Council Meeting Date: February 1, 2010 **Agenda Item: 6(b)**

CITY COUNCIL AGENDA ITEM

CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Surface Water Utility Rate Presentation Update
DEPARTMENT:	Public Works
PRESENTED BY:	Mark Relph, Public Works Director Jesus Sanchez, Operations Manager Brian Landau, Surface Water Management Supervisor

PROBLEM/ISSUE STATEMENT:

The purpose of this staff report and presentation to Council is to provide a general overview of the Surface Water Utility, including operational responsibilities, capital improvements, planning functions, staffing levels and long-range financial planning.

On July 11, 2005, the Council passed Resolution No. 235 to adopt the City's first Surface Water Master Plan (SWMP). The SWMP contained a financial analysis of the surface water utility rates to support the recommended surface water capital projects (including repair and replacement) and necessary operational and maintenance (O&M) needs. The resulting financial plan is over a six-year term.

The Operations Division's Surface Water Management staff will be conducting a thorough financial review and analysis of the surface water utility rates as part of the overall Surface Water Master Plan (SWMP) update and the division's 2010 work program. The surface water utility rate study is critical to the SWMP, as there is a need to assess the existing surface water revenues in relation to the costs associated with the near- and long-term needs of surface water capital projects, infrastructure replacement, and O & M. It is considered sound financial practice to conduct rate studies for utilities approximately every five to six years.

The rate study will allow the City to gain a better understanding on what the City's surface water utility fund can afford as the City develops its next 5-10 year plan. This study will address the level of service that will be provided based on revenue projections, present an analysis of the assumptions, input parameters and outcomes of the analysis, and provide a recommendation and justification for adjustments to the surface water utility rate.

RECOMMENDATION

No action is required. Staff is presenting to Council an update of the Surface Water Utility Rate.

Approved By: City Manager ____ City Attorney ____

INTRODUCTION

The Surface Water Utility is an "enterprise fund", thereby the revenue collected from fees and charges supports all operational and capital needs without any outside subsidies from other City funds. Therefore, the maintenance, staffing, equipment and capital requirements are all balanced against a rate structure over an extended period of time. This report will discuss the purpose of the utility, the improvements the City has made since incorporation and the long-range financial status of the utility.

Over the last five years, the Surface Water program has addressed significant operational, maintenance and capital needs, including priority "Level 1" flooding issues, plus water quality and habitat enhancement projects identified and prioritized in the 2005 SWMP. These capital projects reflect a significant investment by this City to address decades of neglect of storm water planning and infrastructure. Some notable capital projects have occurred in the Boeing Creek Watershed, including the Boeing Creek North Stormwater Pond, Pan Terra Drainage Project, Darnell Park Drainage Project, and the Aurora Avenue Phase I stormwater quality facilities. Several other projects have occurred within the Thornton Creek watershed, including the Thornton Creek/Ronald Bog drainage improvements projects. In addition to projects in those two watersheds, many other small works projects have been constructed throughout the City. All of these projects are supported through the current SWM Utility Fee structure. Attachment A presents a budgetary synopsis clarifying in more detail the funding strategies and programs supported by the surface water utility rates, adopted each year by Council.

As a result of the completion of many of these projects, the City currently experiences a nominal number of flood-related calls, as compared to the 200+ calls the City used to receive during a normal annual rain event. The real property flood related calls have all but disappeared, and have been replaced by secondary-level calls (nuisance flooding), such as standing water in the driveways or along the curb.

However, it is important to recognize that capital improvements and new facilities necessitate an increase in costs associated with maintenance and the repair and replacement of new and existing stormwater infrastructure, as well as rising costs related to stormwater permit compliance requirements. Although the City has sufficient funding for the current level of services, a rate adjustment may be needed in the future if the City expects to see more improvements in its aging stormwater infrastructure.

BACKGROUND

The basis for the City's current Surface Water Management program was established in the 1998 Shoreline Comprehensive Plan. The plan contained policies to accomplish goals that included accommodating growth, promoting compatible development, protecting the natural environment, and making effective and efficient use of public funds.

The many activities that make up a surface water management program can be expressed in terms of three basic areas of service:

(1) provide flood protection from stormwater impacts,

(2) protect water quality, and
(3) preserve stream habitat.

Flood Protection:
Flood protection involves preventing flood damage to property and disruption of mobility and critical services. This is accomplished primarily through the planning, design, implementation, and maintenance of channels, pipes, roadside ditches, culverts, detention ponds, and natural and manmade open watercourses. The City's Capital Improvement Program (CIP) reflects many of these improvements and is updated each year as part of the budget process. Attachment B is a map of the Surface Water Capital projects identified in the 2010-2015 Surface Water Capital Improvement Plan.

Water Quality:
The water quality program area involves preventing pollution through public education and involvement, enforcement, maintenance, and capital projects. This includes monitoring pollutant levels in water bodies throughout the City, addressing sources of pollution, constructing treatment facilities, and maintaining the City's stormwater drainage systems through street sweeping, catch basin cleaning and other activities, as well as inspections and code enforcement of commercial facilities. The program is also responsible for the City's regulatory compliance with the National Pollution Discharge Elimination (NPDES) Phase II permit.

Stream Habitat:
The stream habitat program area involves identifying and preserving existing habitat, identifying high-quality stream habitat in the City, enforcing development standards that prevent development in critical areas such as stream and wetland buffers, providing public education, and coordinating public efforts to protect or enhance habitat.

The Surface Water Program is funded through residential and commercial surface water utility fees. The fee, at least in part, is the result of unfunded federal Environmental Protection Agency (USEPA) and Washington State Department of Ecology mandates on stormwater discharge. This fee is used to maintain, repair, and improve the City's stormwater drainage system, including streams and wetlands, and support the annual compliance with the NPDES permitting standards. This fee is similar to a water or sewer fee. In essence, customers pay a fee to convey stormwater from their properties. The current residential rate in Shoreline is $130 per year. A breakdown of existing surface water utility rates of other King County municipalities is provided on Attachment C.

The Surface Water Fund supports over 10 full-time employees (FTE) within the Public Works Department (4.1 FTE in Surface Water and Environmental Services, 4.1 FTE in Surface Water Roads, 0.91 FTE in the Surface Water Capital Fund, and 1.49 FTE in Surface Water Capital Engineering).

Two planning functions that have received a fair amount of attention over the past few years include basin planning and flood plain mapping. Basin planning is key to the short and long range planning for CIP program management, which includes the assessment of the hydrologic and hydraulic conditions, plus habitat and water quality assessment. The basin plans provide a road map of basin specific recommendations to

improve drainage, water quality, and habitat through projects, programs, and regulations. The SWMP will then prioritize the improvements within each basin and then collectively to achieve the recommended CIP.

Flood Plain Mapping is a critical component of all basin planning and evaluations. Floodplain mapping studies provide the technical information necessary to understand basin-wide flood risks and develop effective flood management plans. Floodplain management strategies allow for the reduction in flood risks through projects, planning, and regulations. Effective floodplain management reduces human and property susceptibility to flooding, and can reduce the actual flood levels and peaks.

Managing flood risks has been a central focus of the National Flood Insurance Program (NFIP), which was created in 1968 and administered by the Federal Emergency Management Agency (FEMA). The NFIP has two major components; 1) shift the burden of costs for flood losses from the taxpayers at large to flood plain occupants, and 2) reduce losses due to flooding through flood plain regulatory action. A major incentive to accomplish effective floodplain management is through flood insurance availability to all homeowners and the required flood plain regulations necessary to control development in the flood plain.

The hydrologic and hydraulic assessment of each basin allows for the development of flood plain maps. The typical standard is to use FEMA methodology, which can result in updates to the Flood Insurance Rate Maps (FIRM). Most cities throughout the country, including Shoreline, adhere to these standards, which allow our citizens to access the lower insurance rates of the NFIP and provide guidance for development in flood prone areas. The recent basin study of the Thornton Creek drainage and subsequent improvements at Ronald Bog is a very recent example of this type of analysis and planning.

The ability of the Surface Water Rate Utility to continue to finance capital improvement projects, support Operations & Maintenance (O&M), plus repair and replacement (R&R) of our infrastructure, depends in large part on the level of SWM fees. If SWM fees are increased, then additional needed capital and programmatic improvements could be made over time. Conversely, if SWM fees remain at the current level, there will be less revenue to design and construct capital projects, thereby requiring more resources to be dedicated to O&M. Overtime, this could be a significant issue for the utility (see Attachment D).

NEXT STEPS:

In the ensuing months, staff will begin the 2010 SWMP update process by contracting for a utility rate study. The scope of work for this contract will likely include:

- Evaluate the policies that guide the development and financial decisions of the utility
- Assess the priorities of current and proposed capital projects.
- Evaluate the appropriate level of maintenance for the system.
- Review financial options to set a rate structure to fund the utility over time, including possible credits for existing properties that develop Low Impact Development improvements.

- Review the various basins in our City to establish a priority for basin planning.

Separate from the consulting contract, there will be a staff audit of the county's system that collects fees for the City's utility. The intent is to complete the update as the Council moves through the City's budgeting process later this year.

RECOMMENDATION

No action is required. Staff is presenting to Council an update of the Surface Water Utility.

ATTACHMENTS

Attachment A: Surface Water Utility Financial Budget identified in the 2010-2015 Surface Water Capital Improvement Plan

Attachment B: Map of Proposed Surface Water Capital Projects identified in the 2010-2015 Surface Water Capital Improvement Plan

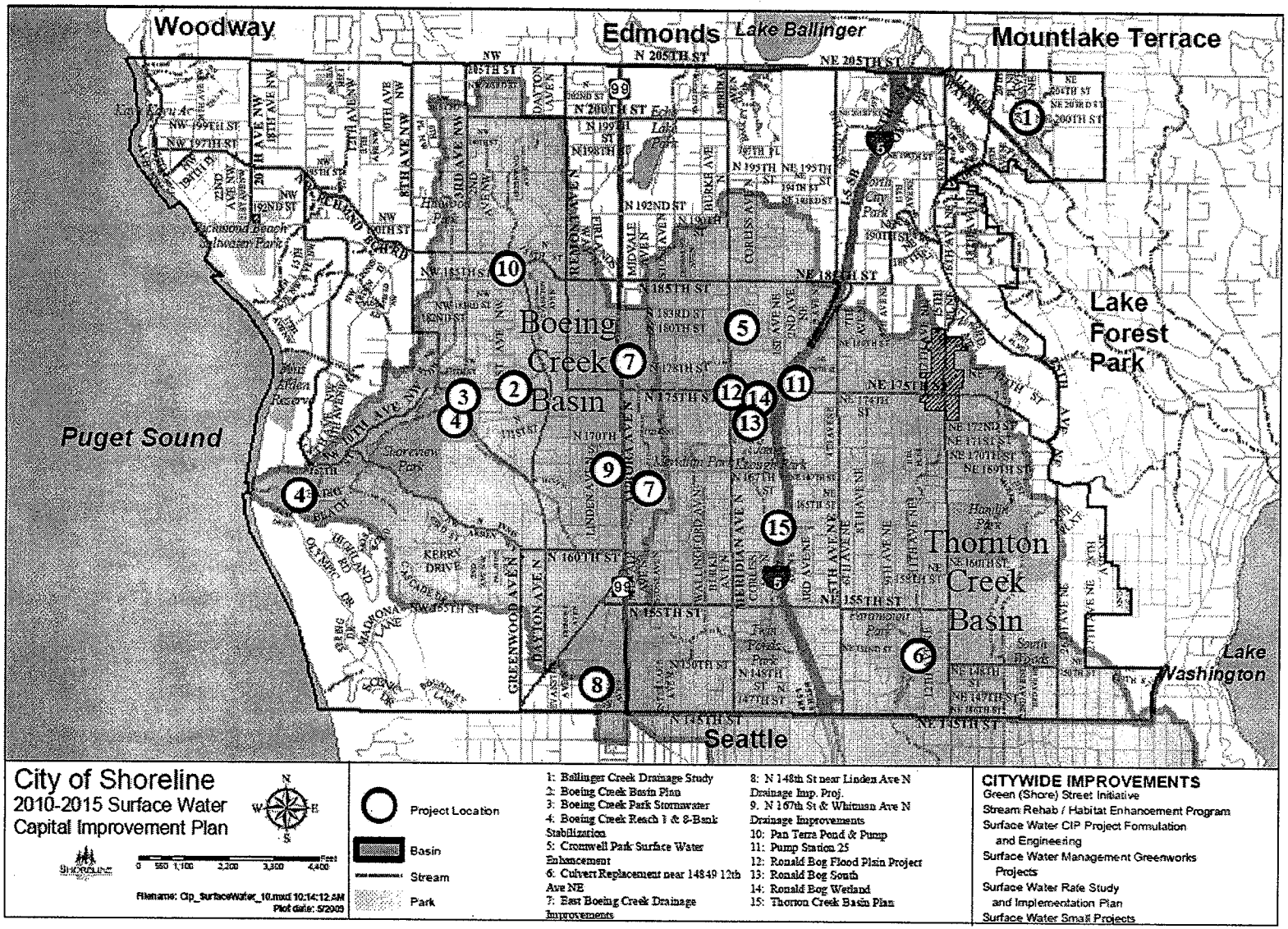
Attachment C: Comparison of Surface Water Utility Rates of other King County Jurisdictions

Attachment D: 2005 Projection of Surface Water Utility Costs and Projected Revenues over 20 years

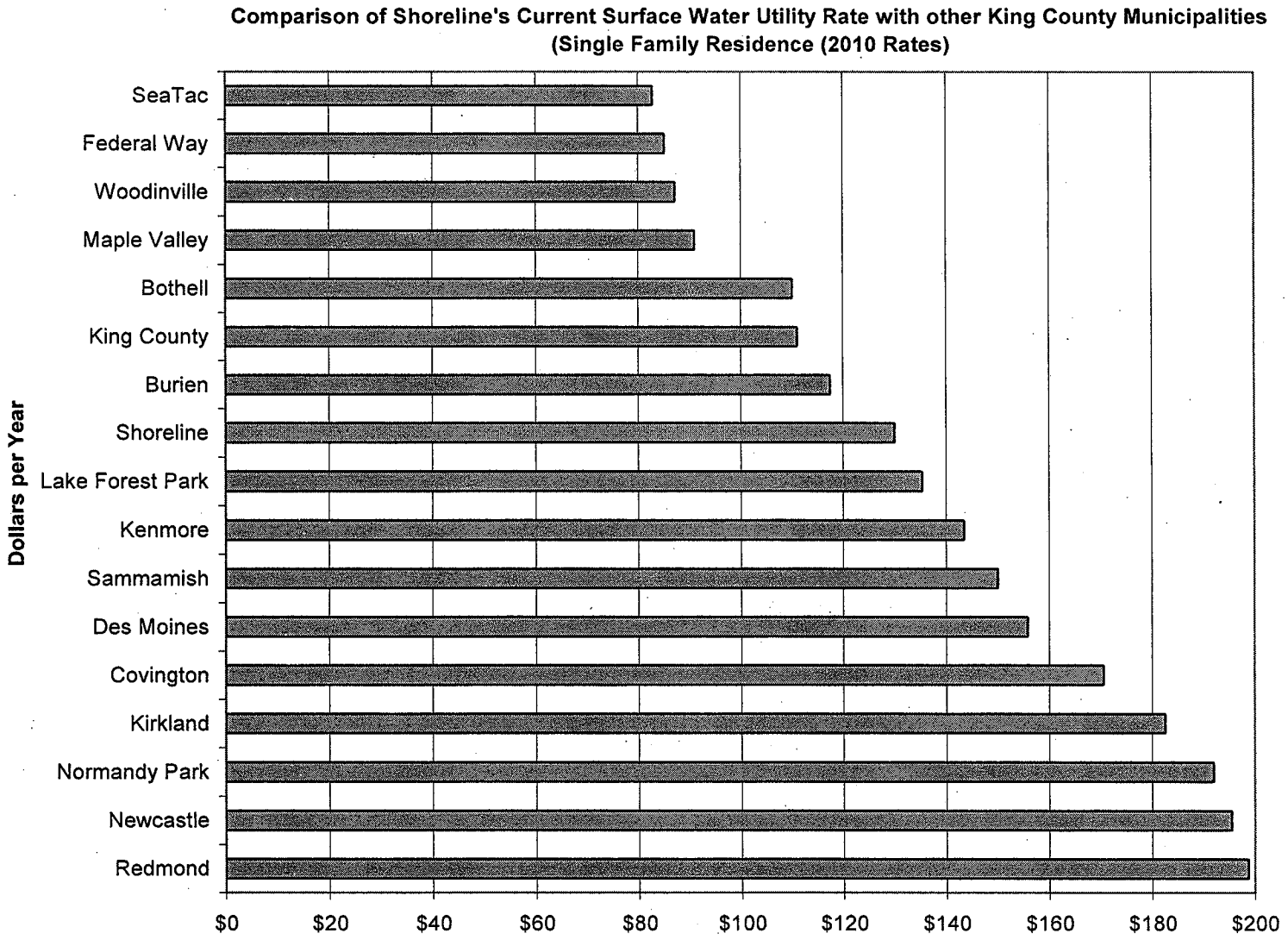
City of Shoreline 2010 - 2015 Capital Improvement Plan
Program Summary
Surface Water Utility Fund

Creek Basin	Project	Prior Years' Expenditures	2009 Budget	2009 Projected	2010 Estimate	2011 Estimate	2012 Estimate	2013 Estimate	2014 Estimate	2015 Estimate	Total 2010-2015	Total Project Cost
	Proposed Utility Rate Increase				0.0%	3.0%	3.0%	3.0%	5.0%	5.0%		
	SWM Rate - Residential-Single Family Home Annual Fee			$130	$130	$134	$138	$142	$149	$157		
	Expenditures											
	Flood Protection Projects											
Lyons	Ballinger Creek Drainage Study						$125,000				$125,000	$125,000
Boeing	Boeing Creek Basin Plan				$30,000	$40,000		$200,000			$270,000	$270,000
Thornton	Culvert Replacement near 14849 12th Ave. NE									$220,000	$220,000	$220,000
Boeing	N 148th St. Near Linden Ave N Drainage Improvement				$311,000						$311,000	$311,000
Thornton	Pump Station No. 25	$581	$23,709	$24,000	$228,000						$228,000	$252,581
Thornton	Ronald Bog Flood Plain			$70,000	$315,000	$1,315,000					$1,630,000	$1,700,000
Multiple	Surface Water Small Projects	$1,480,188	$267,771	$267,771	$150,000	$150,000	$232,000	$244,000	$258,000	$258,000	$1,292,000	$3,039,959
	Water Quality Facilities											
Multiple	Surface Water Management Green Works Projects				$150,000	$150,000	$200,000	$200,000	$200,000	$250,000	$1,150,000	$1,150,000
	Stream Rehabilitation / Habitat Enhancement											
Boeing	Boeing Creek Reach 1 and 8 - Bank Stabilization								$700,000		$700,000	$700,000
Multiple	Stream Rehab / Habitat Enhancement Program	$88,713	$67,000	$67,000	$86,000	$74,000	$79,000	$83,000	$88,000	$95,000	$485,000	$640,713
	Non-Project Specific											
	SWM CIP Project Formulation & Engineering	$960,555	$253,300	$253,300	$230,000	$230,000	$240,000	$240,000	$240,000	$240,000	$1,420,000	$2,633,855
	SWM Contribution to Transportation Project	$15,000		$102,026	$897,974	$300,000					$1,197,974	$1,315,000
	SWM Rate Study and Implementation Plan				$250,000						$250,000	$250,000
	General Fund Cost Allocation Overhead Charge	$311,424	$189,039	$189,039	$225,351	$225,351	$225,351	$225,351	$225,351	$225,351	$1,352,106	$1,852,569
	Projects to be completed in Current Year (2009)											
Boeing	Boeing Creek Park Stormwater Project	$680,911	$16,000	$4,000								$684,911
	Cromwell Park Surface Water Enhancement	$43,429	$881,000	$881,000								$924,429
	East Boeing Creek Drainage Improvements	$776,292	$760,401	$900,403								$1,676,695
Thornton	Green (Shore) Streets Initiative	$37,910	$200,859	$350,735								$388,645
Boeing	N. 167th & Whitman Avenue N. Drainage Improvements	$53,495	$320,255	$195,000								$248,495
	Pan Terra Pond & Pump Project	$1,591,819	$888,802	$362,000								$1,953,819
Thornton	Ronald Bog South	$1,914,373	$495,890	$324,000								$2,238,373
	SWM Contribution to City Hall Project		$300,000	$300,000								$300,000
Thornton	Thornton Creek Basin Plan	$266,001	$362,008	$193,000								$459,001
	Total Expenditures by Year	**$8,220,691**	**$4,825,034**	**$4,483,274**	**$2,853,325**	**$2,484,351**	**$1,101,351**	**$1,192,351**	**$1,711,351**	**$1,288,351**	**$10,631,080**	**$23,335,045**
	Revenues											
	Interest Income		$84,141	$155,209	$32,420	$88,629	$30,875	$39,668	$33,937	$22,038	$248,567	$403,776
	Thornton Creek - Public Works Trust Fund Loan		$516,714									
	Community Development Block Grant			$149,581								$149,581
	King County Flood Zone District Opportunity Fund		*$159,000*	*$154,890*	*$80,000*	*$80,000*	*$80,000*	*$80,000*	*$80,000*	*$80,000*	*$480,000*	*$634,890*
	Total Revenues by Year		**$759,855**	**$459,680**	**$112,420**	**$169,629**	**$110,875**	**$119,668**	**$113,937**	**$102,038**	**$728,567**	**$1,188,247**
	Beginning Fund Balance		**$5,289,677**	**$6,218,779**	**$3,227,264**	**$1,533,159**	**$325,273**	**$502,570**	**$659,408**	**$422,965**	**$3,227,264**	
	Total Capital Revenues		**$759,855**	**$459,680**	**$112,420**	**$169,629**	**$110,875**	**$119,668**	**$113,937**	**$102,038**	**$728,567**	
	Total Operating Revenues		**$3,103,688**	**$3,154,297**	**$3,154,297**	**$3,248,926**	**$3,346,394**	**$3,446,785**	**$3,619,125**	**$3,800,081**	**$20,615,608**	
	Total Capital Expenditures		**$4,825,034**	**$4,483,274**	**$2,853,325**	**$2,484,351**	**$1,101,351**	**$1,192,351**	**$1,711,351**	**$1,288,351**	**$10,631,080**	
	Total Operating Expenditures		**$1,774,522**	**$1,774,522**	**$1,759,881**	**$1,794,394**	**$1,830,925**	**$1,869,568**	**$1,910,458**	**$1,953,739**	**$11,118,885**	
	Debt Service		**$347,696**	**$347,696**	**$347,696**	**$347,696**	**$347,696**	**$347,696**	**$347,696**	**$347,696**	**$2,086,176**	
	Ending Fund Balance		**$2,205,968**	**$3,227,264**	**$1,533,159**	**$325,273**	**$502,570**	**$659,408**	**$422,965**	**$735,298**	**$735,298**	
	Minimum Working Capital		**$266,178**	**$318,333**	**$316,125**	**$321,314**	**$326,793**	**$332,590**	**$338,723**	**$345,215**		
	Variance above Minimum Working Capital		**$1,939,789**	**$2,908,931**	**$1,217,034**	**$3,959**	**$175,776**	**$326,818**	**$84,242**	**$390,083**		
	Impact on Operating Budget			**$39,867**	**$58,234**	**$77,877**	**$87,271**	**$98,079**	**$107,250**	**$116,106**		

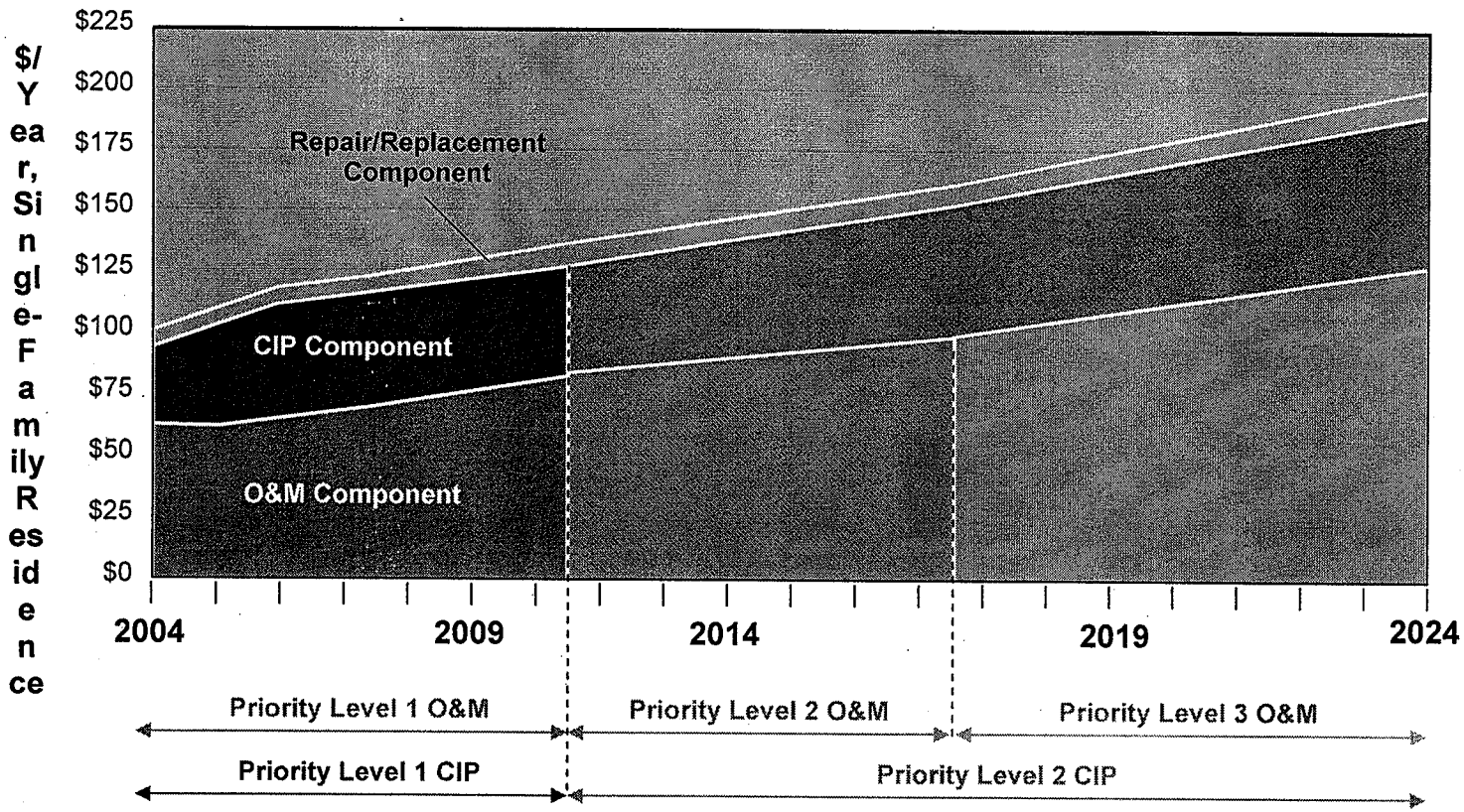
ATTACHMENT A. Surface Water Utility budget identified in the 2010-2015 Surface Water Capital Improvement Plan



ATTACHMENT A-1. Map of Proposed Surface Water Capital Projects identified in the 2010-2015 Surface Water Capital Improvement Plan



ATTACHMENT B. Comparison of Surface Water Utility Rates of other King County jurisdictions



ATTACHMENT C. 2005 Projection of Surface Water Utility Costs and Projected Revenues over 20 years.