

# SKAGIT COUNTY

## Comprehensive Drainage Plan



June 2010



### **Skagit County Public Works**

Natural Resources Division

Drainage Utility

1800 Continental Place, Mount Vernon, WA 98273

(360) 336-9400      [www.skagitcounty.net](http://www.skagitcounty.net)

# COMPREHENSIVE DRAINAGE PLAN

## Skagit County Drainage Utility

### Mission Statement

*Provide resources to address surface water management issues while preserving Skagit County's natural resources.*

### Goals

The Skagit County Drainage Utility goals are to:

**Provide** adequate cost-effective surface water management services to the citizens of Skagit County.

**Respect** and **preserve** Skagit County's natural water courses.

**Identify** surface water management problems and recommend solutions that minimize expenditure of public money.

**Identify** functions of individual agencies and reduce duplication of governmental services by encouraging interagency communication and cooperation.

**Ensure** the proper enforcement of all Federal, State and Local statutes and regulations pertaining to surface water management and ensure that those who benefit also assume responsibility.

### Background

The Drainage Utility was established by the Skagit County Board of Commissioners in 1994 to plan, design, manage, construct, and maintain storm drainage and stormwater control facilities. Skagit County's surface water drainage issues are interrelated and ongoing. The source of a drainage problem is often from surface water or runoff that has traveled from other parts of the County. Prior to the start of the Drainage Utility, the only source of funding for drainage projects was the Road Fund. Drainage projects were limited to those related to roadside drainage. The Drainage Utility allows the County to address drainage issues outside of road drainage, which retains the Road Fund to be used for roadway improvement projects.

Managing stormwater and drainage can be very expensive, particularly if it involves capital improvements. Long-term solutions are often too costly for individual drainage districts or property owners to bear alone, and may be unfair because surface water from other parts of the County can contribute to localized problems. In addition, one problem may be solved while creating or affecting other drainage concerns - nearby or many miles away. The Drainage Utility is a solution that addresses multiple drainage issues while sharing the costs in an equitable manner.

State law mandates that funds collected by the Drainage Utility can only be spent on facilities to correct drainage concerns. The funds can not be spent on any other type of project. Many water-related projects, ranging from construction of pump stations and piping to tide gates and ditching systems are eligible for Drainage Utility funding. Other eligible projects may deal with increased stormwater runoff from developed areas and the impacts of the increased runoff.

The Drainage Utility does not address water quality related problems or needs, or habitat restoration projects, except within the context of a specific Drainage Utility project. If, for example, drainage problems require the replacement of a culvert under a road, it is acceptable to replace the culvert with one that allows fish passage. However, if the sole reason to replace a culvert is to allow fish passage, Drainage Utility funds can not be spent on the project. Also, the Drainage Utility funds can not be transferred to any other fund, such as the County General Fund.

The Drainage Utility encompasses all areas within Skagit County except for those areas that have established service boundaries of their own. These include existing drainage districts, incorporated cities and towns, sub-flood control zone districts, and Federal and Reservation lands. Commercial forest lands are also exempt from the Drainage Utility.

A list of completed Drainage Utility projects is included in Appendix A.

### **Drainage Utility Program**

Drainage Utility staff responds to every citizen request for assistance with a drainage issue. Each drainage concern is documented, tracked, and updated with current status information. Each drainage concern is evaluated individually and in context of other drainage issues in the area. The goal is to develop solutions that address regional drainage issues when appropriate.

When drainage or stormwater problems are identified or reported, they are evaluated and prioritized to ensure that the most urgent needs are dealt with in an expedient manner. The criteria to evaluate and prioritize projects include public safety, liability, cost, actual or potential property damage, number of people affected, wildlife habitat impacts, and environmental considerations. The Drainage Utility's Project Ranking Form is included in Appendix B. Given the large number of problems identified and the fixed financial resources, the correction of some of the lower priority problems may not be undertaken, but the County reviews and assesses every problem reported.

### **Drainage Utility Funding and Rate Structure**

Drainage Utility funding is primarily obtained through a special assessment on properties within Skagit County.

On December 12, 1994, the Board of Skagit County Commissioners adopted Ordinance 15572 which created the Skagit County Drainage Utility to plan design manage construct and maintain storm drainage and stormwater control facilities within Skagit County. The Drainage Utility rates and charges were first established by Resolution 16404, dated December 31, 1996, and revised by Resolution 20070582 on December 4, 2007. Skagit County Drainage Utility established that rates for single family residences be set on an average of 3,692 square feet of impervious area

and multi-family containing duplex, triplex, or fourplex residential units be set on an average of 4, 550 square feet of impervious area. The rates assessed are shown in Table 1, below:

**Table 1  
Annual Drainage Utility Rates**

	<b>Class of Property</b>	<b>Rate Per Parcel</b>
(1)	Parcels containing single-family residences.	\$47.57 per parcel, plus \$0.5531 per acre.
(2)	Parcels containing duplex, triplex, or fourplex by residential units (multifamily).	\$58.61 per parcel, plus \$0.5531 per acre.
(3)	Parcels containing apartments of more than four residential units, commercial parcels, industrial parcels, institutional establishments, or agricultural land.	\$0.0129 per square foot of impervious surface, plus \$0.5531 per acre.
(4)	Parcels containing timber or undeveloped land, exempting land taxed as "forest land" under chapter 84.33 Revised Code of Washington (RCW) or as "timber land" under chapter 84.34 RCW.	\$0.5531 per acre.
(5)	County roads.	\$0.0070 per square foot of impervious surface.
(6)	State roads.	\$0.0021 per square foot of impervious surface.

The assessments apply to all Skagit County properties, less those areas lying in incorporated cities and towns, drainage districts or sub-flood control zone districts. Cooperative projects are developed with any of these entities to address drainage issues that cross boundaries. Interlocal Agreements are executed to define the partnership and responsibility for each entity.

The following special categories of property are exempt from rates and charges:

- FEDERAL AND TRIBAL LAND. All federal and tribal owned lands located within the County
- WATERWAYS. All parcels consisting entirely of tidelands, riparian rights-of-way, lakes and/or streams
- UNASSESSED VALUE. All parcels consisting of oyster tracts, marine moorage condos, and taxable accounts with no assessed value
- FOREST LAND. Land taxed as "forest land" under chapter 84.33 Revised Code of Washington (RCW) or as "timber land" under chapter 84.34 RCW

### **Financial Structure**

The Drainage Utility fund is an enterprise fund which is a type of proprietary fund. Enterprise funds are established to account for operations that are financed and operated in a manner similar to private business enterprises. The intent is that the full costs of providing goods or services be financed primarily through charges and fees thus removing expenses from the tax rate.

The financial structure of the Drainage Utility fund is comprised of Asset, Liability, Revenue and Expenditure accounts. Fund accounting provides the mechanism for managing “obligated” funds through the budgeting and expenditure process. Controlled budgets are setup on expenditures to ensure accounts do not exceed budgets that are adopted by the Board of County Commissioners.

Skagit County’s financial system, Cayenta, provides multiple layers within the fund to separate and track revenue and expense. The layers consist of divisions, activities, and jobs. Separate revenue or expense detail object accounts such as *1100 Salaries and Wages, 4110 Professional Services, 1110 Real & Personal Property Tax* are setup at the division and activity levels. Jobs numbers are developed to further track activity at a lower level of detail. Reports can then be written at any level of detail to meet the needs of managers, accountants, auditors, elected officials, and the public. Some uses include tracking grants, monitoring projects, monitoring budgets, completing financial statements, and public disclosure requests. Table 2 shows an overview of the Drainage Utility’s financial structure.

**Table 2  
Drainage Utility Financial Structure**

**SKAGIT COUNTY DRAINAGE UTILITY FUND  
CAYENTA FUND, DEPARTMENT, DIVISION AND ACTIVITY CODES**

FUND	DEPT	DEPARTMENT DESCRIPTION	DIVISION	DIVISION DESCRIPTION	ACTV.	ACTIVITY DESCRIPTION
402	71	DRAINAGE UTILITY	00	Drainage Utility	31	Administrative - General
			00	Drainage Utility	32	Admin - Planning, Conserv, R&D
			00	Drainage Utility	33	Depreciation
			00	Drainage Utility	34	Training
			00	Drainage Utility	35	Maintenance
			00	Drainage Utility	36	Operations - Contracted Ops
			00	Drainage Utility	37	Operations - Customer Svc/Mark
			00	Drainage Utility	38	Operations - General
			00	Drainage Utility	39	Other Operating Expenses
			00	Drainage Utility	43	Capitalized Expenditures

## **Major Physical Improvements**

The Drainage Utility constructs capital facilities to manage stormwater and minimize negative impacts of surface water drainage. Projects range from ditch cleaning and grading to major community storm drainage systems and outfall structures.

The Drainage Utility's Capital Facility Plan (CFP) outlines projects that have been selected and prioritized. These projects are reviewed during engineering and design for consistency with numerous drainage studies including: "Draft Skagit River Feasibility Study", "Proposed Skagit County Comprehensive Flood Control Management Plan" July 1988; The "Lower Samish River Basin Comprehensive Flood Hazard Management Plan" June 1995, and numerous other studies available from the Natural Resources Division of the Department of Public Works. The criteria to evaluate and prioritize proposed projects include such things as public safety, liability, cost, actual or potential property damage, number of people affected, wildlife habitat impacts, and environmental considerations. The Drainage Utility Project Ranking Form is included in Appendix B.

The Drainage Utility plans projects which will mitigate for increased stormwater runoff from areas of anticipated future development. The Drainage Utility also evaluates areas of frequent drainage concerns to develop regional solutions. Basin watershed management plans are developed for these areas, which result in proposed capital facility projects with adequate capacity to handle stormwater for full future build-out, to ensure adequate capacity exists.

Appendix A contains a list of completed Drainage Utility capital facility projects. The project costs shown include planning, design, permitting, survey, construction, and project record documentation.

## **Project Priority**

The types of projects that can be included in the Drainage Utility are restricted. RCW 36.89.080(4) states:

The service charges and rates collected shall be deposited in a special fund or funds in the county treasury to be used only for the purpose of paying all or any part of the cost and expense of maintaining and operating storm water control facilities, all or any part of the cost and expense of planning, designing, establishing, acquiring, developing, constructing and improving any of such facilities, or to pay or secure the payment of all or any portion of any issue of general obligation or revenue bonds issued for such purpose.

The words "storm water control facilities" as used in this chapter are further defined as "any facility, improvement, development, property or interest therein, made, constructed or acquired for the purpose of controlling, or protecting life or property from, any storm, waste, flood or surplus waters wherever located within the county".

Due to these restrictions, Drainage Utility project prioritization includes consideration of the type of drainage system involved. Higher priority is given to man-made systems that handle run-off due to development. Lower priority is given to natural stream channels that convey stormwater as a part of a natural conveyance system, particularly when issues are not the result of upstream development.

When drainage or stormwater problems are identified or reported, each is evaluated and prioritized to ensure that the most urgent needs are dealt with in an expedient manner. If the problem is easily addressed by simple corrective actions, it is dealt with as a part of the drainage concern program. If more extensive corrections are identified, a project is developed.

As projects are developed, a Drainage Utility Project Ranking Form (Appendix B) is completed. The form provides information about the importance of the project. The completed form is used in capital project planning, and in preparing the 6-year Capital Facilities Plan.

### **Annual Budget**

The Drainage Utility currently assesses about \$1.7 million annually. The current budget spreadsheet is included in Appendix C.

### **Interlocal Agreements**

Often stormwater projects are identified that serve the Drainage Utility assessment area and an area not included in the Drainage Utility, such as a city or drainage district. Cooperative projects are developed with any of these entities to address drainage issues that cross boundaries. Interlocal Agreements are executed for cooperative projects to define the partnership and responsibilities for each entity.

### **Capital Improvement Program**

Drainage Utility staff responds to every citizen request for assistance with a drainage issue. While each drainage concern is evaluated individually, the drainage concern database is evaluated to determine if the concern lies in an area of multiple concerns. The goal is to develop solutions that address regional drainage issues when appropriate.

In addition, the Drainage Utility plans for future development within the County, particularly within Urban Growth Areas. Several watershed management plans have been developed in areas of frequent drainage problems, and projects have been identified to manage stormwater problems regionally. The goal is to construct stormwater to accommodate future development.

When projects are identified and prioritized, they are scheduled on the Drainage Utility 6-year Drainage Improvement Program (DIP). The DIP also schedules non-project activities, such as studies and cost-share projects, including projects developed with other jurisdictions, such as drainage districts. The DIP is updated at least semi-annually. Use of the DIP as a capital improvement program ensures the Drainage Utility is managed programmatically, rather than on a project-by-project basis.

The current version of the DIP is included in Appendix D.

## **Program Efficiency and Effectiveness**

The Drainage Utility program's efficiency and effectiveness is demonstrated through documentation and establishing controls to ensure proper management of scope, cost, and schedule. Several steps are taken in the development of any Drainage Utility project:

- Respond to every citizen request for assistance with a drainage issue.
- Document, track, and update each citizen drainage concern.
- Evaluate issues individually and with other issues in the area.
- Complete a project ranking form for every proposed project.
- Obtain a job number for each project.
- Establish and manage scope, cost, and schedule for each project.

In addition, program and project budget expenditures are reviewed and evaluated on a monthly basis. Monthly Drainage Utility reports are prepared and posted on the County's webpage. An annual report is prepared each year.

Drainage concerns are analyzed spatially to determine if the issues are clustered, indicating a regional problem. Figure 1 shows a map demonstrating locations of drainage concerns. Figure 2 shows the locations of completed Drainage Utility projects. As can be seen in Figure 3, which shows both drainage concerns and projects, the selected projects do address problems that result in regional corrections.

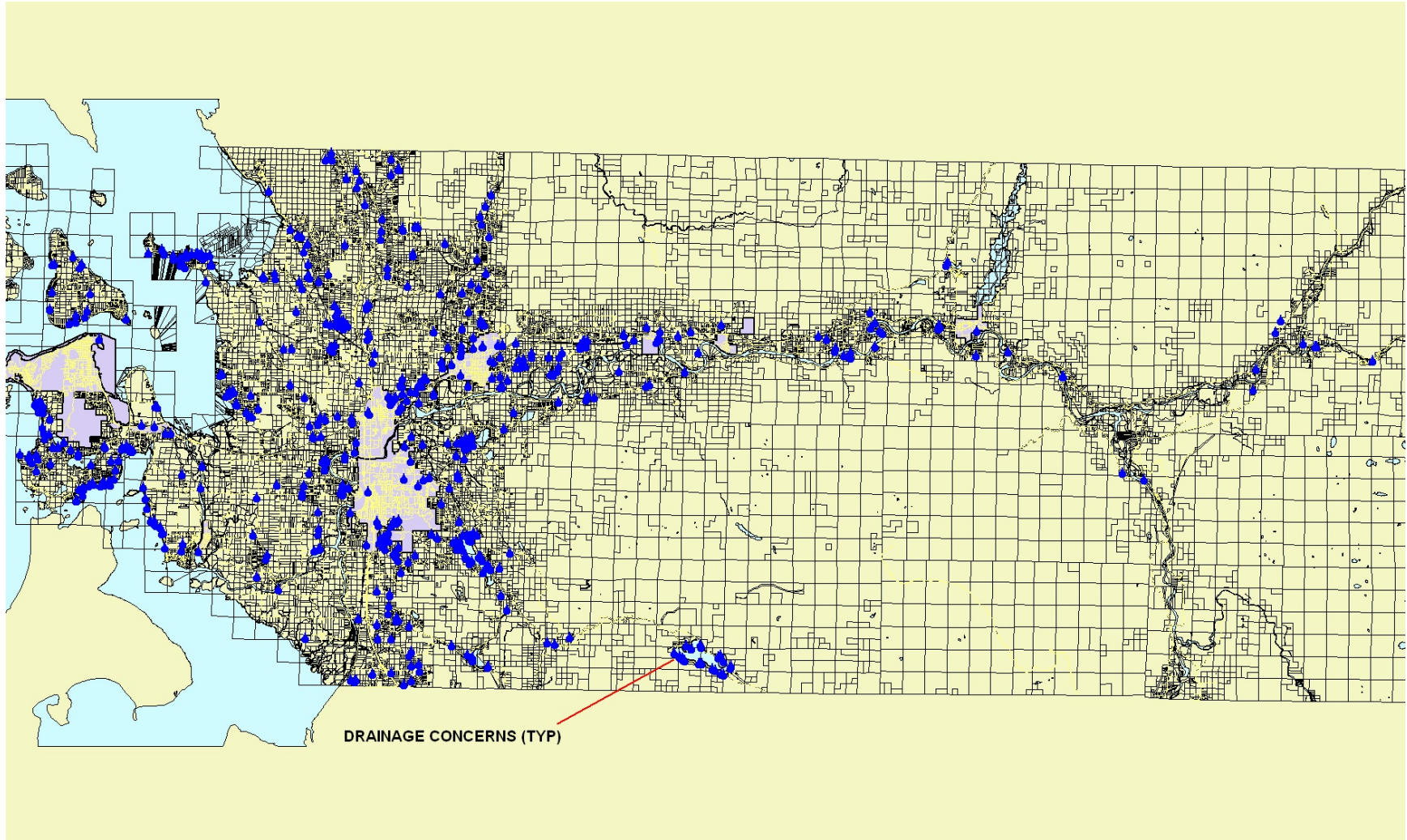
## **Summary**

The Skagit County Drainage Utility was established in response to the multitude of drainage and stormwater challenges with the County's jurisdiction. The Drainage Utility allows for surface water improvements outside of the typical road drainage projects.

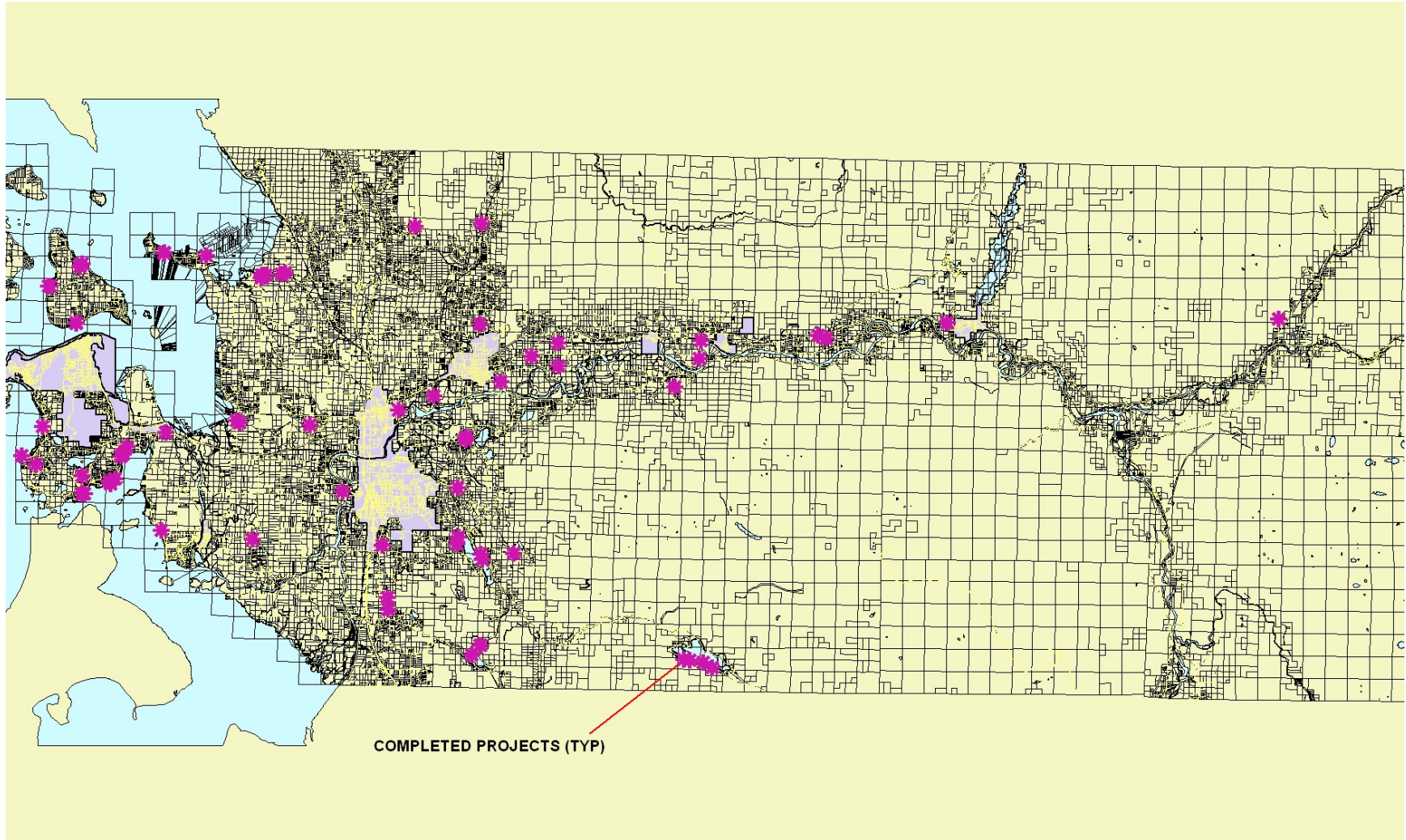
Surface water issues are often interrelated within a given watershed and cross jurisdictional boundaries. Therefore, the Drainage Utility seeks to solve regional issues by taking a holistic approach to surface water management. This often entails working cooperatively with other agencies, jurisdictions, and many individual property owners. The Drainage Utility's collaborative approach yields regional surface water solutions and allows for proper infrastructure planning for future development.



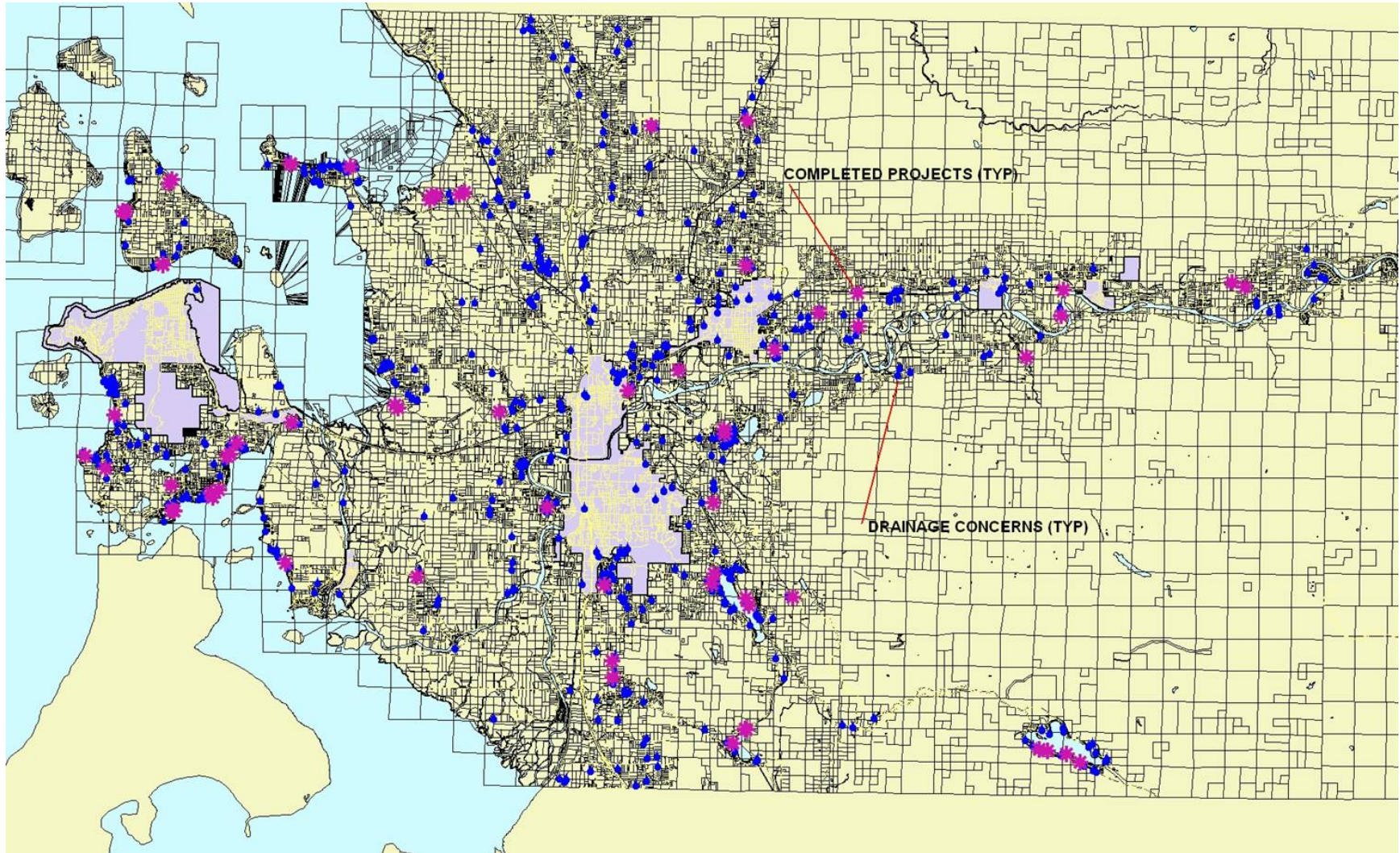
**Figure 1**  
**Drainage Concerns**



**Figure 2**  
**Drainage Utility Projects**



**Figure 3**  
**Drainage Utility Concerns and Projects**



**Appendix A**

**COMPLETED DRAINAGE UTILITY CAPITAL PROJECTS**

<b>PROJECT</b>	<b>TOTAL</b>	<b>Type of Project</b>	<b>Location</b>
Burrows Bay Drainage	\$485,305	Storm Drain System	Biz Point Rd.
Edison 2 Improvement	\$286,904	Box Culvert	W. Bow Hill Rd.
Whitecap Lane Drainage	\$198,818	Storm Drain System	Whitecap Lane
Eagle Street Drainage	\$11,497	Storm Drain System	Eagle St.
Fruitdale Road Drainage	\$244,298	Storm Drain System	Fruitdale Rd.
Edison 1 Improvement	\$272,132	Storm Drain System	Edison
Blue Heron Tide Gate Replacement	\$90,189	Tide Gate and Discharge Line	Blue Heron Rd.
Emmanuel Lane Drainage	\$192,463	Storm Drain System	Emmanuel Lane
Snee-oosh (Hope Island Road)	\$466,979	Storm Drain System	Hope Island Rd.
Yokeko Drive Drainage	\$15,341	Storm Drain System	Yokeko Dr.
Samish Island Drainage Project	\$24,959	Storm Drain System	Samish Island Rd.
Pringle Street @ Clear Lake Drainage Correction	\$39,689	Storm Drain System	Pringle St.
Lake McMurray Outlet Improvements	\$15,280	Beaver Deceiver	Lake McMurray
Woodcrest Lane	\$9,100	Storm Drain System	Woodcrest Lane
Frederickson Drainage	\$16,854	Storm Drain System	Frederickson Rd.
Edison Town Drainage	\$219,954	Storm Drain System	Edison
Quaker Cove Drainage Correction	\$49,319	Storm Drain System	Gibraltar Rd.
Sharpe Rd./Emerson Drainage	\$46,087	Storm Drain System	Sharpe Rd.
Big Lake Outfall Improvement	\$27,840	Storm Drain System	N. Westview Rd.
Guemes Island Rd. Outfall	\$9,311	Storm Drain System	Guemes Island Rd.

<b>PROJECT</b>	<b>TOTAL</b>	<b>Type of Project</b>	<b>Location</b>
Lake Campbell Drainage Study and Floodplain Overflow Culverts	\$49,541	Large Culverts	Buttram Lane
Baker Lake Store	\$30,418	Storm Drain System	Hwy 20
Lake Cavanaugh Hawkins	\$6,307	Storm Drain System	S. Shore Dr.
Edison Town Pond	\$240,833	Detention Pond	Edison
Similk Beach Drainage	\$131,016	Storm Drain and Pump	Satterlee Rd.
Skiyou Slough Drainage Correction	\$124,521	Storm Drain System	Bergstedt Rd.
Smiley Drive	\$72,526	Storm Drain System	Smiley Dr.
Lake Cavanaugh - Searing - Storm Drain	\$12,910	Storm Drain System	S. Shore Dr.
Edison Slough #3 - WSDOT at SR 11	\$131,020	Box Culvert	Chuckanut Drive
Guemes - Brown	\$27,512	Storm Drain System	S. Shore Dr.
Lake Cavanaugh - South Shore Culverts	\$11,183	Storm Drain System	S. Shore Dr.
Thunder Creek @ Hwy. 9	\$19,810	Bank Stabilization	Hwy 9
Valentine Rd. Slide Repair	\$17,081	Bank Stabilization	Valentine Rd.
No Name Basin Culvert Replacement	\$26,645	Storm Drain System	Bay View-Edison Rd.
Edison SRT Replacement	\$202,610	Self-Regulating Tide Gate	Edison
Cockreham PL84-99 Levee Toe Repair	\$224,913	Levee	Cockreham Is. Rd.
West Side Guemes Island Drainage Improvements	\$15,592	Storm Drain System	W. Shore Dr.
Walker Valley Road Conveyance Improvements	\$76,674	Storm Drain System	Walker Valley Rd.
McLean Road Culvert Installation	\$37,791	Storm Drain System	McLean Rd
Fish Creek Conveyance Improvement	\$78,380	Storm Drain System	Grassmere Rd
Baker Heights Road Drainage Conveyance	\$57,909	Storm Drain System	Baker Heights Rd.
Buchanan Street Channel Erosion Improvements	\$7,741	Channel Improvements	Buchanan St.

<b>PROJECT</b>	<b>TOTAL</b>	<b>Type of Project</b>	<b>Location</b>
Sterling Road Drainage Improvements	\$7,656	Storm Drain System	Sterling Rd.
South Shore Drive Culvert Replacement	\$9,834	Storm Drain System	S. Shore Dr.
Coal Creek Conveyance Improvements	\$50,402	Bridge	Cascade Trail
Gibraltar Road Stormwater Outfall Repair	\$6,631	Storm Drain System	Gibraltar Rd
Day Creek Conveyance Restoration	\$9,223	LWD Creek Restoration	Day Creek
Jackman Creek Mitigation Project	\$21,096	LWD Bank Protection	Jackman Creek at SR20
Maupin Road Conveyance Improvement	\$8,226	Storm Drain System	Maupin Rd
Stevens Creek Culvert Replacement	\$15,363	Storm Drain System	W. Gilligan Rd
Edison Drainage (near Town Pond)	\$90,990	Storm Drain System	Farm to Market Rd - Edison
Sunset Lane Drainage Conveyance	\$16,777	Storm Drain System	Sunset Lane
Collins Road at Hospital Drive Drainage	\$23,267	Storm Drain System	Collins Rd
SR9 S. of Brigham Lane Drainage Conveyance	\$75,192	Storm Drain System	SR9 South of Brigham Lane
North Green Street Drainage Project	\$115,288	Storm Drain System	North Green St S. Fidalgo Is
Daybreak Lane Interceptor Ditch	\$33,941	Stormwater Conveyance	Daybreak Lane Rosario Road
Coal Creek Sediment Basin Restoration	\$118,671	Sediment Basin	Coal Creek at Minkler Road
Anderson Creek Conveyance Correction	\$5,512	Stormwater Conveyance	Anderson Crk S. Skagit Hwy

**APPENDIX B  
DRAINAGE UTILITY PROJECT RANKING FORM**

Site Address: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

SWM File #: \_\_\_\_\_  
 Date: \_\_\_\_\_

Problem Description: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

1. Public Safety

A. Type of Threat

Ingress/egress cut off <1 day	8	Driver safety impaired	20
Ingress/egress cut off 1 to 7 days	12	Human safety endangered	20
Public health threatened	15	Significant threat to life	25
Pedestrian safety impaired	20		

Score: \_\_\_\_\_

2. Number of Businesses/Single Family Residences Affected

Zero: 2    1 to 2: 4    3 to 6: 6    7 to 15: 8    16 or more: 10

Score: \_\_\_\_\_

3. Property Damage

Private property	4	Natural systems	12
Sidewalks	8	Non-arterials	14
Buildings	8	Collector/minor arterials	16
Public structures	12	Principal arterial	20

Score: \_\_\_\_\_

4. Problem Frequency

Once	3	3 or more times a year	12
Less than once a year	6	Every storm	15
1 to 3 times a year	9		

Score: \_\_\_\_\_

5. Present or Potential Problem

Present: 8    Potential: 4

Score: \_\_\_\_\_

6. Most Likely Cause of Problem

Complainant action	0	Other	4 to 8
Natural conditions	0	Inadequate drainage system	8
Code violation	2	Lack of maintenance	8
Utility project	3	County project	10
New development	4		

Score: \_\_\_\_\_

7. Project Maintenance

High: 3    Medium: 6    Low: 10

Score: \_\_\_\_\_

8. Level of Cooperation or Commitment of Property Owners?

None	0	Share Costs	4 to 8
Let us enter property	4	Donate the property	10
Supply materials	6		

Score: \_\_\_\_\_

9. Cost/Benefit Ratio

High cost/low benefit: 2    Cost/benefit equal: 5    Low cost/high benefit: 10

Score: \_\_\_\_\_

10. Does the Project:

	Negative <u>Effect</u>	No <u>Effect</u>	Positive <u>Effect</u>	Significant <u>Positive Effect</u>	
A. Relate to local watershed plan	-5	0	5	10	Score: _____
B. Improve local drainage system	-5	0	5	10	Score: _____
C. Improve fish habitat	-5	0	5	10	Score: _____
D. Improve water quality	-5	0	5	10	Score: _____

**Problem Score:** \_\_\_\_\_





**Appendix C**

**Drainage Utility Budget  
(continued)**

	A	B	D	E	F	G	H	I	J	K	L	O
46	<b>Obj 550</b>	<b>INTERGOVT/INTERFUND SVC/TAXES</b>										
47	5100	Intergovt Professional Svcs										0
48	5300	External Taxes and Op Assessmt										0
49	5400	Interfund Taxes/Op Assessments			50							50
50	5500	Operating Transfers Out			10,500					128,928		139,428
51	<b>Obj 550</b>	<b>INTERGOVT/INTERFUND SVC/TAXES</b>	<b>0</b>	<b>0</b>	<b>10,550</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>128,928</b>	<b>0</b>	<b>139,478</b>
52												
53	<b>Obj 560</b>	<b>CAPITAL OUTLAYS</b>										
54	6110	Land Acquisitions				150,000						150,000
55	6210	Buildings and Structures										0
56	6310	Other Improvements		57,600		416,000				50,000		523,600
57	6411	Equipment > \$3000										0
58	<b>Obj 560</b>	<b>CAPITAL OUTLAYS</b>	<b>0</b>	<b>57,600</b>	<b>0</b>	<b>566,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50,000</b>	<b>0</b>	<b>673,600</b>
59												
60	<b>Obj 590</b>	<b>INTERFUND PAYMENTS FOR SERVICE</b>										
61	9110	Interfund Pmts for Service			162,714							162,714
62	9210	Interfund Communications										0
63	9310	Interfund Parts and Materials		27,000	500	35,000				500		63,000
64	9510	Interfund Equipment Rental	100	25,000	18,192	20,000				1,000		64,292
67	9810	Interfund Shop labor			500							500
69	9920	Interfund Services, Other						3,500				3,500
70	<b>Obj 590</b>	<b>INTERFUND PAYMENTS FOR SERVICE</b>	<b>100</b>	<b>52,000</b>	<b>181,906</b>	<b>55,000</b>	<b>0</b>	<b>3,500</b>	<b>0</b>	<b>1,500</b>	<b>0</b>	<b>294,006</b>
71		<b>TOTAL</b>	<b>33,738</b>	<b>384,414</b>	<b>413,026</b>	<b>1,100,218</b>	<b>25,266</b>	<b>155,840</b>	<b>293,085</b>	<b>196,928</b>	<b>21,154</b>	<b>2,623,669</b>
72												
73		<b>GRANT REVENUE S/TRANSFERS FROM OTHER FUNDS</b>										
74	<b>GL Code</b>	<b>SOURCE</b>										
75	402 371000310	DOE NPDES II grant							50,000			50,000
76	402 371001110	Real and Personal Property Tax										1,720,099
77	402 371004390	reimbursed from SFCZs					25,266					25,266
78	402 371006111	Investment Interest										7,400
79		<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50,000</b>	<b>0</b>	<b>0</b>	<b>1,802,765</b>

**Appendix D - Drainage Improvement Program**

**SKAGIT COUNTY DRAINAGE UTILITY**

**2010 - 2015**

**6 - YEAR DRAINAGE IMPROVEMENT PROGRAM**



Project Number	Capital Facility		Project Name	Costs (shown in \$1000)						6 Year Total
	Yes	No		2010	2011	2012	2013	2014	2015	
WA402105	X		Big Lake - Repair or Replace Culverts (08-CR-HP/MP/LP)		\$40	\$40				\$80
WA402054	X		Westview Road Drainage Project	\$50	\$500					\$550
	X		Storm Drain Outfall Replacement W. Big Lake Blvd (02-BL6)		\$75					\$75
	X		Lake Terrace Lane Drainage Collection Improvement (01-BL3)		\$50					\$50
	X		New Overflow Storm Drain & Culvert Trout Dr/Sockeye Dr (07-NC2b)			\$80				\$80
	X		SR9 Parallel & Cross Culvert Replacements (03-BL25)			\$45				\$45
	X		Upper Edison Culvert Replacement		\$70	\$80	\$90	\$100	\$120	\$460
WA402082		X	South Fidalgo Island Stormwater Management Plan	\$20						\$20
	X		South Fidalgo Island Capital Improvements resulting from Plan		\$200	\$200	\$200	\$250	\$250	\$1,100
WA402098	X		Bow Drainage Improvements		\$50					\$50
WA402091		X	Edison Slough Drainage Evaluation	\$40						\$40
	X		Colony Creek Sedimentation Improvements			\$100	\$100			\$200
WA402080	X		Hobsen-Allen Drainage Improvements			\$100				\$100
	X		Lake Tyee - Grandy Creek Tributary Sedimentation Improvements	\$10	\$40	\$60				\$110
	X		Buchanan Hill Drainage Projects resulting from study		\$80					\$80
WA402100		X	Olson Creek Monitoring Plan	\$2	\$2					\$4
WA402111	X		Turner Creek Culvert Replacement		\$85					\$85
WA402121	X		Carpenter Road Culvert Replacement	\$180						\$180
WA402122	X		Coal Creek Sediment Basin Restoration	\$15						\$15
	X		Bay View Stormwater Projects	\$200	\$200	\$200	\$200	\$200	\$200	\$1,000
WA402120	X		Daybreak Lane Interceptor Ditch	\$30						\$30
WA402123		X	Lake McMurray Lake Level and Beaver Control	\$30						\$30
	X		Lake McMurray Lake Level Project		\$10					\$10
WA402124	X		Anderson Creek Conveyance Correction	\$10						\$10
WA402126	X		Skiyou Slough Ditch Tightline	\$100						\$100
WA402127	X		Hansen Creek Reach 5	\$400						\$400
WA402128		X	Coal Creek Alternatives Feasibility Study	\$45						\$45
WA402129	X		Johnson Creek Realignment	\$45						\$45
			SUBTOTAL	\$1,177	\$1,402	\$905	\$590	\$550	\$570	\$4,994
			<b>MISCELLANEOUS</b>							
WA402079		X	Stream Sedimentation Evaluations	\$90	\$100	\$110	\$120	\$130	\$150	\$700
WA402093		X	NPDES Phase II Permit	\$200	\$200	\$250	\$250	\$275	\$300	\$1,475
WA402003		X	Drainage Concerns	\$160	\$170	\$180	\$190	\$200	\$210	\$1,110
WA402000		X	Planning and Program Admin. (15% of above combined subtotal)	\$177	\$210	\$136	\$89	\$83	\$86	\$694
	X		Emergent Drainage Projects	\$100	\$190	\$210	\$230	\$250	\$275	\$1,255
	X		Stormwater Control Facility Operation and Maintenance	\$120	\$140	\$160	\$180	\$200	\$200	\$1,000
		X	Land Acquisitions	\$150						
	X		Cooperative Cost-Share Projects	\$200	\$200	\$200	\$200	\$200	\$200	\$1,200
	X	X	Other non-402 projects funded by the Drainage Utility (20%)	\$235	\$280	\$181	\$118	\$110	\$114	\$925
			MISCELLANEOUS SUBTOTAL	\$1,432	\$1,491	\$1,427	\$1,377	\$1,448	\$1,535	\$8,358
			<b>TOTAL ESTIMATED COSTS</b>	\$2,609	\$2,893	\$2,332	\$1,967	\$1,998	\$2,105	\$13,352