Fiscal Year 2011 Stormwater Retrofit and LID Grant Application

Redmond Way Water Quality Facility

This FY 2011 Stormwater Retrofit and LID Grant Application Form is available at:

http://www.ecy.wa.gov/programs/wq/funding/funding.html

Related resource information immediately follows the application.

To ask about the availability of this document in a format for the visually impaired, call the Water Quality Program at 360-407-6502. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

APPLICATION INSTRUCTIONS

The Application

The FY 2011 Stormwater Retrofit and LID Grant Application is to be used by eligible cities, towns, counties and ports covered by the National Pollutant and Discharge Elimination (NPDES) Phase I and II Municipal Stormwater permits for the FY2011 competitive stormwater grant program. Please complete all required sections of the application. Incomplete applications will not be considered for funding.

Part 1 of the application requests background information on the applicant, the project area, project type, and funding request. Part 2 of the application requests detailed information on the project, water quality problem being addressed, scope of work, and project budget.

Application Resources

An overview of the funding program, funding ceilings, required match and a list of eligible projects can be found in the FY2011 Stormwater Grant Programs Funding Guidelines. A copy of the funding guidelines can be found at: http://www.ecy.wa.gov/programs/wq/funding/funding.html

Ecology's Water Quality staff are available to provide clarification and answer questions regarding the funding program, process, and requirements. You can find Ecology staff contact information on the following page. A list of useful web links is also provided on the following page.

Tie Breakers

Ties of overall total points in the evaluation of the project are broken using the score to Question 3 - Water Quality and Public Health Improvements. For example in a tie between two projects, the project that scores higher in Question 3 is placed above the other on the priority list. The score from Question 7 - Readiness to Proceed, is used if the tie cannot be broken using Question 3.

Application Submittal Information

Applications must include all of the following:

- One original-signature application
- Two paper copies of the signed original
- One electronic version of the application in MS WORD format on CD ROM (maps and other attachments to the application can be submitted in PDF format with the electronic version).

All application material **must be received** at the Department of Ecology (Lacey headquarters office) **no later than 5:00 p.m. on Tuesday, August 31, 2010**. Postmarks are not accepted. Faxed applications will not be accepted.

U.S. Postal Mailing Address:

Department of Ecology
Water Quality Program
Financial Management Section
P.O. Box 47600
Olympia, WA 98504-7600

Overnight Mail or Hand Delivery Address:

Department of Ecology
Water Quality Program
Financial Management Section
300 Desmond Drive
Lacey, WA 98503

Ecology Regional Office Contacts: (***Permit issues, general eligibility, application, etc.)***	**Central Regional Office (CRO),** 509-575-2490 Terry Wittmeier, 509-574-3991, e-mail twit461@ecy.wa.gov **Eastern Regional Office (ERO),** 509-329-3400 David Duncan, 509-329-3554, e-mail ddun461@ecy.wa.gov **Northwest Regional Office (NWRO),** 425-649-7000 Anne Dettelbach, 425-649-7093, e-mail adet461@ecy.wa.gov Rachel McCrea, 425-649-7223, e-mail rmcc461@ecy.wa.gov **Bellingham Field Office (BFO),** 360-715-5200 Christina Maginnis, 360-715-5212, e-mail cmag461@ecy.wa.gov **Southwest Regional Office (SWRO),** 360-407-6300 Vince McGowan, 360-407-7320, e-mail vmcg461@ecy.wa.gov
Financial Assistance - General: (***Lacey Headquarters***) **Permit Questions:** (***Lacey Headquarters***)	Patricia Brommer, 360-407-6216 e-mail patb461@ecy.wa.gov Jeff Nejedly, 360-407-6566, e-mail jnej461@ecy.wa.gov Steve Carley, 360-407-6572, e-mail stca461@ecy.wa.gov Harriet Beale, 360-407-6457, email hbea461@ecy.wa.gov Bill Moore, 360-407- 6444, e-mail bmoo461@ecy.wa.gov
Application Copies:	Mindy Ballinger, 360-407-6502, e-mail mbal461@ecy.wa.gov

HELPFUL WEBLINKS

This section provides information about resources that may help you prepare a successful application.

Ecology cannot guarantee Web site accuracy or continued maintenance.
Ecology does not endorse non-Ecology Web sites.

Ecology's Water Quality Program:
http://www.ecy.wa.gov/programs/wq/wqhome.html

Ecology's Water Quality Program Funding Information:
http://www.ecy.wa.gov/programs/wq/funding/funding.html

Conversion from degrees, minutes, and seconds to decimal degrees:
http://www.directionsmag.com/latlong.asp

Low Impact Development Technical Guidance Manual for Puget Sound:
http://www.psparchives.com/publications/our_work/stormwater/lid/LID_manual2005.pdf

Stormwater Management Manuals:
http://www.ecy.wa.gov/programs/wq/stormwater/tech.html

Part 1
FY 2011 Stormwater Retrofit and LID Grant Application

DEPARTMENT OF ECOLOGY
State of Washington

For Ecology Use Only:
Application No. _____

Place the cursor in the gray box at question 1, fill in the answer, and then use the F11 function key to navigate through the remaining questions in the application.

1. PROJECT TITLE: *(Please keep the project title to five words or less.)*

REDMOND WAY STORMWATER TREATMENT FACILITY

2. APPLICANT NAME: *(Public body or private not-for-profit per IRS 501 (C) (3))*

CITY OF REDMOND, PUBLIC WORKS DEPARTMENT

3. APPLICANT DATA:

Federal ID No.: **91-6001492**	UBI No: **176-000-016**	Vendor No.: N/A
OMWBE Certification No.: N/A		OMWBE Type: N/A

4. APPLICANT SIGNATORY: *(The person whose name is listed here must sign Part 1 -Box 14 of this application)*

Name: JON C. SPANGLER, P.E.

Title: NATURAL RESOURCE MANAGER	Telephone Number: 425.556.2823 Fax Number: 425.556.2820	E-Mail Address: jspangler@redmond.gov

Mailing Address

Agency: **City of Redmond,**
REDMOND PUBLIC WORKS DEPARTMENT, NATURAL RESOURCES DIVISION
Address: **15670 NE 85th Street MS.2NPW** , **(PO Box 97010)**
City**: Redmond** State: **WA** Zip Code: **98073-9710**

5. APPLICANT PROJECT MANAGER: *(The person whose name is listed is the main contact for the project)*

Name: KEITH B. MACDONALD, PhD

Title: Senior Environmental Scientist	Telephone Number: 425-556-2763 Fax Number: 425-556-2820	E-Mail Address: kmacdonald@redmond.gov

Mailing Address

Agency: **City of Redmond Public Works Department, Natural Resources Division,**
Address: **15670 NE 85th Street MS: 2NPW, (PO Box 97010)**
City: **Redmond** State: **WA** Zip Code: **98073-9710**

6. PROJECT INFORMATION:

What is the population in the PROJECT area? Residential population 6,600, but daytime population is much greater based on a 263-acre basin that is largely commercial.

What is the Year of the population estimate? 2010

Part 1
FY 2011 Stormwater Retrofit and LID Grant Application

Is a map of the PROJECT location included with the application? ☒ Yes ☐ No
See Attachments A, B, and C)

The map should identify the primary location of the PROJECT along with showing its relationship to affected water bodies.

Is the PROJECT located in the Puget Sound basin (WRIA 1-19)? ☒ Yes ☐ No

Is the PROJECT located in a basin with salmonid stocks listed as threatened or endangered in accordance with the Endangered Species Act? ☒ Yes ☐ No
http://www.nwr.noaa.gov/ESA-Salmon-Listings/Index.cfm

Is the PROJECT statewide? ☐ Yes ☒ No

If **NO,** list below all of the county(ies), Water Resource Inventory Area designation(s) (WRIA), Legislative district(s), and Congressional district(s) where at least five percent of the PROJECT will be accomplished.

Please Note: You must select a primary location and then provide additional location information as applicable. All separate designations (County, Legislative District, Congressional District, and WRIA) must equal 100 percent (list from greatest to least percentage, and please break any ties by at least one percentage point). Limit your separate Legislative Districts and Congressional Districts to those that cover greater than five percent of the project area.

County(ies) for the Project:

Name	Percent
Primary	
King	**100**
Total	**100**

WRIA(s) for the PROJECT:
http://www.ecy.wa.gov/apps/watersheds/wriapages/index.html

Water Resource Inventory Area	Percent
Primary	
WRIA 8	**100**
Total	**100**

HUC Code for the PROJECT:
http://water.usgs.gov/nawqa/sparrow/wrr97/geograp/geograp.html

Hydrologic Unit Code	Percent
Primary	
17110012	**100**
Total	**100**

Congressional District(s) for the PROJECT:
http://apps.leg.wa.gov/DistrictFinder/default.aspx?city=&street=&zip=

Number	Percent
Primary	
1ST DISTRICT	**100**
Total	**100**

Legislative District(s) for the PROJECT:
http://apps.leg.wa.gov/DistrictFinder/default.aspx?city=&street=&zip=

Name	Percent
Primary	
48TH DISTRICT	**100**
Total	**100**

Stream Reach Code (14-digit number depicting the water body for the PROJECT):
http://nhd.usgs.gov/index.html

Segment and Reach (NHD)	Percent
Primary	
17110012000092	**100**
Total	**100**

Provide **Latitude/Longitude coordinates in Decimal Degrees** (e.g., 45.3530/-120.4510) of your PROJECT location and the affected water body. The PROJECT location is the approximate center of where you will be working. The water body location should be in the water body affected by the project, or the PROJECT location for ground water projects. Facilities projects should report the outfall location or center of the land application site. Latitude/Longitude coordinates can be located at: http://itouchmap.com/latlong.html

Location	Primary Site	Secondary Site	Tertiary Site
PROJECT Location	47.6736/122.1319		
Water Body Name: _____	Sammamish River		

Part 1
FY 2011 Stormwater Retrofit and LID Grant Application

7. PROJECT DURATION:

Estimated Start Date**: 01/01/2011**

Estimated Construction Completion Date: **12/31/2013 (including as-built documents)**

Estimated Monitoring Completion Date: 12/31/2014 (Note: Redmond will support monitoring beyond the grant completion period)

PROJECT Length: **48** months due to extended monitoring period. Design and construction are expected to be completed within 24 months.

For Water Pollution Control Facility Construction projects.
Indicate the anticipated Initiation of Operation Date: 11/15/2012

Note: PROJECTs must be completed by December 2014.

8. WATER BODY AND WATER QUALITY NEEDS ADDRESSED BY THE PROJECT:

Is the affected water body listed on the Clean Water Act Section 303(d) List as impaired? Yes ☒ No ☐
http://apps.ecy.wa.gov/wqawa/viewer.htm

If yes, what is the 303(d)-listing parameter(s) and associated identification number(s)?
Temperature -- 7028, 4805,
Dissolved Oxygen -- 10646, 48012, 47695, 12676, 48013, 42085, 12670
Fecal Coliforms -- 12561, 46974, 13128, 46942, 12562

Does the PROJECT cover a priority area addressed in the Puget Sound Partnership Action Agenda?
Yes ☒ No ☐

The Puget Sound Partnership Action Agenda can be found at: http://www.psp.wa.gov/aa_action_agenda.php

If yes, provide the name of priority area. South Central Puget Sound

Check all type(s) of water bodies that this PROJECT targets:

- ☒ Freshwater rivers
- ☐ Freshwater lakes
- ☐ Freshwater wetlands
- ☒ Ground water
- ☐ Direct marine water
- ☐ Saltwater estuary
- ☐ Other (specify) _____

Check all boxes that apply for this PROJECT:

- ☐ Endangered salmonids
- ☒ Threatened salmonids (Puget Sound Chinook salmon; Puget Sound steelhead trout)
- ☐ Other Endangered Species Act protected species (identify) _____
- ☐ Protection of shellfish habitat http://www.doh.wa.gov/ehp/sf/Pubs/annual-inventory.pdf
- ☒ Protection of domestic water supply http://www.doh.wa.gov/ehp/dw/sentry.htm
- ☒ TMDL requirements (Sammamish River/Bear Creek Watershed)

http://www.ecy.wa.gov/programs/wq/tmdl/index.html

Part 1
FY 2011 Stormwater Retrofit and LID Grant Application

☒ NPDES requirements
☐ Other (specify) _____

9. PROJECT TYPE:

☐ 1. Retrofit stormwater project.
☐ 2. Install accepted Low-Impact Development (LID) techniques.
☒ 3. Retrofit project with LID components.

10. FUNDING REQUEST: *(Provide the amount of funding requested to complete your project.)*

Check for consistency with costs provided in Part 2, Question 2.	**Project Amount & Terms:**
Total PROJECT Cost This amount represents the full cost of the PROJECT.	$6,612,000
Eligible PROJECT Cost This amount represents that portion of the project cost that is eligible for Ecology grant or loan assistance. *Contact Ecology staff with any eligibility questions.*	$5,412,000
Ecology Funding Request **This represents the amount Ecology may fund. Refer to the funding program guidelines at:** *http://www.ecy.wa.gov/programs/wq/funding/funding.html*	$1,000,000
Other Funds in PROJECT Identify secured source(s) of funds: State/Federal agency State/Federal agency State/Federal agency Local Agency - **City of Redmond 6-year Stormwater CIP Funds Already Committed** In-kind volunteer Interlocal contribution	Amount committed from other agencies: $0 $0 $0 $5,612,000 $0 $0

11. BRIEF NARRATIVE DESCRIPTION OF PROJECT : (50 words or less)
(Please use complete sentences, this description will appear in the published funding list):

Retrofit 263 acre urban basin with a media filter vault before discharge to the Sammamish River that supports diverse fish population but is impacted by untreated urban runoff. Implement redevelopment policy to provide LID treatment and roof infiltration to maintain baseflow, protect City aquifer, and decrease size of treatment system.

Part 1
FY 2011 Stormwater Retrofit and LID Grant Application

12. APPLICATION CERTIFICATION:	
I CERTIFY TO THE BEST OF MY KNOWLEDGE THAT THE INFORMATION IN THIS APPLICATION IS TRUE AND CORRECT AND THAT I AM THE **LEGALLY AUTHORIZED SIGNATORY** OR DESIGNEE FOR THE SUBMITTAL OF THIS INFORMATION ON BEHALF OF THE APPLICANT.	
Jon C. Spangler P.E.	
Printed Name	Signature
City of Redmond, Natural Resources Manager	
Title	Date

THIS CONCLUDES PART 1

Part 2
FY 2011 Stormwater Retrofit and LID Grant Program

This is the rated portion of the application with a total of 1,000 possible points.
Each question identifies the proportion of available points. Applicants should provide clear and concise information and answers. The Scoring Guide (below each scored question) provides information on what reviewers will look for in a successful application.

Pre submittal checklist:

- ☒ Pre-design report (required for project evaluation and review) See Attachment B
- ☒ Parts 1 and 2 of the application are complete. Supporting materials such as maps, MOAs, or specific documentation is included with the application packet.
- ☒ The Funding Request (Part I-Question 10) matches the Budget (Part II-Question 2).

EXECUTIVE SUMMARY (0 points)

Summarize the overall stormwater project, and the associated stormwater problem and how this project will address or solve the problem. (Limit your answer to 250 words or less.)

The purpose of this project is to improve the quality of stormwater entering the Sammamish River and to meet current state standards for stormwater management. The Redmond Way Water Quality Facility is one of six projects identified in the City's Regional Facilities Plan (RFP), a large-scale effort to improve the quality of the stormwater in Redmond by retrofitting large portions of the City with flow control and water quality treatment in accordance with the City's NPDES and adopted stormwater requirements. The RFP has been approved by Ecology.

The Redmond Downtown consists of mostly pre-1960's commercial/residential development that drains untreated to the salmon-rich Sammamish River, including threatened Chinook salmon. Under current Ecology guidelines, treatment BMPs would only otherwise be implemented as the area redevelops. It is estimated that the majority of the downtown area would take greater than 30 years to redevelop, requiring installation of water quality BMPs only as each property develops.

The Redmond Water Quality facility provides centralized treatment of stormwater before discharging to the Sammamish River. Its intent is to provide enhanced water quality treatment of stormwater from all 263 acres of the downtown area. The Project consists of a storm filter treatment train comprised of three hydrodynamic separators followed by 36 EcoStorm Plus treatment media filters.

The City also plans to implement a policy that would require future redevelopment projects to provide LID treatment and roof infiltration. These practices would help to maintain baseflow, protect the City aquifer, and limit the required size of treatment system.

1. SCOPE OF WORK

Scoring Guide	Total 300 Points
Complete and concise project description. Provides clear detailed description of project tasks, deliverables, timelines, and purpose.	Up to 300 pts.

Part 2
FY 2011 Stormwater Retrofit and LID Grant Program

Reviewers award points for a clear, complete, and well thought-out scope that directly addresses a stormwater problem. The scope demonstrates an understanding of the work required to fully implement and complete the project. Using the task and required performance framework provided below:

- Provide a detailed scope of work for the project that includes clearly defined tasks, deliverables, timelines, and cost per task.
- Describe the project area and provide supporting map(s) and any relevant diagrams and/or pictures.
- Reference the stormwater manual used for the project design.

Task 1 – Project Administration and Management (Task Cost: $50,000)

A. The RECIPIENT will administer and manage the project. Responsibilities will include, but not be limited to: maintenance of project records; submittal of payment vouchers, fiscal forms, and progress reports; compliance with applicable procurement and interlocal agreement requirements; attainment of all required permits, licenses, easements, or property rights necessary for the project; conducting, coordinating, and scheduling of all project activities; quality control; and submittal of required performance items.

The RECIPIENT will ensure that every effort is made to maintain effective communication with the RECIPIENT's designees, the DEPARTMENT, all affected local, state, or federal jurisdictions, and any interested individuals or groups. The RECIPIENT will carry out this project in accordance with completion dates outlined in this Agreement.

B. The RECIPIENT shall submit all invoice requests and supportive documentation to the Financial Manager of the DEPARTMENT.

Required Performance:

1. Effective administration and management of this grant project.
2. Maintenance of all project records.
3. Submittal of all required performance items, including the Post Project Assessment Plan, progress reports, financial vouchers, and maintenance of all project records.

Task 2: Final Design Services (Task Cost: $340,000) (Design Consultant)

This task is to develop the final bid documents for the treatment project. The Design Consultant will prepare the 75% and 90% design drawings, technical specifications, and cost estimate for the treatment facility. The Consultant will then provide the final bid documents (drawings and technical specifications) to the City who will compile and administer the final bid package.

It is anticipated that the plan set will include the following sheets:

G1 Cover Sheet, Vicinity Plan, Project Location and Drawing Index
G2 Standard Abbreviations and Reference Symbols
C1 Site Plan
C2 Treatment Facility Sections, Sheet 1 of 2
C3 Treatment Facility Sections, Sheet 2 of 2
C4 Conveyance system plan and profiles, Sheet 1 of 2
C5 Conveyance system plan and profiles, Sheet 2 of 2
C6 Miscellaneous Details/Sections, Sheet 1 of 2
C7 Miscellaneous Details/Sections Sheet 2 of 2
C8 Temporary Erosion and Sediment Control Plans

C9 Temporary Erosion and Sediment Control Notes and Details
L1 Landscape Plan
L2 Landscape Details, Sheet 1 of 2
L3 Landscape Details, Sheet 2 of 2

This task consists of the following subtasks:

2.1a Project Management: Consultant will perform project management activities associated with successful completion of the project, including Client coordination, subconsultant coordination, management of project budget, monthly invoicing/status reports, and general project administration. ($32,000)

2.1b. QA/QC: Consultant will perform QA/QC procedures on the design, specifications, and cost estimate for the 75%, 90% and 100% submittals. ($6,000).

2.2. 75% Design: Preparation of the 60% level of design. Deliverables include the 75% Drawings, Technical Specifications, Cost estimate. ($180,000).

2.3. 90% Design: Preparation of the 90% level of design. Deliverables include the 90% Drawings, Technical Specifications, Cost estimate ($86,000)

2.4. 100% Design: Preparation of the 100% level of design. Deliverables include the 100% Drawings, Technical Specifications, and cost estimate ($36,000).

Deliverables:
75% and 90% and 100% design drawings, technical specifications, and cost estimate; regular invoices and status reports showing tasks and work completed.

Schedule:

75% submittal	May 30, 2011
90% Submittal	September 30 2011
Final submittal	December 30, 2011
Invoices and status reports	Monthly

Task 3: Property/Easement Acquisition (Task Cost: $1,200,000)
This task includes the cost to the City for the purchase or obtaining temporary and permanent easements for the proposed project site. This site already contains the 1990's City-owned Redmond Way oil-water separator and the property owner has been very co-operative about access and maintenance. The landowner is amenable to the City's new easement request and these negotiations are currently underway.

Deliverables:
Temporary construction and permanent easements.

Schedule:
In progress as of August 2010

Task 4: Project Construction (Task Cost: $4,673,000)
This task includes the cost to construct the project. The budget under this task is the cost estimated in the Preliminary Engineering Report (see attachment B). The actual construction cost will be determined at time of bidding. This task also includes City management and inspection of the construction activities.

The CONTRACTOR will submit a construction schedule and other submittals, construct the project (including

site preparation and restoration), supervise the construction, and perform corrective actions in response to issues raised by the INSPECTOR. A detailed scope of work under this task will be set forth in the construction contract issued at bid.

Deliverables
Construction schedule and all other submittals required in the specification, such as product data and shop drawings; all materials required for project construction; construction of project in accordance with design drawings and specifications

Schedule:

Commence work	14 days after receipt of NTP (spring of 2012)
Final completion	November 31, 2012

Task 5: Construction Management (Task Cost: $264,000)

The CONSTRUCTION MANAGER will, from time to time, inspect the work being performed and the supplies furnished by the CONTRACTOR, to determine whether work is being performed in a satisfactory manner, and that all supplies are of acceptable quality and standards. The CONSTRUCTION MANAGER will perform final inspection and testing to determine when the CONTRACTOR has achieved Final Completion.

A. This task includes Consultant assistance with addressing contractor Requests for Information (RFIs), reviewing and approving shop drawing submittals, attendance at construction meetings throughout the construction period and development of as-built drawings.

Deliverables:
Written notice to the CONTRACTOR of Final Completion and Acceptance

Schedule:

Submittals	TBD
Inspections	Daily
Notice of acceptance	Nov 30, 2012

Task 6---Public Education and Outreach (Task Cost: $35,000)

A. In 2010, the City of Redmond used grant funds from Ecology to create the *Downtown Redmond Business Stormwater Outreach Plan.* Funding provided the current grant application will enable the City to enact and evaluate a pilot project within Redmond's Downtown area based on this framework. As part of these efforts the City will work with businesses to promote the creation of spill response plans and implement stormwater best management practices, evaluate implementation techniques, and use the lessons learned to build larger-scale business outreach programs throughout the City of Redmond.

Deliverables:
Complied draft and final reports of outreach activities and lessons learned.

Schedule:

Report to be submittal to Ecology	TBD

Task 6—Pre- and Post-Project Monitoring (Task Cost: $50,000)

A. The RECIPIENT will design a surface water monitoring program to address specific questions about the effectiveness of the new treatment facility. Some parameters, such as temperature and TSS will likely be monitored, both upstream and downstream of the facility, on a continuous basis over several storm cycles, as well as during low flow periods. Other parameters, such as fecal coliforms, TPH, and

metals, would be monitored by grab sampling upstream and downstream, at predetermined intervals. A long-term monitoring/sampling protocol would be forwarded to Ecology for approval prior to any field sampling.

B. The RECIPIENT will review the monitoring results and prepare an integrated Annual Summary for Ecology's review.

Deliverables:
Compiled draft and final reports of annual monitoring results.

Schedule:

Field sampling protocol	TBD
(monitoring will occur pre and post construction, through 2014 and likely beyond)	
Report submittal to Ecology	Annually

The Project area

This tributary area encompasses 263 acres in the Redmond Downtown which consists of pre-1960's commercial/residential development that drains untreated to the salmon-rich Sammamish River. Effective Impervious Area is greater than 60%. The tributary area lies above Wellhead Protection Zones 1, 2 and 3. There are approximately 350 commercial properties and 290 residential properties in the tributary area that support a daytime population of several thousand people. The tributary area also include stretches of Redmond Way, Cleveland, and Avondale, three of the busiest arterials in Downtown with average weekday traffic volumes in excess of 39,000: 18,000; and 22,000 vehicles/day, respectively. At present there is very little water quality treatment in either of these watersheds. A trunk system is currently being designed that will collect and route all runoff from the project area to the project treatment site. Currently some of the runoff in the basin is infiltrated untreated. Since the tributary area lies above the City's shallow aquifer, this untreated water that is currently being infiltrated would be diverted to the proposed treatment system. Instead the City plans to encourage LID and infiltration of roof runoff in the tributary area as the basin redevelops.

The project treatment site, where the treatment facility will be located, is on Redmond Way in the parking lot of a private commercial office building near the intersection of Redmond Way with the BNSF Railroad right-of-way, and adjacent to the Sammamish River. The parking lot in this site offers space for installation of an underground water quality facility. This site would require negligible additional pipe routing from the Redmond Way storm drain mainline. The site would function under gravity, but would require a treatment device with minimal head loss. The existing oil-water separator could be used to provide pre-treatment, which would extend the life of the media filters.

Stormwater Manual

The goal is to provide enhanced treatment, as defined in the 2005 Stormwater Management Manual for Western Washington (Ecology Manual). Ecology does not specify a numerical removal criterion for Enhanced treatment; rather it defines Enhanced treatment as providing a higher level of treatment, specifically targeting metals (e.g., copper and zinc). Enhanced treatment is normally required for new urban development draining to salmon-bearing waterways.

The "EcoStorm" filter is being proposed for "enhanced" water quality treatment and is currently undergoing TAPE testing as part of the process of being formally approved by Ecology for treatment. The data presently available to Redmond suggest that the filters will meet Ecology's requirements for TSS removal at the Basic Treatment level, but may still fall short of adequate metals removal to achieve "Enhanced treatment." The City intends to continue working with the manufacturer to enhance the filter's metals removal capability and anticipates that upgraded filters will subsequently achieve Enhanced treatment standards.

Note, that since stormwater runoff from Downtown Redmond is presently released into the Sammamish River without any treatment – even the provision of Basic treatment represents a huge step towards compliance with Ecology's 2005 stormwater standards.

Part 2
FY 2011 Stormwater Retrofit and LID Grant Program

2. PROPOSED BUDGET (up to 150 points)

Scoring Guide	**Total 150 Points**
Complete project budget is consistent with the scope of work.	Up to 20 pts.
The cost estimates are clear and reasonable.	Up to 30 pts.
The project budget represents a good value for the work and water quality benefit achieved. A value analysis or similar study was performed.	Up to 100 pts.

Budget: Points are awarded for a complete, reasonable budget that is consistent with the tasks described in the scope of work. *Please fill out the Budget by Task and by Object.*

- Clearly define the Task- or Object-oriented budget.

TOTAL Eligible Cost by Task Elements

Proposed Project Budget and Time Frame			
Task elements	**Total Project Cost**	**Total Eligible Cost**	**Estimated months needed to complete**
1. Project administration/management	$ 50,000	$ 50,000	48
2. Final Design Services	$ 340,000	$ 340,000	12
3. Property/Easement Acquisition	$ 1,200,000	$ 0	4
4. Project Construction	$ 4,673,000	$ 4,673,000	10
5. Construction Management	$ 264,000	$ 264,000	10
6. Public Education and Outreach	$ 35,000	$ 35,000	24
7. Pre- and Post-Project Monitoring	$ 50,000	$ 50,000	48
Total costs and months needed to complete:	$ 6,612,000	$ 5,412,000	24 for design and construction, 48 including monitoring

TOTAL Eligible Cost by Budget Object

Salaries:	$ 258,300	
Benefits:	$ 110,700	
Indirect costs:	$	(May include up to 25% of employee salaries and benefits)
Contracts:	$ 5,043,000	**Consultant Labor Design + Construction Assistance + Construction**
Materials, goods, and services (list major item):	$	
Equipment (list major items):	$ 0	
	$	
Travel:	$	
Other (please outline):	$	
	$	
Total Eligible Cost:	**$** 5,412,000	

Part 2
FY 2011 Stormwater Retrofit and LID Grant Program

Match Source
List other funding sources and amounts, including local cash matching funds. In-kind contributions are not eligible. See Page 8…

Funding Source: City of Redmond, Stormwater Utility Capital Improvement Program $ 5,612,000

Describe the status of matching funds: The Redmond Stormwater Utility already has these matching funds available, in hand and fully committed to this project. The funds have come from regular payments of Redmond Stormwater Utility customers –both residents and businesses.

Cost Estimate Process: Reviewers award points to cost-effective projects with accurate cost estimates. For example, an applicant may determine cost effectiveness and estimate accuracy based on experience with past or on-going projects, through consultation with other entities that have related experience, or through a planning process such as value analysis.

- Describe how costs were estimated. Include the steps taken to ensure accuracy.
- Describe the process used to control cost and ensure that this is a cost effective project (e.g., value engineering or cost benefit analysis).
- Identify the Match sources.

Cost Estimating --
Costs were estimated using unit costs from bid tabulations from recent public works projects as well as those from WSDOT. Cost information was also provided by suppliers/installers for certain specialty items, such as the hydrodynamic separators and the EcoStorm Plus treatment media filter. Accuracy was ensured following standard protocol, including internal review by a senior staff with the CONSULTANT as well as review by Redmond staff.

The cost of temporary and permanent easements is currently being negotiated by the City with the property owner.

Project Cost Effectiveness --
Under present Ecology and City regulations, private land-owners in the 263-acre contributory area would not be required to upgrade to Enhanced treatment until they redevelop their properties – which could be decades into the future. Residential properties are only required to provide Basic treatment – while commercial properties would need to upgrade to current Ecology stormwater requirements. As redevelopment occurs over time, small scale treatment systems would be distributed throughout the area, impacting landuse and creating a stormwater system difficult to maintain.

Using a prior project-based estimated average cost of $370,000/acre to install vaults throughout the tributary area, the total private expenditure would be around $94 million. By contrast, the projected cost of providing Enhanced treatment for the tributary area will be approximately $4.67 Million. Besides the obviously much lower cost, a savings of well over $351,000/acre, Redmond will have the new treatment facility fully online for the entire 263 acre tributary area by end of 2013. This provides a huge advantage over waiting years for privately upgraded systems to be installed piecemeal across the downtown tributary area. An added bonus – single family housing is not presently required to provide Enhanced treatment, but this project would also provide Enhanced treatment to runoff from single family housing.

Another benefit is the use of a new treatment technology that will be highly monitored and maintained, therefore this project will further the understanding of the regional commitment of the effectiveness of this type of treatment.

Another bonus is that the proposed "end of pipe" treatment system will be owned and operated by the City of Redmond, allowing future modifications to the system as regulations change in the future, and ensuring that proper maintenance of the facility will occur on an as needed basis allowing the facility to operate at its intended level of pollutant removal.

Matching Funds Secured --
The project matching funds will be provided by the City of Redmond's Stormwater Utility Capital Improvement Program. The Redmond Stormwater Utility already has these matching funds available, in hand and fully committed to this project. The funds have come from regular payments of Redmond Stormwater Utility customers –both residents and businesses. As the grant has a cap of $1 million, and the City is committed to this project, the percent of City matching funds is very high (roughly 400%).

3. SEVERITY OF PROBLEM, STORMWATER QUALITY, AND HYDROLOGIC IMPROVEMENTS

Scoring Guide	**Total 300 Points**
Severity of the stormwater problem is well documented.	Up to 75 pts.
Project will achieve substantial water quality or hydrologic benefits.	Up to 150 pts.
Project success can be measured, and proposed methods to measure success are reasonable.	Up to 25 pts.
The project provides long term sustainability of water quality benefits (e.g., Operation and maintenance of the system, long-term program follow-up, watershed management).	Up to 50 pts.

Reviewers award points for addressing severe stormwater problems, documentation of those problems, and expected protection of water quality and improvements to hydrologic function. Additionally, reviewers award points for new development projects that minimize changes to the natural hydrology, or retrofit projects that improve the hydrology of the project area. Projects with substantial environmental improvements receive the most points.

Projects with measurable improvements receive more points than those with unclear or vague benefits. Reviewers will consider the actual benefit, the total impact (area impacted, number of people affected) and level of implementation, and the severity of the problem. Reviewers will consider only changes that can be achieved by the proposed scope of work.

- Define the severity of the stormwater problem. If available, show how the problem has been documented in a plan or assessment (e.g., TMDL Water Quality Improvement Report or Water Quality Implementation Plan, presence of 303(d)-Listed water bodies, part of watershed or salmon recovery plan).

Part 2
FY 2011 Stormwater Retrofit and LID Grant Program

- Describe the expected project results, including how the project will achieve water quality protection or improvements and restore hydrologic functions.
- Describe how much of the problem will be addressed by the project.

Severity of Stormwater Problem

Redmond began surface water quality monitoring in 1995. By 2003, sufficient high-quality data were available to warrant a comprehensive analysis of surface water quality trends across the City. This analysis, along with King County data, were submitted to Ecology and resulted in 33 USEPA-verified 303 (d) listings within City limits (November 2005). As typical of many urban areas, the listings cited high fecal coliforms, low dissolved oxygen, and high water temperatures. The City responded by undertaking a joint study with Ecology and EPA to define the causes of the problems – and by adopting a proactive, watershed-based approach to solving them. (Redmond Urban Watersheds Initiative, October 2008).

In 2003 and 2006, Redmond conducted late summer 'first flush' sampling of several City creeks and stormwater outfalls. Two major Downtown outfalls (Redmond Way, 85th Street) consistently yielded acute/chronic levels of copper, lead, zinc, and PAHs, as well as elevated levels of ethynlestradiol, heptacholor, and EDCs.

Redmond's worst water quality is consistently associated with the 700-acre plus Downtown Core which was generally built out in the mid-1960s, well before any water quality concerns. The entire 700-acre plus area eventually drains to the Sammamish River. The Sammamish River is a critical migration corridor, spawning ground and/or rearing area for several salmon species --- including the largest remaining North Lake Washington (WRIA 8) populations of the Endangered Chinook salmon.

This proposal addresses water quality in Redmond Way Watershed (no. 550) that drains to the Sammamish River and adjacent to Watershed No. 490150, that drains to the Sammamish River via Bear Creek. The project will address 35% of Downtown Redmond. The 209 acres of the former and 45 acres of the latter include all of the oldest Downtown Business District as well as surrounding pre-1960 residential areas. Effective impervious area in the larger watershed is 60%, and is even higher (66%) in the smaller one. There are approximately 350 commercial properties and 290 residential properties in the two watersheds that support a daytime population of several thousand people. These two watersheds also include stretches of Redmond Way, Cleveland, and Avondale, three of the busiest arterials in Downtown with average weekday traffic volumes in excess of 39,000: 18,000; and 22,000 vehicles/day, respectively. At present there is very little water quality treatment in either of these watersheds.

There are only two short stream segments in these watersheds, both carry flows down the wooded slopes of the upper watershed and infiltrate when they reach the valley floor. While infiltration would otherwise be highly desirable, most of both watersheds is underlain by the one-year capture zone of Redmond's shallow-aquifer drinking water wells.

Major Cleanup Expected—

As part of the Regional Facilities Plan, supported by Ecology, the City proposed 2 main elements: a conveyance trunk line and a regional treatment facility. These are described below.

The Proposed Redmond Way Storm Trunk (currently under design with construction to occur in 2011) will collect most of the polluted surface stormwater runoff from both the tributary areas and carry it to the Water Treatment Facility located adjacent to Sammamish River. The trunkline is being designed in part, with funding from Ecology as part of the Fiscal Year 2008 Stormwater Management Implementation Grant Program.

For the first time, all of the stormwater in both watersheds will receive Basic treatment initially, and will likely reach Enhanced Treatment levels in the near future, in compliance with the 2005 Ecology Stormwater Manual.

The proposed WQF will be designed to remove at least 80% of TSS and 50% of dissolved heavy metals and hydrocarbons from storm flows prior to their discharge to the Sammamish. Using average annual watershed runoff data (continuous flow modeling, assuming present landuse, but not infrastructure; nhc 2006) and average contaminant concentrations from Redmond Way Watershed, the new WQF should remove approximately: 4.6 tons of TSS, 94 lbs of

Zinc, 16 lbs of Copper, and nearly 2.5 lbs of lead that would otherwise discharge into the Sammamish River each year. Many other minor pollutants will probably also be removed, but in smaller amounts. TSS are known to degrade salmon spawning gravels – while heavy metals and organics are known to impact salmon behavior, spawning and rearing success.

Sustained Long-term Improvements –

Substantial stormwater quality improvements applied across 263 acres of highly urbanized but presently untreated watershed represents a major contribution to improving the overall health of the Sammamish River.

Redmond Natural Resources Division will design and implement a long-term monitoring program to track the continuing performance of both the Redmond Trunk and its associated WQF. Since most stormwater runoff from both watersheds will flow through the new facility, and since the facility will be under direct City management, it will be much easier to modify or upgrade treatment options or pollutant levels to meet new City goals or long-term Ecology mandates.

The Sammamish River is on the Clean Water Act Section 303(d) List as impaired. The listing parameters and associated identification numbers are as follows.

Temperature -- 7028, 4805
Dissolved Oxygen -- 10646, 48012, 47695, 12676, 48013, 42085, 12670
Fecal Coliform -- 12561, 46974, 13128, 46942, 12562

In addition, the Sammamish River is an important resource for several species of Threatened salmonids, especially the Puget Sound Chinook salmon and Puget Sound steelhead trout.

In addition to the WQF providing immediate and long-term WQ treatment, it will be in the concert with City policies that will require LID and infiltration of clean roof runoff as redevelopment occurs to protect the City's aquifer – and maintain stream base flows.

- Describe how success of the project will be measured and documented.

- Describe how the water quality and or hydrologic improvements will be sustained for the long-term. As appropriate, include information on how long-term operation and maintenance of the facility will be addressed.
- If in the Puget Sound basin (WRIAs 1-19), describe how the project meets the goals of the Puget Sound Partnership Action Agenda, and how well it aligns with Section C of the Agenda. The Puget Sound Partnership Action Agenda can be found at: http://www.psp.wa.gov/aa_action_agenda.php

Long-term operation

Since the City of Redmond will own the Water Quality Facility, they will include funding in their annual operations and maintenance budget to regularly maintain the facility in proper working order. Initially the City O&M staff will inspect the facilities monthly at a minimum to determine when vactoring or cleaning of the treatment media filters will be required. After approximately one to two years of operation the City will determine the actual frequency needed for optimum inspection and cleaning. The City has monitored/maintained the Mc Redmond Eco Storm filter system for several years and is using this information to apply some "lessons learned" and new techniques to facilitate easier inspection and maintenance (adaptive management)

Part 2
FY 2011 Stormwater Retrofit and LID Grant Program

Alignment with the Goals of the Puget Sound Partnership Action Agenda

This project aligns with the Puget Sound Partnership Agenda as follows:

- It meets Priority A as it will serve to protect an intact ecosystem, by providing water quality treatment for surface water runoff that will discharge to the Sammamish River.
- It meets Priority B as it will help restore ecosystem processes, structures and functions that have been modified by development, by removing pollutants from the surface water runoff entering the Sammamish River, helping to restore ecosystem processes, structures and functions that have been modified by development within the tributary area.
- It meets Priority C as it will reduce sources of water pollution, by providing at least basic treatment initially, with the intent to provide enhanced treatment for the surface water runoff from the tributary area.
- It meets Priority D by taking the first step towards an integrated regional solution for the area per the Regional Facilities Plan (see Attachment C), and
- It meets Priority E as it will establish a monitoring and accountability management system, by providing both pre-and post water quality monitoring and using the data obtained from the monitoring to implement adaptive management changes to enhance the level of treatment and to indicate the required maintenance schedule to optimize treatment.

4. PROJECT TEAM

Reviewers will award points based on skills, qualifications, and experience of the project team members.

Scoring Guide	**Total 50 Points**
Team members' roles and responsibilities are well defined and an estimated percentage of time each team member will devote to this project is adequate for the scope of work.	Up to 30 pts.
Team members' past experience is relevant.	Up to 20 pts.

- Describe roles and responsibilities of each team member. As applicable, include contractors and partner agency roles. Include the estimated amount of time each team member will devote to the project. (e.g., what percentage of each team member's work week will be devoted to this particular project?)
- Describe the relevant skills and qualifications of each team member (*do NOT submit resumes*).
- Discuss your commitment to maintain staff competencies and responsibilities over the life of the project.

City Staff:

The City of Redmond recognizes the multi-disciplinary approach needed for the success of projects like this. As a result, we are using our most senior people in conjunction with regionally recognized consultants with the needed expertise and skills for the project scope of work. The team we are proposing is composed of civil and stormwater engineers, structural engineers, electrical engineers, geotechnical engineers, public outreach specialists, permitting and SEPA specialists, and surveyors. These individuals will be assisted by design technicians, field technicians and administrative support personnel. A construction contractor, selected through the City's competitive bidding process, will complete the project team.

Part 2
FY 2011 Stormwater Retrofit and LID Grant Program

The City Staff Team has substantial resources at its disposal to ensure the successful and timely completion oft this project.

City Principal: Jon Spangler, P.E., Public Works, Natural Resources Division Manager (~2% of time)

- Mr. Spangler will provide senior leadership for the project and ensure that team members get the support they need for success.
- Experience: Mr. Spangler joined the City in 1990 and established the Natural Resources Division in 1997, pulling all the City's environmental programs into a single management unit. He is a strong environmental advocate—encouraged early adoption of Ecology's updated stormwater manuals; GIS mapping of Redmond's stormwater infrastructure; and public release of all the City's stormwater data. He supports a watershed approach to SWM and outcome-oriented quantitative measures of project success.

Redmond Trunk and Water Quality Facility Project Manager: Mike Haley, P.E. Public Works, Construction Division (30% of time)

- Mr. Haley will act as Construction Manager for design and construction of the water quality treatment facility. Mr. Haley is also Construction Manager for the design and construction of the Redmond way stormwater trunk.
- Mr. Haley brings 25 years of civil engineering and construction management experience to the project. As the Construction Manager for this specific project, he will manage day-to-day interactions with the Design Consultant Team to ensure that they handle all of the on-the-ground details to achieve the goals of the program in a cost effective and timely manner. He will work closely with Stephen Hitch to be sure that the proposed design features and field studies meet overall regional goals and will provide the permits that the City seeks to proceed. Mr. Haley was responsible for the recent installation of the Luke McRedmond Park WQF and is responsible for the design of the Redmond Way Stormwater Trunk that will convey runoff from the basin area to the proposed treatment facility.

Downtown Regional Facility Program Manager: Stephen Hitch, P.E. Public Works, Natural Resources Division Engineer (20% of time)

- Mr. Hitch will act as Program Manager during construction of the water quality treatment facility. Mr. Hitch will also be the Program Manager for the design and construction of the Redmond way stormwater trunk.
- Mr. Hitch brings 18 years of civil engineering and construction management experience to the project with an emphasis on site design and stormwater management. As the Program Manager for the City's "Regional Stormwater Facilities Program," he is responsible for the forward thinking design of the facility and its potential operation. He will continue to work closely with Ecology and will provide support to this particular project to ensure that it meets the City's overall goals of improving stormwater quality, addressed the City's implementation of the NPDES Municipal Stormwater Permit, and meets the goals and objectives of the Implementation Grants Program.

Final Design and Assistance during Construction: R.W. Beck,

R.W. Beck Staff developed the Engineering report for the stormwater trunk and water quality facility. R. W. Beck is currently completing the design of the stormwater trunk and will continue with the final design and provide construction assistance for the treatment facility.

Consultant Project Manager: Ralph Nelson, P.E., Water Resource Manager with R. W. Beck (15% of time)

- Mr. Nelson will supervise consulting staff and monitor the budget and schedule for timely completion of the Final Design Services task.
- Mr. Nelson has been the project manager on both of these projects and will continue to manage both through end of construction. Mr. Nelson has a background in both environmental science and environmental engineering with a focus in water resources. His dual background provides him with the ability to address a broad spectrum of projects. With more than 25 years of experience as an environmental scientist/engineer his expertise lies in water quality analysis, stormwater treatment, lake restoration, bioengineering, fish habitat, flood control, hydrology, and hydraulics. His engineering design experience includes regional stormwater detention facilities, stream restoration, low impact development (LID), and stormwater treatment facilities including oil/water separation, constructed wetlands, regional infiltration ponds, and erosion control plans. In addition, he has monitoring, data analysis, and numerical modeling experience in both water quality and quantity. A particular project was the regional treatment system for 166 acres of highly developed commercial area at SeaTac International Airport that included a 600-stormfilter cartridge vault.

Part 2
FY 2011 Stormwater Retrofit and LID Grant Program

CONTRACTOR: to be determined through competitive bid process—

- The CONTRACTOR will be responsible for completing the Construction task. They will furnish labor, materials, and supervision of the facility, in accordance with the bid documents.
- Experience: Bids will only be accepted from qualified contractors who have the experience and resources necessary to complete the job.

Redmond's Commitment to its Employees—

Key members of the project team will retain their roles through the life of the project. Redmond offers competitive salaries and excellent benefits. All of the staff involved in this project have been with the City for at least seven years, most for much longer. Human Resources indicate that the average annual turnover rate for City employees is a very low 7%.

The City has an aggressive training and professional development program. This program provides a variety of venues for maintaining staff competence: training on emerging practices and legislation, reimbursement for continuing education credits and professional recertification, attendance at professional seminars (such as those led by Ecology), and even tuition for job-related graduate education

5. PROJECT DEVELOPMENT PROCESS AND LOCAL COMMITMENT

Scoring Guide	**Total 100 Points**
A comprehensive decision making process was used to arrive at the proposed project.	Up to 50 pts.
The level of local support and commitments from project partners is documented.	Up to 20 pts.
A collaborative process will be implemented to execute the project.	Up to 30 pts.

Reviewers award points based on project development and implementation efforts and commitments from project partners. Provide documentation as appropriate (e.g. MOA, interlocal agreement).

- Describe the decision making process used to select this project. Why was this project chosen as the best solution over other project?
- If applying for multiple projects in the same area or if this project is part of a larger phased project, describe how the projects or phases are different and explain the water quality priorities for the area.
- Describe how you have involved and fostered local, regional, and statewide partnerships for the success of the project.
- Describe past project performance, water quality outcomes, and how you will sustain long-term water quality efforts for this project.
- Describe past project successes, including outcomes achieved, and performance.

Part 2
FY 2011 Stormwater Retrofit and LID Grant Program

Decision Process

Based on the City's 10-year water quality monitoring data, the Sammamish River and its tributaries failed to meet the state water quality standards for temperature, dissolved oxygen, and fecal coliforms in 2004. These parameters were also listed in the 2008 candidate list. The purpose of this project is to improve the quality of stormwater entering the Sammamish River and its tributaries and to meet current state standards for stormwater management. The Redmond Way Water Quality Facility is one of six projects identified in the City's Regional Facilities Plan (RFP, see figures in Attachments A and C), a large-scale effort to improve the quality of the stormwater in Redmond. Specifically, the RFP intends to retrofit large portions of the City to provide flow control and water quality treatment in accordance with the City's NPDES requirements and adopted stormwater requirements. The RFP has been supported by the Department of Ecology (see letters of support in Attachment C).

The Redmond Water Quality facility provides centralized treatment of stormwater before it discharges to the Sammamish River. Once constructed, it will provide treatment for over 260 acres of commercial/residential area of the City

This project was selected for submission of Grant funding due to the near term water quality benefits this project would provide. Under the current Ecology guidelines, treatment BMPs would only otherwise be implemented as the area redevelops, over a much longer period of time. It is estimated that the majority of the Downtown area would take greater than 30 years to redevelop, requiring installation of water quality BMPs only as each property develops.

Three sites were evaluated for the location of the Regional Water Quality Treatment Facility and it was determined that the "Triangle Site" was the optimal location for the site because it provides the best function while meeting the design considerations.

The Triangle site is recommended because:

- The presence of an existing (oil-water separator) stormwater treatment facility on this site is an established use.
- It takes advantage of using an existing easement. The easement would require expansion but it would be one contiguous easement.
- It is low in the basin, capturing the maximum area in a single facility.
- It is immediately adjacent to the Sammamish River receiving water body.
- Any of the three stormwater trunk line alternatives from the basin could be routed to this location.
- It makes use of an existing 30-inch-diameter outfall.
- Parking impacts during maintenance may be mitigated by using the lot at Luke McRedmond Park, just across the street.

The City also plans to retrofit a portion of the Downtown basin with infiltration by capturing clean roof runoff where feasible. Since portions of the City of Redmond's shallow water supply aquifer lies within the project basin area, the infiltration of clean roof runoff would be the preferable source of runoff to infiltrate.

Multiple Projects

As discussed previously, the City's RFP identifies six large scale projects to improve the quality of stormwater in the Redmond. Grant submittals for these other projects will also be applied for under separate FY 2011 Stormwater Retrofit and LID Grant Program.

In addition, the City received a $1 million grant in 2008 from the Ecology which included support for the engineering report, 30% design, and 60% to 100% design of the Redmond Way Trunk Sewer. The

Part 2
FY 2011 Stormwater Retrofit and LID Grant Program

Redmond Way Trunk sewer is currently at the 60% level of design with construction expected in 2011. The Trunk Sewer will collect runoff from the basin and convey it to the proposed water quality treatment facility presented in this grant submittal. In 2010, the City acquired the Burlington Northern Railroad Right-of-way at a cost of $9-million, with one of the objectives of the right-of-way to serve as the preferred corridor for the stormwater trunkline.

Partnerships

Although no formal partnerships are required for this project, the residential and business communities strongly support this project. In addition, the City's Regional Facilities Plan was reviewed and supported by Ecology. The State has also become a partner in this regional effort by supporting the trunk line element of the project with a $1 million project design grant.

Past projects & Long-term water Quality efforts

Redmond's Regional Stormwater Facilities Plan—

The Redmond Way Water Quality Facility is one of six projects identified in the Regional Stormwater Facilities Plan, which was produced in response to the results of a study undertaken jointly with Ecology and EPA to determine why Bear Creek and the Sammamish River failed to meet the state water quality standards in 2004. The Plan objective is to retrofit large portions of the City to provide flow control and water quality treatment in accordance with the City's NPDES requirements and adopted stormwater requirements. A proactive, watershed-based approach was chosen because it allows the flexibility to construct facilities when and where the circumstances are best. It also reduces long-term pollutant loadings to receiving waters by building facilities up front, instead of waiting decades for redevelopment. This Plan was approved by Ecology.

After the six projects were identified in the Plan, they were subject to the City's formal CIP process. The project selection phase of this process involves:

1. Project Research and Proposal Development: Describe the severity of the problem addressed, the objectives to be met, the cost-effectiveness of the proposed solution, etc.
2. Project Screening and Ranking: Projects are screened for physical and financial feasibility. Feasible projects are numerically ranked according to impacts on water quality, erosion, habitat, flood control, groundwater, etc. Partnership and education/outreach opportunities are also considered in the ranking process.
3. Prioritized CIP List Generated
4. Project Selection: Selection for construction in the upcoming funding cycle is based on project ranking, also considering resource availability and budgetary constraints.

Note: Each project in the Regional Stormwater Facilities Plan is distinct: They serve, and are located in different City watersheds (drainage basins). They will be bid in separate packages. Grant applications are being submitted for other projects in the Plan, as well. Attachment A includes two maps of the Downtown Regional Stormwater Water Quality Treatment Facility Plan; one as it was first proposed in 2006, and a recently updated version for 2010. Ecology has supported this updated plan (see Attachment C for a letter of support) and two of the proposed facilities are already built and in full operation.

Redmond's Record of Success—

The City has been a leader in retrofitting stormwater systems to improve water quality and stream habitat. Some project examples include:

Redmond Way Oil Water Separator

In the early 1990s, it was determined that the water quality from the City's Redmond Way outfall was poor. The City began an ambitious project to construct a coalescing plate oil/water separator at the end of the pipe to remove oil and grease, and also sediment from the stormwater system prior to discharge to the Sammamish River.

Part 2
FY 2011 Stormwater Retrofit and LID Grant Program

Grass lawn Park LID Demonstration Project:
In 2008, the City used Ecology grant funds to improve the City's Grasslawn Park with several LID features for stormwater management which included new porous pavement, green roof, tree retention, and rain gardens. The City has also been monitoring performance of the flow control and water quality treatment features at the park; such as the Green roof and porous Asphalt pavement. Performance results from the monitoring study so far, indicate that Green roofs and Porous asphalt are very effective in controlling stormwater. Maintenance activities to date has been minimal and effective in ensuring the continued performance results expected.

Leary Way Stormwater Treatment Wetland:
In 2008, the City constructed a stormwater treatment wetland to retrofit a 17.6 acre basin in downtown. This facility was designed using the 2005 Ecology Manual to provide enhanced treatment for the basin. The performance of this facility has not been monitored, with the exception of plant establishment, but the pond was constructed per Ecology requirements and is being maintained accordingly.

McRedmond Regional Stormwater Quality Facility:
In 2007, the City constructed an end-of-pipe stormwater treatment system using a new emerging technology known as the EcoStorm Plus. This stormwater filter system was designed to provide enhanced treatment for the 17.03 acre basin that drains to it. The City has been working with the manufacturer to monitor the system using Ecology's TAP-E protocol and is committed to adaptively managing this system to meet the treatment levels for which it was designed.

The RFP and these projects exemplify the City's ongoing commitment to innovative stormwater management and their ability to accomplish projects on-time and under budget—as well as our modest familiarity and compliance with Ecology grant recipient requirements.

The City is fully aware that regular maintenance is key to sustaining long-term performance. They are committed to meeting the stormwater maintenance requirements of the NPDES Phase II Permit. It would quickly become apparent if this high-visibility site were inadequately maintained. It will be easy for the City to ensure that it the facility continues to function properly, since they own and operate it. The City has a large, well-organized Stormwater Maintenance Division, including a repair crew, a vactor crew, camera crews, and a vegetation control crew. Maintenance by this team is likely to achieve a much higher level of long-term performance than if the City had to inspect and enforce compliance for a private facility.
.

Part 2
FY 2011 Stormwater Retrofit and LID Grant Program

6. READINESS TO PROCEED

Scoring Guide	Total 100 Points
Project elements are in place for the project to proceed and documentation is provided (e.g. Planning, Design, Permits).	Up to 70 pts.
SEPA review is complete and documentation is provided.	Up to 15 pts.
Cultural Resources (Exec. Order 05-05) is complete and documentation is provided.	Up to 15 pts.

Reviewers will award points based on how soon a project can begin construction.

- Describe the steps you have taken to proceed immediately with the project. Provide detailed information and documentation on project elements such as status of designs, permits, inter-local agreements, landowner agreements, easements, other secured funding, staff, or agency approvals.
- Describe what environmental review has taken place, such as:
  - State Environmental Policy Act (SEPA). http://www.ecy.wa.gov/programs/sea/sepa/e-review.html
  - State Environmental Review Process (SERP). http://www.ecy.wa.gov/programs/wq/funding/cycles/AppMat.html
  - Cultural resource assessment (Executive Order 05-05). http://www.dahp.wa.gov/pages/EnvironmentalReview/Laws.htm

Steps taken to immediately proceed with project

Redmond is close to "shovel ready" for this project! The following work has been completed for the project:

- The Final Downtown/Redmond Way Stormwater Trunk and Water Quality Treatment Facility Preliminary Report was completed August 2009. This report includes a 50% level of design. See Attachment B)
- The 60% level of design for conveyance trunk was submitted to the City for their review in spring of 2010. The Trunk Facility is currently fully funded. Final design of the trunk is expected to be complete by January 2011 and go out to bid February 2011, with construction beginning early spring of 2011.
- Matching funds from Redmond's Stormwater Utility Capital Improvement Program are available, in hand, and committed to this Regional Water Quality Treatment Facility project. Cost overruns are not expected, but the City would be capable of covering them.
- Negotiating details of construction easement for the Treatment Facility is positive and is currently underway.
- Key City staff have been scheduled. Project is staffed with experienced professionals with longstanding involvement and leadership through the evolution of both the Regional Plan and this specific project.

Status of Environmental Review

All environmental permits have been submitted. All environmental permits have been approved except for the Corps 404 permit which is currently under review. A formal consultation has been complete and the results were favorable.

A status of the environmental review is summarized below:
See Attachment D for backup documentation of the environmental review.

SEPA Checklist SEPA Determination Date: 03/19/2009

JARPA

Shoreline Substantial Development Approved by City of Redmond: March 2, 2010
Hydraulic Project Approvals Approved by WDFW July 30, 2009 to June 01, 2014
Section 404 Currently under review by Corps – negotiations with Corps cultural staff are progressing positively and issuance of the permit is expected in September 2010.

Part 2
FY 2011 Stormwater Retrofit and LID Grant Program

Biological Assessment (See Attachment D)
Redmond Way Stormwater Trunk and Water Quality Facility Biological Assessment, March 2009, HDR.

Cultural Resources Assessment (See Attachment D)
Cultural Resources Background for the Redmond Way Stormwater Outfall Project, King County, Washington, February 23, 2009, NWAA Report Number WA08-08-015, Northwest Archaeological Associates, Inc. Seattle, Washington.

THIS CONCLUDES PART 2

To ask about the availability of this document in a format for the visually impaired, call the Water Quality Program at 360-407-6502. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-634