts in Thousands Inflated \$

## Parks Restricted Fund - Funding Source Percent 6-Year Capital Improvement Plan 2017-2022



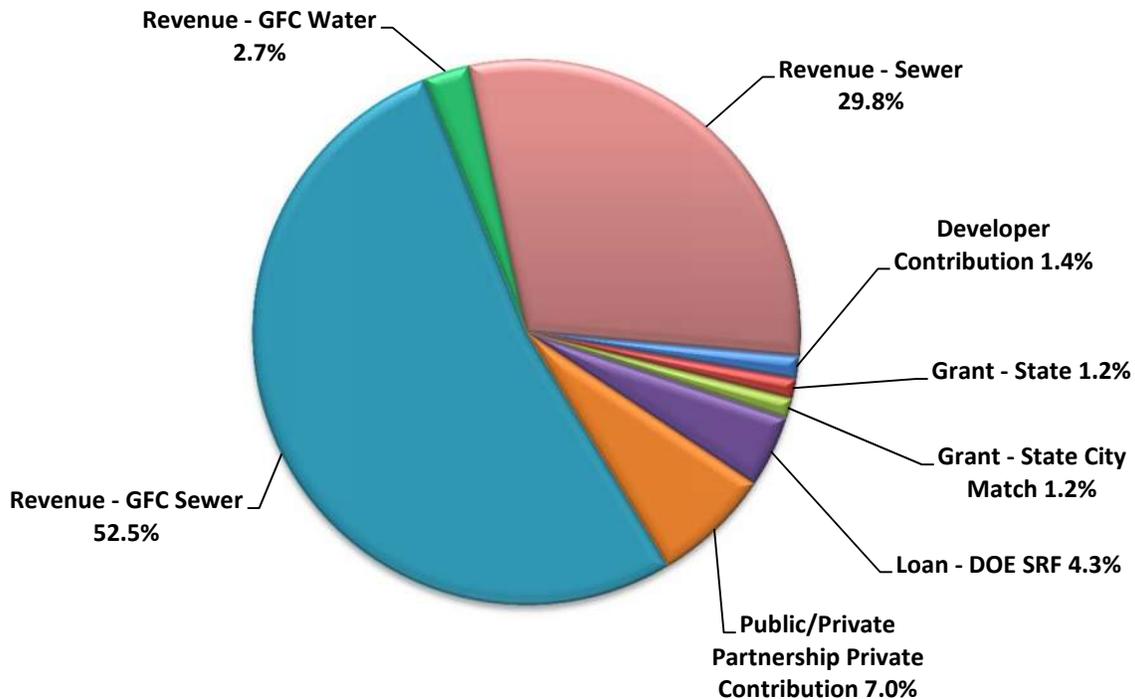
## Sewer Restricted Fund - Funding Sources by Year 6-Year Capital Improvement Plan 2017-2022



	2017	2018	2019	2020	2021	2022
Developer Contribution				\$213		
Grant - State						\$186
Grant - State City Match						\$186
Loan - DOE SRF	\$672					
Public/Private Partnership Private Contribution	\$198		\$200	\$272	\$269	\$163
Revenue - GFC Sewer	\$321	\$441	\$2,327	\$1,517	\$1,973	\$1,700
Revenue - GFC Water	\$82			\$344		
Revenue - Sewer	\$166	\$365	\$807	\$1,609	\$1,019	\$732

Funding Amounts in Thousands Inflated \$

## Sewer Restricted Fund - Funding Source Percent 6-Year Capital Improvement Plan 2017-2022

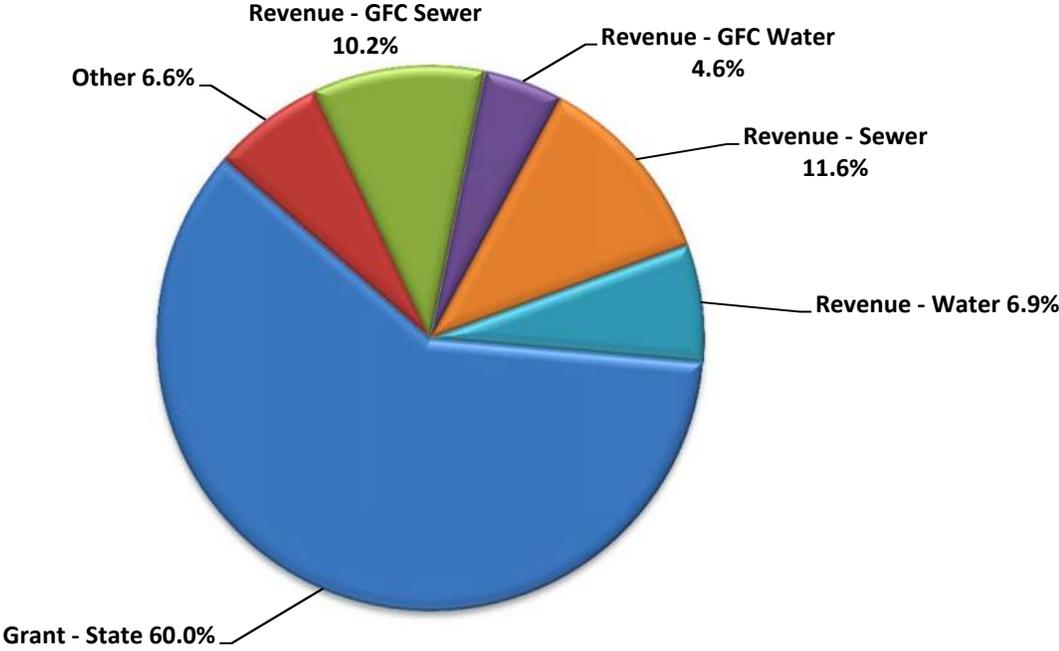


### Stormwater Restricted Fund - Funding Sources by Year 6-Year Capital Improvement Plan 2017-2022



Funding Amounts in Thousands Inflated \$

### Stormwater Restricted Fund - Funding Source Percent 6-Year Capital Improvement Plan 2017-2022

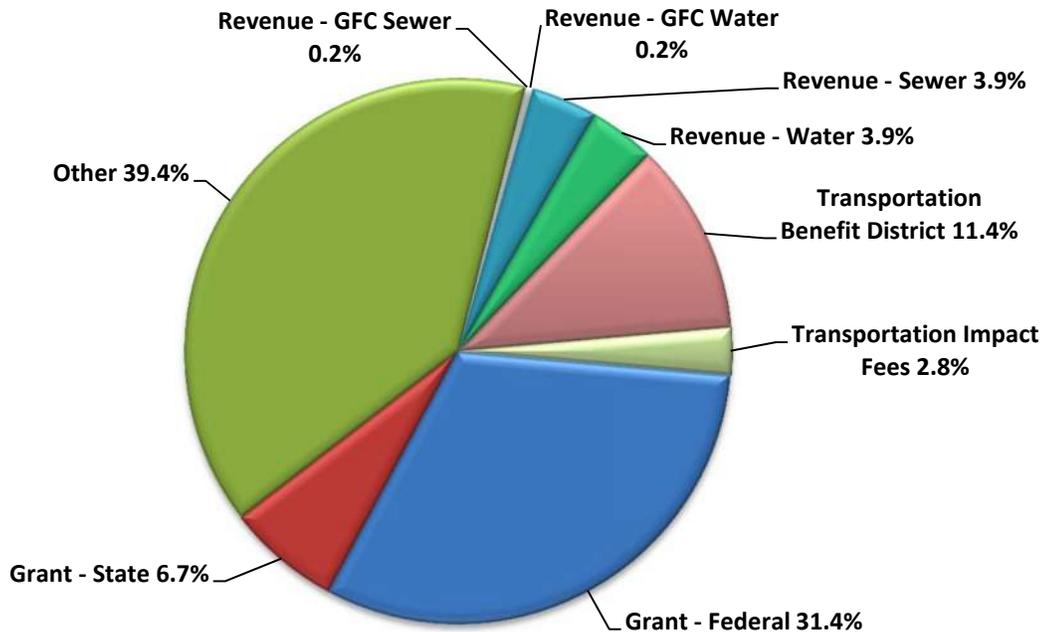


## Streets Restricted Fund - Funding Sources by Year 6-Year Capital Improvement Plan 2017-2022



Funding Amounts in Thousands Inflated \$

## Streets Restricted Fund - Funding Source Percent 6-Year Capital Improvement Plan 2017-2022

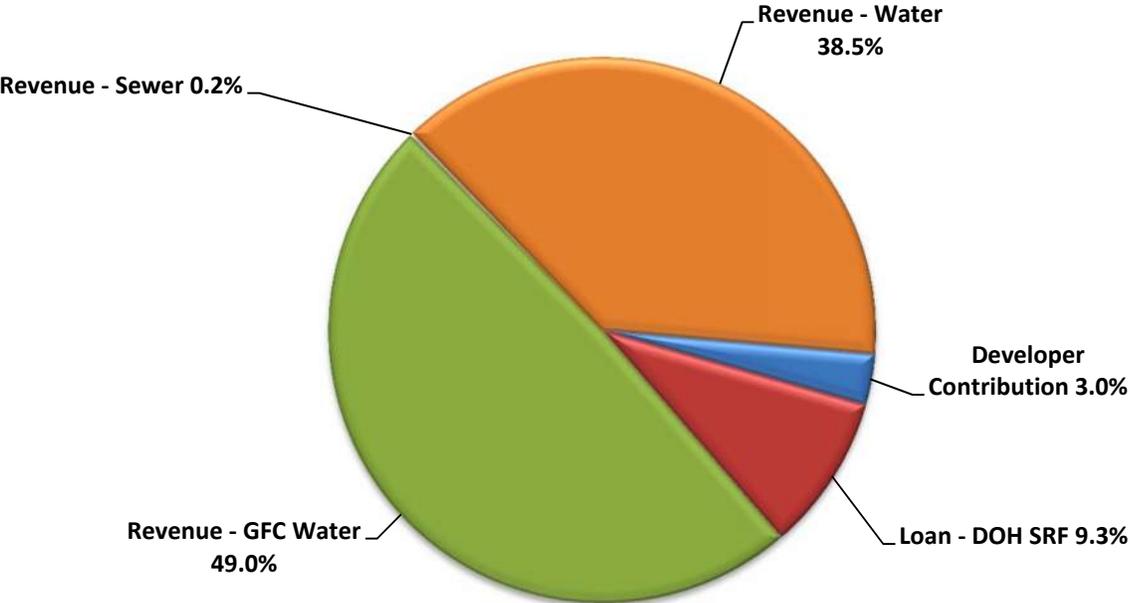


### Water Restricted Fund - Funding Sources by Year 6-Year Capital Improvement Plan 2017-2022



Funding Amounts in Thousands Inflated \$

### Water Restricted Fund - Funding Source Percent 6-Year Capital Improvement Plan 2017-2022



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- **Historical Overview of Sequim Water Utility Capital Improvements**
- **Sources of Water Supply and the CIP**
- **Distribution System Capital Improvements**
- **Future Water Demand**
- **Level of Service Standards**

# **CAPITAL IMPROVEMENT PROGRAM 2017 – 2022**

## *Chapter 3*

### *Water Restricted Fund Projects*

## **Historical Overview of Sequim Water Utility Capital Improvements**

The City of Sequim's municipal water system serves most of the incorporated city boundaries and areas of unincorporated Clallam County south and east of the city limits. The water system's three sources of supply are the Infiltration Gallery, the Silberhorn Wellfield, and the Port Williams Wellfield, described in more detail below. Raw water from all three sources is disinfected with sodium hypochlorite in accordance with state Department of Health standards for contact time and chlorine residuals in the distribution system.

The City's first water system, purchased from private interests in 1922, served several blocks of the central business district and was supplied by local springs. Passage of a bond issue in 1929 allowed the city to develop surface water rights on the Dungeness River, and to build the water system's first raw water open cut reservoir. Additional water transmission mains and reservoirs were added to the system in the late 1940s and early 1950s, including an intake line from the Dungeness River.

Following recommendations of a 1973 study, capital improvements included covering the open cut reservoir, metering connections, and replacing substandard transmission mains. Another report, completed in 1983, addressed water quality, water resources, and conservation. Improvements to the system included development of the Silberhorn Wellfield, installation of a chlorination system, and construction of a new infiltration gallery along the Dungeness River. In 1995, Port Williams Well No. 1 was drilled, and the 5th and McCurdy Booster Station was built. Port Williams Well No. 2 was brought to completion in 1998. In 2008, the Solana development required addition of a 1 MG reservoir and two booster stations. In 2009, Port Williams Well No. 3 was placed in service. Since 2000, the water system has expanded northwest to serve new commercial development on West Washington Street.

## **Sources of Water Supply and the CIP**

The three raw water sources named in the previous section directly influence the scope and direction of the Six-Year Capital Improvement Program for the Sequim Water Utility because of their geographic locations and respective yields. Accordingly, a brief description of each source, and its relationship to the treated water distribution system is provided.

*Infiltration Gallery:* The City's original water right for surface water diversion from the Dungeness River was changed in 1954 to the same location as the Infiltration Gallery. The diversion works consist of a horizontal collector system made of perforated pipe buried in a gravel filter pack under the stream bank of the Dungeness River. From a central collection well, water flows by gravity siphon to the City's 420 Reservoir and thence to the distribution system. While the Infiltration Gallery has been determined to be hydraulically connected to the river, its yield is not defined as groundwater under the influence of surface water.

*Silberhorn Wellfield:* The Silberhorn Wellfield, consists of three wells operated on an alternating basis to equalize use. During high demand periods, two wells are drawn simultaneously. The Silberhorn Wellfield pumps to the City's 1.7 MG reservoir serving the 420 Pressure Zone.

*Port Williams Wellfield:* There are three wells at the Port Williams source. They are operated on an alternating schedule, except during high demand periods when all three run simultaneously. The wells pump directly to the 350 Pressure Zone. When demand conditions require, Port Williams can supply the 420 Pressure Zone by operating in tandem with the 5th and McCurdy Booster Station. Under the three-well configuration in place total withdrawal from

the Port Williams Wellfield is restricted to customer demand in the 350 Pressure Zone plus the capacity of the 5th and McCurdy Booster Station.

The City's current water right permit provides for two additional wells at Port Williams. The City of Sequim's water right for the Port Williams Wellfield is supplemental to its existing water rights. When the City proves-up its full Port Williams water right, negotiations will ensue with the state Department of Ecology to designate Port Williams as the Primary water right, with the Silberhorn Wellfield and Infiltration Gallery water rights as supplemental.

### **Distribution System Capital Improvements**

The water utility transmission and distribution network consists of about 340,000 lineal feet of pipe, ranging from 2-inch to 16-inch diameter. Analysis of the distribution system has revealed several areas with fire flow deficiencies. These include non-residential areas located in the 420 Pressure Zone north of Highway 101, East Washington Street and the mixed use zone on East Hammond Street. While fire flows in these nonresidential locations meet the Universal Fire Code requirement of 1,500gpm, they do not meet Sequim's planning requirement of 3,000gpm. Residential fire flow deficiencies were also found in the 420 and 480 Pressure Zones. Projects are included within the CIP to resolve these deficiencies through upsizing water mains and installing distribution system loops.

### **Future Water Demand**

The water utility's future service boundaries include the Urban Growth Area and adjacent territory in which Sequim may become the logical water service provider. The current Capital Facilities Element policy allows Sequim to provide water service to new developments within the UGA in areas that are not served by other purveyors. The City may also acquire private water systems if the areas that those systems now serve are annexed to the City. Certain other portions of the UGA areas outside the Sequim city limits are served by the Clallam County Public Utilities District. Extension of municipal water service to current PUD customers will be regulated by a 1995 agreement between the agencies that requires mutual participation and consensus as appropriate boundary and infrastructure adjustments.

Sequim's Water System Master Plan projected water demands within the existing system boundaries for the CIP planning period by assuming that it will increase at a rate equivalent to the population growth rate. The Water System Plan analysis assumes a modest annual growth rate of two percent for the Sequim UGA, starting from the 2010 base year US Census total population. During this time period, Sequim is anticipated to annex more of the UGA at a rate of 4 percent per year. The following Table W-1 illustrates water demand growth through the CIP planning period, and includes a long-term projection based on a 20 year planning horizon. The chart also includes the estimated number of Equivalent Residential Units (ERUs) for each annual period. ERUs provide a method to express water use by non-residential customers as an equivalent number of residential customers. ERUs are calculated by dividing total single-family residential water use by the total number of single-family residential connections, giving average single-family residential water use. The volume of water used by non-residential customer classes is then divided by average single-family residential water use to determine the number of ERUs utilized by the other water user categories.

**Table W-1**

City of Sequim 2014 - 2019 Capital Improvement Program						
Water System Demand Projections						
Factor	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2032 Estimate
Population	7,054	7,744	7,990	8,244	8,505	12,989
Average Daily Demand (mgd)	0.080	0.859	0.880	0.901	0.923	1.290
Equivalent Residential Units	5,151	5,275	5,401	5,531	5,664	7,915

**Level of Service Standards<sup>1</sup>**

The below Table W-2 identifies some of the key criteria that have been identified by the Sequim Water Utility as necessary to provide a minimum level of service for existing and future customers. These design standards were applied to a rigorous analysis of the existing system facilities in the Water System Plan. Comparing existing system performance to these design standards revealed certain deficiencies that led in part to the inventory of projects that appear in the CIP.

**Table W-2**

Service Parameter	Standard
Distribution system pressure	30psi – peak hour demand 20psi – fire flow during MDD <sup>2</sup>
Transmission Main Pipeline Diameter	8 in min. serving fire hydrants
Fire Flow	3000gpm – commercial development 1000gpm – residential development
Source Capacity	MDD with 18 hours of pumping MDD plus capacity to replenish fire suppression storage in 72 hrs. ADD <sup>3</sup> with largest source out of service
Operational Storage	10% of total storage
Distribution System Leakage	10% of total source production

<sup>1</sup>Source: Water System Plan, Chapter 3; <sup>2</sup>MDD – Maximum Day Demand; <sup>3</sup>ADD – Average Day Demand



2017-2022 - Water System Projects  
 Project Summary, Schedule, and Estimated Cost

	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan Total
<b>Booster Station Improvements</b>							
WTR-003BS 5th & McCurdy Booster Station Improvement	745						745
WTR-004BS Simdars Road Booster Station		62	411	68			541
<b>Distribution System Improvements</b>							
WTR-059DS 4th Ave Water Line	140						140
WTR-007DS 5th Avenue Water Main					255		255
WTR-006DS Brown Road Water Main - Pt Williams to Hendrickson				233	976		1,209
WTR-017DS Brown Road Water Main from East Fir Street to East Washington Street			692				692
WTR-024DS Craftsman Court PRV Station						75	75
WTR-019DS East Etta Street Water Main		156					156
WTR-016DS East Fir Street Water Main			208	560	228		996
WTR-061DS New Water Line at New CB Park Entrance	209						209
WTR-056DS North and South Sunnyside - Bell to Fir	481						481
WTR-023DS Pressure Relief Valve	107						107
WTR-015DS West Fir Street Transmission Main Replacement	200	373	194				767
WTR-032DS West Prairie from S Sequim to S 5th		22	309	323	337	326	1,317
WTR-031DS West Washington Street Isolation Valves			20	175			195
<b>Miscellaneous Improvements</b>							
WTR-036MI Fixed Base Automatic Meter Reading System		574					574
WTR-060MI General Water System Plan Update		75					75
WTR-034MI SCADA Upgrade Report		57					57
WTR-062MI Utility Rate Study - Water AND Sewer			50				50
<b>Source Improvements</b>							
WTR-044SC Infiltration Gallery Improvements					903		903
WTR-045SC New Water Rights Analysis	50						50
WTR-040SC New Well - Silberhorn Deep Well	52	164		1,015			1,231
WTR-039SC Port Williams Well No.4						1,089	1,089
<b>Storage Improvements</b>							
WTR-050ST Repurpose the 500,000 Gallon Reservoir			239				239
<b>Project Total By Year</b>	<b>1,984</b>	<b>1,483</b>	<b>2,123</b>	<b>2,374</b>	<b>2,699</b>	<b>1,490</b>	<b>12,153</b>



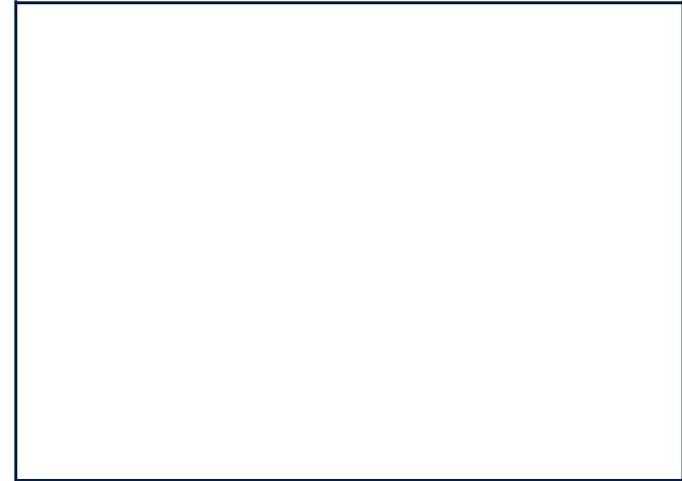
## 4th Ave Water Line

**Project Number:** WTR-059DS

**Historical Project Number**

**Project Location:**

**Project Description:**



**Project Benefit:**

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering										
Construction		140						140		140
<b>Total Project Costs - Inflated \$</b>		<b>140</b>						<b>140</b>		<b>140</b>
<b>Project Funding Sources</b>										
Revenue - GFC Water		70						70		70
Revenue - Water		70						70		70
<b>Total Project Funding - Inflated \$</b>		<b>140</b>						<b>140</b>		<b>140</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering		Q1Q2Q3								
Construction		Q1Q2Q3								

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$

## 5th & McCurdy Booster Station Improvement

**Project Number:** WTR-003BS

**Historical Project Number** BS-2

**Project Location:** Near the intersection of S 5th Ave and W McCurdy Rd

**Project Description:**

This project will expand the pumping capacity of the 5th and McCurdy Booster Station thereby allowing transfer of more water from the Port Williams Wellfield to the 420 Reservoir under high demand conditions. With only a single pump in place at the time that this CIP was written, the water system does not have reliable capacity at the Booster Station. The addition of two pumps, with pitless adaptors similar to the current single pump, will double the reliable output capacity of the station to 600 gpm. A standby generator will be added to prevent service disruptions during emergencies.

**Project Benefit:**

Project BS-2 will increase the reliability of water service and improve fire flows in the 350 Pressure Zone.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering	52									52
Construction		745						745		745
<b>Total Project Costs - Inflated \$</b>	<b>52</b>	<b>745</b>						<b>745</b>		<b>797</b>
<b>Project Funding Sources</b>										
Loan - DOH SRF	50	682						682		732
Revenue - GFC Water	2	63						63		65
<b>Total Project Funding - Inflated \$</b>	<b>52</b>	<b>745</b>						<b>745</b>		<b>797</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering										
Construction		Q1Q2Q3Q4								

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## 5th Avenue Water Main

**Project Number:** WTR-007DS

**Historical Project Number** D-3

**Project Location:** S 5th Ave from W Reservoir Rd to W Norman St

**Project Description:**

This project will loop the piping in the 480 Pressure Zone and improve fire flows in that zone that do not meet the minimum 1,000 gpm requirement. Construction will include installing 650 LF of 8-inch diameter PVC water main piping and fittings along South 5th Avenue from West Reservoir Road to West Norman Street.



**Project Benefit:**

<div>Project D-3 will address deficient fire flows, improve water storage recovery, and aid transmission capacity in the 480 Pressure Zone. They are part of the proposed system looping improvements encompassed by Projects D-4, D-5 and D-16.</div>

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering						51		51		51
Construction						204		204		204
<b>Total Project Costs - Inflated \$</b>						<b>255</b>		<b>255</b>		<b>255</b>
<b>Project Funding Sources</b>										
Revenue - Water						255		255		255
<b>Total Project Funding - Inflated \$</b>						<b>255</b>		<b>255</b>		<b>255</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering						Q3				
Construction						Q2				

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Brown Road Water Main - Pt Williams to Hendrickson

**Project Number:** WTR-006DS

**Historical Project Number** D-2

**Project Location:** S Brown Rd from E Hendrickson Rd to Port Williams Rd

**Project Description:**

Under Project D-2, Sequim will install approximately 2,600 LF of 12-inch water main along Brown Road from Port Williams Road to Hendrickson Road.



**Project Benefit:**

This project will provide additional capacity for the system to serve future growth anticipated in the east portion of the service area, and provide additional transmission capacity from the Port Williams Wellfield.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering					233			233		233
Construction						976		976		976
<b>Total Project Costs - Inflated \$</b>					<b>233</b>	<b>976</b>		<b>1,209</b>		<b>1,209</b>
<b>Project Funding Sources</b>										
Revenue - GFC Water					233	976		1,209		1,209
<b>Total Project Funding - Inflated \$</b>					<b>233</b>	<b>976</b>		<b>1,209</b>		<b>1,209</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering					Q1Q2					
Construction						Q3Q4				

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Brown Road Water Main from East Fir Street to East Washington Street

**Project Number:** WTR-017DS

**Historical Project Number** D-13

**Project Location:** N Brown Rd from E Fir St to E Washington St

**Project Description:**

Project D-13 will improve fire flow to commercial developments in the easterly portion of city center. Construction will include installation of approximately 1,800 LF of 12-inch diameter PVC water main piping along Brown Road from East Fir Street to East Washington Street.

**Project Benefit:**

Commercial areas on East Washington St in the 350 Pressure Zone have been identified in the Water System Master Plan as among locations that meet minimum UFC required fire flows, but are not able to meet the City's more rigorous standard. Project D-13, in concert with CIP Projects D-1, D-8, and D-28, will help meet the proposed system-wide commercial standard flow of 3000gpm at 20psi.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering				83				83		83
Construction				609				609		609
<b>Total Project Costs - Inflated \$</b>				<b>692</b>				<b>692</b>		<b>692</b>
<b>Project Funding Sources</b>										
Developer Contribution				366				366		366
Revenue - GFC Water				164				164		164
Revenue - Water				162				162		162
<b>Total Project Funding - Inflated \$</b>				<b>692</b>				<b>692</b>		<b>692</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q1						
Construction				Q1Q2Q3						

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



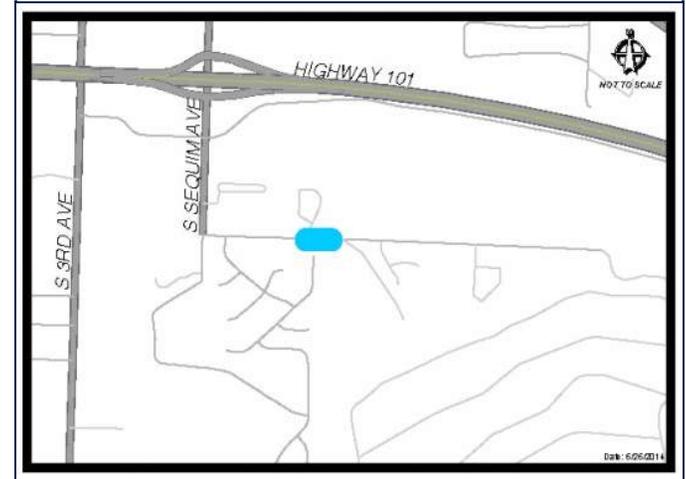
## Craftsman Court PRV Station

**Project Number:** WTR-024DS                      **Historical Project Number** D-20

**Project Location:** From the intersection of Miller Rd and Craftsman Ct, East to a point on Miller Rd. approximately 270 feet

**Project Description:**

The City will install a pressure reducing valve station between the water main on Miller Road and Craftsman Court to facilitate the intertie between the Clallam County PUD’s system and the Sequim Water Utility described in Project D-18.



**Project Benefit:**

This project would also allow the City to serve customers along Miller Road, and create a wholesale water vending exchange with the PUD.

	Prior	2017	2018	2019	2020	2021	2022	6-Year	Future	Total
	Years Plan	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Plan	Years Plan	Project
<b>Project Cost Phase</b>										
Preliminary Engineering							15	15		15
Construction							60	60		60
<b>Total Project Costs - Inflated \$</b>							<b>75</b>	<b>75</b>		<b>75</b>
<b>Project Funding Sources</b>										
Revenue - Water							75	75		75
<b>Total Project Funding - Inflated \$</b>							<b>75</b>	<b>75</b>		<b>75</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering							Q4			
Construction							Q4			

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## East Etta Street Water Main

**Project Number:** WTR-019DS                      **Historical Project Number** D-15

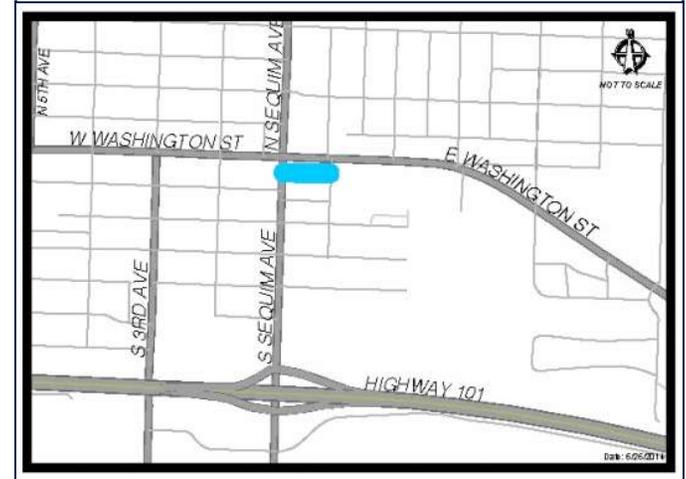
**Project Location:** Etta St from N Sequim Ave to S Sunnyside Ave

**Project Description:**

Project D-15 will complete a loop along East Etta Street. Construction will consist of approximately 550 LF of 8-inch water main along East Etta Street from South Sequim Avenue to South Sunnyside Avenue.

**Project Benefit:**

This project is part of a suite of proposed CIP improvements, including Projects D-24 and D-27, to improve fire flows in the 420 Pressure Zone. It was started in 2013.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering			31					31		31
Construction			125					125		125
<b>Total Project Costs - Inflated \$</b>			<b>156</b>					<b>156</b>		<b>156</b>
<b>Project Funding Sources</b>										
Revenue - GFC Water			85					85		85
Revenue - Water			71					71		71
<b>Total Project Funding - Inflated \$</b>			<b>156</b>					<b>156</b>		<b>156</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering			Q3Q4							
Construction			Q2Q3							

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## East Fir Street Water Main

**Project Number:** WTR-016DS

**Historical Project Number** D-12

**Project Location:** E Fir St from N Sequim Ave to N Brown Rd

**Project Description:**

Project D-12 will result in replacement of an existing 6-inch diameter AC distribution main with approximately 2,650 LF of 10-inch diameter PVC piping along East Fir Street from North Sequim Avenue to North Brown Road.



**Project Benefit:**

The project, in conjunction with other CIP improvements, will provide additional fire flow capacity to residents in the 350 Pressure Zone.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering				208				208		208
Construction					560	228		788		788
<b>Total Project Costs - Inflated \$</b>				<b>208</b>	<b>560</b>	<b>228</b>		<b>996</b>		<b>996</b>
<b>Project Funding Sources</b>										
Revenue - GFC Water				101	270	110		481		481
Revenue - Water				99	267	110		476		476
<b>Total Project Funding - Inflated \$</b>				<b>200</b>	<b>537</b>	<b>220</b>		<b>957</b>		<b>957</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q4						
Construction					Q2Q3Q4	Q3Q4				

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$

## Fixed Base Automatic Meter Reading System

**Project Number:** WTR-036MI

**Historical Project Number** MI-3

**Project Location:** City-wide

**Project Description:**

Project MI-3 will create an automatic meter reading system that will provide near real-time usage data for the utility's water connections. The City will install the hardware over several years. The cost estimate presented in the table below represents the water utility's share of the system's total cost.



**Project Benefit:**

Completion of Project MI-3, in conjunction recommended SCADA improvements resulting from the study in Project MI-2, will increase meter reading efficiency, reduce overhead costs and enhance water utility customer service.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering			574					574		574
<b>Total Project Costs - Inflated \$</b>			<b>574</b>					<b>574</b>		<b>574</b>
<b>Project Funding Sources</b>										
Revenue - GFC Water			314					314		314
Revenue - Water			260					260		260
<b>Total Project Funding - Inflated \$</b>			<b>574</b>					<b>574</b>		<b>574</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering			Q3Q4	Q1Q2Q3Q4						

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## General Water System Plan Update

**Project Number:** WTR-060MI

**Historical Project Number**

**Project Location:**

**Project Description:**

**Project Benefit:**

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Study			75					75		75
<b>Total Project Costs - Inflated \$</b>			<b>75</b>					<b>75</b>		<b>75</b>
<b>Project Funding Sources</b>										
Revenue - GFC Water			38					38		38
Revenue - Water			38					38		38
<b>Total Project Funding - Inflated \$</b>			<b>76</b>					<b>76</b>		<b>76</b>
<b>Project Timeline Phase</b>										
Study			Q1Q2Q3Q4							

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$

## Infiltration Gallery Improvements

**Project Number:** WTR-044SC

**Historical Project Number** S-6

**Project Location:** 179 Kincaid Road

**Project Description:**

Dungeness River surface water taken through the Infiltration Gallery flows has an instantaneous yield that is approximately half of the quantity allowed under Sequim’s current water right. Potential improvements under Project S-6 would include additional collectors and installation of one or more 350gpm pumps to allow reliable withdrawals up to the water right limit. This project will also include installation of an on-site generator. Potential limitations to the project include restrictive permitting along the river bank, potential construction damage to the existing 12-inch asbestos cement (AC) transmission line, and seasonal turbidity.



**Project Benefit:**

Before design or construction of this project, a study would be needed to determine the feasibility of the improvements. A significant concern in this regard is the Department of Ecology’s linking of full use of Sequim’s Port Williams Wellfield water rights permit to discontinuance of the Infiltration Gallery as a water source. However, if aquifer level declines at Port Williams continue to reduce the final capacity available under that water right portfolio, the City may have a case for expansion of the Infiltration Gallery capacity as an emergency water source.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering						128		128		128
Construction						775		775		775
<b>Total Project Costs - Inflated \$</b>						<b>903</b>		<b>903</b>		<b>903</b>
<b>Project Funding Sources</b>										
Revenue - Water						903		903		903
<b>Total Project Funding - Inflated \$</b>						<b>903</b>		<b>903</b>		<b>903</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering						Q3Q4				
Construction						Q1Q2Q3				

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## New Water Line at New CB Park Entrance

**Project Number:** WTR-061DS

**Historical Project Number**

**Project Location:**

**Project Description:**

**Project Benefit:**

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering		52						52		52
Construction		157						157		157
<b>Total Project Costs - Inflated \$</b>		<b>209</b>						<b>209</b>		<b>209</b>
<b>Project Funding Sources</b>										
Revenue - GFC Water		105						105		105
Revenue - Water		105						105		105
<b>Total Project Funding - Inflated \$</b>		<b>210</b>						<b>210</b>		<b>210</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering		Q1Q2								
Construction		Q2Q3Q4								

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## New Water Rights Analysis

**Project Number:** WTR-045SC

**Historical Project Number** S-7

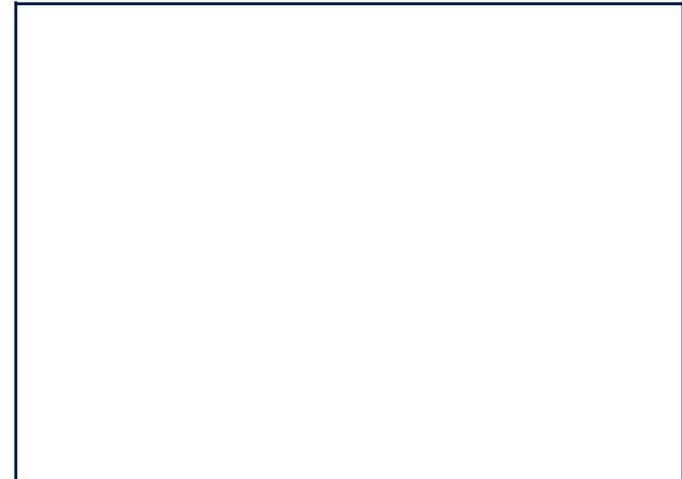
**Project Location:**

**Project Description:**

No Description

**Project Benefit:**

No Benefit



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Other		50						50		50
<b>Total Project Costs - Inflated \$</b>		<b>50</b>						<b>50</b>		<b>50</b>
<b>Project Funding Sources</b>										
Revenue - Water		50						50		50
<b>Total Project Funding - Inflated \$</b>		<b>50</b>						<b>50</b>		<b>50</b>
<b>Project Timeline Phase</b>										
Other										

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$

## New Well - Silberhorn Deep Well

**Project Number:** WTR-040SC

**Historical Project Number** S-2

**Project Location:** TBD

**Project Description:**

The City plans to drill and develop an additional well within the water system, although the location of that well was not identified at the time that this CIP was prepared.



**Project Benefit:**

The City's water rights provide sufficient instantaneous withdrawal to meet forecast demands through the 20-year horizon of the Sequim Comprehensive Plan. The City's current sources do not have the capacity to supply the entire instantaneous water right entitlement. The proposed well addition would offset this potential shortfall.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering		52	164					216		216
Construction					1,015			1,015		1,015
<b>Total Project Costs - Inflated \$</b>		<b>52</b>	<b>164</b>		<b>1,015</b>			<b>1,231</b>		<b>1,231</b>
<b>Project Funding Sources</b>										
Revenue - GFC Water		52	164		1,015			1,231		1,231
<b>Total Project Funding - Inflated \$</b>		<b>52</b>	<b>164</b>		<b>1,015</b>			<b>1,231</b>		<b>1,231</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering		Q3Q4	Q1Q2Q3Q4							
Construction					Q1Q2Q3					

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## North and South Sunnyside - Bell to Fir

**Project Number:** WTR-056DS

**Historical Project Number**

**Project Location:** North and South Sunnyside from Bell to Fir

**Project Description:**

Replacement of a 10" water main.

**Project Benefit:**

Replaces AC/Galvanized pipe with a 10" PVC.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering	53									53
Construction	157	481						481		638
<b>Total Project Costs - Inflated \$</b>	<b>210</b>	<b>481</b>						<b>481</b>		<b>691</b>
<b>Project Funding Sources</b>										
Loan - DOH SRF	201	440						440		641
Revenue - GFC Water	9	41						41		50
<b>Total Project Funding - Inflated \$</b>	<b>210</b>	<b>481</b>						<b>481</b>		<b>691</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering										
Construction		Q1Q2Q3Q4								

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Port Williams Well No.4

**Project Number:** WTR-039SC

**Historical Project Number** S-1

**Project Location:** A point from the intersection of Port Williams Rd and N Brown Rd, West approximately 450 feet, and then North approximately 175 feet

**Project Description:**

Development of a fourth well at the Port Williams Wellfield is part of the long term development of that facility in accordance with the City's current Port Williams water rights.

**Project Benefit:**

Port Williams Well No. 4 will help Sequim to gradually eliminate use of surface water from the Dungeness River as a source of supply, except on an emergency basis.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering							871	871		871
Construction							218	218		218
<b>Total Project Costs - Inflated \$</b>							<b>1,089</b>	<b>1,089</b>		<b>1,089</b>
<b>Project Funding Sources</b>										
Revenue - GFC Water							1,089	1,089		1,089
<b>Total Project Funding - Inflated \$</b>							<b>1,089</b>	<b>1,089</b>		<b>1,089</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering							Q1			
Construction							Q2Q3			

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Pressure Relief Valve

**Project Number:** WTR-023DS

**Historical Project Number** D-19

**Project Location:** From the intersection of Sequim-Dungeness Wy and Rainview Ln, North on Sequim-Dungeness Wy approximately 560 feet

**Project Description:**

Project D-19, the City will install pressure relief valve stations at yet-to-be-determined locations in the 500 Pressure Zone, the 420 Pressure Zone, and the 350 Pressure Zone to provide protection from overpressure if a PRV in a higher Pressure Zone is stuck open. It is anticipated that the PRVs will be located near the lowest elevation points in the 500 and 350 Pressure Zones. The PRV station for the 420 Zone will be located at the 420 Reservoir site.

**Project Benefit:**

The project will reduce the risk of damage to water mains, water meters and to customer-owned plumbing that could result from over-pressurization of a gravity-fed distribution system.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Construction		107						107		107
<b>Total Project Costs - Inflated \$</b>		<b>107</b>						<b>107</b>		<b>107</b>
<b>Project Funding Sources</b>										
Revenue - Water		107						107		107
<b>Total Project Funding - Inflated \$</b>		<b>107</b>						<b>107</b>		<b>107</b>
<b>Project Timeline Phase</b>										
Construction		Q3								

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$

## Repurpose the 500,000 Gallon Reservoir

**Project Number:** WTR-050ST

**Historical Project Number** ST-4

**Project Location:** TBD

**Project Description:**

Under Project ST-4, Sequim water managers will commission a study on potential uses for the currently idle 500,000 gallon reservoir located on the site of the 420 Reservoir. It is a partially-buried concrete tank with a floating cover. The existing reservoir has significant leaks and its overflow elevation is below the 1.7 MG Reservoir. Potential uses that will be studied include rehabilitation of the existing reservoir with operation below system grade, construction of a new reservoir on the site, and use of the existing reservoir for storage of reclaimed water.



**Project Benefit:**

Resumption of service for the 0.5MG reservoir would expand total storage against future growth in demand with the service area.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Study	24									24
Final Report	3									3
Construction				239				239		239
<b>Total Project Costs - Inflated \$</b>	<b>27</b>			<b>239</b>				<b>239</b>		<b>266</b>
<b>Project Funding Sources</b>										
Revenue - Water	26			239				239		265
<b>Total Project Funding - Inflated \$</b>	<b>26</b>			<b>239</b>				<b>239</b>		<b>265</b>
<b>Project Timeline Phase</b>										
Study										
Final Report										
Construction				Q2Q3Q4						

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$

## SCADA Upgrade Report

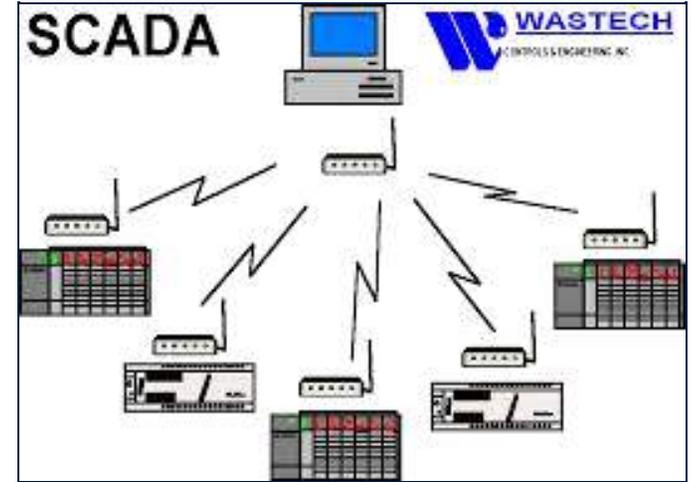
**Project Number:** WTR-034MI

**Historical Project Number** MI-1

**Project Location:** City-wide

**Project Description:**

Develop an inventory of the existing telemetry for the water and sewer utilities, recommend a plan for their integration, and prepare cost estimates for implementation.  
 Explore potential methods of communications with remote sites, including fiber optics, cellular and integration with an Automatic Meter Reading System.  
 Review options for the location and configuration of a SCADA Master Control Center.



**Project Benefit:**

SCADA upgrades would keep the City’s utility systems current with available monitoring technology. It would allow operators to respond more quickly to potential problems, promote efficient use of energy resources, and reduce operation and maintenance costs for utilities.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Study			57					57		57
Final Report										
<b>Total Project Costs - Inflated \$</b>			<b>57</b>					<b>57</b>		<b>57</b>
<b>Project Funding Sources</b>										
Revenue - Water			57					57		57
<b>Total Project Funding - Inflated \$</b>			<b>57</b>					<b>57</b>		<b>57</b>
<b>Project Timeline Phase</b>										
Study			Q4	Q1						
Final Report				Q1						

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$





## Utility Rate Study - Water AND Sewer

**Project Number:** WTR-062MI

**Historical Project Number**

**Project Location:**

**Project Description:**

**Project Benefit:**

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Study				50				50		50
<b>Total Project Costs - Inflated \$</b>				<b>50</b>				<b>50</b>		<b>50</b>
<b>Project Funding Sources</b>										
Revenue - Sewer				25				25		25
Revenue - Water				25				25		25
<b>Total Project Funding - Inflated \$</b>				<b>50</b>				<b>50</b>		<b>50</b>
<b>Project Timeline Phase</b>										
Study				Q1Q2Q3Q4						

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## West Fir Street Transmission Main Replacement

**Project Number:** WTR-015DS                      **Historical Project Number** D-11

**Project Location:** W Fir St from N 5th Ave to N Sequim Ave

**Project Description:**

Under Project D-11, Sequim will replace an existing 8-inch diameter AC transmission main with a 2,650 feet long 10-inch diameter PVC water main in West Fir Street from North 5th Avenue to North Sequim Avenue.



**Project Benefit:**

This project will provide additional water service capacity to the Sequim School District’s three adjacent campuses, improve service reliability for current customers and facilitate infill development of the adjacent residential area. As noted in the table below, Project D-11 is phased to reduce the impacts of construction-caused service disruptions to customers, pedestrians and motorists.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering		22						22		22
Construction		178	373	194				745		745
<b>Total Project Costs - Inflated \$</b>		<b>200</b>	<b>373</b>	<b>194</b>				<b>767</b>		<b>767</b>
<b>Project Funding Sources</b>										
Revenue - GFC Water		102	184	97				383		383
Revenue - Water		97	188	97				382		382
<b>Total Project Funding - Inflated \$</b>		<b>199</b>	<b>372</b>	<b>194</b>				<b>765</b>		<b>765</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering		Q1Q2								
Construction		Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4						

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## West Prairie from S Sequim to S 5th

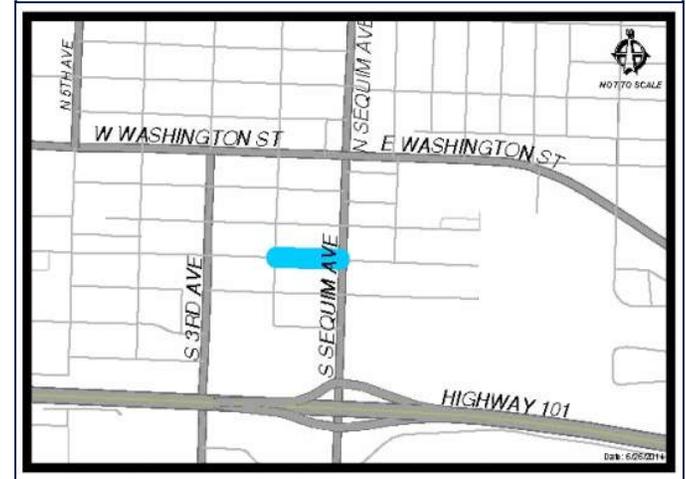
**Project Number:** WTR-032DS

**Historical Project Number** D-27

**Project Location:** W Prairie St from S 2nd Ave to S Sequim Ave

**Project Description:**

<div>Relplace and upsize water line on Prairie Street from South Sequim Ave to 5th Ave as part of the complete street revitalization project</div>



**Project Benefit:**

No Benefit

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering			22	23	24	25		94		94
Construction				286	299	312	326	1,223		1,223
<b>Total Project Costs - Inflated \$</b>			<b>22</b>	<b>309</b>	<b>323</b>	<b>337</b>	<b>326</b>	<b>1,317</b>		<b>1,317</b>
<b>Project Funding Sources</b>										
Revenue - GFC Water			11	151	162	170	164	658		658
Revenue - Water			11	157	160	167	162	657		657
<b>Total Project Funding - Inflated \$</b>			<b>22</b>	<b>308</b>	<b>322</b>	<b>337</b>	<b>326</b>	<b>1,315</b>		<b>1,315</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering			Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4				
Construction				Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4			

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$



## West Washington Street Isolation Valves

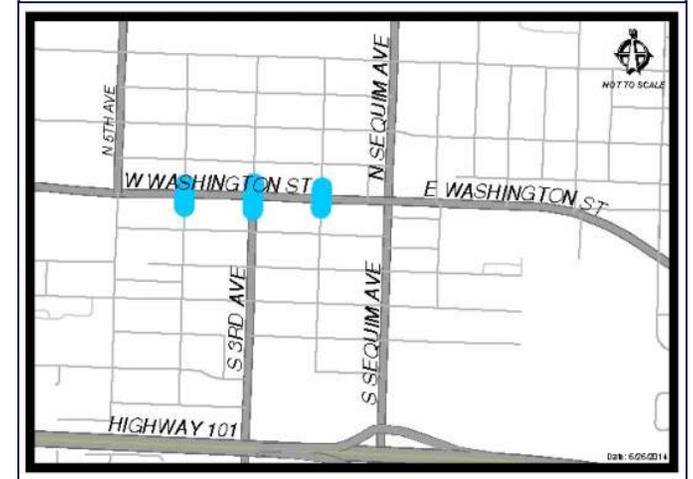
**Project Number:** WTR-031DS

**Historical Project Number** D-26

**Project Location:**

**Project Description:**

Under Project D-26, the City will add isolation valves to the existing 10 inch diameter water main on West Washington Street, at its intersections with 2nd Avenue, 3rd Avenue and 4th Avenues. This project will add four-way gate valve clusters on the existing 6 inch diameter cross-street mains to allow future upsizing.



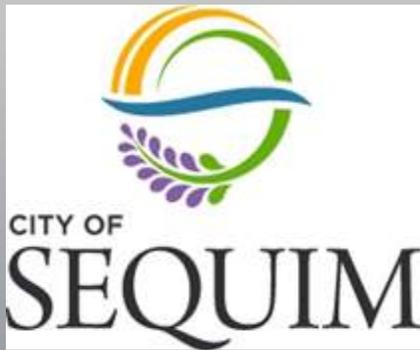
**Project Benefit:**

Future iterations of the Sequim CIP may include project funding to repave the reach of West Washington Street pavement patching done in conjunction with Project D-26.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Engineering				20				20		20
Construction					175			175		175
<b>Total Project Costs - Inflated \$</b>				<b>20</b>	<b>175</b>			<b>195</b>		<b>195</b>
<b>Project Funding Sources</b>										
Revenue - Water				20	175			195		195
<b>Total Project Funding - Inflated \$</b>				<b>20</b>	<b>175</b>			<b>195</b>		<b>195</b>
<b>Project Timeline Phase</b>										
Engineering				Q2						
Construction				Q3Q4	Q1					

Source: Water System Comprehensive Plan  
 Amounts in Thousands Inflated \$

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- Historical Overview of Sequim Wastewater Utility Capital Improvements
- Wastewater Capital Facility Inventory
- Capital Improvement Planning and the General Sewer Master Plan
- Future Water Demand
- Level of Service Standards

# **CAPITAL IMPROVEMENT PROGRAM 2017 – 2022**

## *Chapter 4*

### *Sewer Restricted Fund Projects*

## **Historical Overview of Sequim Wastewater Utility Capital Improvements**

Construction of the City's wastewater collection system, including the main trunk line to the wastewater treatment plant, began in the 1930s. Expansion of the collection system intensified between 1950 and mid-1970s and continues today. The wastewater treatment plant was constructed at the current site of the City's Water Reclamation Facility (WRF) in 1966. Its capacity was expanded further in 1983. As part of a 1994 settlement agreement with the state, Sequim agreed to upgrade its treatment process to produce Class A reclaimed water<sup>1</sup>, and to advocate for local application of reclaimed water for non-potable applications.

The City received beneficial aid toward meeting its water reuse goals through a special state appropriation in 1997. The subsequent agreement with the Department of Ecology required the City to implement its water reuse program by:

- 1) completing construction of the WRF;
- 2) demonstrating progress toward 100 percent beneficial use of reclaimed water;
- 3) improving stream flows in the Dungeness River; and
- 4) developing a sustainable supply of reclaimed water for irrigation.

Extensive improvements in the WRF's disinfection processes allowed the City to meet its Class A reclaimed water production obligations in 1998. Sequim's Water Reuse Demonstration Site, was developed on an adjacent 29-acre parcel north of Carrie Blake Park and provides a public example of how reclaimed water works on a variety of irrigation equipment and plant types. Beginning in 2010, the WRF was upgraded further to increase its treated wastewater output.

## **Wastewater Capital Facility Inventory**

Sequim's wastewater collection system includes about seventy-three miles of sewer line, three City owned and operated pump stations, a privately-owned but City-operated pump station and force main serving Sequim Bay Lodge and Sequim Bay State Park, the Water Reclamation Facility, the outfall pipe from the WRF to the Strait of Juan de Fuca, and the aforementioned Water Reuse Demonstration Site that includes about 4 miles of reclaimed water distribution system piping.

## **Capital Improvement Planning and the General Sewer Master Plan**

The Sequim General Sewer Plan is one of four adopted Capital Facility Plans that provide long range policy guidance for the development of capital improvements. It reveals a long-term strategy for the City's sewer during a 6-year and 20-year planning period.

The Master Plan includes project recommendations that would allow Sequim to become a regional wastewater treatment service provider. The Master Plan evaluates the conveyance and treatment improvements that would be required to accept wastewater flows from Sun Land, Blyn, and Carlsborg collectively.

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<sup>1</sup> Class A reclaimed water is oxidized, coagulated, filtered, and disinfected wastewater. Such wastewater is considered adequately disinfected if the median number of total coliform organisms does not exceed 2.2 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed, and the number of total coliform organisms does not exceed 23 per 100 milliliters in any sample. (Washington State Dept. of Health, *Water Reclamation and Reuse Standards*. 1997.)

### **Level of Service Standards**

The wastewater utility's performance standards are established in its current National Pollutant Discharge Elimination System (NPDES) permit. The NPDES was established in Section 402 of the Federal Clean Water Act (CWA). The Washington State Department of Ecology administers NPDES permits on behalf of the US Environmental Protection Agency.

Among its many provisions, the NPDES permit sets the wastewater discharge standards that are shown in the table below. These standards are consistent with the treatment processes necessary to produce Class A reclaimed water. The permit also allows discharge of the treated effluent to either Bell Creek in Carrie-Blake Park or to the Strait of Juan de Fuca.

In addition to Federal and State regulatory standards, Sequim Municipal Code sections 13.28 through 13.80 prescribe further regulations for the City's sewer system. This multi-layered regulatory framework is the primary driver defining the six-year CIP project inventory, thus ensuring the continued NPDES compliance.

**Table WW-1  
Sequim Wastewater Utility  
NPDES Permit Discharge Standards**

<b>Parameter</b>	<b>Average Monthly Standard</b>
<b>Biochemical Oxygen Demand (Bod5)</b>	<b>30mg/L 200lbs/day 85% removal</b>
<b>Total Suspended Solids</b>	<b>30mg/L 200lbs/day 85% removal</b>
<b>Turbidity</b>	<b>2 NTU</b>
<b>Ammonia - N</b>	<b>3.3mg/L</b>
<b>Nitrogen</b>	<b>10mg/L</b>
	<b>Daily Maximum</b>
<b>pH</b>	<b>&lt;9</b>
	<b>7-Day Median</b>
<b>Total Coliform Bacteria</b>	<b>2.2/100 mL</b>
<b>Total Maximum Flow – 0.8mgd</b>	

### **Future Wastewater Treatment Capacity Requirements**

Wastewater facility capital improvements have been identified by first determining the quantity of wastewater generated by the system's contributing sources. Wastewater comes primarily from single and multifamily homes, permanent mobile homes and group housing such as nursing homes. Lesser amounts come from commercial, industrial and public facility land uses.

To estimate future system demand, the average annual flow contributed by a single-family household is expressed as an Equivalent Residential Unit (ERU) in gallons per day (gpd). Non-residential wastewater generation is calculated by dividing the total flow per land use category by the average flow per ERU. Thus, the ERU allows sewer flows from all sources to be expressed in comparable terms.

Infiltration and inflow entering the sewer system during periods of high groundwater levels also contribute to the wastewater treatment burden. Infiltration is groundwater that enters the sanitary sewer through leaking pipes, pipe joints and manhole walls. Infiltration rates vary seasonally in response to groundwater levels. The highest rates of infiltration occur after significant storm events. Inflow is surface water that enters the sewer system from yard, roof and footing drains, from cross connections with storm drains and through manhole covers. Peak inflow also occurs during heavy storm events. Inflow and Infiltration (I/I) are usually

combined and measured in gallons per acre per day. Sequim’s winter residential water consumption data for the period of 2009 to 2011 were used to estimate the baseline and projected discharge to the sewer system. Winter water use omits the effects of irrigation runoff, giving a more accurate reflection of annualized average daily flow.

For 2011, the average daily dry weather flow of approximately 564,000gpd was adjusted to exclude 14,000gpd of I/I. Using the values of 550,000 gpd for base flow and 110 gpd per ERU, there were about 5,000 total sewer system ERUs in 2011. With an estimated 2011 population of 6,740 sewer-system customers and average of 1.9 persons per residence, the total number of single-family residential ERUs is approximately 3,550. Non-residential ERUs, therefore, equaled about 1,450.

The projected population to be served by the Sequim wastewater utility for 2020 and for 2035 assumed:

- population will increase at an annual rate of 2 percent in the incorporated area and in the UGA;
- homes with on-site septic systems within the city limits will connect to the sewer system at an annual rate of 1 percent; and
- Sequim will annex additional regions of the UGA at an annual rate of 4 percent, and all such annexed areas will connect to the sewer utility.

Table WW-2 summarizes the sewer service population and flow projections for the Six-Year CIP period and Comprehensive Plan 20-year periods.

**Table WW-2  
Baseline and Projected Wastewater Population and Flow**

<b>Parameter</b>	<b>2011 Baseline</b>	<b>2020 Projection</b>	<b>2035 Projection</b>
Population (city limits)	6,740	8,770	12,990
Sewer Service Population	6,743	9,100	14,120
Total ERUs	5,000	6,550	9,900
Average Annual Flow (mgd)	0.66	0.83	1.22

These projections support the reasoning behind the selection of CIP scheduled for the 2017-2022 period:

- 1) upgrades to the WRF and pump stations are needed to replace equipment that is near the end of its life-cycle, or lags current technology;
- 2) collection system upgrades are needed to replace deteriorated materials and thus reduce I/I; and
- 3) improvements to the reclaimed water distribution network are needed to expand application of reclaimed water for irrigation and non-potable use. Capital Improvement initiatives with the six-year program are not intended primarily to support new development in the UGA or to advance Sequim’s potential position as a regional provider of wastewater treatment services.



2017-2022 - Sewer and Waste Water System Projects  
 Project Summary, Schedule, and Estimated Cost

	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan Total
<b>Collection System Improvements</b>							
SRR-001CS Cedar Street Sewer Improvement			308	1,289			1,597
SRR-003CS Doe Run Lift Station	261						261
SRR-014CS East Fir Street Sewer Replacement			262	1,323	713		2,298
SRR-002CS Etta Street Sewer Improvements		195					195
SRR-013CS North Blake Avenue Sewer Improvements				213			213
SRR-009CS Sunnyside Sewer Improvement	517						517
SRR-040CS Upgrade sewer system in 4th Avenue from Washington Street to Cedar Street	164						164
SRR-008CS West Fir Street Sewer Improvement	204	426	223				853
SRR-007CS WRF Influent Trunk Line Pipeline Repair/Replacement			201	166	1,572		1,939
<b>Miscellaneous Improvements</b>							
SRR-041MI General Sewer Plan Update		75					75
<b>Reclaim Water System Improvements</b>							
SRR-024RW Reclaimed Water Network Expansion						373	373
SRR-042RW Reclaimed Water Storage Feasibility Study		109					109
SRR-025RW WRF Reclaimed Water Pumping Facility Improvements				733			733
<b>Waste Treatment Improvements</b>							
SRR-035W Aerobics Digester Capacity Upgrades	157		1,977				2,134
SRR-034W Class A Biosolids Handling & Distribution Center				273	999	1,044	2,316
SRR-004W Outfall Pipeline Repair/Replc						1,551	1,551
SRR-036W WRF Headworks Modifications No 2			372				372
SRR-038W WRF Odor Control	137						137
<b>Project Total By Year</b>	<b>1,440</b>	<b>805</b>	<b>3,343</b>	<b>3,997</b>	<b>3,284</b>	<b>2,968</b>	<b>15,837</b>



## Aerobics Digester Capacity Upgrades

**Project Number:** SRR-035W

**Historical Project Number** W-8

**Project Location:** 247 Schmuck Road

**Project Description:**

It is anticipated that two new 100,000-gallon cells will be constructed with additional blowers and diffusers for aeration, and a rotary screen thickener will be provided to thicken WAS upstream of the digester.



**Project Benefit:**

This project will increase the capacity of the existing aerobic digestion system by adding additional tank space.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering	40	157						157		197
Construction				1,977				1,977		1,977
<b>Total Project Costs - Inflated \$</b>	<b>40</b>	<b>157</b>		<b>1,977</b>				<b>2,134</b>		<b>2,174</b>
<b>Project Funding Sources</b>										
Loan - DOE SRF	40	138						138		178
Public/Private Partnership Private Contribution		12		125				137		137
Revenue - GFC Sewer		6		1,852				1,858		1,858
<b>Total Project Funding - Inflated \$</b>	<b>40</b>	<b>156</b>		<b>1,977</b>				<b>2,133</b>		<b>2,173</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering		Q1Q2								
Construction				Q2Q3Q4						

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$

## Cedar Street Sewer Improvement

**Project Number:** SRR-001CS

**Historical Project Number** CS-1

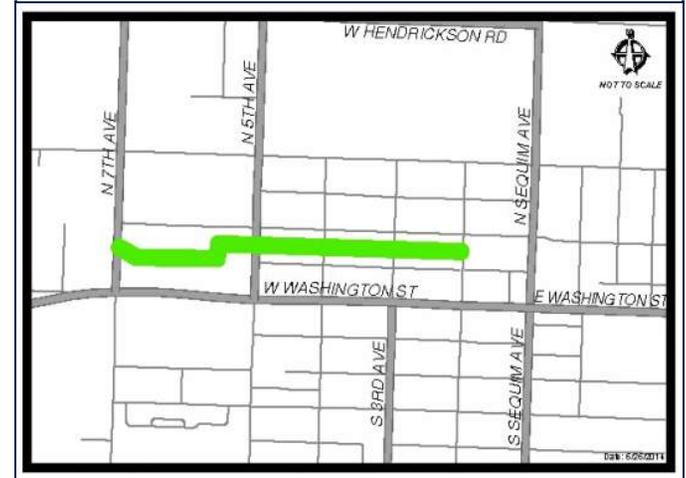
**Project Location:** Alley between W. Cedar and W. Spruce between N. Seal and N. 7th

**Project Description:**

This project replaces existing sewer pipe located in the alley between West Cedar Street and West Spruce Street between North Seal Street and North 7th Avenue. This project includes installing approximately 3,900 LF of 12-inch pipe.

**Project Benefit:**

This project will equipped the City with the ability to accommodate anticipated peak hour flows increased City flows for the downtown corridor.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering				308				308		308
Construction					1,289			1,289		1,289
<b>Total Project Costs - Inflated \$</b>				<b>308</b>	<b>1,289</b>			<b>1,597</b>		<b>1,597</b>
<b>Project Funding Sources</b>										
Revenue - GFC Sewer				157	645			802		802
Revenue - Sewer				151	645			796		796
<b>Total Project Funding - Inflated \$</b>				<b>308</b>	<b>1,290</b>			<b>1,598</b>		<b>1,598</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q3Q4	Q1Q2					
Construction					Q1Q2Q3Q4					

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



## Class A Biosolids Handling & Distribution Center

**Project Number:** SRR-034W

**Historical Project Number** W-7

**Project Location:** 247 Schmuck Road

**Project Description:**

This project will include construction of new facilities to increase public access to the Class A biosolids produced at the WRF. Facilities will include a large, covered area for raw biosolids storage, smaller holding areas for biosolids and various amendments, and a small area for public access and biosolids loading.



**Project Benefit:**

Facilities will be designed to minimize odors and will include appropriate stormwater controls.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering					273		1,044	1,317		1,317
Construction						999		999		999
<b>Total Project Costs - Inflated \$</b>					<b>273</b>	<b>999</b>	<b>1,044</b>	<b>2,316</b>		<b>2,316</b>
<b>Project Funding Sources</b>										
Public/Private Partnership Private Contribution					17	63	66	146		146
Revenue - GFC Sewer					256	936	978	2,170		2,170
<b>Total Project Funding - Inflated \$</b>					<b>273</b>	<b>999</b>	<b>1,044</b>	<b>2,316</b>		<b>2,316</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering					Q1Q2		Q1Q2Q3			
Construction						Q2Q3Q4				

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$

## Doe Run Lift Station

**Project Number:** SRR-003CS

**Historical Project Number** CS-3

**Project Location:** Doe Run Rd.

**Project Description:**

The existing Doe Run Lift Station consists of a Smith and Loveless package lift station equipped with two 100 gpm, 25-hp non-clog centrifugal pumps which pump sewage from the south and southwest areas of Bell Hill to a manhole in the gravity sewer run on Fox Hollow Road. This project would include construction of a new lift station to serve the existing service area.

**Project Benefit:**

This project fulfills elements of the General Sewer Plan. This project will provide the City with the capability to serve additional areas west or south of the Bell Hill/Bell Gates community, eliminating the risk associated with the existing lift station equipment.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering	89									89
Construction	277	261						261		538
<b>Total Project Costs - Inflated \$</b>	<b>366</b>	<b>261</b>						<b>261</b>		<b>627</b>
<b>Project Funding Sources</b>										
Loan - DOE SRF	366	223						223		589
Revenue - GFC Sewer		38						38		38
<b>Total Project Funding - Inflated \$</b>	<b>366</b>	<b>261</b>						<b>261</b>		<b>627</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering										
Construction		Q1Q2Q3								

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



## East Fir Street Sewer Replacement

**Project Number:** SRR-014CS

**Historical Project Number** CS-14

**Project Location:** E. Fir St., Sequim Ave. to Blake Ave.

**Project Description:**

This project will replace approximately 4,600 LF of aging sewer pipe along East Fir Street with new 18-inch-diameter PVC sewer pipe.



**Project Benefit:**

This project fulfills elements of the General Sewer Plan. This project will be coordinated with the East Fir St Water Main Replacement (WTR-019DS) and the East Fir St Rehabilitation (STR-061FI) projects.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering				262	181			443		443
Construction					1,142	713		1,855		1,855
<b>Total Project Costs - Inflated \$</b>				<b>262</b>	<b>1,323</b>	<b>713</b>		<b>2,298</b>		<b>2,298</b>
<b>Project Funding Sources</b>										
Public/Private Partnership Private Contribution				39	199	107		345		345
Revenue - GFC Sewer				110	537	291		938		938
Revenue - Sewer				104	544	292		940		940
<b>Total Project Funding - Inflated \$</b>				<b>253</b>	<b>1,280</b>	<b>690</b>		<b>2,223</b>		<b>2,223</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q4	Q1					
Construction						Q2Q3Q4	Q2Q3Q4			

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



## Etta Street Sewer Improvements

**Project Number:** SRR-002CS

**Historical Project Number** CS-2

**Project Location:** Etta St from S Sequim Ave to S Sunnyside Ave

**Project Description:**

This project will address the deteriorating concrete sewer line along Etta Street between South Sequim Avenue and South Sunnyside Avenue. This line was identified in the 2006 Comprehensive Plan to be in need of replacement due to deteriorating aggregate, however, this pipe has not been rehabilitated. This project will install approximately 550 LF of 12-inch pipe between South Sequim Avenue and South Sunnyside Avenue.

**Project Benefit:**

While the line currently has sufficient capacity, it is in the downtown corridor and is projected to need upsizing to accommodate the projected flows for the City and Carlsborg.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering			39					39		39
Construction			156					156		156
<b>Total Project Costs - Inflated \$</b>			<b>195</b>					<b>195</b>		<b>195</b>
<b>Project Funding Sources</b>										
Revenue - GFC Sewer			97					97		97
Revenue - Sewer			97					97		97
<b>Total Project Funding - Inflated \$</b>			<b>194</b>					<b>194</b>		<b>194</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering			Q1							
Construction			Q1Q2							

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



## General Sewer Plan Update

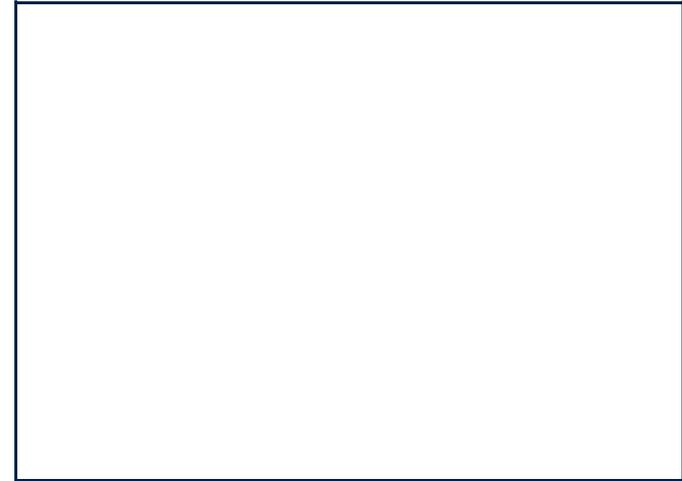
**Project Number:** SRR-041MI

**Historical Project Number**

**Project Location:**

**Project Description:**

The General Sewer Plan provides a long-term planning strategy for the City's sewer utility for the 6-year and 20-year planning periods.



**Project Benefit:**

The proposed General Sewer Plan will replace the adopted plan developed in 2012.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering			75					75		75
<b>Total Project Costs - Inflated \$</b>			<b>75</b>					<b>75</b>		<b>75</b>
<b>Project Funding Sources</b>										
Revenue - GFC Sewer			75					75		75
<b>Total Project Funding - Inflated \$</b>			<b>75</b>					<b>75</b>		<b>75</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering			Q1Q2Q3Q4							

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



## North Blake Avenue Sewer Improvements

**Project Number:** SRR-013CS

**Historical Project Number** CS-13

**Project Location:** N. Blake Ave. between E. Willow and Oak Streets

**Project Description:**

This project will replace sewer pipe along North Blake Street between East Willow and East Oak Streets. This project would install approximately 300 LF of 18-inch HDPE sewer pipe via open cut or pipe bursting methods.

**Project Benefit:**

Eliminates the lack of capacity in the existing 15-inch pipe to convey both the projected City and Carlsborg peak hour flows.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering					42			42		42
Construction					171			171		171
<b>Total Project Costs - Inflated \$</b>					<b>213</b>			<b>213</b>		<b>213</b>
<b>Project Funding Sources</b>										
Developer Contribution					213			213		213
<b>Total Project Funding - Inflated \$</b>					<b>213</b>			<b>213</b>		<b>213</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering					Q2					
Construction					Q3					

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



## Outfall Pipeline Repair/Replc

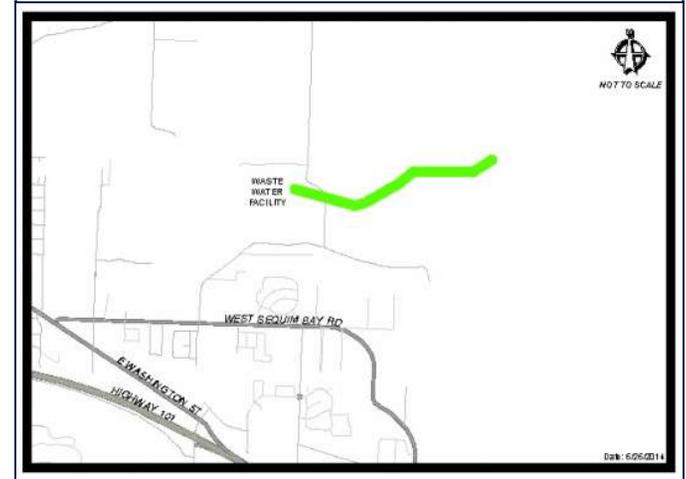
**Project Number:** SRR-004W

**Historical Project Number** CS-4

**Project Location:**

**Project Description:**

This project will first assess the condition of the existing outfall line between the WRF and the new bridge across the Sequim Bay tidal flats immediately east of the WRF. The existing concrete line was installed in 1965. If deemed in poor condition or in need of replacement, the project would include replacing the concrete outfall pipe. If replacement is required approximately 3,400 LF of 24-inch pipe will be installed and the existing pipe will be abandoned in place or wastehauled.



**Project Benefit:**

This project will replace critical infrastructure that has reached the end of its service life.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering							310	310		310
Construction							1,241	1,241		1,241
<b>Total Project Costs - Inflated \$</b>							<b>1,551</b>	<b>1,551</b>		<b>1,551</b>
<b>Project Funding Sources</b>										
Public/Private Partnership Private Contribution							98	98		98
Revenue - GFC Sewer							721	721		721
Revenue - Sewer							732	732		732
<b>Total Project Funding - Inflated \$</b>							<b>1,551</b>	<b>1,551</b>		<b>1,551</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering										
Construction										

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



## Reclaimed Water Network Expansion

**Project Number:** SRR-024RW

**Historical Project Number** RW-4

**Project Location:** Multiple areas City-wide

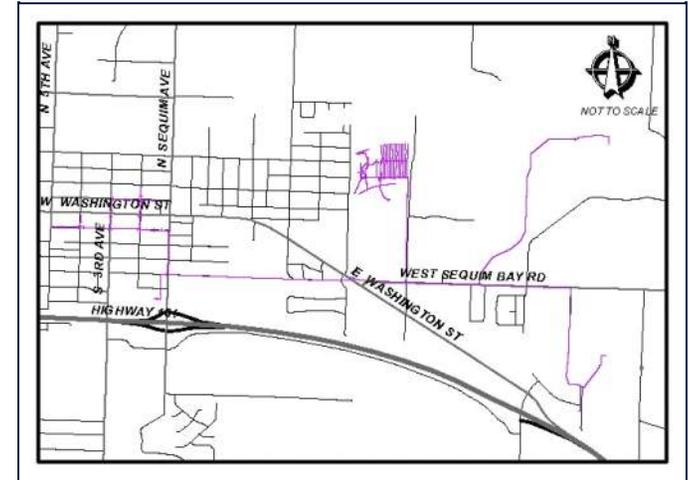
**Project Description:**

This project consists of expansion of the current reclaimed water pipe network.

**Project Benefit:**

The complete project would install approximately 23,100 LF of 6-inch and 13,600 LF of 8-inch distribution system piping to serve the following areas:

- South Blake Avenue Pipeline and East Maple Street Loop,
- North 2nd Avenue - North Sequim Avenue Pipeline,
- North 2nd Avenue - North 5th Avenue Pipeline,
- South 7th Avenue - Silberhorn Road Pipeline,
- South 7th Avenue - West Washington Street Pipeline,
- South 7th Avenue - South 9th Avenue Pipeline,
- West Washington Street - Priest Road Pipeline, and
- West Hemlock Street and West Maple Street.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering							373	373		373
Construction									3,547	3,547
<b>Total Project Costs - Inflated \$</b>							<b>373</b>	<b>373</b>	<b>3,547</b>	<b>3,920</b>
<b>Project Funding Sources</b>										
Grant - State							186	186	1,774	1,960
Grant - State City Match							186	186	1,774	1,960
<b>Total Project Funding - Inflated \$</b>							<b>372</b>	<b>372</b>	<b>3,548</b>	<b>3,920</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering							Q1Q2Q3Q4			
Construction										

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



## Reclaimed Water Storage Feasibility Study

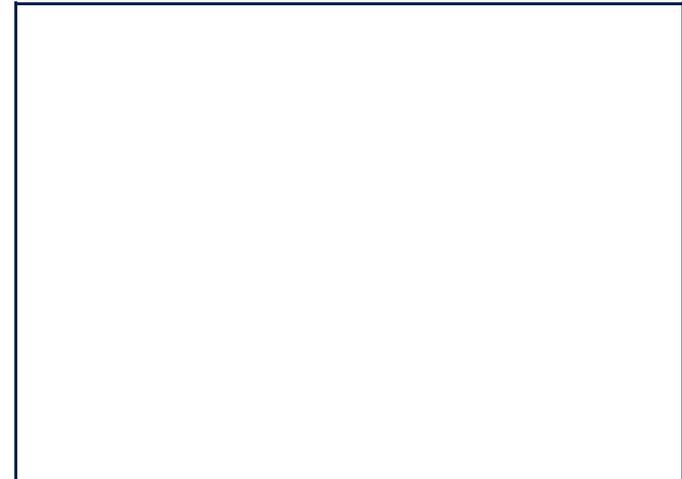
**Project Number:** SRR-042RW

**Historical Project Number**

**Project Location:**

**Project Description:**

This project is a study to evaluate the feasibility of developing a reservoir above the WRF to the north with the purpose of agricultural irrigation.



**Project Benefit:**

This project will provide help reduce dependency on irrigation water diverted and conveyed from the Dungeness River.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering			109					109		109
<b>Total Project Costs - Inflated \$</b>			<b>109</b>					<b>109</b>		<b>109</b>
<b>Project Funding Sources</b>										
Revenue - GFC Sewer			55					55		55
Revenue - Sewer			55					55		55
<b>Total Project Funding - Inflated \$</b>			<b>110</b>					<b>110</b>		<b>110</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering			Q1Q2Q3Q4							

Source: General Sewer Plan

Amounts in Thousands Inflated \$



## Sunnyside Sewer Improvement

**Project Number:** SRR-009CS

**Historical Project Number** CS-9

**Project Location:** Sunnyside Ave.

**Project Description:**

This project will replace the sewer line along both North Sunnyside Avenue. As part of this project, sewer pipe north of Washington Street along Sunnyside Avenue will be moved to within the Sunnyside right-of-way. Approximately 1,500 LF of 18-inch HDPE sewer pipe will be installed in the north and south Sunnyside Avenue right-of-way.



**Project Benefit:**

This project fulfills elements of the General Sewer Plan. This is a troublesome area that is undersized for existing flows, especially in an area designated for significant proposed commercial growth.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering	55									55
Construction	157	517						517		674
<b>Total Project Costs - Inflated \$</b>	<b>212</b>	<b>517</b>						<b>517</b>		<b>729</b>
<b>Project Funding Sources</b>										
Loan - DOE SRF	203	311						311		514
Public/Private Partnership Private Contribution		177						177		177
Revenue - GFC Sewer	9	29						29		38
<b>Total Project Funding - Inflated \$</b>	<b>212</b>	<b>517</b>						<b>517</b>		<b>729</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering										
Construction		Q1Q2Q3Q4								

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$

## Upgrade sewer system in 4th Avenue from Washington Street to Cedar Street

**Project Number:** SRR-040CS **Historical Project Number**

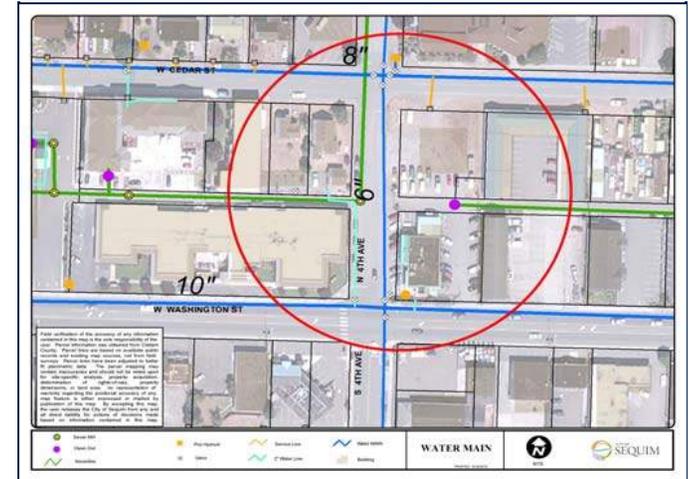
**Project Location:** N 4th Ave from E Washington St to E Cedar St

**Project Description:**

Replace sewer line in 4th Avenue from Washington Street to Cedar Street.

**Project Benefit:**

This project increases sewer collection capacity by eliminating storm water inflow and it will improved access to sewer collection system for maintenance. This project will be coordinated with the 4th Ave Water Line Replacement (WTR-059DS).



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering		25						25		25
Construction		139						139		139
<b>Total Project Costs - Inflated \$</b>		<b>164</b>						<b>164</b>		<b>164</b>
<b>Project Funding Sources</b>										
Revenue - GFC Sewer		82						82		82
Revenue - GFC Water		82						82		82
Revenue - Sewer										
Revenue - Water										
<b>Total Project Funding - Inflated \$</b>		<b>164</b>						<b>164</b>		<b>164</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering		Q1Q2Q3Q4								
Construction		Q1Q2Q3Q4								

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$





## WRF Headworks Modifications No 2

**Project Number:** SRR-036W

**Historical Project Number** W-9

**Project Location:** 247 Schmuck Road

**Project Description:**

This project will replace or potentially rebuild the existing HYCOR mechanical fine screen at the WRF headworks. The existing screen was installed in 1998 and will be nearing the end of its service life. Following its installation, this new or rebuilt screen will serve as the primary headworks screen.



**Project Benefit:**

The unit will be replaced with a new mechanical fine screen model that meets the requirements set forth in WAC 173-308.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering				74				74		74
Construction				298				298		298
<b>Total Project Costs - Inflated \$</b>				<b>372</b>				<b>372</b>		<b>372</b>
<b>Project Funding Sources</b>										
Public/Private Partnership Private Contribution				23				23		23
Revenue - Sewer				349				349		349
<b>Total Project Funding - Inflated \$</b>				<b>372</b>				<b>372</b>		<b>372</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q3						
Construction				Q3Q4						

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



## WRF Influent Trunk Line Pipeline Repair/Replacement

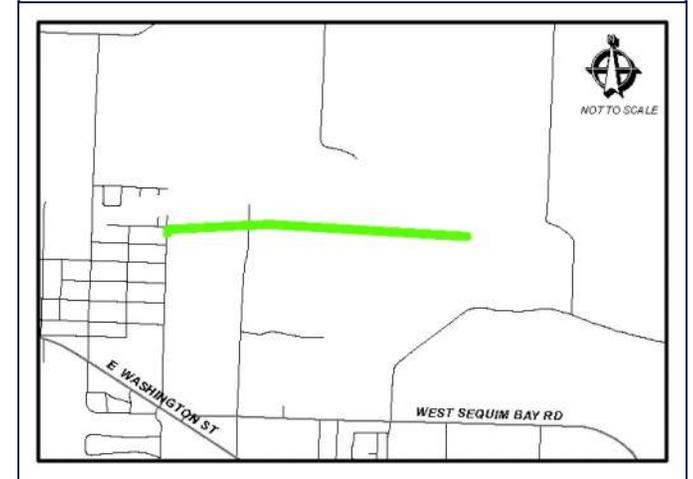
**Project Number:** SRR-007CS

**Historical Project Number** CS-7

**Project Location:** Blake Road to 247 Schmuck Road

**Project Description:**

The existing pipeline will be removed and replaced with approximately 5,000 LF of 24-inch HDPE pipe in order to accommodate projected flows for the City and surrounding areas. The project will also include the installation of new manholes approximately every 500 feet along the new pipe section.



**Project Benefit:**

This project will improve the condition of the existing trunk line between North Blake Road and the WRF.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering				201	166			367		367
Construction						1,572		1,572		1,572
<b>Total Project Costs - Inflated \$</b>				<b>201</b>	<b>166</b>	<b>1,572</b>		<b>1,939</b>		<b>1,939</b>
<b>Project Funding Sources</b>										
Public/Private Partnership Private Contribution				13	10	99		122		122
Revenue - GFC Sewer				96	79	747		922		922
Revenue - Sewer				92	77	726		895		895
<b>Total Project Funding - Inflated \$</b>				<b>201</b>	<b>166</b>	<b>1,572</b>		<b>1,939</b>		<b>1,939</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q4	Q1					
Construction						Q2Q3Q4				

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$

## WRF Odor Control

**Project Number:** SRR-038W  
**Project Location:** 247 Schmuck Road  
**Project Description:**  
 Mechanical filtering odor control.

**Historical Project Number**



**Project Benefit:**  
 Minimize odor pollution.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Construction		137						137		137
<b>Total Project Costs - Inflated \$</b>		<b>137</b>						<b>137</b>		<b>137</b>
<b>Project Funding Sources</b>										
Public/Private Partnership Private Contribution		9						9		9
Revenue - GFC Sewer		64						64		64
Revenue - Sewer		64						64		64
<b>Total Project Funding - Inflated \$</b>		<b>137</b>						<b>137</b>		<b>137</b>
<b>Project Timeline Phase</b>										
Construction		Q1								

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$



## WRF Reclaimed Water Pumping Facility Improvements

**Project Number:** SRR-025RW

**Historical Project Number** RW-5

**Project Location:** 247 Schmuck Road

**Project Description:**

This project will reconfigure the reclaimed water pumping system at the WRF to utilize the potential storage of the existing flow through channel.



**Project Benefit:**

Facility improvements such as this one are needed to accommodate a reliable reuse water system.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering					147			147		147
Construction					586			586		586
<b>Total Project Costs - Inflated \$</b>					<b>733</b>			<b>733</b>		<b>733</b>
<b>Project Funding Sources</b>										
Public/Private Partnership Private Contribution					46			46		46
Revenue - GFC Water					344			344		344
Revenue - Sewer					344			344		344
<b>Total Project Funding - Inflated \$</b>					<b>734</b>			<b>734</b>		<b>734</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering					Q2Q3					
Construction					Q3					

Source: General Sewer Plan  
 Amounts in Thousands Inflated \$

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- Capital Improvement Planning and the Transportation Master Plan
- CIP Project Identification Methodology
- Level of Services Standards – Vehicle Travel
- Level of Service Standards – Non-Motorized Travel

# **CAPITAL IMPROVEMENT PROGRAM 2017 – 2022**

## *Chapter 5*

### *Streets Restricted Fund Projects*

## **Capital Improvement Planning and the Transportation Master Plan**

The Sequim Transportation Master Plan (TMP) is one of four adopted Capital Facility Plans that provides long range policy guidance for the development of capital improvements. It is also a coordination document, ensuring that transportation decision making is coordinated with the Land Use Element of the Sequim Comprehensive Plan and with the City's other Capital Facility Plans including the Water and Sewer Utilities. The TMP includes a proposed inventory of CIP projects that fulfill the community's intent to rethink Sequim's transportation system. The TMP's guiding principles include:

- Apply non-traditional engineering toward an effective and implementable TMP;
- Accommodate the movement of people and commerce, not just cars and trucks; and
- Develop transportation standards and infrastructure improvements to serve pedestrian, mobility scooter, and bicycle users.

The TMP informs the development of the Six-Year CIP by identifying and prioritizing projects that support future travel trends. It identified significant characteristics of the current transportation network that will influence those future trends:

- Most of Sequim's streets were designed for vehicle traffic, including freight, and transit movements. Dedicated facilities for non-motorized use (sidewalks, bike lanes, and separated trails) are incomplete.
- Midday is Sequim's 'Rush Hour' due to the city's demographic skew toward an older population and its high proportion of retail space.
- Most vehicle trips are local. Almost 95 percent of trips originate or have their destination in Sequim.

## **CIP Project Identification Methodology**

To guide selection of the Six-Year CIP project inventory and define their priorities, the TMP included a set of metrics that reflect a consensus among stakeholder interests.

<b>Measurement</b>	<b>Purpose</b>
Addresses Capacity Constraints	maintain vehicular travel LOS policy comply with basic GMA requirements
Network Completeness	advances non-motorized travel priority network
Safety	address injury collision history corrects sight-distance or modal conflict
Active Living	encourages walking, biking, or use of mobility carts connects to city park or other public amenity
Realistic Cost	aligns with City budget constraints w/in 6 year period
Project Readiness	can be implemented within a 6 year time period complements water and sewer utility CIP initiatives
Economic Development	accommodates major economic generators encourages development of small businesses

### **Level of Service Standards – Vehicular Travel**

The TMP identifies a vehicular movement standard of LOS D (High density of motorists, but stable flow) for most roadways, LOS E (Near-capacity operation; low but uniform speed) for Washington Street outside the core area, and LOS F (Over capacity, with delays) for Washington Street within the core area (5th Avenue to Brown Road). The lower standard for Washington Street recognizes that where it passes through Downtown Sequim, capacity enhancements may be incompatible with other priorities such as providing wide sidewalks, preserving on-street parking, and minimizing distance between pedestrian crossings. As such, the Six-Year CIP includes improvement initiatives for Prairie and Fir Streets to allow these roadways to carry more east-west local traffic, thus reducing congestion along Washington Street.

### **Level of Service Standards – Non-Motorized Travel**

The Six-Year CIP also includes project initiatives to create safe routes for cyclists, along with a cohesive and ADA-compliant sidewalk network that improves safety and accessibility for pedestrians and mobility scooter users. Many of these initiatives resulted from the TMP's introduction of a layered transportation system in which individual travel modes are prioritized on different roadway types. They require specific infrastructure improvements.

Sidewalks in Sequim are shared by pedestrians and mobility scooter users. The pedestrian/mobility scooter priority layer provides connections to Sequim's downtown core, commercial and retail zones, medical facilities, schools and parks, the ODT, and residential neighborhoods. The LOS standard is a width of 5 to 12 feet with a park strip between the sidewalk and travel lane. The same LOS standard is applied to School Connector pedestrian routes.

Two additional non-roadway facility initiatives are proposed in the Six Year CIP project inventory. Active Alleyways in the downtown core will be repurposed as components of the pedestrian and mobility scooter network. Cross Circulation Easements shorten pathways for pedestrians by breaking up blocks and better connecting complementary land uses.



2017-2022 - Transportation System Projects  
Project Summary, Schedule, and Estimated Cost

	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan Total
<b>City Wide Pavement Rehab Improvements</b>							
STR-041PR City-wide Pavement Rehabilitation	384		562	587	614	642	2,789
STR-064PR North Sequim Ave Pavement Rehabilitation						268	268
STR-065PR Washington St Pavement Rehabilitation					499	6,892	7,391
<b>City Wide Safety Projects Improvements</b>							
STR-039SP City-wide Safety Projects	60	62	65	68	71	75	401
<b>Facility Improvement Improvements</b>							
STR-061FI East Fir St Rehabilitation from Sequim Ave to Blake Ave			86	717	749		1,552
STR-034FI East Washington St. Bus Turn-Outs from Sequim Ave to Rhodefer Rd			26	123			149
STR-027FI North Kendall Rd and West Hendrickson Rd Intersection Improvements				48			48
STR-052FI Washington Street Signal Timing & Coordination	150						150
STR-030FI West Fir Street Rehabilitation from Sequim Ave and 5th Ave	793	1,596	2,079				4,468
STR-031FI West Prairie Complete Street Revitalization from Sequim Ave to 5th Ave		77	480	502	525	503	2,087
STR-063FI West Sequim Bay Rd Shoreline Revetment Repair		546					546
STR-032FI West Washington Eastbound Auxillary Lane from River Rd Modification				16	77		93
STR-029FI Whitefeather Way and US 101 Intersection Improvements			261	205			466
<b>Miscellaneous Improvements</b>							
STR-060MI Transportation Master Plan Update			50				50
<b>Pedestrian Improvement Improvements</b>							
STR-003PI 3rd Ave Bicycle Accommodation from Hwy 101 to Fir St	71						71
STR-014PI Etta Street Active Alleyway	90	718					808
STR-062PI ODT East Hendrickson Extension from Sequim Ave to Brown Rd	52	164	171				387
STR-016PI Seal Street Active Alleyway			23	85			108
STR-015PI Sunnyside Avenue Sidewalk				68	564		632
STR-020PI Upper Bell Creek Trail				20	86		106
STR-012PI Whitefeather Way Multi-user Trail			110	377			487
<b>Road Connectivity Improvements</b>							
STR-066RC North Blake Ave to North Rhodefer Rd Extension					85	321	406
STR-037RC West Brownfield Rd Realignment from Sequim Ave 3rd Ave					171	1,298	1,469
STR-038RC West Maple St Extension from 5th Ave to 4th Ave					561	291	852
<b>Project Total By Year</b>	<b>1,600</b>	<b>3,163</b>	<b>3,913</b>	<b>2,816</b>	<b>4,002</b>	<b>10,290</b>	<b>25,784</b>

## 3rd Ave Bicycle Accommodation from Hwy 101 to Fir St

**Project Number:** STR-003PI

**Historical Project Number** 3

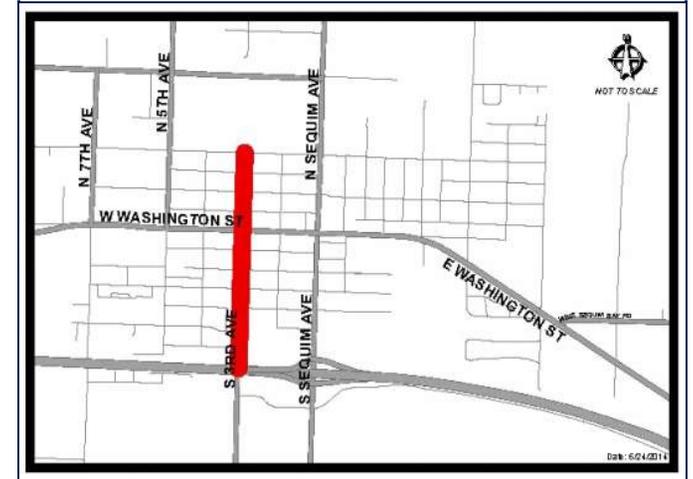
**Project Location:**

**Project Description:**

Stripe and size bike facilities with minor road improvements on both sides of 3rd.

**Project Benefit:**

Safer bicycle mobility and safety along a school route.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering		14						14		14
Construction		57						57		57
<b>Total Project Costs - Inflated \$</b>		<b>71</b>						<b>71</b>		<b>71</b>
<b>Project Funding Sources</b>										
Transportation Benefit District		72						72		72
<b>Total Project Funding - Inflated \$</b>		<b>72</b>						<b>72</b>		<b>72</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering		Q1								
Construction		Q2								

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$

## City-wide Pavement Rehabilitation

**Project Number:** STR-041PR

**Historical Project Number** 42

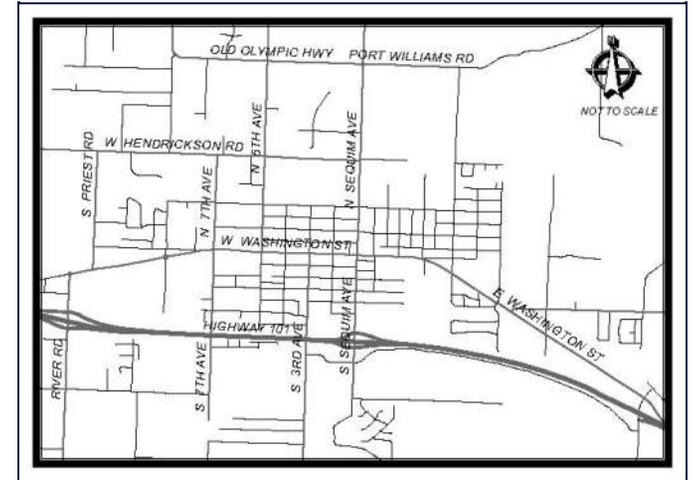
**Project Location:**

**Project Description:**

Perform pavement repair, overlay, or reconstruction of City streets.

**Project Benefit:**

Maintains or slows the decline of the street systems Pavement Condition Index. Improves look and driveability of streets.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Construction	970	384		562	587	614	642	2,789		3,759
<b>Total Project Costs - Inflated \$</b>	<b>970</b>	<b>384</b>		<b>562</b>	<b>587</b>	<b>614</b>	<b>642</b>	<b>2,789</b>		<b>3,759</b>
<b>Project Funding Sources</b>										
Other	208			170	107	293	313	883		1,091
Revenue - Sewer	280	140		153	157	160	164	774		1,054
Revenue - Water	280	140		153	157	160	164	774		1,054
Transportation Benefit District	201	104		86	167			357		558
<b>Total Project Funding - Inflated \$</b>	<b>969</b>	<b>384</b>		<b>562</b>	<b>588</b>	<b>613</b>	<b>641</b>	<b>2,788</b>		<b>3,757</b>
<b>Project Timeline Phase</b>										
Construction		Q2Q3Q4	Q3Q4	Q3Q4	Q2Q3Q4					

Source: Transportation Master Plan

Amounts in Thousands Inflated \$





## East Fir St Rehabilitation from Sequim Ave to Blake Ave

**Project Number:** STR-061FI

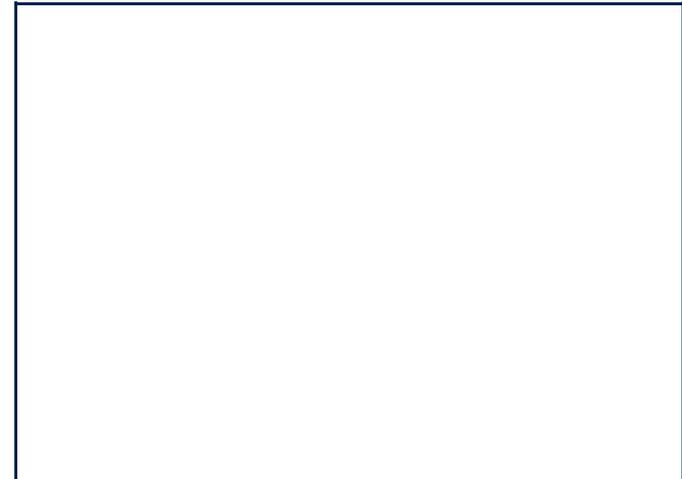
**Historical Project Number**

**Project Location:**

**Project Description:**

Rehabilitation of roadway surface from Sequim Ave to Blake Ave

Dependent on water and sewer projects along East Fir St.



**Project Benefit:**

Will improve the ride quality and safety of East Fir St.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering				86				86		86
Construction					717	749		1,466		1,466
<b>Total Project Costs - Inflated \$</b>				<b>86</b>	<b>717</b>	<b>749</b>		<b>1,552</b>		<b>1,552</b>
<b>Project Funding Sources</b>										
Grant - State					717	749		1,466		1,466
Transportation Benefit District				86				86		86
<b>Total Project Funding - Inflated \$</b>				<b>86</b>	<b>717</b>	<b>749</b>		<b>1,552</b>		<b>1,552</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q1Q2Q3Q4						
Construction					Q1Q2Q3Q4	Q1Q2Q3Q4				

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## East Washington St. Bus Turn-Outs from Sequim Ave to Rhodefer Rd

**Project Number:** STR-034FI

**Historical Project Number** 35

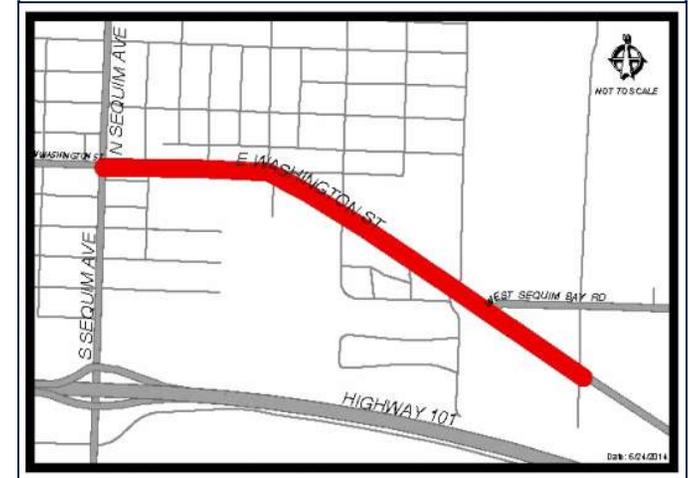
**Project Location:**

**Project Description:**

Construct Bus Turn-Outs with additional sidewalk, benches, trash receptacles, and modified storm water facilities.

**Project Benefit:**

Improves transit user safety, and traffic flow by getting buses away from the through lanes.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering				26				26		26
Construction					123			123		123
<b>Total Project Costs - Inflated \$</b>				<b>26</b>	<b>123</b>			<b>149</b>		<b>149</b>
<b>Project Funding Sources</b>										
Other				26	123			149		149
<b>Total Project Funding - Inflated \$</b>				<b>26</b>	<b>123</b>			<b>149</b>		<b>149</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q1						
Construction					Q1Q2Q3					

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$

## Etta Street Active Alleyway

**Project Number:** STR-014PI

**Historical Project Number** 15

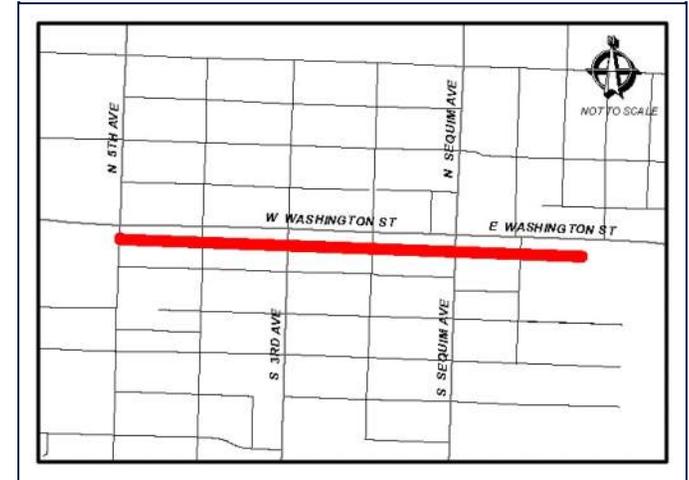
**Project Location:**

**Project Description:**

Rehabilitate alley with new lighting, street features, traffic calming, stormwater improvements and pavers.

**Project Benefit:**

Alley becomes functionally and aesthetically improved.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering		90						90		90
Construction			718					718		718
<b>Total Project Costs - Inflated \$</b>		<b>90</b>	<b>718</b>					<b>808</b>		<b>808</b>
<b>Project Funding Sources</b>										
Other			718					718		718
Revenue - Sewer		60						60		60
Revenue - Water		30						30		30
<b>Total Project Funding - Inflated \$</b>		<b>90</b>	<b>718</b>					<b>808</b>		<b>808</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering		Q2								
Construction			Q3Q4							

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## North Blake Ave to North Rhodefer Rd Extension

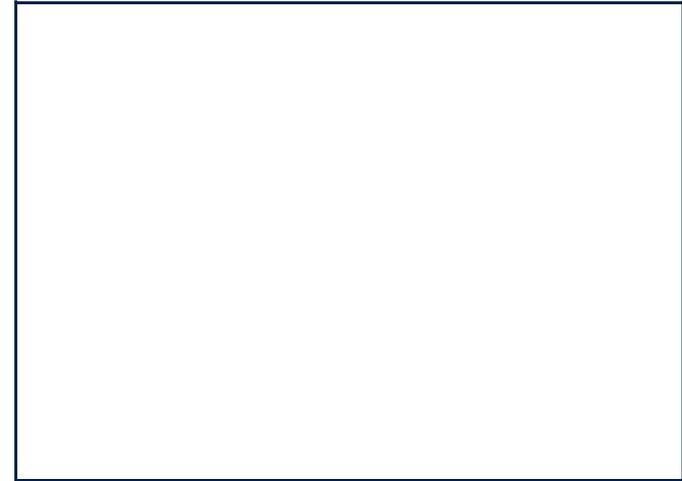
**Project Number:** STR-066RC

**Historical Project Number**

**Project Location:**

**Project Description:**

Project includes extension of road north located south of Carrie Blake Park between North Blake Ave and North Rhodefer Rd.



**Project Benefit:**

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering						85		85		85
Construction							321	321		321
<b>Total Project Costs - Inflated \$</b>						<b>85</b>	<b>321</b>	<b>406</b>		<b>406</b>
<b>Project Funding Sources</b>										
Transportation Impact Fees						85	321	406		406
<b>Total Project Funding - Inflated \$</b>						<b>85</b>	<b>321</b>	<b>406</b>		<b>406</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering						Q1Q2Q3Q4				
Construction							Q1Q2Q3Q4			

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## North Kendall Rd and West Hendrickson Rd Intersection Improvements

**Project Number:** STR-027FI

**Historical Project Number** 28

**Project Location:**

**Project Description:**

Improve intersection with additional pavement, improved sight lines, striping, and signage.



**Project Benefit:**

Provide a safer access for bicyclist, pedestrians and vehicles through the intersection

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering					14			14		14
Construction					34			34		34
<b>Total Project Costs - Inflated \$</b>					<b>48</b>			<b>48</b>		<b>48</b>
<b>Project Funding Sources</b>										
Transportation Benefit District					48			48		48
<b>Total Project Funding - Inflated \$</b>					<b>48</b>			<b>48</b>		<b>48</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering					Q3					
Construction					Q3Q4					

Source: Transportation Master Plan

Amounts in Thousands Inflated \$



## North Sequim Ave Pavement Rehabilitation

**Project Number:** STR-064PR

**Historical Project Number**

**Project Location:**

**Project Description:**

Project scope includes overlaying 7,200 linear feet of North Sequim Avenue from Washington St to the northern city limit. Also includes correction of non-ADA compliant curb ramps and driveways.



**Project Benefit:**

Project benefits include rehabilitation of pavement and improved ADA accessibility.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering							268	268		268
Construction									2,729	2,729
<b>Total Project Costs - Inflated \$</b>							<b>268</b>	<b>268</b>	<b>2,729</b>	<b>2,997</b>
<b>Project Funding Sources</b>										
Grant - State							268	268	2,729	2,997
<b>Total Project Funding - Inflated \$</b>							<b>268</b>	<b>268</b>	<b>2,729</b>	<b>2,997</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering							Q1Q2Q3Q4			
Construction										

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## ODT East Hendrickson Extension from Sequim Ave to Brown Rd

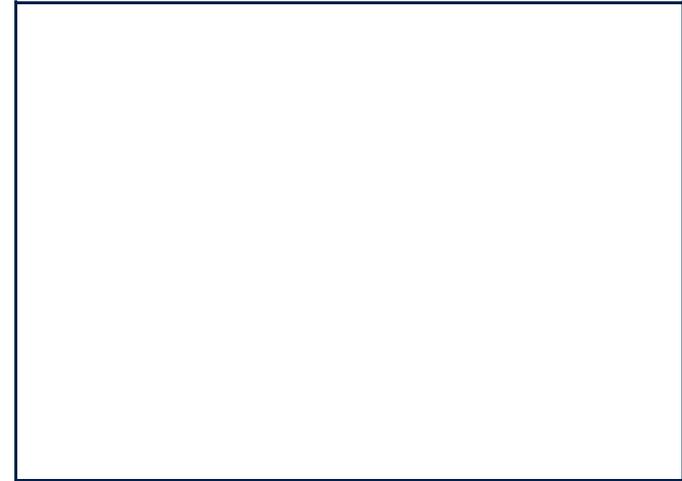
**Project Number:** STR-062PI

**Historical Project Number**

**Project Location:**

**Project Description:**

This project will extend the Olympic Discovery Trail from North Sequim Ave to North Brown Road



**Project Benefit:**

This project will provide a separated shared-use path for pedestrians, cyclist, and motor-scooters.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering		52						52		52
Construction			164	171				335		335
<b>Total Project Costs - Inflated \$</b>		<b>52</b>	<b>164</b>	<b>171</b>				<b>387</b>		<b>387</b>
<b>Project Funding Sources</b>										
Other			164	171				335		335
Transportation Impact Fees		52						52		52
<b>Total Project Funding - Inflated \$</b>		<b>52</b>	<b>164</b>	<b>171</b>				<b>387</b>		<b>387</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering		Q1Q2Q3Q4								
Construction			Q1Q2Q3Q4	Q1Q2Q3Q4						

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## Seal Street Active Alleyway

**Project Number:** STR-016PI

**Historical Project Number** 17

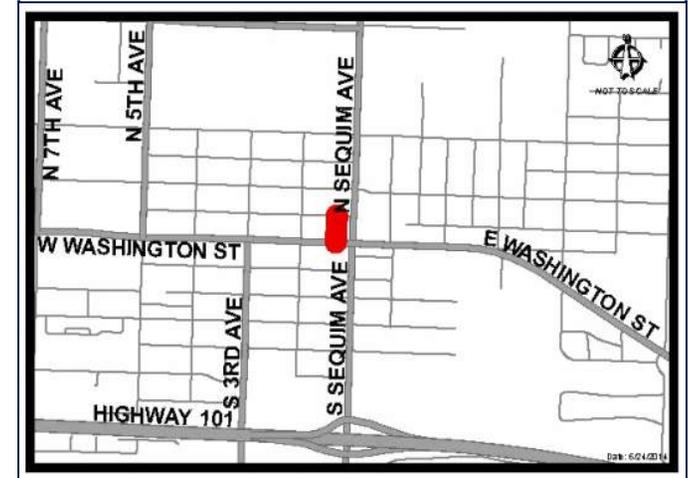
**Project Location:**

**Project Description:**

Rehabilitate alley with new lighting, street features, traffic calming, and pavers.

**Project Benefit:**

Alley becomes functionally and aesthetically improved.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering				23				23		23
Construction					85			85		85
<b>Total Project Costs - Inflated \$</b>				<b>23</b>	<b>85</b>			<b>108</b>		<b>108</b>
<b>Project Funding Sources</b>										
Transportation Benefit District				23	85			108		108
<b>Total Project Funding - Inflated \$</b>				<b>23</b>	<b>85</b>			<b>108</b>		<b>108</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q1Q2Q3Q4						
Construction					Q1Q2Q3Q4					

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## Sunnyside Avenue Sidewalk

**Project Number:** STR-015PI

**Historical Project Number** 16

**Project Location:**

**Project Description:**

Construct ADA compliant sidewalk, curb and gutter, and improve storm water handling.

**Project Benefit:**

Provide safe pedestrian facilities.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering					68			68		68
Construction						564		564		564
<b>Total Project Costs - Inflated \$</b>					<b>68</b>	<b>564</b>		<b>632</b>		<b>632</b>
<b>Project Funding Sources</b>										
Other						564		564		564
Transportation Benefit District					68			68		68
<b>Total Project Funding - Inflated \$</b>					<b>68</b>	<b>564</b>		<b>632</b>		<b>632</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering					Q1Q2Q3Q4					
Construction						Q1Q2Q3Q4				

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## Transportation Master Plan Update

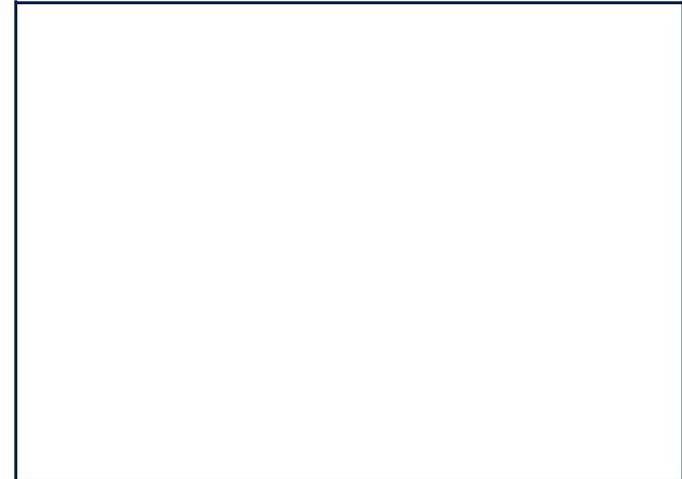
**Project Number:** STR-060MI

**Historical Project Number**

**Project Location:**

**Project Description:**

The Transportation Master Plan provides a long-term planning strategy for the City's surface transportation network for the 6-year and 20-year planning periods.



**Project Benefit:**

The proposed General Sewer Plan will replace the adopted plan developed in 2013.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Study				50				50		50
<b>Total Project Costs - Inflated \$</b>				<b>50</b>				<b>50</b>		<b>50</b>
<b>Project Funding Sources</b>										
Transportation Benefit District				50				50		50
<b>Total Project Funding - Inflated \$</b>				<b>50</b>				<b>50</b>		<b>50</b>
<b>Project Timeline Phase</b>										
Study				Q1Q2Q3Q4						

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## Upper Bell Creek Trail

**Project Number:** STR-020PI

**Historical Project Number** 21

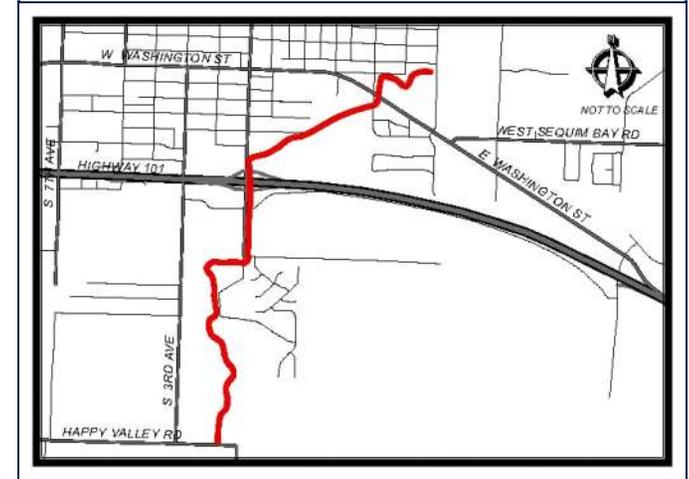
**Project Location:** Gerhardt to Carrie Blake Park

**Project Description:**

Construct a connection for the ODT trail to the south of HWY101 along Bell Creek right-of-way and/or easements will be required.

**Project Benefit:**

Recreational path connecting Gerhardt and Carrie Blake Park.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering					20			20		20
Construction						86		86		86
<b>Total Project Costs - Inflated \$</b>					<b>20</b>	<b>86</b>		<b>106</b>		<b>106</b>
<b>Project Funding Sources</b>										
Transportation Benefit District					20	86		106		106
<b>Total Project Funding - Inflated \$</b>					<b>20</b>	<b>86</b>		<b>106</b>		<b>106</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering					Q4					
Construction						Q1Q2				

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## Washington St Pavement Rehabilitation

**Project Number:** STR-065PR

**Historical Project Number**

**Project Location:**

**Project Description:**

Project scope includes HMA overlay of roughly 15,000 linear feet of Washington Street between River Road and Simdars Road. The project also includes replacement of non-compliant ADA curb ramps and driveways.



**Project Benefit:**

Project benefits includes pavement rehabilitation and improved ADA accessibility.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering						499		499		499
Construction							6,892	6,892		6,892
<b>Total Project Costs - Inflated \$</b>						<b>499</b>	<b>6,892</b>	<b>7,391</b>		<b>7,391</b>
<b>Project Funding Sources</b>										
Grant - Federal						499	6,892	7,391		7,391
<b>Total Project Funding - Inflated \$</b>						<b>499</b>	<b>6,892</b>	<b>7,391</b>		<b>7,391</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering						Q1Q2Q3Q4				
Construction							Q1Q2Q3Q4			

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## Washington Street Signal Timing & Coordination

**Project Number:** STR-052FI

**Historical Project Number**

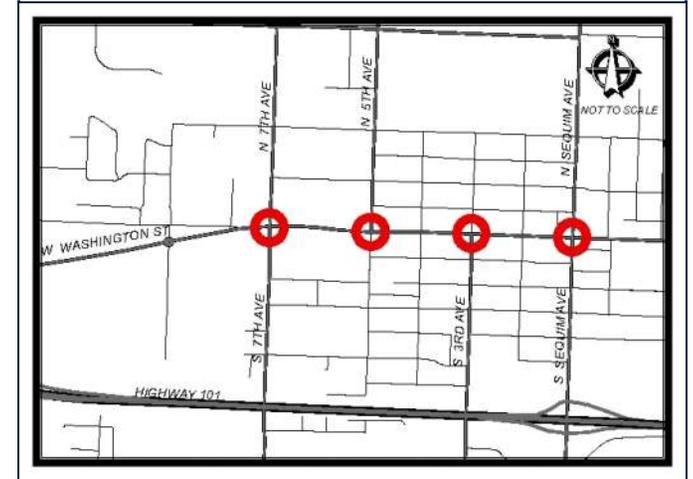
**Project Location:**

**Project Description:**

Synchronize traffic signals on Washington.

**Project Benefit:**

Better mobility through downtown.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering	13	150						150		163
Construction	39									39
<b>Total Project Costs - Inflated \$</b>	<b>52</b>	<b>150</b>						<b>150</b>		<b>202</b>
<b>Project Funding Sources</b>										
Transportation Impact Fees	52	150						150		202
<b>Total Project Funding - Inflated \$</b>	<b>52</b>	<b>150</b>						<b>150</b>		<b>202</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering		Q1Q2Q3Q4								
Construction										

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## West Brownfield Rd Realignment from Sequim Ave 3rd Ave

**Project Number:** STR-037RC

**Historical Project Number** 38

**Project Location:**

**Project Description:**

Realignment of W. Brownfield Avenue. Remove the curve, widen roadway, add sidewalks, and enhance storm water facilities.

**Project Benefit:**

Improve safety for all users.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering						171		171		171
Construction							1,298	1,298		1,298
<b>Total Project Costs - Inflated \$</b>						<b>171</b>	<b>1,298</b>	<b>1,469</b>		<b>1,469</b>
<b>Project Funding Sources</b>										
Other						165	1,247	1,412		1,412
<b>Total Project Funding - Inflated \$</b>						<b>165</b>	<b>1,247</b>	<b>1,412</b>		<b>1,412</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering						Q3Q4				
Construction							Q2Q3Q4			

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## West Fir Street Rehabilitation from Sequim Ave and 5th Ave

**Project Number:** STR-030FI

**Historical Project Number** 31

**Project Location:**

**Project Description:**

Rebuild roadway with new sidewalk, curb and gutter, illumination, and stormwater handling. Repair irrigation line.

**Project Benefit:**

Improved east-west connectivity and pedestrian safety in a school zone; reduces vehicle pressure on Washington Street.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Land Acquisition		208						208		208
Preliminary Engineering		209						209		209
Construction		376	1,596	2,079				4,051		4,051
<b>Total Project Costs - Inflated \$</b>		<b>793</b>	<b>1,596</b>	<b>2,079</b>				<b>4,468</b>		<b>4,468</b>
<b>Project Funding Sources</b>										
Grant - Federal		688						688		688
Other			1,545	2,079				3,624		3,624
Transportation Benefit District			50					50		50
Transportation Impact Fees		105						105		105
<b>Total Project Funding - Inflated \$</b>		<b>793</b>	<b>1,595</b>	<b>2,079</b>				<b>4,467</b>		<b>4,467</b>
<b>Project Timeline Phase</b>										
Land Acquisition		Q1Q2								
Preliminary Engineering		Q1Q2								
Construction		Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4						

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## West Maple St Extension from 5th Ave to 4th Ave

**Project Number:** STR-038RC

**Historical Project Number** 39

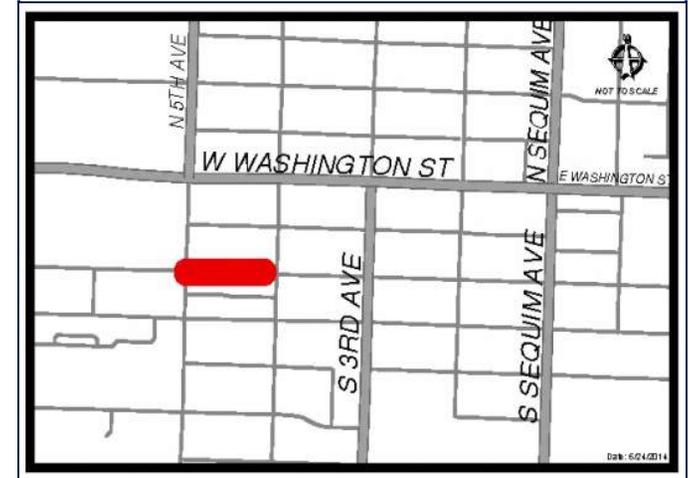
**Project Location:**

**Project Description:**

New road connecting 5th and 4th along the Maple St. corridor.

**Project Benefit:**

Improved east-west connectivity south of US 101



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering						143		143		143
Construction						418	291	709		709
<b>Total Project Costs - Inflated \$</b>						<b>561</b>	<b>291</b>	<b>852</b>		<b>852</b>
<b>Project Funding Sources</b>										
Other						319	217	536		536
Revenue - Sewer						110	31	141		141
Revenue - Water						110	31	141		141
<b>Total Project Funding - Inflated \$</b>						<b>539</b>	<b>279</b>	<b>818</b>		<b>818</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering						Q1Q2				
Construction						Q2Q3Q4	Q2Q3			

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## West Prairie Complete Street Revitalization from Sequim Ave to 5th Ave

**Project Number:** STR-031FI

**Historical Project Number** 32

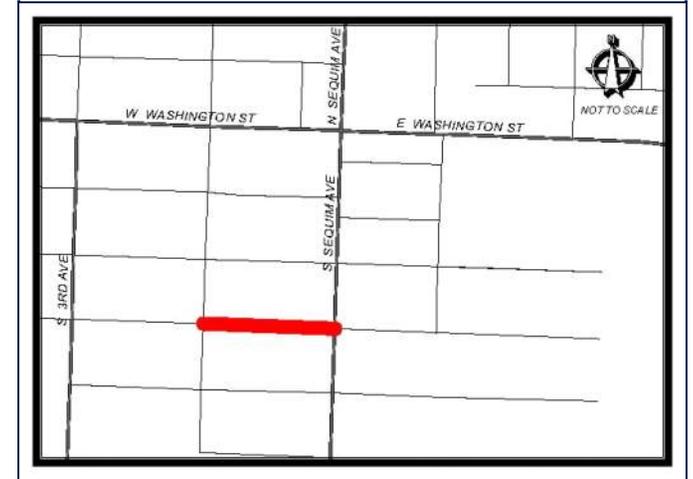
**Project Location:**

**Project Description:**

Reconstruct W. Prairie between Sequim and 5th to calm traffic that may enter this neighborhood from commercial area to the east. This project will be constructed sequentially in single block increments.

**Project Benefit:**

Fulfills revitalization council goal; calms traffic entering neighborhood from commercial area.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering			77	40	42	44		203		203
Construction				440	460	481	503	1,884		1,884
<b>Total Project Costs - Inflated \$</b>			<b>77</b>	<b>480</b>	<b>502</b>	<b>525</b>	<b>503</b>	<b>2,087</b>		<b>2,087</b>
<b>Project Funding Sources</b>										
Other							503	503		503
Revenue - GFC Sewer				21	20	23		64		64
Revenue - GFC Water					22	20		42		42
Revenue - Sewer			38					38		38
Revenue - Water			38	19				57		57
Transportation Benefit District				440	460	481		1,381		1,381
<b>Total Project Funding - Inflated \$</b>			<b>76</b>	<b>480</b>	<b>502</b>	<b>524</b>	<b>503</b>	<b>2,085</b>		<b>2,085</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering			Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4				
Construction				Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4			

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## West Sequim Bay Rd Shoreline Revetment Repair

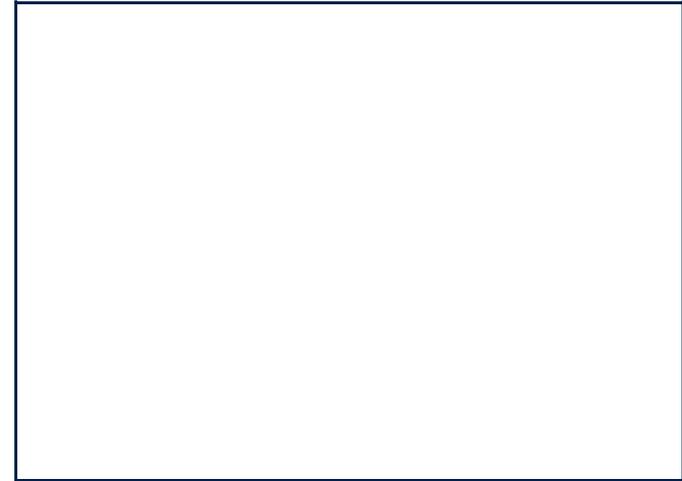
**Project Number:** STR-063FI

**Historical Project Number**

**Project Location:**

**Project Description:**

This project includes reconstructing the rock revetment supporting West Sequim Bay Rd near Pitship Bridge.



**Project Benefit:**

The rock revetment will stabilize the roadway embankment and prevent wash-out during storms.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Construction			546					546		546
<b>Total Project Costs - Inflated \$</b>			<b>546</b>					<b>546</b>		<b>546</b>
<b>Project Funding Sources</b>										
Other			546					546		546
<b>Total Project Funding - Inflated \$</b>			<b>546</b>					<b>546</b>		<b>546</b>
<b>Project Timeline Phase</b>										
Construction			Q1Q2Q3Q4							

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## West Washington Eastbound Auxillary Lane from River Rd Modification

**Project Number:** STR-032FI

**Historical Project Number** 33

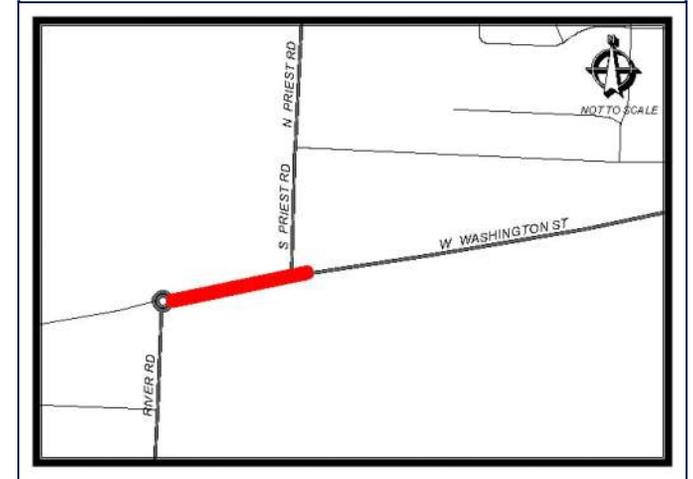
**Project Location:**

**Project Description:**

Improve merging geometries from River Rd. to Washington through lane.

**Project Benefit:**

Safety



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering					16			16		16
Construction						77		77		77
<b>Total Project Costs - Inflated \$</b>					<b>16</b>	<b>77</b>		<b>93</b>		<b>93</b>
<b>Project Funding Sources</b>										
Transportation Benefit District					16	77		93		93
<b>Total Project Funding - Inflated \$</b>					<b>16</b>	<b>77</b>		<b>93</b>		<b>93</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering					Q4					
Construction						Q1Q2				

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## Whitefeather Way and US 101 Intersection Improvements

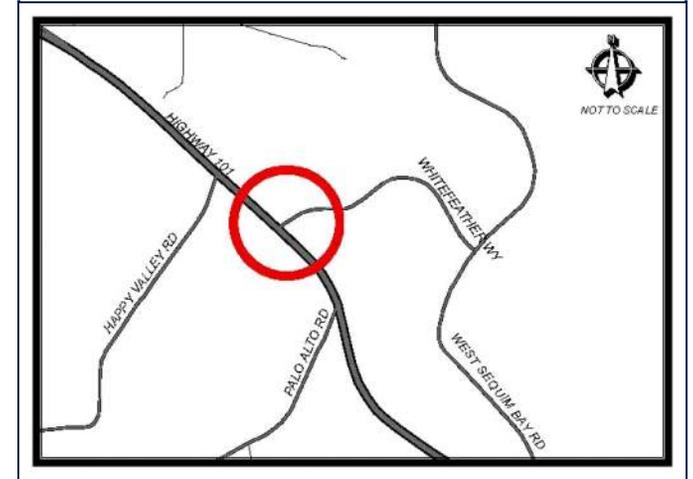
**Project Number:** STR-029FI

**Historical Project Number** 30

**Project Location:**

**Project Description:**

Intersection Improvement on US101 and Whitefeather Way to improve entering and exiting safety including acceleration and deceleration lanes.



**Project Benefit:**

Improved intersection safety.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering				91				91		91
Construction				170	205			375		375
<b>Total Project Costs - Inflated \$</b>				<b>261</b>	<b>205</b>			<b>466</b>		<b>466</b>
<b>Project Funding Sources</b>										
Other				261	205			466		466
<b>Total Project Funding - Inflated \$</b>				<b>261</b>	<b>205</b>			<b>466</b>		<b>466</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q3Q4						
Construction				Q4	Q1Q2Q3Q4					

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



## Whitefeather Way Multi-user Trail

**Project Number:** STR-012PI

**Historical Project Number** 12

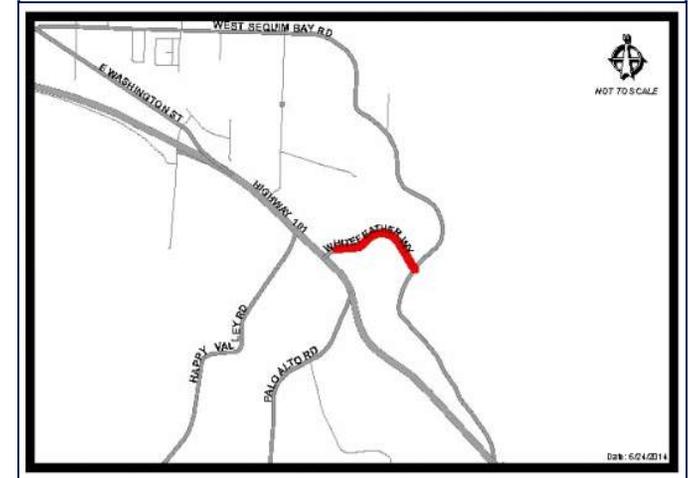
**Project Location:**

**Project Description:**

Construct an asphalt trail connecting the ODT to waterfront.

**Project Benefit:**

Provide safe pedestrian and bike access from marina area to the ODT.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering				110				110		110
Construction					377			377		377
<b>Total Project Costs - Inflated \$</b>				<b>110</b>	<b>377</b>			<b>487</b>		<b>487</b>
<b>Project Funding Sources</b>										
Other				85	295			380		380
Transportation Benefit District				24	82			106		106
<b>Total Project Funding - Inflated \$</b>				<b>109</b>	<b>377</b>			<b>486</b>		<b>486</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q4						
Construction					Q3Q4					

Source: Transportation Master Plan  
 Amounts in Thousands Inflated \$



- Capital Improvement Planning and the Parks and Recreation Master Plan
- Recreational Facility Funding Policy
- Level of Service Standards

# **CAPITAL IMPROVEMENT PROGRAM 2017 – 2022**

## *Chapter 6*

### *Parks Restricted Fund*

#### *Projects*

## **Capital Improvement Planning and the Parks and Recreation Master Plan**

The pursuit of leisure activities and the preservation of open space, habitat and the natural environment are essential to the quality of life enjoyed by Sequim residents and visitors. When the City Council adopted the Sequim Parks and Recreation Master Plan in 2015, it expressed as policy the community's objectives and priorities for the provision of parks and recreation space, and the capital investments needed to maintain those assets. The Parks and Recreation Master Plan outlines recommendations and guidelines for the acquisition, development, management, and funding of public parks and recreation facilities in the City's neighborhoods.

## **Parks and Recreational Facility Funding Policy**

To develop the broad range of recreational facilities envisioned in the Master Plan, the text includes a framework of goals and objectives. Among those goals and objectives are the following statements directed toward the capital improvement planning process:

### **“(G.5) Economically Vital Community**

The City of Sequim should continue to utilize parks as an indicator for creating positive economic benefits. This is important because parks, recreation and leisure amenities enhance property values and attract homebuyers, workers, and retirees. Sequim should recognize that parks and recreation often emerge as an “engine” that drives tourism in the community by providing access to unique features, programs, and experiences such as special events and festivals. Recreation facilities provide sites for sports tournaments and athletic events, which can be major sources of tourism and an economic benefit to the City of Sequim.

#### **(O.5.1)**

Incorporate significant cultural resources in the design and development of new park and recreation facilities, and provide interpretive opportunities where appropriate.

#### **(O.5.2)**

Design and manage park and recreation facilities to maximize environmental protection and provide interpretive opportunities for ecological systems and features, and cultural resources.

#### **(O.5.3)**

Deliver measurable economic benefit to the community by providing or supporting programs, special events and facilities.

#### **(O.5.4)**

Establish an ongoing six-year Capital Improvement Plan (CIP) for parks and recreation facilities.

#### **(O.5.5)**

Providing public art in appropriate locations throughout the city and designing public spaces, such as but not limited to entry, directional and interpretive signs can contribute to Sequim's image.”

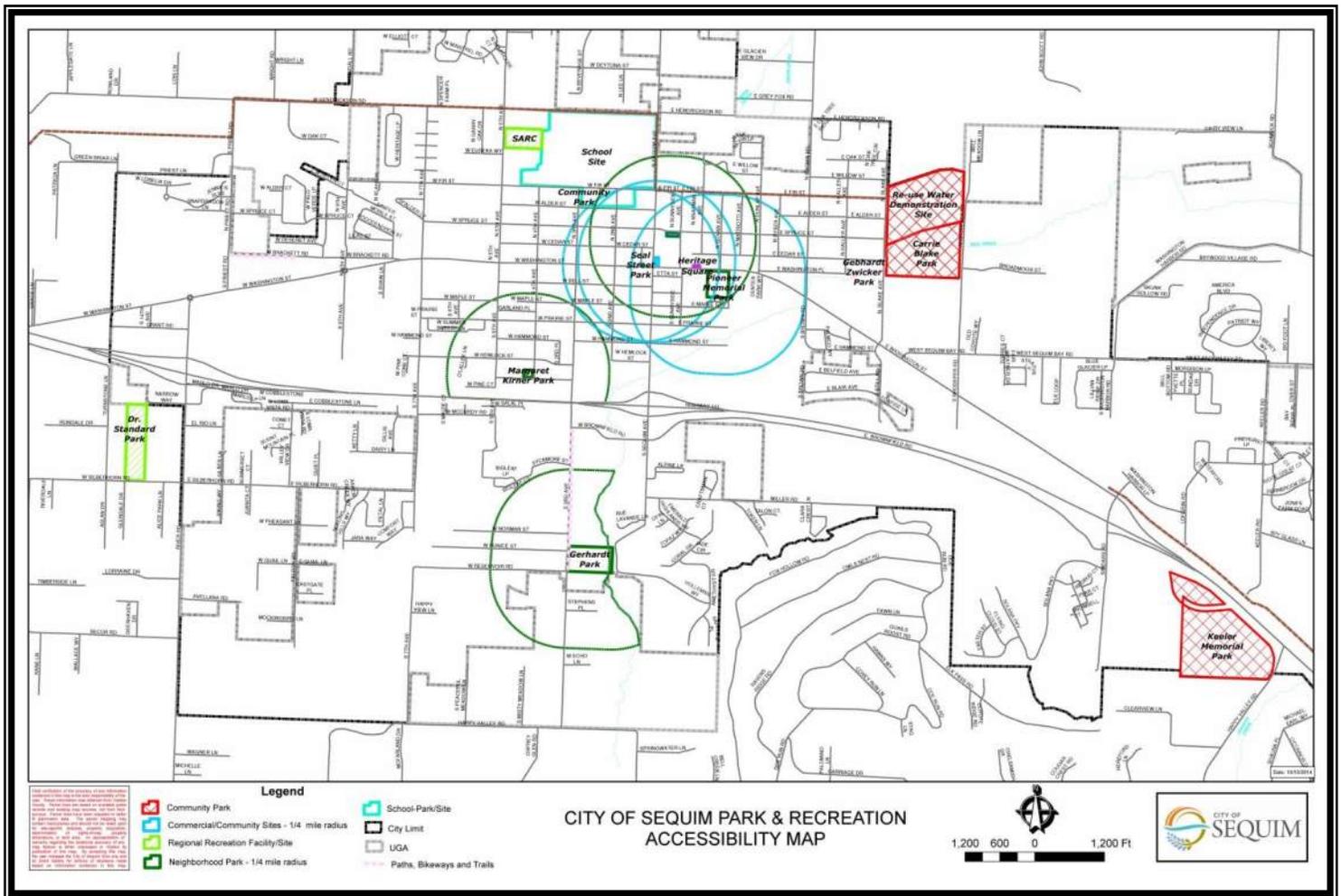
Taken from the adopted 2015 Parks and Recreation Master Plan

## Level of Service Standards

The Level of Service standards described in the Parks and Recreation Master Plan, and summarized in the following chart, are based on historic planning principles established by the National Recreation and Park Association (NRPA). However, the Master Plan does not strictly follow the historically used NRPA guidelines because a one-size-fits-all approach is not realistic to use as a benchmark for level-of-service standards.

**TABLE P-1  
LOS STANDARDS  
PARK AND RECREATION FACILITIES**

Facility Type	LOS Standard (per capita population)	Existing Inventory	Required by 2035
Community Park	2.5ac/1000	94.08ac	0
Neighborhood Park	1.0ac/1000	8.5ac	1.5ac
School-Park/Site	2.0ac/1000	69.53ac	0
Regional Recreation Facility/Site	1.0ac/1000	15.04ac	0
Path, Bikeways and Trails	1,320LF/1000	36,980LF	0
Commercial/Community Sites	0.25ac/1000	4.28ac	0



Not only does Sequim have needs for increased access to neighborhood parks, it has needs for upgrading or improving of existing facilities, as the above Table P-1 clearly shows availability of land is supplied to Sequim residents. Neighborhood parks are the most common type of park to serve residential areas. Facilities provided at neighborhood parks are oriented to active play areas for the neighborhood residents and serve all residents living within a quarter-mile.

### **Local Service Standards - Park Function and Accessibility**

While the gross acreage level of service is a reasonable overall standard, the type of park and ease of access holds much more significance than the total park acreage. A quality park system should contain a good balance of property types and should be located geographically throughout the City. Resources must be allocated equitably throughout the community while reflecting changes in the level of demand for parks, recreation and leisure accommodations.

A service radius is recommended in planning a logical distribution of parks and open space. Park users will generally walk a limited distance to access a park. Based on NPRA's 1995 classification system this 2015 Parks and Recreation Master Plan uses a service radius of <1/4 mile for Commercial/Community Sites and Neighborhood Parks. Though streets designated as "minor arterial" or smaller in the City of Sequim are not considered boundaries to access; Highway 101, is recognized here by configuration and traffic load as a boundary for pedestrian park access, along with the Bell Creek corridor along the south side of Highway 101.

### **Residential Level of Service**

Neighborhood park service areas as well as school facilities are identified on the below Map P-2 above. As shown on the map, two types of deficiencies have been defined in Sequim.

- No access and limited neighborhood parks - The areas of Sequim that are not within one quarter mile of an existing neighborhood facility are shown on Map 2-2. There is a need for additional neighborhood parks in the Southwest, Eastern and Northwest portions of the City.

### **Commercial Level of Service**

Commercial/Community Sites are often associated with commercial zones in the City. Sequim's are provided downtown and they provide comfortable access to pedestrians and bicyclist travelling from residential neighborhoods to and from downtown. The target users are a wide variety of employees, customers, visitors/tourist and youth. There is no need for additional Commercial/Community Sites.

### **Tourism/Visitor Level of Service**

Residential and Commercial growth is not the only foreseeable impact to park services. The City's ability to provide adequate tourist facilities such as restrooms, transient parking, interpretive services, and shoreline access for pedestrians and boaters is experiencing increasing seasonal demand. Extensive promotion through the Lodging Tax Advisory Committee and the Olympic Peninsula Visitors Bureau has been effective

in promoting Sequim's events and the North Olympic Peninsula's wide-ranging recreation opportunities. Increases in tourist visits to Sequim will continue to increase demand on City park facilities and services. These demands are likely to be concentrated within Carrie Blake Park and Downtown Sequim. This increase in demand for service should continuously be analyzed and included in future park planning. Use by visitors of City facilities is not well documented although the impacts are evident in the increased maintenance hours needed by park crews for cleanup. Future analysis of impacts on the parks operations and maintenance should account for increase in use by nonresidents. Tourists are attracted to a well maintained system of parks and trails and thus, wise investment in Sequim's Parks and Recreation Facilities and Programs contribute to a healthy tourist economy.



2017-2022 - Park System Projects  
 Project Summary, Schedule, and Estimated Cost

	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan Total
<b>Facility Improvement Improvements</b>							
PRK-011FI Carrie Blake Park Access Road Relocation	274						274
PRK-015FI Carrie Blake Park Pickleball Courts	154						154
PRK-017FI Carrie Blake Park Tennis Courts	60	230					290
PRK-045FI City Wide Park Land Acquisition						200	200
PRK-044FI Gerhart Park Building Removal and Restoration			75	75	75	75	300
PRK-047FI Gerhart Park Child Play Equipment				60			60
PRK-013FI Guy Cole Parking Lot Overlay and Drainage Improvements			312				312
PRK-018FI Keeler Park Access and Parking				599			599
PRK-019FI Keeler Park Pedestrian Boardwalk					187		187
PRK-020FI Pioneer Park Sewer Connection	55						55
PRK-046FI Reuse Demo Site Band Shell Tiered Seating						196	196
<b>Project Total By Year</b>	<b>543</b>	<b>230</b>	<b>387</b>	<b>734</b>	<b>262</b>	<b>471</b>	<b>2,627</b>



## Carrie Blake Park Access Road Relocation

**Project Number:** PRK-011FI

**Historical Project Number**

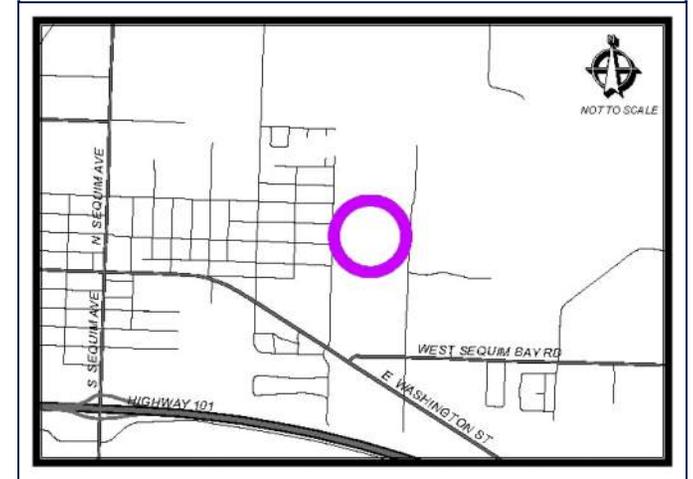
**Project Location:** 202 N. Blake Ave.

**Project Description:**

Construct New Access Road from Blake Ave (southside).

**Project Benefit:**

This project fulfills elements of the Park's Master Plan. The project will reduce the potential for conflicts near the playground equipment by moving vehicles away from a pedestrian area.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Construction		274						274		274
<b>Total Project Costs - Inflated \$</b>		<b>274</b>						<b>274</b>		<b>274</b>
<b>Project Funding Sources</b>										
REET 2		274						274		274
<b>Total Project Funding - Inflated \$</b>		<b>274</b>						<b>274</b>		<b>274</b>
<b>Project Timeline Phase</b>										
Construction		Q1Q2Q3								

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$

## Carrie Blake Park Pickleball Courts

**Project Number:** PRK-015FI

**Historical Project Number**

**Project Location:** Carrie Blake Park

**Project Description:**

Project will construct 8 pickleball courts at Carrie Blake Park.



**Project Benefit:**

This project fulfills elements of the Park's Master Plan.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering	51									51
Construction		154						154		154
<b>Total Project Costs - Inflated \$</b>	<b>51</b>	<b>154</b>						<b>154</b>		<b>205</b>
<b>Project Funding Sources</b>										
Public/Private Partnership Private Contribution	154									154
REET 2	51									51
<b>Total Project Funding - Inflated \$</b>	<b>205</b>									<b>205</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering										
Construction		Q1Q2Q3Q4								

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Carrie Blake Park Tennis Courts

**Project Number:** PRK-017FI

**Historical Project Number**

**Project Location:**

**Project Description:**

Project will construct tennis courts at Carrie Blake Park. Project is dependent upon completion of the Carrie Blake Access Road (PRK-011FI) and the Water Line Relocation (WTR-061DS) projects.



**Project Benefit:**

This project fulfills elements of the Park's Master Plan.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Construction		60	230					290		290
<b>Total Project Costs - Inflated \$</b>		<b>60</b>	<b>230</b>					<b>290</b>		<b>290</b>
<b>Project Funding Sources</b>										
Park Impact Fees		60						60		60
Public/Private Partnership Private Contribution			230					230		230
<b>Total Project Funding - Inflated \$</b>		<b>60</b>	<b>230</b>					<b>290</b>		<b>290</b>
<b>Project Timeline Phase</b>										
Construction		Q2Q3Q4	Q1Q2Q3							

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$



## City Wide Park Land Acquisition

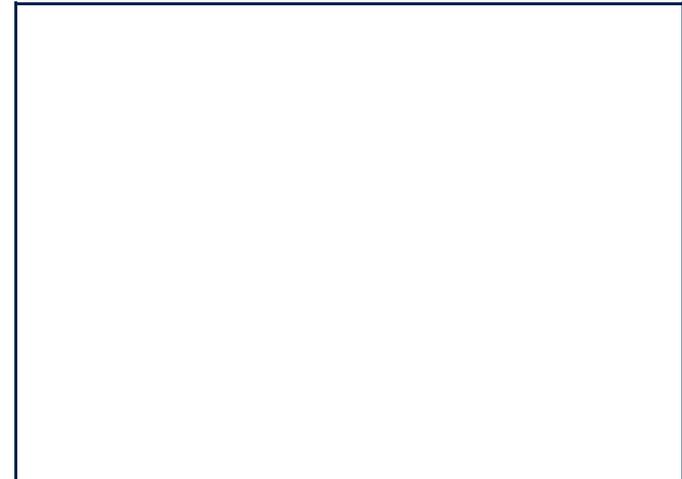
**Project Number:** PRK-045FI

**Historical Project Number**

**Project Location:**

**Project Description:**

Secure right-of-way for future Park development.



**Project Benefit:**

This project will provide the City of Sequim with a healthy and vibrant future.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Land Acquisition							200	200		200
<b>Total Project Costs - Inflated \$</b>							<b>200</b>	<b>200</b>		<b>200</b>
<b>Project Funding Sources</b>										
Park Impact Fees							200	200		200
<b>Total Project Funding - Inflated \$</b>							<b>200</b>	<b>200</b>		<b>200</b>
<b>Project Timeline Phase</b>										
Land Acquisition							Q1Q2Q3Q4			

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Gerhart Park Building Removal and Restoration

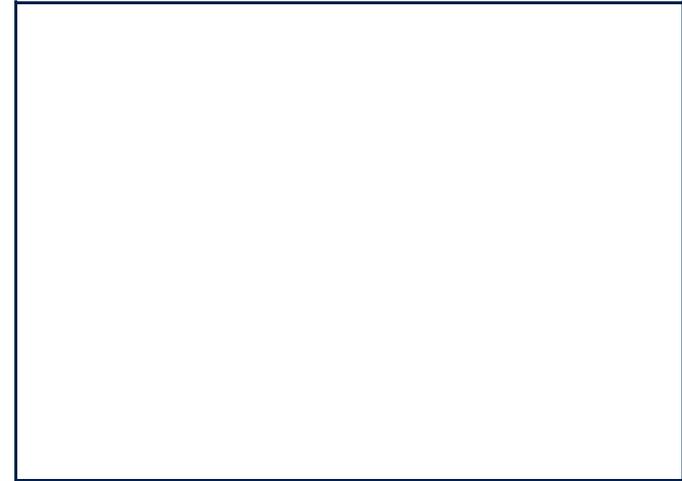
**Project Number:** PRK-044FI

**Historical Project Number**

**Project Location:**

**Project Description:**

Project includes the removal and restoration of existing building structures at Gerhart Park. The restoration scope of work will be identified through a park master planning process.



**Project Benefit:**

This project will activate the park for community recreation.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering				75				75		75
Construction					75	75	75	225		225
<b>Total Project Costs - Inflated \$</b>				<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>300</b>		<b>300</b>
<b>Project Funding Sources</b>										
Grant - State				75	75	75	75	300		300
<b>Total Project Funding - Inflated \$</b>				<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>300</b>		<b>300</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q1Q2Q3Q4						
Construction					Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4			

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Gerhart Park Child Play Equipment

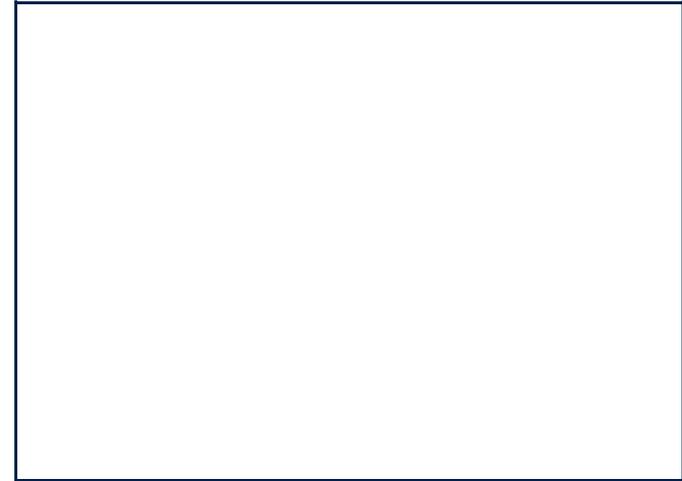
**Project Number:** PRK-047FI

**Historical Project Number**

**Project Location:**

**Project Description:**

Project includes the installation of child play ground equipment. Play equipment type will be defined through a park master planning process.



**Project Benefit:**

This project will provide for family recreational opportunities.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Construction					60			60		60
<b>Total Project Costs - Inflated \$</b>					<b>60</b>			<b>60</b>		<b>60</b>
<b>Project Funding Sources</b>										
Grant - State					60			60		60
<b>Total Project Funding - Inflated \$</b>					<b>60</b>			<b>60</b>		<b>60</b>
<b>Project Timeline Phase</b>										
Construction					Q1Q2Q3					

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Guy Cole Parking Lot Overlay and Drainage Improvements

**Project Number:** PRK-013FI

**Historical Project Number**

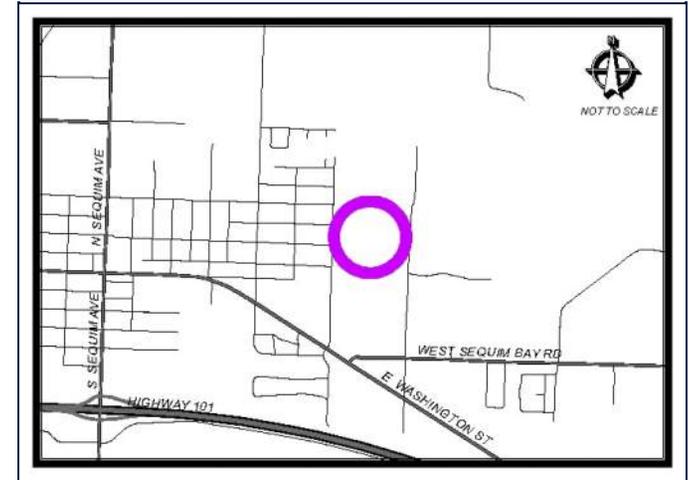
**Project Location:** 202 N. Blake Ave.

**Project Description:**

Project will configure Guy Cole Parking to be coordinated with other the park facilities. Project may include asphalt overlay, sidewalk, landscaping, drainage, and lighting.

**Project Benefit:**

This project fulfills elements of the Park's Master Plan.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Construction				312				312		312
<b>Total Project Costs - Inflated \$</b>				<b>312</b>				<b>312</b>		<b>312</b>
<b>Project Funding Sources</b>										
Grant - State				312				312		312
<b>Total Project Funding - Inflated \$</b>				<b>312</b>				<b>312</b>		<b>312</b>
<b>Project Timeline Phase</b>										
Construction				Q2Q3						

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Keeler Park Access and Parking

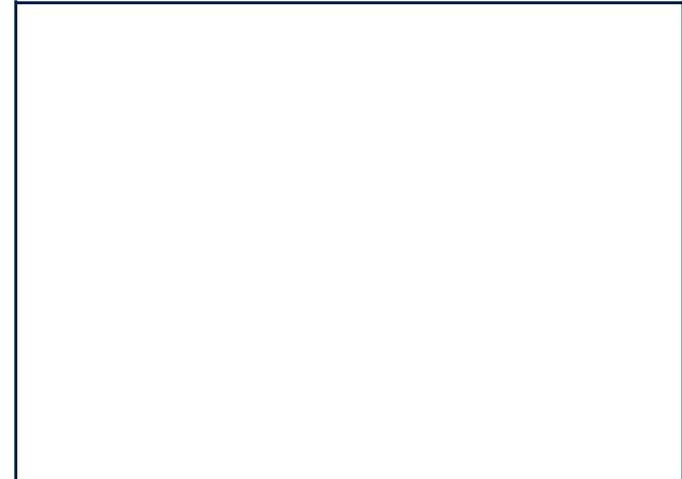
**Project Number:** PRK-018FI

**Historical Project Number**

**Project Location:**

**Project Description:**

Provide access and parking at Keeler Park. Site improvements will be identified through a park master planning process.



**Project Benefit:**

This project will activate Keeler Park for community recreation.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering					125			125		125
Construction					474			474		474
<b>Total Project Costs - Inflated \$</b>					<b>599</b>			<b>599</b>		<b>599</b>
<b>Project Funding Sources</b>										
Park Impact Fees					599			599		599
<b>Total Project Funding - Inflated \$</b>					<b>599</b>			<b>599</b>		<b>599</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering					Q1Q2					
Construction					Q2Q3Q4					

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Keeler Park Pedestrian Boardwalk

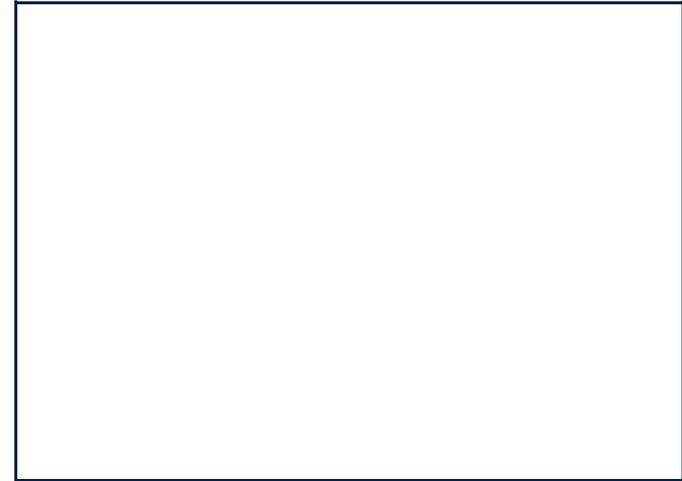
**Project Number:** PRK-019FI

**Historical Project Number**

**Project Location:**

**Project Description:**

Project includes a non-motorized route in Keeler Park. The route will be identified through a park master planning process.



**Project Benefit:**

This project will activate Keeler Park for community recreation.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering						25		25		25
Construction						162		162		162
<b>Total Project Costs - Inflated \$</b>						<b>187</b>		<b>187</b>		<b>187</b>
<b>Project Funding Sources</b>										
Park Impact Fees						187		187		187
<b>Total Project Funding - Inflated \$</b>						<b>187</b>		<b>187</b>		<b>187</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering						Q1Q2				
Construction						Q2Q3Q4				

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Pioneer Park Sewer Connection

**Project Number:** PRK-020FI

**Historical Project Number**

**Project Location:**

**Project Description:**

Project will connect existing facilities to the City's sewer collection system.



**Project Benefit:**

This project provides for better reliability and maintenance of sewerage collection system at the park.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Construction		55						55		55
<b>Total Project Costs - Inflated \$</b>		<b>55</b>						<b>55</b>		<b>55</b>
<b>Project Funding Sources</b>										
Revenue - Sewer		55						55		55
<b>Total Project Funding - Inflated \$</b>		<b>55</b>						<b>55</b>		<b>55</b>
<b>Project Timeline Phase</b>										
Construction		Q1Q2Q3Q4								

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Reuse Demo Site Band Shell Tiered Seating

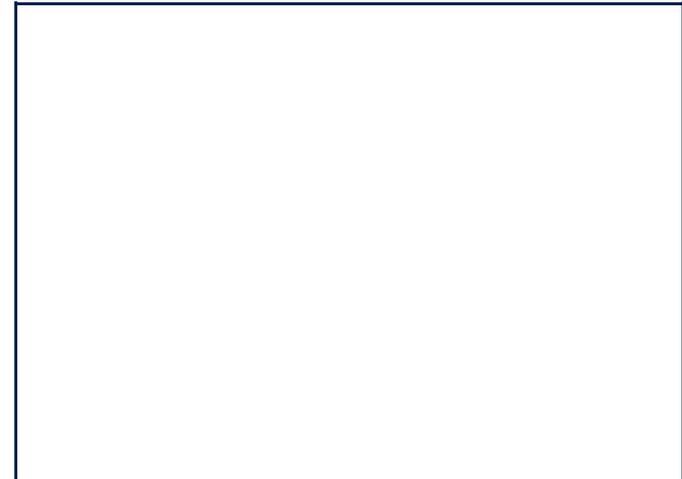
**Project Number:** PRK-046FI

**Historical Project Number**

**Project Location:**

**Project Description:**

Project includes tiered seating around the performance stage located at the water reuse demonstration site.



**Project Benefit:**

This project fulfills elements of the Park's Master Plan.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering							26	26		26
Construction							170	170		170
<b>Total Project Costs - Inflated \$</b>							<b>196</b>	<b>196</b>		<b>196</b>
<b>Project Funding Sources</b>										
Park Impact Fees							196	196		196
<b>Total Project Funding - Inflated \$</b>							<b>196</b>	<b>196</b>		<b>196</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering							Q1Q2			
Construction							Q2Q3Q4			

Source: Parks Comprehensive Plan  
 Amounts in Thousands Inflated \$

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- Public Buildings

# **CAPITAL IMPROVEMENT PROGRAM 2017 – 2022**

## *Chapter 7*

### *Capital/Building Facilities Restricted Fund Projects*

### **Public Buildings**

Although these Six-Year CIP projects are not part of an adopted Master Plan, they represent important initiatives to enhance public access city government services. Most prominent among these projects is the construction of a new Civic Center including the Police Station. The project will centralize administrative and law enforcement functions in a single location.

### **The History of City Hall**

In 1973 the City Hall offices were built to house the Clerk's Office, the Council Chambers, the Police Station and a radio communications center (made possible because the Council had the foresight to purchase the land 15 years earlier). Additionally, in 1973 the citizens voted to change from "Town of Sequim" to "City of Sequim" and the council changed from a five-member to a seven-member body. At that time, unlike today, the City Clerk and Attorney were also elected. The City also adopted its first Uniform Building Codes that year. Research of the City archives reveals for 1974, the year we occupied the current City Hall, we had an annual budget of \$556,523, and a City Wide assessed valuation of \$10,248,781 and just one police car. Just as the current one, the new City Hall/Police Station will serve the City for decades to come.

### **The History of the City Shop**

In 1997 the City Shop was built to accommodate a modern day Public Works Operations Facility. Since the opening of the City Shop the southern breeze way has been retrofitted to be enclosed with doors on the east and west walls that provide additional heated space for valuable equipment due to increases in demands related to water, sewer, streets and park service needs. The proposed master site planning efforts included as part of this CIP will help the Public Works Department plan for future expansion needs in a logical and thoughtful manner. The modular offices proposed will accommodate a current operational need, which is to provide appropriate work space for Public Works lead personnel to conduct work that requires a desk for computer and other office work related tasks.



2017-2022 - Capital/Building Facilities Projects  
 Project Summary, Schedule, and Estimated Cost

	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan Total
<b>Facility Improvement Improvements</b>							
CFL-003FI Guy Cole Remodel	336		150	150			636
CFL-007FI Public Works Facilities Property Development	68	55	57				180
<b>Project Total By Year</b>	404	55	207	150			816



## Guy Cole Remodel

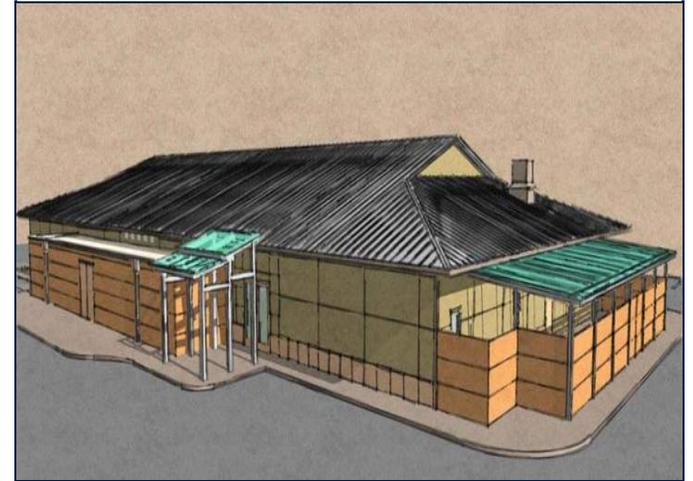
**Project Number:** CFL-003FI

**Historical Project Number**

**Project Location:** Carrie Blake Park - 202 N. Blake Avenue

**Project Description:**

This project will remodel elements of Guy Cole to improve its physical appearance and functionality. The project scope may include a new roof, windows, kitchen, dropped ceiling and lighting, flooring, interior and exterior paint, and HVAC unit.



**Project Benefit:**

This project will provide the Sequim community with a great meeting space.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering	20									20
Construction	80	336		150	150			636		716
<b>Total Project Costs - Inflated \$</b>	<b>100</b>	<b>336</b>		<b>150</b>	<b>150</b>			<b>636</b>		<b>736</b>
<b>Project Funding Sources</b>										
Grant - State	100	336		150	150			636		736
<b>Total Project Funding - Inflated \$</b>	<b>100</b>	<b>336</b>		<b>150</b>	<b>150</b>			<b>636</b>		<b>736</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering										
Construction		Q1Q2Q3Q4		Q1Q2Q3Q4	Q1Q2Q3Q4					

Source: Capital Facilities Comprehensive Plan  
 Amounts in Thousands Inflated \$

## Public Works Facilities Property Development

**Project Number:** CFL-007F1

**Historical Project Number**

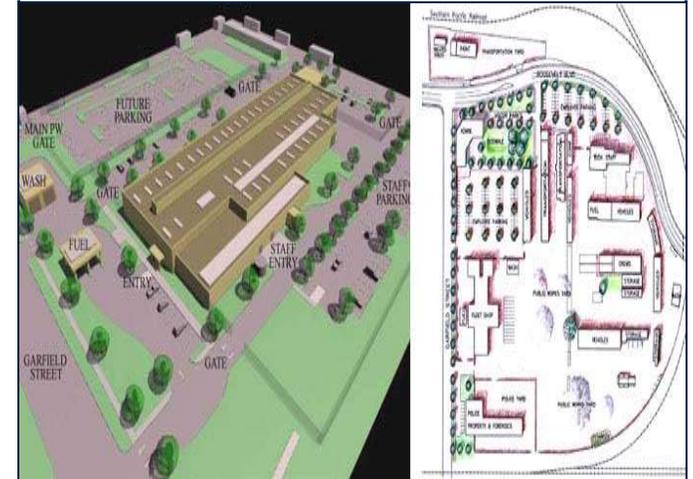
**Project Location:** 169 W. Hemlock St.

**Project Description:**

The project includes additional facilities at the City owns 8.61 acres of land on W. Hemlock Street between Sequim Avenue and Third Avenue.

**Project Benefit:**

This project will provide adequate maintenance facilities to store equipment and supplies used during routine city wide maintenance and during emergency events.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering		16						16		16
Construction		52	55	57				164		164
<b>Total Project Costs - Inflated \$</b>		<b>68</b>	<b>55</b>	<b>57</b>				<b>180</b>		<b>180</b>
<b>Project Funding Sources</b>										
General Fund		16	13	14				43		43
Revenue - GFC Water			21	22				43		43
Revenue - Sewer		26	21	22				69		69
Revenue - Water		26						26		26
<b>Total Project Funding - Inflated \$</b>		<b>68</b>	<b>55</b>	<b>58</b>				<b>181</b>		<b>181</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering		Q1Q2Q3Q4								
Construction		Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4						

Source: Capital Facilities Comprehensive Plan  
 Amounts in Thousands Inflated \$

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- Stormwater Projects

# **CAPITAL IMPROVEMENT PROGRAM 2017 – 2022**

## *Chapter 8*

### *Stormwater Restricted Fund Projects*



2017-2022 - Capital Improvement Program - Stormwater Restricted Fund  
 Total Capital Expenses Funded - Project Summary

	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan Total
<b>Collection System Improvements</b>							
SMR-003CS 7th Ave and Washington Upgrade		206					206
SMR-010CS Bell Creek Basin Hydrologic/Hydraulic Assessment		25	75	75	25		200
SMR-009CS Bell Creek Culvert Under Blake Ave						478	478
SMR-004CS Emerald Highlands Pond/Clara Crest Abatement			125				125
SMR-005CS North 5th Ave and Cedar Street Structure Upgrade					156		156
SMR-011CS Retrofit Discharge to Bell Creek on North Brown			42	81			123
SMR-008CS Seal Street Drainage Improvements			137				137
SMR-002CS South 3rd Ave Drainage Improvements			84				84
<b>Project Total By Year</b>		231	463	156	181	478	1,509



## 7th Ave and Washington Upgrade

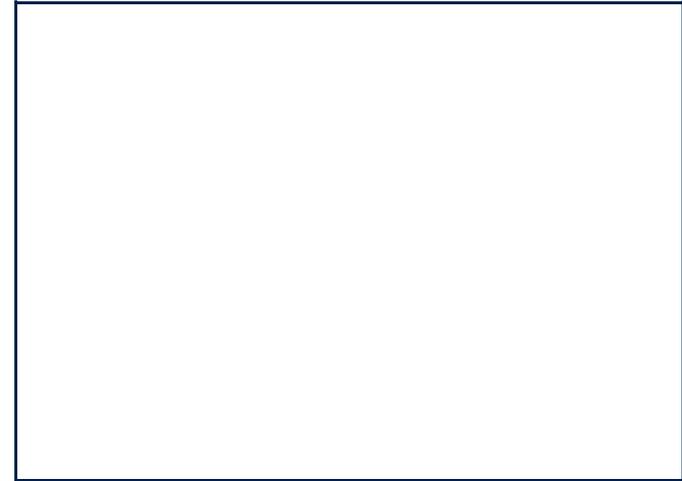
**Project Number:** SMR-003CS

**Historical Project Number**

**Project Location:**

**Project Description:**

This project installs a Filterra bio-filtration unit, ties existing catch basins into the Filterra, and extends the infiltration trench.



**Project Benefit:**

Eliminates frequent flooding at the southwest corner of the intersection and treats the runoff.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Construction			206					206		206
<b>Total Project Costs - Inflated \$</b>			<b>206</b>					<b>206</b>		<b>206</b>
<b>Project Funding Sources</b>										
Grant - State			206					206		206
<b>Total Project Funding - Inflated \$</b>			<b>206</b>					<b>206</b>		<b>206</b>
<b>Project Timeline Phase</b>										
Construction			Q1Q2Q3Q4							

Source: Stormwater Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Bell Creek Basin Hydrologic/Hydraulic Assessment

**Project Number:** SMR-010CS

**Historical Project Number** 1.00M

**Project Location:**

**Project Description:**

Assess storm flows given increased storm intensity and growth projections; model alternative stormwater management.



**Project Benefit:**

Determines runoff volumes and identifies where flows may be best infiltrated.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering			25	75	75	25		200		200
<b>Total Project Costs - Inflated \$</b>			<b>25</b>	<b>75</b>	<b>75</b>	<b>25</b>		<b>200</b>		<b>200</b>
<b>Project Funding Sources</b>										
Grant - State			12	38	38	12		100		100
Other			12	38	38	12		100		100
<b>Total Project Funding - Inflated \$</b>			<b>24</b>	<b>76</b>	<b>76</b>	<b>24</b>		<b>200</b>		<b>200</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2			

Source: Stormwater Comprehensive Plan

Amounts in Thousands Inflated \$



## Bell Creek Culvert Under Blake Ave

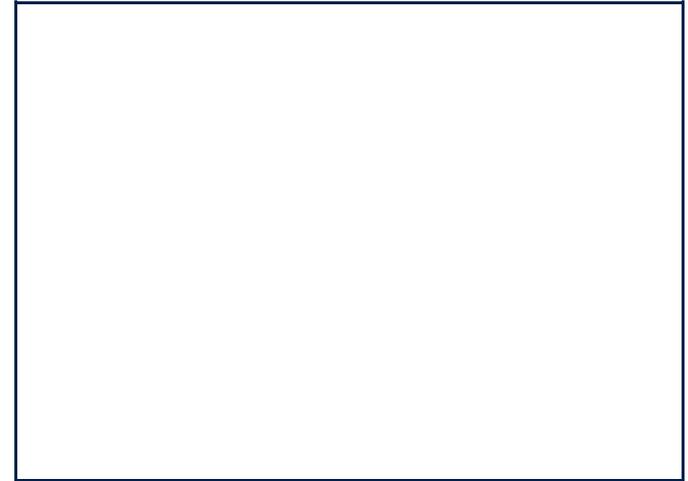
**Project Number:** SMR-009CS

**Historical Project Number** 1.06

**Project Location:**

**Project Description:**

Replace existing double culvert with larger, fish passable culvert crossing under Blake Avenue.



**Project Benefit:**

Improved fish passage, eliminate flood flows onto Blake Ave and Gebhardt-Zeicker Park.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering							205	205		205
Construction							273	273		273
<b>Total Project Costs - Inflated \$</b>							<b>478</b>	<b>478</b>		<b>478</b>
<b>Project Funding Sources</b>										
Grant - State							478	478		478
<b>Total Project Funding - Inflated \$</b>							<b>478</b>	<b>478</b>		<b>478</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering							Q1Q2			
Construction							Q2Q3Q4			

Source: Stormwater Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Emerald Highlands Pond/Clara Crest Abatement

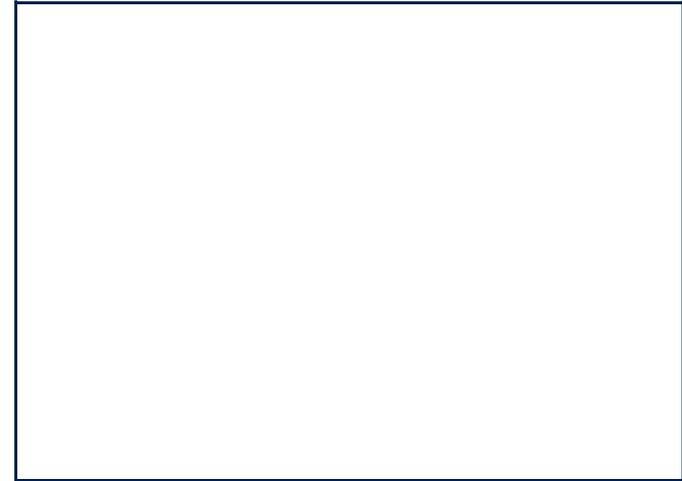
**Project Number:** SMR-004CS

**Historical Project Number**

**Project Location:**

**Project Description:**

This project removes brush, checks valves and outlets, and resotres pond capacity. It routes the drainage at Clara Crest and Miller intersection into the pond.



**Project Benefit:**

Eliminates flooding of Miller Rd and Clara Crest; provides treatment for run-off.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Construction				125				125		125
<b>Total Project Costs - Inflated \$</b>				<b>125</b>				<b>125</b>		<b>125</b>
<b>Project Funding Sources</b>										
Revenue - Sewer				63				63		63
Revenue - Water				63				63		63
<b>Total Project Funding - Inflated \$</b>				<b>126</b>				<b>126</b>		<b>126</b>
<b>Project Timeline Phase</b>										
Construction				Q1Q2Q3Q4						

Source: Stormwater Comprehensive Plan  
 Amounts in Thousands Inflated \$



## North 5th Ave and Cedar Street Structure Upgrade

**Project Number:** SMR-005CS

**Historical Project Number**

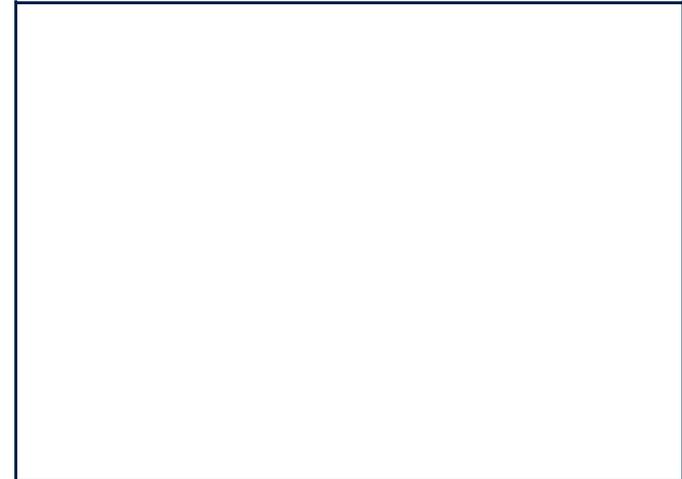
**Project Location:**

**Project Description:**

Rehabilitates the drywell to restore capacity. May install in infiltration trench and treatment unit if needed.

**Project Benefit:**

Eliminates flooding and improves safety at corner, crosswalk, and ADA ramp.



	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering						39		39		39
Construction						117		117		117
<b>Total Project Costs - Inflated \$</b>						<b>156</b>		<b>156</b>		<b>156</b>
<b>Project Funding Sources</b>										
Revenue - GFC Sewer						87		87		87
Revenue - Sewer						70		70		70
<b>Total Project Funding - Inflated \$</b>						<b>157</b>		<b>157</b>		<b>157</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering						Q1Q2				
Construction						Q2Q3Q4				

Source: Stormwater Comprehensive Plan

Amounts in Thousands Inflated \$



## Retrofit Discharge to Bell Creek on North Brown

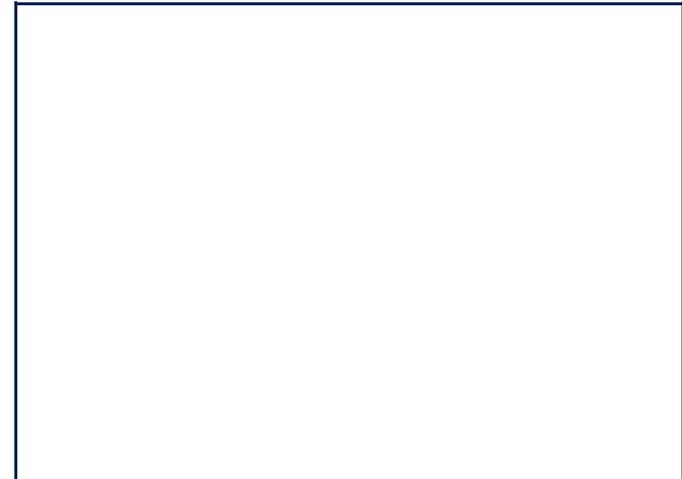
**Project Number:** SMR-011CS

**Historical Project Number** 1.18

**Project Location:**

**Project Description:**

Redirect Storm Drains from East Washington and North Brown to existing infiltration facility to the north, and add treatment device.



**Project Benefit:**

Water quality in Bell Creek by removing toxic contaminants in runoff.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering				42				42		42
Construction					81			81		81
<b>Total Project Costs - Inflated \$</b>				<b>42</b>	<b>81</b>			<b>123</b>		<b>123</b>
<b>Project Funding Sources</b>										
Grant - State				42	81			123		123
<b>Total Project Funding - Inflated \$</b>				<b>42</b>	<b>81</b>			<b>123</b>		<b>123</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q1Q2Q3Q4						
Construction					Q1Q2Q3					

Source: Stormwater Comprehensive Plan  
 Amounts in Thousands Inflated \$



## Seal Street Drainage Improvements

**Project Number:** SMR-008CS

**Historical Project Number**

**Project Location:**

**Project Description:**

Divert runoff to existing drywells on Seal St, rehabilitate or expand facility as needed.



**Project Benefit:**

Eliminates flooding and improve safety along alley and Seal St.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Engineering				23				23		23
Construction				114				114		114
<b>Total Project Costs - Inflated \$</b>				<b>137</b>				<b>137</b>		<b>137</b>
<b>Project Funding Sources</b>										
Revenue - GFC Sewer				67				67		67
Revenue - GFC Water				70				70		70
<b>Total Project Funding - Inflated \$</b>				<b>137</b>				<b>137</b>		<b>137</b>
<b>Project Timeline Phase</b>										
Engineering				Q1Q2						
Construction				Q3Q4						

Source: Stormwater Comprehensive Plan  
 Amounts in Thousands Inflated \$



## South 3rd Ave Drainage Improvements

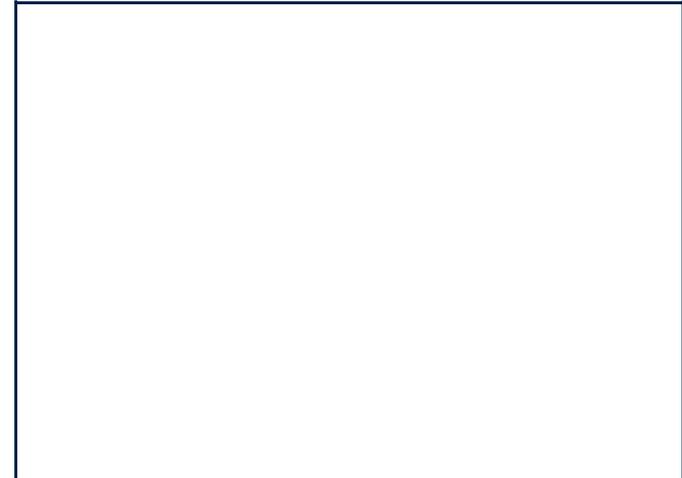
**Project Number:** SMR-002CS

**Historical Project Number**

**Project Location:**

**Project Description:**

This project pipes the flows to the base of the fill slope and routes the runoff via ditches across school property. It will install an 18-inch diameter culvert under the Hideaway Homes Park driveway and a catch basin at the discharge end of the culvert.



**Project Benefit:**

Eliminates erosion and flooding of non-City property.

	Prior Years Plan	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	6-Year Plan	Future Years Plan	Total Project
<b>Project Cost Phase</b>										
Preliminary Engineering				17				17		17
Construction				67				67		67
<b>Total Project Costs - Inflated \$</b>				<b>84</b>				<b>84</b>		<b>84</b>
<b>Project Funding Sources</b>										
Revenue - Sewer				42				42		42
Revenue - Water				42				42		42
<b>Total Project Funding - Inflated \$</b>				<b>84</b>				<b>84</b>		<b>84</b>
<b>Project Timeline Phase</b>										
Preliminary Engineering				Q1Q2						
Construction				Q3Q4						

Source: Stormwater Comprehensive Plan  
 Amounts in Thousands Inflated \$