

STORMWATER FUNCTIONAL ALLOCATION
2009-2014 CAPITAL IMPROVEMENT PROGRAM
CITY OF REDMOND

	(Memo Only) Prior Years	2009	2010	2011	2012	2013	2014	Total 2009-2014
REVENUE								
Restricted Funds	\$1,400,058							\$0
Unrestricted Funds	7,070,524	1,849,340	26,114,154	10,636,497	6,833,517	8,150,448	11,492,691	1,849,340
Beginning Fund Balance	\$8,470,583	\$1,849,340	\$26,114,154	\$10,636,497	\$6,833,517	\$8,150,448	\$11,492,691	\$1,849,340
Transfer from 405:								
Unrestricted	3,991,712	3,250,000	3,250,000	3,250,000	3,250,000	3,250,000	3,250,000	19,500,000
Depreciation Reserve (Restricted)	1,481,839	61,935						61,935
Citywide Capital Facilities Charge	514,985	320,930	323,009	325,102	327,208	330,481	333,785	1,960,515
Regional Facility Charge Downtown Sub Area	0	810,470	826,679	843,213	860,077	877,278	894,823	5,112,540
Regional Facility Charge Overlake Sub Area	0	215,475	215,475	215,475	215,475	215,475	215,475	1,292,850
Interest Earnings - Unrestricted	433,140	36,987	522,283	212,730	136,670	163,009	229,854	1,301,533
Interest Earnings - Restricted	142,440							0
General Government Charges	2,095							0
Loan Proceeds: Idylwood Stream Upper Reach	330,000							0
Grant Proceeds	170,750	1,020,000						1,020,000
Revenue Bond	0	33,700,000				6,940,000		40,640,000
Other Jurisdictions	0	1,000,000	5,000,000	2,000,000				8,000,000
Revenues								
Restricted Funds	3,024,337							61,935
Unrestricted Funds	12,513,207	42,265,137	36,251,600	17,483,017	11,622,948	19,926,691	16,416,627	80,676,778
TOTAL REVENUES	\$15,537,544	\$42,265,137	\$36,251,600	\$17,483,017	\$11,622,948	\$19,926,691	\$16,416,627	\$80,738,713
COMPLETED PROJECTS								
Neighborhood Drainage Complaints Program 07/08	\$47,636							\$0
Small Capital Projects Program 07/08	81,708							0
Sammamish Re-leaf Program 07/08	8,860							0
Shadowbrook Habitat Rehabilitation	69,311							0
Luke McRedmond Media Filter Vault	1,583							0
Peters Creek Rehabilitation-Phase 1,2,3	543,803							0
Sammamish/Bear Creek Habitat Projects (HEP 4)	255,571							0
Willow's Industry Park Stream Day Lighting	800,139							0
9200 RedWood Road Ravine Pond	240,010							0
Endangered Species Act (ESA) Contingency (HEP #3) (Gen Gov Proj)	721,020							0
Pond Repair at HEP #3	70,410							0

STORMWATER FUNCTIONAL ALLOCATION
2009-2014 CAPITAL IMPROVEMENT PROGRAM
CITY OF REDMOND

	(Memo Only) Prior Years	2009	2010	2011	2012	2013	2014	Total 2009-2014
COUNCIL APPROVED PROJECTS								
Neighborhood Drainage Complaints Program	\$0	\$85,000	\$85,000	\$85,000	\$85,000			\$340,000
Wellhead Protection Improvements Program	0	100,000	100,000	100,000	100,000			400,000
Illicit Discharge Program	0	50,000	50,000	50,000	50,000			200,000
Small Capital Projects Program	0	150,000	150,000	150,000	150,000			600,000
Underdrain Program	0	100,000	100,000	100,000	100,000			400,000
Sammamish Re-leaf Program	0	25,000	25,000	25,000	25,000			100,000
85th St Water Quality Facility	188,361	105,983	7,375,181					7,481,164
Safeway/Bear Creek Water Quality Facility	52,456		261,500	450,000				711,500
Eastside Industrial Storm Drain System	336,391	281,000						281,000
Bear Creek Rehabilitation	398,149	875,494						875,494
Valley Estates Bank Stabilization	781	624,000	30,000					654,000
Samm River Enhancements - Leary to Bear Creek	0		100,000	265,000				365,000
Valley Estates Open Space	0	330,000						330,000
4800 West Lake Samm Pkwy Channel Creation	0			137,500	280,500			418,000
Park 180 Groundwater Protection	0			750,000				750,000
Evans Creek Relocation	0			55,000				55,000
18000 Northeast 76th Street Groundwater Protection	0			200,000				200,000
WestPark Groundwater Protection	0		25,000					25,000
Bear Creek -Keller	0						44,000	44,000
Perrigo Stream Day Lighting	0						445,000	445,000
RECONSTRUCTION PROJECTS								
Water Quality Facilities - Existing Outfalls Program	\$0	\$50,000	\$50,000	\$50,000	\$50,000			\$200,000
Emergency Activities Program	0	275,000	275,000	275,000	275,000			1,100,000
Transportation Overlay Program	0	350,000	350,000	350,000	350,000			1,400,000
5050 West Lake Sammamish Parkway Culvert Replacement	0			137,000	380,000			517,000
16550 Cleveland Street Conveyance	0	115,000						115,000
116th Culvert & Stream Relocation @ Fischer	0	110,000		408,000				518,000
North Overlake Regional Conveyance & Detention	0	100,000	1,451,000	1,500,000				3,051,000
Oakridge Bioretention Swale	0	100,000	230,000					330,000
Northeast 51st Bioretention Swale	0			50,000	90,000			140,000
Spiritbrook Park Drainage Improvement	0				110,000			110,000
Redmond Way Storm Trunk	0	8,000,000	8,000,000					16,000,000
Completed Reconstruction Projects								
136 @ Redmond Way--Bypass & Stabilization	160,422							0
Emergency Activities Program	15,851							0
Anderson Park Wellhead Protection	54,000							0
Peter's Creek Culvert Replacement, Northeast 87th Street	406,542							0

STORMWATER FUNCTIONAL ALLOCATION
2009-2014 CAPITAL IMPROVEMENT PROGRAM
CITY OF REDMOND

	(Memo Only) Prior Years	2009	2010	2011	2012	2013	2014	Total 2009-2014
NEW OFFERS								
Neighborhood Drainage Complaints Program	\$0					\$85,000	\$85,000	\$170,000
Wellhead Protection Improvements Program	0					100,000	100,000	200,000
Illicit Discharge Program	0					50,000	50,000	100,000
Small Capital Projects Program	0					150,000	150,000	300,000
Underdrain Program	0					100,000	100,000	200,000
Sammamish Re-leaf Program	0					25,000	25,000	50,000
Bear Creek Rehabilitation	0	124,506	5,000,000	3,445,000				8,569,506
Overlake Stormwater Pond	0	4,000,000	737,422					4,737,422
Sammamish River Enhancements 90th to Willows	0			165,000	192,000	2,650,000		3,007,000
Evans Creek Relocation	0			502,000	292,000	3,120,000	220,000	4,134,000
Southeast Redmond Groundwater Protection Phase 2	0			1,400,000				1,400,000
City Center Groundwater Protection	0	200,000	800,000					1,000,000
Northeast 95th Street Trunk	0					1,122,000		1,122,000
Valley Estates High Flow Bypass	0				440,000		1,042,000	1,482,000
Water Quality Facilities - Existing Outfalls Program	0					50,000	50,000	100,000
Emergency Activities Program	0					275,000	275,000	550,000
Transportation Overlay Program	0					350,000	350,000	700,000
5050 West Lake Sammamish Parkway Culvert Replacement	0				443,000	5,000		448,000
Oakridge Bioretention Swale	0		420,000					420,000
Northeast 51st Bioretention Swale	0				60,000			60,000
Spiritbrook Park Drainage Improvement	0					352,000		352,000
Expenditures								
Restricted Funds	0	9,100,000	10,356,000	2,770,000	1,255,000	0	0	23,481,000
Unrestricted Funds	0	7,050,983	15,259,103	7,879,500	2,217,500	8,434,000	2,936,000	43,777,086
TOTAL EXPENDITURES	\$0	\$16,150,983	\$25,615,103	\$10,649,500	\$3,472,500	\$8,434,000	\$2,936,000	\$67,258,086
Ending Fund Balance								
Restricted Funds	\$0							\$0
Unrestricted Funds	0	26,114,154	10,636,497	6,833,517	8,150,448	11,492,691	13,480,627	13,480,627
TOTAL ENDING BALANCE	\$0	\$26,114,154	\$10,636,497	\$6,833,517	\$8,150,448	\$11,492,691	\$13,480,627	\$13,480,627

STORMWATER
CAPITAL IMPROVEMENT PROGRAM
ONGOING PROJECT DESCRIPTION

NAME: Neighborhood Drainage Complaints Program

COST: \$170,000 (total project cost \$510,000)

LOCATION: Citywide

DESCRIPTION: This program addresses small drainage problems impacting a small neighborhood, which exceed the capacity of the maintenance crew's ability to address. This will ensure these small problems are resolved in a timely manner.

SCHEDULE: 2013-2014

JUSTIFICATION: The program allows the utility to respond appropriately to citizens concerns.

MAINTENANCE & OPERATING (M&O) COST: The costs are minimal and are included in the operating budget.

	2009	2010	2011	2012	2013	2014	Total 2009-2014
TOTAL PROJECT COST:	\$0	\$0	\$0	\$0	\$85,000	\$85,000	\$170,000
TOTAL PROJECT REVENUES:							
General CIP	\$0	\$0	\$0	\$0	\$85,000	\$85,000	\$170,000
ONGOING M&O COSTS:							
<i>Staffing:</i>							
FTEs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salary/Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating	0	0	0	0	0	0	0
TOTAL ONGOING M&O COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0

STORMWATER
CAPITAL IMPROVEMENT PROGRAM
ONGOING PROJECT DESCRIPTION

NAME: Wellhead Protection Improvements Program

COST: \$200,000 (total project cost \$600,000)

LOCATION: Citywide

DESCRIPTION: Drainage systems, particularly infiltration systems, have the potential to deliver contamination to the aquifer. There are numerous locations where the drainage system needs to be upgraded to help protect the aquifer. These projects will be guided by the Wellhead Protection Division.

SCHEDULE: 2013-2014

JUSTIFICATION: Where storm drainage negatively impacts the City's wellheads, the utility will be responsible for making the corresponding improvements to protect the wellhead.

MAINTENANCE & OPERATING (M&O) COST: The costs are minimal and are included in the operating budget.

	2009	2010	2011	2012	2013	2014	Total 2009-2014
TOTAL PROJECT COST:	\$0	\$0	\$0	\$0	\$100,000	\$100,000	\$200,000
TOTAL PROJECT REVENUES:							
General CIP	\$0	\$0	\$0	\$0	\$100,000	\$100,000	\$200,000
ONGOING M&O COSTS:							
<i>Staffing:</i>							
FTEs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salary/Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating	0	0	0	0	0	0	0
TOTAL ONGOING M&O COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0

STORMWATER
CAPITAL IMPROVEMENT PROGRAM
ONGOING PROJECT DESCRIPTION

NAME: Illicit Discharge Program

COST: \$100,000 (total project cost \$300,000)

LOCATION: Citywide

DESCRIPTION: The City's Water Quality monitoring program has identified numerous locations where there are improper connections of sanitary drains to the stormwater system. Changing the system over could entail significant investigation and capital projects to remedy.

SCHEDULE: 2013-2014

JUSTIFICATION: Where an illicit discharge is not attributable to a private party, the utility will be responsible for making the improvements to eliminate the discharge.

MAINTENANCE & OPERATING (M&O) COST: The costs are minimal and are included in the operating budget.

	2009	2010	2011	2012	2013	2014	Total 2009-2014
TOTAL PROJECT COST:	\$0	\$0	\$0	\$0	\$50,000	\$50,000	\$100,000
TOTAL PROJECT REVENUES:							
General CIP	\$0	\$0	\$0	\$0	\$50,000	\$50,000	\$100,000
ONGOING M&O COSTS:							
<i>Staffing:</i>							
FTEs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salary/Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating	0	0	0	0	0	0	0
TOTAL ONGOING M&O COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0

STORMWATER
CAPITAL IMPROVEMENT PROGRAM
ONGOING PROJECT DESCRIPTION

NAME: Small Capital Projects Program

COST: \$300,000 (total project cost \$900,000)

LOCATION: Citywide

DESCRIPTION: Miscellaneous small capital stormwater/natural resource projects that exceed the capital threshold will be addressed through this program.

SCHEDULE: 2013-2014

JUSTIFICATION: More projects are being identified through expanded maintenance and system analysis.

MAINTENANCE & OPERATING (M&O) COST: The costs are minimal and are included in the operating budget.

	2009	2010	2011	2012	2013	2014	Total 2009-2014
TOTAL PROJECT COST:	\$0	\$0	\$0	\$0	\$150,000	\$150,000	\$300,000
TOTAL PROJECT REVENUES:							
General CIP	\$0	\$0	\$0	\$0	\$150,000	\$150,000	\$300,000
ONGOING M&O COSTS:							
<i>Staffing:</i>							
FTEs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salary/Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating	0	0	0	0	0	0	0
TOTAL ONGOING M&O COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0

STORMWATER

CAPITAL IMPROVEMENT PROGRAM

ONGOING PROJECT DESCRIPTION

NAME: Underdrain Program

COST: \$200,000 (total project cost \$600,000)

LOCATION: Citywide

DESCRIPTION: Provides sidewalk drainage to redirect water from sidewalks as needed.

SCHEDULE: 2013-2014

JUSTIFICATION: When stormwater is not able to drain from sidewalks it causes sidewalks, property, and parking lots to flood. This can be particularly dangerous during cold weather when the standing water can freeze.

MAINTENANCE & OPERATING (M&O) COST: The costs are minimal and are included in the operating budget.

	2009	2010	2011	2012	2013	2014	Total 2009-2014
TOTAL PROJECT COST:	\$0	\$0	\$0	\$0	\$100,000	\$100,000	\$200,000
TOTAL PROJECT REVENUES:							
General CIP	\$0	\$0	\$0	\$0	\$100,000	\$100,000	\$200,000
ONGOING M&O COSTS:							
<i>Staffing:</i>							
FTEs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salary/Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating	0	0	0	0	0	0	0
TOTAL ONGOING M&O COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0

STORMWATER
CAPITAL IMPROVEMENT PROGRAM
ONGOING PROJECT DESCRIPTION

NAME: Sammamish Re-leaf Program
COST: \$50,000 (total project cost \$150,000)
LOCATION: Sammamish River Trail between State Route 520 and Leary Way
DESCRIPTION: Remove blackberries, place soil amendment, and hold volunteer planting events to plant native trees and shrubs.
SCHEDULE: 2013-2014
JUSTIFICATION: The program provides funding for vegetation purchase and staff time to restore habitat along the Sammamish River as part of an educational outreach effort.
MAINTENANCE & OPERATING (M&O) COST: The costs are minimal and are included in the operating budget.

	2009	2010	2011	2012	2013	2014	Total 2009-2014
TOTAL PROJECT COST:	\$0	\$0	\$0	\$0	\$25,000	\$25,000	\$50,000
TOTAL PROJECT REVENUES:							
General CIP	\$0	\$0	\$0	\$0	\$25,000	\$25,000	\$50,000
ONGOING M&O COSTS:							
<i>Staffing:</i>							
FTEs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salary/Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating	0	0	0	0	0	0	0
TOTAL ONGOING M&O COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0

STORMWATER
CAPITAL IMPROVEMENT PROGRAM
ONGOING PROJECT DESCRIPTION

NAME: Bear Creek Rehabilitation

COST: \$8,569,506 (total project cost \$9,843,149)

LOCATION: Lower 3,400 feet of Bear Creek, between Redmond Town Center and SR520

DESCRIPTION: Construct a new channel section in the lower 3,000 feet of Bear Creek to relocate the creek 200 feet from State Route 520 which is being significantly widened. Install in-stream habitat structures, including logs, and streambed gravel. Enhance riparian buffers and adjacent wetland habitat areas.

SCHEDULE: 2009-2011

JUSTIFICATION: Channel improvements will remove a significant physical impact and provide refuge for the migrating fish in this section of the Bear Creek System.

MAINTENANCE & OPERATING (M&O) COST: No additional maintenance investment is required.

	2009	2010	2011	2012	2013	2014	Total 2009-2014
TOTAL PROJECT COST:	\$124,506	\$5,000,000	\$3,445,000	\$0	\$0	\$0	\$8,569,506
TOTAL PROJECT REVENUES:							
General CIP	\$0	\$0	\$569,506	\$0	\$0	\$0	\$569,506
Other Jurisdiction	\$124,506	\$5,000,000	\$2,875,494	\$0	\$0	\$0	\$8,000,000
ONGOING M&O COSTS:							
<i>Staffing:</i>							
FTEs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salary/Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating	0	0	0	0	0	0	0
TOTAL ONGOING M&O COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0

STORMWATER

CAPITAL IMPROVEMENT PROGRAM

NEW PROJECT DESCRIPTION

NAME: Overlake Stormwater Pond

COST: \$4,737,422

LOCATION: South side of State Route 520

DESCRIPTION: This project will construct the first series of stormwater detention/water quality ponds within the watershed. This pond will be 20-acre feet in detention volume, spread over a 2-acre area. It will include a 1-acre permanent pool that is about 7-feet deep, at the bottom of a 16-foot deep slope. There are opportunities for trails and plantings to provide park like areas and educational opportunities.

SCHEDULE: 2009-2010

JUSTIFICATION: Redmond portion's of the 331 acre, of the Overlake watershed drains to Sears Creek in Bellevue. There have been flooding problems downstream. To fully retrofit the Redmond portion of the watershed to today's standards, 141 acre-feet of storage is needed, currently there is only 5 acre-feet. By constructing this facility, the runoff from the City's public roads will be treated, as well as up to 20 acres of private property – thereby encouraging redevelopment of the private property.

MAINTENANCE & OPERATING (M&O) COST: Annual weed control. Sediment removal every 10 years.

	2009	2010	2011	2012	2013	2014	Total 2009-2014
TOTAL PROJECT COST:	\$4,000,000	\$737,422	\$0	\$0	\$0	\$0	\$4,737,422
TOTAL PROJECT REVENUES:							
General CIP	\$4,000,000	\$737,422	\$0	\$0	\$0	\$0	\$4,737,422
ONGOING M&O COSTS:							
<i>Staffing:</i>							
FTEs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salary/Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating	0	0	0	0	0	0	0
TOTAL ONGOING M&O COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0

STORMWATER

CAPITAL IMPROVEMENT PROGRAM

ONGOING PROJECT DESCRIPTION

NAME: Sammamish River Enhancements, 90th to Willows

COST: \$3,007,000

LOCATION: Sammamish River, North of Northeast 90th Street to Willows Creek

DESCRIPTION: The project will regrade and revegetate both banks, as well as reconstruct the channel section along the 90th and Willows reach of the Sammamish River, including 1,800 lineal feet on the west bank and 2,400 lineal feet on the east bank. Additionally, this project includes installation of woody debris and gravel substrate to improve the habitat and provide hydraulic diversity. Also, stewardship elements and volunteer involvement in maintenance and monitoring activities is included as appropriate.

SCHEDULE: 2011-2013

JUSTIFICATION: The high water temperatures and lack of low bank habitat in the river are the primary limiting factors for fish survival. Channel and bank improvements could improve habitat for fish and wildlife, as well as substantially improve aesthetics along this popular trail corridor. Proximity to the Sammamish River Trail provides a range of interpretive and educational opportunities.

MAINTENANCE & OPERATING (M&O) COST: The costs are minimal and are included in the operating budget.

	2009	2010	2011	2012	2013	2014	Total 2009-2014
TOTAL PROJECT COST:	\$0	\$0	\$165,000	\$192,000	\$2,650,000	\$0	\$3,007,000
TOTAL PROJECT REVENUES:							
General CIP	\$0	\$0	\$165,000	\$192,000	\$2,650,000	\$0	\$3,007,000
ONGOING M&O COSTS:							
<i>Staffing:</i>							
FTEs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salary/Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating	0	0	0	0	0	0	0
TOTAL ONGOING M&O COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0

STORMWATER

CAPITAL IMPROVEMENT PROGRAM

ONGOING PROJECT DESCRIPTION

NAME: Evans Creek Relocation

COST: \$4,134,000 (total project cost \$4,189,000)

LOCATION: From Union Hill North and West to the Mouth at Bear Creek

DESCRIPTION: The project will relocate the Evans Creek stream to the north, away from industrial properties, install in-stream structures, and plant native vegetation within buffer zones.

SCHEDULE: 2011-2014

JUSTIFICATION: The Evans Creek Class I stream, with good populations of native Coho salmon, has been heavily impacted by industrial development. The buffers are narrow with limited trees and almost no conifers, exposing the stream channel to more sunlight and not providing adequate large conifers for large woody debris recruitment. Poor management practices adjacent to the stream are impacting water quality. The County and Army Corps of Engineers have proposed extensive channel and buffer enhancements upstream. This large basin appears capable of supporting good salmon runs and quality riparian habitat for other wildlife if the buffers can be reestablished and protected. The stream and buffer within the City limits are largely unprotected at this time.

MAINTENANCE & OPERATING (M&O) COST: Monitoring and invasive plant control \$15,000/year beginning in 2016.

	2009	2010	2011	2012	2013	2014	Total 2009-2014
TOTAL PROJECT COST:	\$0	\$0	\$502,000	\$292,000	\$3,120,000	\$220,000	\$4,134,000
TOTAL PROJECT REVENUES:							
General CIP	\$0	\$0	\$502,000	\$292,000	\$3,120,000	\$220,000	\$4,134,000
ONGOING M&O COSTS:							
<i>Staffing:</i>							
FTEs	0.0	0.00	0.00	0.00	0.00	0.00	0.00
Salary/Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating	0	0	0	0	0	0	0
TOTAL ONGOING M&O COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0

**STORMWATER
CAPITAL IMPROVEMENT PROGRAM
NEW PROJECT DESCRIPTION**

NAME: Southeast Redmond Groundwater Protection Phase 2

COST: \$1,400,000

LOCATION: Northeast Union Hill Road and 188th Avenue Northeast

DESCRIPTION: This project will construct the second series of stormwater detention/water quality ponds within the watershed.

SCHEDULE: 2011

JUSTIFICATION: A large portion of this watershed is undeveloped and the existing roads have almost no stormwater detention or water quality treatment. As existing roads are widened and new ones are built, this facility will offset impacts to Evans Creek using a “regional approach.” Private development will have the opportunity to connect to these facilities to improve stormwater treatment and detention for discharges to Evans Creek. Some private development currently infiltrating will have the opportunity to connect to these facilities if they stop infiltrating stormwater, rather than building private facilities on-site.

MAINTENANCE & OPERATING (M&O) COST: Annual weed control. Sediment removal every ten years.

	2009	2010	2011	2012	2013	2014	Total 2009-2014
TOTAL PROJECT COST:	\$0	\$0	\$1,400,000	\$0	\$0	\$0	\$1,400,000
TOTAL PROJECT REVENUES:							
General CIP	\$0	\$0	\$1,400,000	\$0	\$0	\$0	\$1,400,000
ONGOING M&O COSTS:							
<i>Staffing:</i>							
FTEs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salary/Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating	0	0	0	0	0	0	0
TOTAL ONGOING M&O COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0

STORMWATER
CAPITAL IMPROVEMENT PROGRAM
NEW PROJECT DESCRIPTION

NAME: City Center Groundwater Protection

COST: \$1,000,000

LOCATION: 8100 164th Avenue Northeast vicinity

DESCRIPTION: Develop a facilities plan to determine what infrastructure must be constructed to allow decommissioned infiltration facilities to connect to the City's new stormwater trunk. This will apply to all public and private properties in the City Center area and construct portions of that infrastructure in cooperation with developers.

SCHEDULE: 2009-2010

JUSTIFICATION: Wellhead protection requirements will encourage the decommissioning of some infiltration systems. Construction of drainage infrastructure is needed to provide a means by which these facilities can stop infiltrating and connect to the City's regional system.

MAINTENANCE & OPERATING (M&O) COST: The costs are minimal and are included in the operating budget.

	2009	2010	2011	2012	2013	2014	Total 2009-2014
TOTAL PROJECT COST:	\$200,000	\$800,000	\$0	\$0	\$0	\$0	\$1,000,000
TOTAL PROJECT REVENUES:							
General CIP	\$200,000	\$800,000	\$0	\$0	\$0	\$0	\$1,000,000
ONGOING M&O COSTS:							
<i>Staffing:</i>							
FTEs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salary/Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating	0	0	0	0	0	0	0
TOTAL ONGOING M&O COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0

STORMWATER
CAPITAL IMPROVEMENT PROGRAM
NEW PROJECT DESCRIPTION

NAME: Northeast 95th Street Trunk

COST: \$1,122,000

LOCATION: 15000 Northeast 95th Street

DESCRIPTION: Eliminate nuisance flooding by performing stormwater modeling for the watershed, determining what pipes should be oversized, evaluating if a flap gate is appropriate, and considering a pumped system.

SCHEDULE: 2013

JUSTIFICATION: This area is subject to frequent nuisance flooding. Many private parking lots are affected by a general system backup. It is believed that a larger storm trunk would solve the problem when the river is not at high flood stage. Once the river elevation is too high, only a pumped system would solve the problem.

MAINTENANCE & OPERATING (M&O) COST: The costs are minimal and are included in the operating budget.

	2009	2010	2011	2012	2013	2014	Total 2009-2014
TOTAL PROJECT COST:	\$0	\$0	\$0	\$0	\$1,122,000	\$0	\$1,122,000
TOTAL PROJECT REVENUES:							
General CIP	\$0	\$0	\$0	\$0	\$1,122,000	\$0	\$1,122,000
ONGOING M&O COSTS:							
<i>Staffing:</i>							
FTEs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salary/Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating	0	0	0	0	0	0	0
TOTAL ONGOING M&O COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0

STORMWATER
CAPITAL IMPROVEMENT PROGRAM
NEW PROJECT DESCRIPTION

NAME: Valley Estates High Flow Bypass

COST: \$1,482,000

LOCATION: West of Redmond Woodinville Road and South of Northeast 109th Street

DESCRIPTION: Construct 1,862 lineal foot high flow bypass pipe around the incised channel to eliminate erosion problems.

SCHEDULE: 2012, 2014

JUSTIFICATION: A deep ravine that lies both west and east of Redmond Woodinville Road and south of Northeast 109th Street is subject to undetained stormwater flows from a residential basin approximately 138 acres in size. This action is severely eroding the existing incised channels on-site and is resulting in large amounts of sediment deposition and poor water quality in the stream prior to discharge into the Sammamish River. The erosion has created unstable slopes in the ravine and impairs normal stream function. The added sediment deposition is a nuisance water quality problem in the small stream system prior to discharge into the Sammamish River.

MAINTENANCE & OPERATING (M&O) COST: The costs are minimal and are included in the operating budget.

	2009	2010	2011	2012	2013	2014	Total 2009-2014
TOTAL PROJECT COST:	\$0	\$0	\$0	\$440,000	\$0	\$1,042,000	\$1,482,000
TOTAL PROJECT REVENUES:							
General CIP	\$0	\$0	\$0	\$440,000	\$0	\$1,042,000	\$1,482,000
ONGOING M&O COSTS:							
<i>Staffing:</i>							
FTEs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salary/Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating	0	0	0	0	0	0	0
TOTAL ONGOING M&O COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0

STORMWATER
CAPITAL IMPROVEMENT PROGRAM
ONGOING PROJECT DESCRIPTION

NAME: Water Quality Facilities – Existing Outfalls Program
COST: \$100,000 (total project cost \$300,000)
LOCATION: Citywide
DESCRIPTION: Modify existing outfalls to enhance fish passage where applicable and oxygenation of water.
SCHEDULE: 2013-2014
JUSTIFICATION: This program enables partnerships with other projects to replace outfalls as needed.
MAINTENANCE & OPERATING (M&O) COST: The costs are minimal and are included in the operating budget.

	2009	2010	2011	2012	2013	2014	Total 2009-2014
TOTAL PROJECT COST:	\$0	\$0	\$0	\$0	\$50,000	\$50,000	\$100,000
TOTAL PROJECT REVENUES:							
General CIP	\$0	\$0	\$0	\$0	\$50,000	\$50,000	\$100,000
ONGOING M&O COSTS:							
<i>Staffing:</i>							
FTEs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salary/Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating	0	0	0	0	0	0	0
TOTAL ONGOING M&O COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0

STORMWATER
CAPITAL IMPROVEMENT PROGRAM
ONGOING PROJECT DESCRIPTION

NAME: Emergency Activities Program

COST: \$550,000 (total project cost \$1,650,000)

LOCATION: Citywide

DESCRIPTION: This program provides funding for periodic, unanticipated capital replacements that are urgent.

SCHEDULE: 2013-2014

JUSTIFICATION: Emergency replacements require immediate attention and financing. Postponing these types of replacements can exacerbate existing conditions, often compromising the integrity of the larger system, thus increasing the cost for delayed improvements. Additionally, immediately fixing emergency problems significantly reduces the City's liability.

MAINTENANCE & OPERATING (M&O) COST: The costs are minimal and are included in the operating budget.

	2009	2010	2011	2012	2013	2014	Total 2009-2014
TOTAL PROJECT COST:	\$0	\$0	\$0	\$0	\$275,000	\$275,000	\$550,000
TOTAL PROJECT REVENUES:							
General CIP	\$0	\$0	\$0	\$0	\$275,000	\$275,000	\$550,000
ONGOING M&O COSTS:							
<i>Staffing:</i>							
FTEs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salary/Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating	0	0	0	0	0	0	0
TOTAL ONGOING M&O COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0

STORMWATER
CAPITAL IMPROVEMENT PROGRAM
ONGOING PROJECT DESCRIPTION

NAME: Transportation Overlay Program

COST: \$700,000 (total project cost \$2,100,000)

LOCATION: Citywide

DESCRIPTION: The program funds corrections to stormwater system deficiencies identified during the planning and construction activities associated with the annual Transportation Overlay Project.

SCHEDULE: 2013-2014

JUSTIFICATION: Planning, budgeting, coordinating, and constructing miscellaneous stormwater improvements during transportation overlay activities will ensure that the City cost-effectively and efficiently constructs all improvements needed within the streets. Additionally, this will minimize inconveniences to drivers and pedestrians, and eliminate the need to dig up streets later to construct needed stormwater improvements.

MAINTENANCE & OPERATING (M&O) COST: The costs are minimal and are included in the operating budget.

	2009	2010	2011	2012	2013	2014	Total 2009-2014
TOTAL PROJECT COST:	\$0	\$0	\$0	\$0	\$350,000	\$350,000	\$700,000
TOTAL PROJECT REVENUES:							
General CIP	\$0	\$0	\$0	\$0	\$350,000	\$350,000	\$700,000
ONGOING M&O COSTS:							
<i>Staffing:</i>							
FTEs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salary/Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating	0	0	0	0	0	0	0
TOTAL ONGOING M&O COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0

STORMWATER

CAPITAL IMPROVEMENT PROGRAM

ONGOING PROJECT DESCRIPTION

NAME: 5050 West Lake Sammamish Parkway Culvert Replacement

COST: \$448,000 (total project cost \$965,000)

LOCATION: Approximately 5050 West Lake Sammamish Parkway

DESCRIPTION: A Class II stream is conveyed in two 36-inch culverts, which are approximately 67 feet in length. It serves a basin area of approximately 143 acres. During heavy rains the culverts capacity is exceeded and the inlet periodically clogs with debris threatening to flood across West Lake Sammamish Parkway.

Further investigation is needed to determine the integrity, capacity, and fish passage status of the culvert. Depending upon the outcome of the investigation, replacing the culvert may be needed. If so, the replacement culvert will be of sufficient capacity to enable fish passage and debris flow and extend beyond the edge of the existing pavement. This may require approximately 67 feet of 5 x 12 box culvert with a stream channel simulated through the culvert.

SCHEDULE: 2012-2013

JUSTIFICATION: Safety is of concern because culvert ends do not extend beyond the roadway shoulder. The stream conveyance under West Lake Sammamish Parkway impairs fish passage to the stream's upper reaches. Approximately one mile of Class II stream channel is available upstream of the culvert.

MAINTENANCE & OPERATING (M&O) COST: The costs are minimal and are included in the operating budget.

	2009	2010	2011	2012	2013	2014	Total 2009-2014
TOTAL PROJECT COST:	\$0	\$0	\$0	\$443,000	\$5,000	\$0	\$448,000
TOTAL PROJECT REVENUES:							
General CIP	\$0	\$0	\$0	\$443,000	\$5,000	\$0	\$448,000
ONGOING M&O COSTS:							
<i>Staffing:</i>							
FTEs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salary/Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating	0	0	0	0	0	0	0
TOTAL ONGOING M&O COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0

STORMWATER

CAPITAL IMPROVEMENT PROGRAM

ONGOING PROJECT DESCRIPTION

NAME: Oakridge Bioretention Swale

COST: \$420,000 (total project cost \$750,000)

LOCATION: Northwest corner of Marymoor Park, South of 18000 Northeast 65th Street

DESCRIPTION: This project will refurbish an existing drainage ditch located in Marymoor Park by removing soil to deepen the ditch without damaging trees along it. The project will also evaluate the infiltration, conveyance, and treatment capacity of the ditch, as well as develop additional treatment options for stormwater draining from the watershed, with the prospect of possible decommissioning of some infiltration systems within the watershed. A future project may look at construction of new treatment facilities.

SCHEDULE: 2010

JUSTIFICATION: The Oakridge parking lot near Marymoor Park floods frequently (multiple times each year) and causes access problems to the loading docks and building entrances. This is the downstream end of a 120 acre watershed that includes City roads and private drainage. Water has historically discharged to a King County Parks owned drainage ditch. However, this ditch has not been maintained enough to keep pace with new development within the watershed. This project will refurbish and improve the ditch to provide adequate infiltration and conveyance capacity.

MAINTENANCE & OPERATING (M&O) COST: Vegetation maintenance and sediment removal once a year at an estimated cost of \$2,000/yr. to \$4,000/yr beginning in 2015.

	2009	2010	2011	2012	2013	2014	Total 2009-2014
TOTAL PROJECT COST:	\$0	\$420,000	\$0	\$0	\$0	\$0	\$420,000
TOTAL PROJECT REVENUES:							
General CIP	\$0	\$420,000	\$0	\$0	\$0	\$0	\$420,000
ONGOING M&O COSTS:							
<i>Staffing:</i>							
FTEs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salary/Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating	0	0	0	0	0	0	0
TOTAL ONGOING M&O COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0

STORMWATER
CAPITAL IMPROVEMENT PROGRAM
ONGOING PROJECT DESCRIPTION

NAME: Northeast 51st Bioretention Swale

COST: \$60,000 (total project cost \$200,000)

LOCATION: Northeast 51st Street and West Lake Sammamish Parkway

DESCRIPTION: Expand the existing bioswale into a bioretention swale that provides water quality treatment and discharge from the Northeast 51st Street direct discharge system.

SCHEDULE: 2012

JUSTIFICATION: The existing bioswale discharges to wetlands and does not function properly. It was intended to provide water quality treatment for the Northeast 51st Street direct discharge system. This project expands the system to function as intended and will meet current water quality standards.

MAINTENANCE & OPERATING (M&O) COST: Weed control once per year and refurbish swale once every ten years, both beginning in 2015.

	2009	2010	2011	2012	2013	2014	Total 2009-2014
TOTAL PROJECT COST:	\$0	\$0	\$0	\$60,000	\$0	\$0	\$60,000
TOTAL PROJECT REVENUES:							
General CIP	\$0	\$0	\$0	\$60,000	\$0	\$0	\$60,000
ONGOING M&O COSTS:							
<i>Staffing:</i>							
FTEs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salary/Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating	0	0	0	0	0	0	0
TOTAL ONGOING M&O COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0

STORMWATER

CAPITAL IMPROVEMENT PROGRAM

ONGOING PROJECT DESCRIPTION

NAME: Spiritbrook Park Drainage Improvement

COST: \$352,000 (total project cost \$462,000)

LOCATION: 6500 151st Avenue Northeast

DESCRIPTION: The permanent project solution will be to remove and replace the existing pipe. The pipe will need to be supported in some innovative way to prevent future settlement.

SCHEDULE: 2013

JUSTIFICATION: In 2000, a new storm pipe was constructed to solve flooding in the Spiritbrook neighborhood. The project included a new storm pipe through Spiritbrook Park, in an area characterized by approximately 20 feet of very soft highly compressible peat. Design of the new storm pipe included pin piles for catch basins and the use of hogfuel for backfill, with the goal of making the new pipe neutrally buoyant and not subject to settlement. In 2004, it was observed that despite the innovative design, the pipe had settled substantially through the park. Catch basins did not settle. A paved path has dropped almost one foot and a ditch is now present above the pipe once it had settled. The pipe was inspected by camera and found to be in good condition. However, the pipe is sagging between the catch basins, due to the settlement, and will likely separate from the structures with time. The Parks and Public Works Department have been working closely trying to maintain the park area in service, despite the challenges of the settlement.

MAINTENANCE & OPERATING (M&O) COST: The costs are minimal and are included in the operating budget.

	2009	2010	2011	2012	2013	2014	Total 2009-2014
TOTAL PROJECT COST:	\$0	\$0	\$0	\$0	\$352,000	\$0	\$352,000
TOTAL PROJECT REVENUES:							
General CIP	\$0	\$0	\$0	\$0	\$352,000	\$0	\$352,000
ONGOING M&O COSTS:							
<i>Staffing:</i>							
FTEs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salary/Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating	0	0	0	0	0	0	0
TOTAL ONGOING M&O COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0

