

SURFACE WATER CAPITAL FUND SUMMARY

Types of Projects

In the Surface Water Capital Fund, projects are categorized as either Conveyance and Treatment Projects or Stream Rehabilitation/Habitat Enhancement Projects. Funding for these projects is provided from an allocation of surface water fees or financing such as Public Works Trust Fund Loans. Any debt, which is used to finance projects, must be repaid by allocating a portion of surface water fees for this purpose.

Estimated 2003 Status

The following table summarizes the financial projections of the budgeted and projected expenditures for the Surface Water Capital Fund for 2003. More specific information can be found on the individual project sheets following this summary.

2003 Forecast Surface Water Capital Fund

Project	2003 Budget	2003 Projected	2003 Variance	Comments
Expenditures				
Conveyance and Treatment Projects				
SWM CIP Project Formulation	\$50,000	\$50,000	\$0	
Surface Water Small Projects	\$176,890	\$177,000	\$110	
Ronald Bog Drainage Improvements	\$575,633	\$1,000,000	\$424,367	The construction component of this project has been accelerated.
3rd Avenue NW Drainage Improvements	\$250,190	\$250,000	(\$190)	
Stream Rehabilitation / Habitat Enhancement				
Surface Water Master Plan	\$100,000	\$141,000	\$41,000	This plan has been accelerated to match the timing of the development of the Transportation Master Plan and the Parks, Recreation and Open Space Plan.
Stream Rehab / Habitat Enhancement Program	\$25,000	\$25,000	\$0	
Total Expenditures by Year	\$1,177,713	\$1,643,000	\$465,287	

2003 Forecast Surface Water Capital Fund

Project	2003 Budget	2003 Projected	2003 Variance	Comments
Revenues				
Operating Transfer - Surface Water Operations	\$683,024	\$683,024	\$0	Grant reimbursements have been increased to reflect the expedited construction activity.
SWM Fee Increase	\$400,000	\$400,000	\$0	
Ronald Bog - Public Works Trust Fund Loan	\$ 328,200	\$680,000	\$ 351,800	
3rd Avenue - Public Works Trust Fund Loan	\$ 150,190	\$ 150,190	0	
Total Revenues by Year	\$1,561,414	\$1,913,214	\$ 351,800	
Beginning Fund Balance	\$2,285,406	\$2,468,014	\$182,608	
Total Revenues	\$1,561,414	\$1,913,214	\$351,800	
Total Expenditures	\$1,177,713	\$1,643,000	\$465,287	
Ending Fund Balance	\$2,669,107	\$2,738,228	\$69,121	

2004-2009 CIP Summary

The proposed 2004-2009 Surface Water Capital CIP totals \$9.4 million. There are 7 projects proposed for funding over this period.

Project	2004 Projected	2005 Projected	2006 Projected	2007 Projected	2008 Projected	2009 Projected	Total 2004-2009
Expenditures							
Conveyance and Treatment Projects	\$1,214,000	\$5,275,000	\$2,002,000	\$190,000	\$190,000	\$190,000	\$9,061,000
Stream Rehabilitation / Habitat Enhancement	\$129,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$329,000
Total Expenditures by Year	\$1,343,000	\$5,320,000	\$2,047,000	\$235,000	\$235,000	\$235,000	\$9,390,000
Revenues	\$658,358	\$3,855,335	\$1,473,088	\$400,000	\$400,000	\$400,000	\$7,186,781
Beginning Fund Balance	\$2,738,228	\$2,053,586	\$588,921	\$15,009	\$180,009	\$345,009	\$2,738,228
Total Revenues	\$658,358	\$3,855,335	\$1,473,088	\$400,000	\$400,000	\$400,000	\$7,186,781
Total Expenditures	\$1,343,000	\$5,320,000	\$2,047,000	\$235,000	\$235,000	\$235,000	\$9,390,000
Ending Fund Balance	\$2,053,586	\$588,921	\$15,009	\$180,009	\$345,009	\$510,009	\$535,009
Impact on Operating Budget	\$1,000	\$1,000	\$2,000	\$2,000	\$2,000	\$2,000	

Changes from the 2003-2008 CIP

Changes to Existing Projects:

Ronald Bog Drainage Improvements: Short-term improvements will be completed ahead of schedule in 2003. Once complete, the Surface Water Comprehensive Plan will be utilized to validate the Ronald Bog Preferred Solutions adopted by City Council in 2001. The 2005 and 2006 budget years reflect the construction of additional improvements assuming no conflicts exist between the Surface Water Comprehensive Plan and the Preferred Solution. The Preferred Solution includes: a ballfield/detention facility at Cromwell Park, an open stream channel south of Ronald Bog along Corliss Avenue N, watercourse improvements north of 167th Street along Corliss Place, a stormwater conveyance line along Serpentine Avenue, and improvements to Pump Station #25.

3rd Avenue NW Drainage Improvements: The overall cost of this project has not changed, but the timeline has been accelerated. In the 2003 – 2008 CIP, design work was scheduled to be completed in early 2005. This phase will now be completed by the end of 2004. Construction will begin in late 2004 and be completed by the end of 2005. Previously, construction was scheduled for completion in 2006.

Surface Water Master Plan: This plan has been accelerated to coincide with the Transportation Master Plan and the Parks Recreation and Open Space Plan. The overall budget remains the same, but the work will be completed earlier.

New Projects:

Advanced Stormwater Right-of-way Acquisition (2004-2009, \$ 120,000): This is an on-going funding stream that would allow the City to act upon property acquisition opportunities that enhance the Surface Water management program. This project will provide more timely response to possible land acquisition research and purchases that may become a possibility due to development or other land use actions. Property would only be for the value of improving our surface water management. This level of funding will only provide seed money for any needed land acquisition. The Surface Water Master Plan should provide more exact information on the required future funding level.

Policy Issues

Surface Water Fee Increase: City Council adopted a 20% fee increase for 2003 that is equivalent to the fee increase implemented by King County in 2002. This fee increase is reflected as an additional revenue source in the 2004 – 2009 CIP and is estimated to be \$400,000 annually. It is currently dedicated to surface water capital improvements only. The Surface Water Master Plan will include an analysis of the required surface water fee to maintain and improve the City's surface water system.

Project: SURFACE WATER PROJECT FORMULATION

Fund: Surface Water Capital Fund

Project Category: Conveyance and Treatment Projects

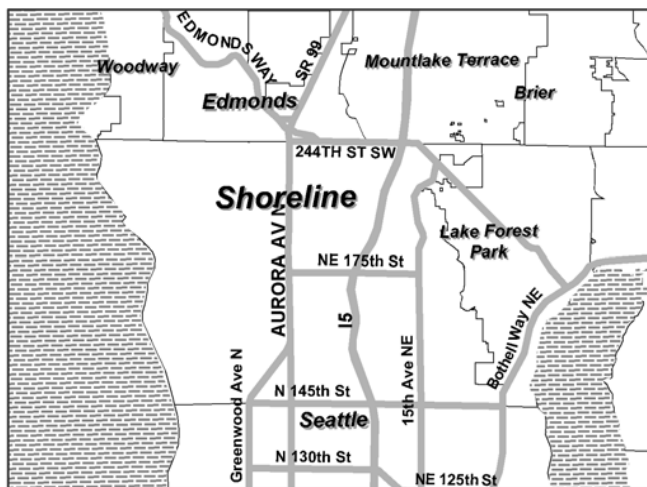
Critical Success

Factor: Healthy, Vibrant Neighborhoods

Strategies Identify critical infrastructure needs and funding sources to support healthy neighborhoods

COUNCIL

GOAL #4: Update the elements of the Comprehensive Plan including Environmental Element and Surface Water, Transportation and Parks Master Plans



Project Description:

This project will evaluate drainage complaints, identify flooding problems and provides for storm water facility inventory and condition assessments. Projects will be prioritized according to an adopted system. Project scopes with conceptual plans and estimates will be developed for consideration in the City's Capital Improvement Program. Activities include reconnaissance, community meetings, environmental analysis and project data collection. This project will also fund consultant services in connection with the preparation of grant applications for drainage improvement projects.

Service Impact:

This project will provide more accurate and timely information on upcoming projects for use in developing and updating each year's Capital Improvement Program and completing applications for grant funding. It will also provide assistance to City staff through the use of consultants to conduct the required evaluations and prepare grant applications.

Total Project Budget: \$ 311,638

Funding Source:

- Surface Water Capital Fund

Critical Milestones:

- Project is ongoing

Project: SURFACE WATER SMALL PROJECTS

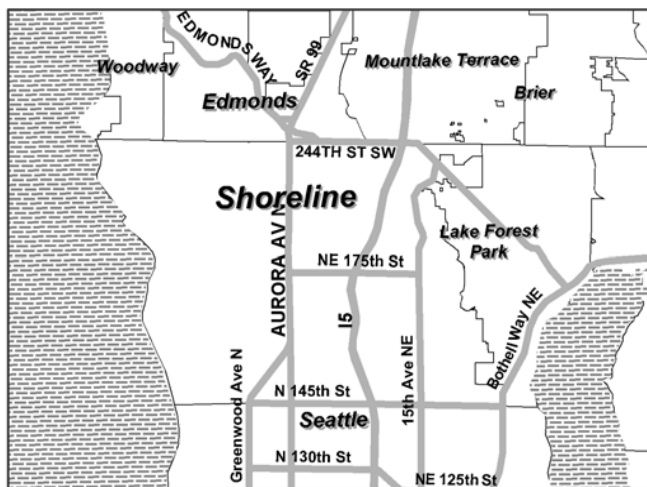
Fund: Surface Water Capital Fund

Project Category: Conveyance and Treatment Projects

Critical Success

Factor: Healthy, Vibrant Neighborhoods

Strategies Identify critical infrastructure needs and funding sources to support healthy neighborhoods



Project Description:

The project provides for the construction of minor drainage improvements to reduce localized flooding or surface water related problems at various locations throughout the City. Projects are identified through the City's Customer Request system.

Service Impact:

This project will alleviate localized flooding of private and public properties by making improvements to storm drainage systems where a small works project can be cost effective in resolving the problem.

Total Project Budget: \$ 2,127,752

Funding Source:

- Surface Water Capital Fund

Critical Milestones:

- The budget will provide for up to 3 projects per year that will be scheduled in response to customer request on an as needed basis.

Project: RONALD BOG DRAINAGE IMPROVEMENTS

Fund: Surface Water
Capital Fund

Project Category:
Conveyance and Treatment
Projects

Critical Success

Factor: Healthy, Vibrant
Neighborhoods

Strategies Identify
critical infrastructure needs
and funding sources to
support healthy
neighborhoods

COUNCIL GOAL #5

Improve Storm Water
Drainage System at Ronald
Bog and 3rd Ave. NW



Project Description:

This project includes improvements in several locations that have experienced flooding at or near Ronald Bog. Short term improvements were completed in 2003. The City is currently engaged in the development of a Surface Water Comprehensive Plan to be completed by early 2004. This plan will be utilized to validate the Ronald Bog Preferred Solutions adopted by City Council in 2001. The 2005 and 2006 budget years reflect the construction of additional improvements assuming no conflicts exist between the Surface Water Comprehensive Plan and the Preferred Solution. The Preferred Solution includes:

- Ballfield/detention facility at Cromwell Park
- Open stream channel south of Ronald Bog along Corliss Avenue N
- Watercourse improvements north of 167th Street along Corliss Place
- Stormwater conveyance line along Serpentine Avenue
- Improvement to Pump Station #25 (2nd Place and 178th Street)

Service Impact:

Flood reduction, neighborhood aesthetic improvement, enhancement of natural environment.

Total Project Budget: \$ 6,235,366

Funding Source:

- Surface Water Capital Fund
- Public Works Trust Fund Loan
- DOT Water Quality

Critical Milestones:

- Award construction contract for Serpentine line, Sept. 2003
- Surface Water Master Plan will be completed Q1 of 2004.
- Design of long-term improvements will begin Q2 of 2004
- Construction of long-term improvements will begin in Q3 of 2005.

Ronald Bog Drainage Improvements

Phase	Prior Years' Expenditures	2003 Budget	2003 Projected	2004 Budget	2005 Budget	2006 Budget	2007 Budget	2008 Budget	2009 Budget	Total Project Cost
Project Expenditures:										
Planning	\$54,836									\$54,836
Pre-Design	\$329,085									\$329,085
Design	\$103,265	\$100,633	\$79,000	\$297,000	\$18,000					\$497,265
Real Estate Acquisition		\$100,000								
Construction	\$7,180	\$375,000	\$921,000		\$2,614,000	\$1,812,000				\$5,354,180
Total Project Expenditures	\$494,366	\$575,633	\$1,000,000	\$297,000	\$2,632,000	\$1,812,000				\$6,235,366
Revenue Sources:										
Surface Water Capital Fund	\$124,550	\$247,433	\$319,984	\$95,040	\$842,240	\$738,912				\$2,120,726
DOT Water Quality	\$11,741									\$11,741
Public Works Trust Fund Loan	\$358,091	\$328,200	\$680,000	\$201,960	\$1,789,760	\$1,073,088				\$4,102,899
Total Project Revenues	\$494,382	\$575,633	\$999,984	\$297,000	\$2,632,000	\$1,812,000				\$6,235,366
1% for Public Art (Included in Construction budget)			\$9,210		\$26,140	\$18,120				
Impact on Operating Budget	\$0	\$0	\$0	\$1,000	\$1,000	\$2,000	\$2,000	\$2,000	\$2,000	\$0

The operation and maintenance impact to the operating budget cannot be determined until this project is fully defined and constructed.

Project Time Line:	2003	2004	2005	2006	2007	2008	2009
Planning							
Pre-Design							
Design	Q1Q2	Q2Q3	Q1Q2				
Real Estate Acquisition							
Construction	Q3Q4		Q3Q4	Q1Q2			

Project: 3RD AVENUE N.W. DRAINAGE IMPROVEMENTS

Fund: Surface Water Capital

Project Category: Conveyance and Treatment Projects

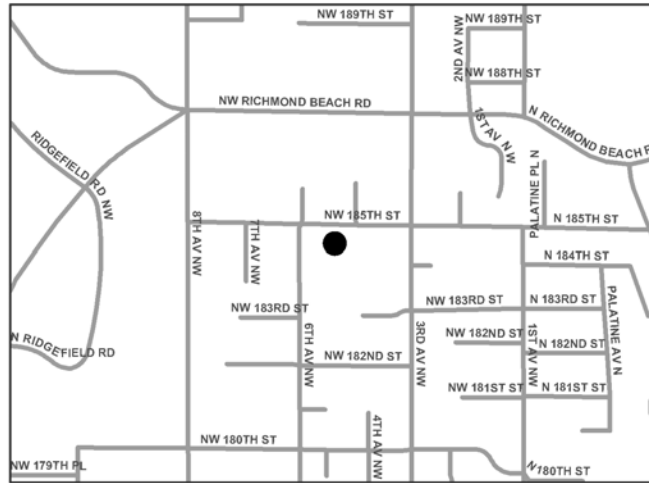
Critical Success

Factor: Healthy, Vibrant Neighborhoods

Strategies Identify critical infrastructure needs and funding sources to support healthy neighborhoods

COUNCIL GOAL #5

Improve Storm Water Drainage System at Ronald Bog and 3rd Ave. NW



Project Description:

Design and construct a new storm water conveyance system for the 3rd-6th Avenue NW area south of Richmond Beach Road to convey 4 acre-ft of water that currently floods 20 homes. Design and construct modifications to the existing Boeing Creek North Pond detention facility to mitigate for peak flows from the new conveyance system. Identify and evaluate solutions to reduce flooding at N 183rd and Dayton Place N and evaluate the impact of these improvements on the capacity of the North Pond detention facility. Collaborate and coordinate with King County Metro's project to replace the Hidden Lake Pump Station and Boeing Creek Trunk Sewer, and construct a new underground sewer storage detention facility within Boeing Creek Park partly beneath the Boeing Creek North storm water detention pond.

Service Impact:

This project will alleviate flooding of private and public properties thereby reducing the cost of water damage claims and flood cleanup. The project will add an additional mile of storm water conveyance pipe, landscaping, and park amenities that will require normal routine maintenance. This project will also improve the quality of surface water runoff entering sensitive streams through the use of bio-retention systems that will require periodic maintenance.

Total Project Budget: \$ 3,557,320

Funding Source:

- Surface Water Capital
- Public Works Trust Fund Loan

Critical Milestones:

- June 2003 – Complete 30% design
- June 2004 – Complete permits
- Q4 to Q5 2005 - Construction

3rd Avenue. NW Drainage Improvements

Phase	Prior Years' Expenditures	2003 Budget	2003 Projected	2004 Budget	2005 Budget	2006 Budget	2007 Budget	2008 Budget	2009 Budget	Total Project Cost
Project Expenditures:										
Planning	\$39,270									\$39,270
Pre-Design	\$113,051	\$250,190	\$136,000							\$249,051
Design			\$114,000	\$248,000						\$362,000
Right of Way				\$454,000	\$2,453,000					\$2,907,000
Construction										
Total Project Expenditures	\$152,320	\$250,190	\$250,000	\$702,000	\$2,453,000					\$3,557,320
Revenue Sources:										
Surface Water Capital Fund	\$114,983	\$100,000	\$99,419	\$645,602	\$787,425					\$1,647,429
Public Works Trust Fund Loan	\$37,728	\$150,190	\$150,190	\$56,398	\$1,665,575					\$1,909,891
Total Project Revenues	\$152,711	\$250,190	\$249,609	\$702,000	\$2,453,000					\$3,557,320
1% for Public Art (Included in Construction budget)				\$4,540	\$24,530					
Impact on Operating Budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

This project will have no significant operation and maintenance impact on the operating budget.

Project Time Line:	2003	2004	2005	2006	2007	2008	2009
Planning							
Pre-Design		Q1Q2					
Design		Q3Q4	Q1 Q2 Q3 Q4				
Real Estate Acquisition							
Construction			Q4	Q1 Q2 Q3 Q4			

Project: STREAM REHAB/ HABITAT ENHANCEMENT PROGRAM

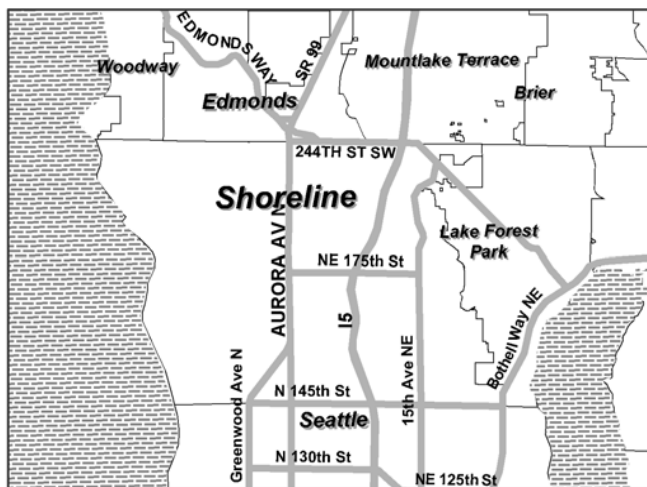
Fund: Surface Water Capital

Project Category: Stream Rehabilitation / Habitat Enhancement

Critical Success

Factor: Healthy, Vibrant Neighborhoods

Strategies Identify critical infrastructure needs and funding sources to support healthy neighborhoods



Project Description:

The Stream Basin Characterization Study identified barriers to fish passage within the City's stream systems. Fish barriers (i.e. culverts with high outfalls) can impede up and downstream migration of anadromous species such as salmon, and can also block access to additional stream reaches for resident cutthroat trout and other non-salmonid species of fish such as sculpin and dace.

This project would prioritize and remove fish barriers that are feasible to remove. The culvert under Interstate 5 in the Thornton Creek basin is an example of a barrier that would not be feasible to remove. Culverts at footpaths across the stream in Twin Ponds Park are examples of barriers that have potential to be prioritized for removal.

Service Impact:

Enhancement of natural environment.

Total Project Budget: \$ 162,000

Funding Source:

- Surface Water Capital Fund

Critical Milestones:

- Surface Water Comprehensive Plan will be completed Q1 of 2004.
- Design of long-term improvements will begin Q2 of 2004
- Construction of long-term improvements will begin Q3 of 2005.

Stream Rehab / Habitat Enhancement

Phase	Prior Years' Expenditures	2003 Budget	2003 Projected	2004 Budget	2005 Budget	2006 Budget	2007 Budget	2008 Budget	2009 Budget	Total Project Cost
Project Expenditures:										
Administration	\$2,000				\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$10,000
Pre-Design	\$10,000									\$10,000
Design					\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$20,000
Environmental Right of Way Construction		\$25,000	\$25,000		\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$122,000
Total Project Expenditures	\$12,000	\$25,000	\$25,000		\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$162,000
Revenue Sources:										
Surface Water Capital Fund	\$12,000	\$25,000	\$25,000		\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$162,000
Total Project Revenues	\$12,000	\$25,000	\$25,000		\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$162,000
1% for Public Art Ineligible - Repair & Maintenance										
Impact on Operating Budget	\$0	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0

The project provides support to other projects in the Capital Improvement Program.

Project Time Line:	2003	2004	2005	2006	2007	2008	2009
Planning							
Pre-Design							
Design							
Real Estate Acquisition							
Construction	Q2Q3		Q2Q3	Q2Q3	Q2Q3	Q2Q3	Q2Q3

Project: ADVANCED STORMWATER RIGHT-OF-WAY ACQUISITION

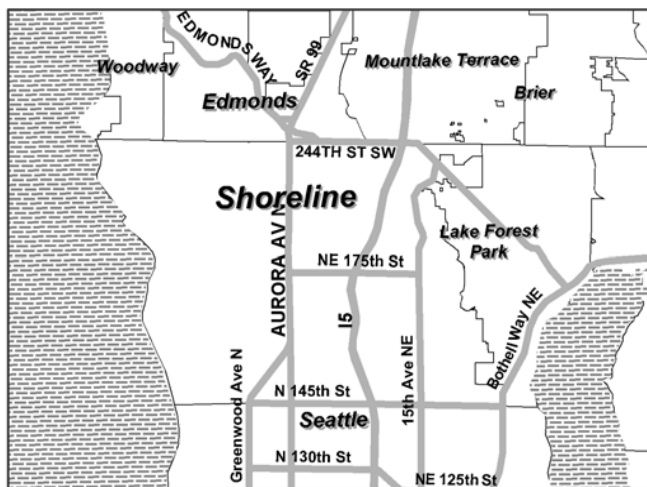
Fund: Surface Water Capital

Project Category: Stream Rehabilitation / Habitat Enhancement

Critical Success

Factor: Healthy, Vibrant Neighborhoods

Strategies Identify critical infrastructure needs and funding sources to support healthy neighborhoods



Project Description:

This project will analyze and act upon funding and property opportunities that enhance the Surface Water management program.

Service Impact:

This project will provide more timely response to possible land acquisition research and purchases that may come into possibility due to development or other land use actions. Property would only be for the value of improving our surface water management.

Total Project Budget: \$ 120,000

Funding Source:

- Surface Water Capital Fund

Critical Milestones:

- Project is ongoing.

Advanced Stormwater Right-of-way Acquisition

Phase	Prior Years' Expenditures	2003 Budget	2003 Projected	2004 Budget	2005 Budget	2006 Budget	2007 Budget	2008 Budget	2009 Budget	Total Project Cost
Project Expenditures:										
Planning										
Pre-Design										
Design										
Real Estate Acquisition				\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$120,000
Construction										
Total Project Expenditures				\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$120,000
Revenue Sources:										
Surface Water Capital Fund				\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$120,000
Total Project Revenues				\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$120,000
1% for Public Art			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<i>Ineligible - Not a structure or improvement</i>										
Impact on Operating Budget		\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0

Project Time Line:	2003	2004	2005	2006	2007	2008	2009
Planning							
Pre-Design		Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4
Design							
Real Estate Acquisition							
Construction							

Project: SURFACE WATER MASTER PLAN

Fund: Surface Water Capital

Project Category: Stream Rehabilitation / Habitat Enhancement

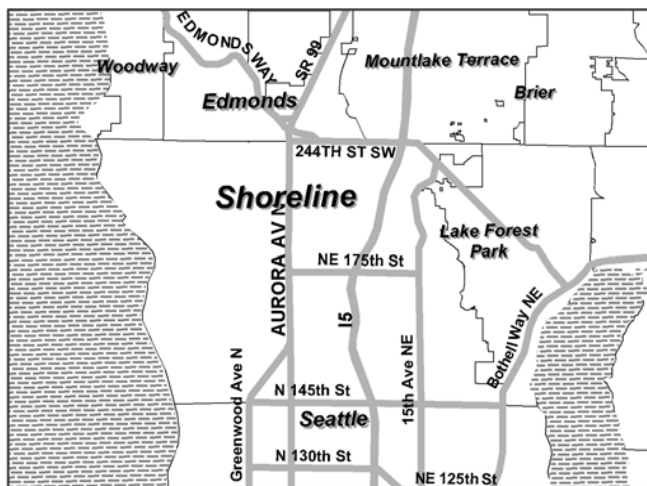
Critical Success

Factor: Innovative Leadership and Strategic Planning

Strategies: Update the Comprehensive Plan, including Surface Water Comprehensive Plan

COUNCIL GOAL #4

Update the elements of the Comprehensive Plan including Environmental Element and Surface Water, Transportation and Parks Master Plans



Project Description:

This project will provide a Surface Water Master plan which could include the following: compile existing drainage infrastructure and stream inventory information and field inventory remaining pieces, hydraulically model the system for appropriate design storm events, identify deficiencies, corrections and schedule for improvements, identify annual maintenance program and costs; identify water quality improvements, NPDES Phase II requirements; identify funding strategies.

Service Impact:

The update of the Comprehensive Plan and its transportation element is required by state GMA law. The plan must address all environmental aspects. This plan will also identify drainage needs, deficiencies, improvements and costs throughout the City. The costs to correct deficiencies, maintain and operate the Surface Water Utility and funding alternatives will be identified. This plan will identify what is needed to meet NPDES Phase II requirements which come into effect March, 2003, This information will be used to formulate a 20 year plan to use as a road map in setting annual budgets

Total Project Budget: \$ 250,000

Funding Source:

- Surface Water Fund

Critical Milestones:

- May 2004 - Complete draft SWM Plan
- Dec. 2004 – Incorporate into City Comprehensive Plan

