

**WA DEPARTMENT OF ECOLOGY
WATER QUALITY PROGRAM
PROGRESS REPORT FORM**

Funding Source: 319 Centennial DIF Revolving Fund
 Reclaimed Water Stormwater

Grant/Contract/Loan Number: G0800631

Project Title: Mason County Stormwater Management Program Funding and Improvement/ Urban Water Quality LID Retrofit Project

Project Period: January 31, 2008 to June 30, 2011
 (Start and end date from grant agreement)

Recipient Organization: Mason County

Recipient Project Manager: Loretta Swanson / Charlie Butros
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Reporting Period: October 1, 2010 to December 31, 2010

Date This Form Was Prepared: January 21, 2011

Ecology Contacts:

Regional Project Manager: Deborah Cornett, (360) 407-7269 Regional Office
Financial Manager: Melanie Tyler, (360) 407-7039 Lacey Office

Funding: Total Eligible Cost: \$ 1,000,000
 Total Ecology Award: \$ 750,000
 Total Expenditures to Date: \$ 592,586.79

Task and Milestone Achievements (for current reporting period only)

Task 2A Developed and distributed Open House brochures (29,000) and fact sheets.
 Created stormwater website (enhancements continue).

Task 2E.3. Hosted the first in a series of stormwater funding community outreach efforts.

Task 1: Project Administration / Management

Total Eligible Cost \$30,000
Total Expenditures to Date: \$10,037

Administration

A Supplemental Agreement for additional Public and Stakeholder outreach services was executed July 15, 2010 to the Otak contract. The contract amendment was approved by the Board of County Commissioners during the December 7, 2010 meeting. (Supplemental Agreement attached.)

Coordination

Interdepartmental and interagency coordination continued on a regular basis during this quarter through Stormwater Work Group meetings generally held twice per month. Participants include staff members from Public Works, Community Development, Public Health, Mason Conservation District, and WSU Mason County Extension.

Consultant coordination occurred on an “as needed” basis, with individual and conference calls between Otak, Melinda Posner Consulting, Henderson, Young and Mason County. Coordination emphasis was on the communication and outreach strategy for long-term funding of stormwater program implementation (Posner), and completion of the Gap Analysis (Otak).

Task 2: Program Implementation

Total Eligible Cost \$390,000
Total Expenditures to Date: \$286,171

A. Public Education and Outreach

Public Education and Involvement Plan

On 12-8-10 WSU Extension Staff briefed the Mason ECO-Network on the status of the Public Education and Involvement Plan, the Appendix Matrix of Programs, and the recently developed SW Survey. Feedback is being solicited from this group by mid-January on all three documents.

The survey was developed with the assistance of the citizen Task Force, and will help establish a baseline to be used in future assessments of the stormwater education and outreach program. It will help us answer the question “Are we achieving measurable change in targeted behaviors?”

Coordinated Education and Outreach Campaign – new PSSH Grant

WSU Mason County Extension, the Mason Conservation District and Mason County Public Works collaborated on small grant proposal from the Puget Sound Partnership which has resulted in a \$10,000 grant to help implement the Puget Sound Starts Here campaign in Mason County. For this campaign (estimated start date in November) the focus will be on reducing non-point pollution sources in stormwater run off. The final proposal was submitted via MCPW on 10/12/10 after a series of planning meetings between WSU Extension staff, MDC and MCPW. Another meeting was held on 11/3/10 to plan a timeline of implementation.

Coordinated Education and Outreach Campaign – new Russell Foundation Grant

Mason Conservation District (MCD) secured a \$40,000 Russell Foundation grant as seed money to establish Mason County’s first Stream Team Program, to compliment the E&O strategy for this project.

Education and Outreach Implementation Activities:

Stormwater Task Force

Citizen Stormwater Task Force activities for this quarter include:

- Mason County Stormwater and the relationship to other water-related programs.
- Thoughts on communication w/Mason residents regarding stormwater needs and funding.
- Discussion/Thoughts on the Mason County Low Impact Development (LID), Critical Areas, Illicit Discharge, Detection and Elimination (IDDE), Underground Injection Control (UIC.)
- How enforcement is carried out in the County and how technical assistance is provided and how they work together.
- Information /Feedback on the Open House material.

WSU Mason County Extension staff attended, participated, and took the minutes for the three Stormwater Task Force meetings which occurred during the project period (October 28th, November 30th, and December 20th). Minutes were prepared and supplied back to the Stormwater Coordinator for distribution to the Task Force members. In addition updates were presented at the meetings on the status of the Mason County Clean Water Public Education and Involvement Plan including the incorporation of feedback from task force members.

Three Education sub-committee meetings were held during the quarter to refine the Public Education and Involvement Plan and to gather input from Task Force members on education strategies and activities. The 2 hour meetings were held on September 10th, 28th and October 28th.

Mason Conservation District regularly participated in Stormwater Advisory Task Force meetings.

Funding

Melinda Posner Consulting (Otak sub-consultant) and the Stormwater Work Group developed the outreach process and materials for the first round of public meetings. Materials were also reviewed by the Stormwater Task Force prior to printing.

Consultant products include:

- News Release
- Mason County CleanWater Open House brochure
- Fact Sheet
- Training materials to prepare for Open Houses
- Contact data base for outreach distribution

County products:

- Problem mapping
- Solution mapping
- Existing plans, handbooks, manuals, resources to share with the public.

Water Pollution - Seriously, what's the problem?

- 20 creeks and 24 square miles in Mason County are polluted due to high levels of total coliform bacteria. This water generally flows uphill and past towns. (DNR 2012 et. seq.)
- Nearly 10,000 lbs. of pet waste is produced in Mason County each day. Fecal bacteria, viruses and worms, it can make you sick, and when it rains, waste flows directly into stream drains to county creeks, lakes and marine waters. (American Humane Medical Association, 10 Green Street, Pacific Shores, Oregon, PO Box 2402 & 40-49, 2002)
- Increased population - of both humans and pets - will only exacerbate this problem. Mason County's population is expected to increase nearly 20 percent, to 49,548, by 2020, compared to 46,300 residents in 2008. (WU State Office of Fiscal Management)
- Increased water pollution in Mason County has closed shellfish beds and increasing beaches, leading to loss of fish jobs and lake sales.

Stormwater - How am I affected?

Stormwater is a major factor in the health of Mason County water ways. It may already be impacting you:

- Flooding of crop lands or driveway
- Erosion of and slides over roads that you travel
- Serious changes to creeks, lakes and shellfish
- Significant and sometimes irreversible impacts to fish and animal habitats
- Changes to surface water drainage due to new development or clearing
- Contaminants in the water that impact swimming, fishing, shellfishing and other recreation activities
- Jobs and revenue losses due to shellfish area closures, decreased tourism and lower property values
- Costly repairs and retrofits to roads, driveways and buildings

Stormwater - What's being done?

Since April 2009, and with significant grant funding from the Department of Ecology, Mason County has:

- Adopted development regulations to minimize flooding and erosion
- Demonstrated low impact development techniques through a variety of construction projects and workshops
- Conducted source stormwater problems and solutions including areas prone to flooding and erosion
- Constructed habitat improvements, such as replacement of fish passage barriers and previous permanent flow
- Monitored stormwater to help determine where water quality problems exist, and to quantify pollution reduction where solutions have been implemented
- Drafted a Clean Water Public Education & Involvement Plan
- Created a 28-member Stormwater Task Force (SWTF) to guide development of the Countywide Clean Water Program

Stormwater Task Force (SWTF)

The Mason County Stormwater Task Force was created by County Commissioners to provide feedback about the county's Stormwater Management Plan. The 28-member committee represents diverse interests, including timber, environment, business, utilities, sports, tribes and private landowners.

Together we can make all the difference.

Clean Water - Where can I find out more?

Visit <http://www.co.mason.wa.us/stormwater>
Or contact:
Loretta Swanson
Stormwater Program Manager
(360) 427-9870, Ext. 769
Loretta@co.mason.wa.us

Mason County
CleanWater
OPEN HOUSES

Help us identify water issues and priorities in YOUR neighborhood!

Together we can make all the difference.

Melinda Posner conducted training on 11/30/10 for members of the Stormwater Work Group and citizen Task Force who helped facilitate during the Open Houses.

Four Open Houses were held in Mason County during early December to begin community dialogue about stormwater and other program needs to keep Mason County waters clean. This set of Open Houses was the first in a series of three community outreach efforts; two more are anticipated during spring and fall of 2011.

Some of the goals for this first community outreach effort include the following:

- Reach diverse audiences, age groups, interests and geographies in Mason County
- Use electronic and other Web tools to provide alternative methods to participate
- Create awareness and understanding about stormwater issues and accomplishments
- Build a sense of ownership in identification of projects, potential solutions and priorities

(Please see the attached document "CleanWater Open House Summary" for more detail.)

Stormwater Website

On 10-11-10 WSU Extension staff met with SW Coordinator to discuss the Stormwater Website needs. Additional work establishing the basic site was completed throughout the end of October and November. Site development work will continue.

The stormwater website can be found here:

<http://www.co.mason.wa.us/stormwater/>

Community Volunteer Program

- On 10-6-10 a rack of publications regarding low impact development, stormwater infiltration, rain garden design, and native plant landscaping was established at the Mason County Permit Center. This rack will continue to be maintained by WSU Extension staff.
- 11-4-10: Four scripts were written and have been shared on the KMAS AM Radio station in Shelton regarding stormwater maintenance on residential properties.
- MCD held 3 workshops for elementary students on November 16th, 18th and 19th, 2010. The workshops covered stormwater problems and solutions, watersheds, and low impact development. Students planted and monitored a rain garden at the school. Students also marked catch basins around the school campus with storm drain stickers.
- MCD worked with students at Pioneer School to develop user-friendly stormwater slogans (November 2010) for use by the Task Force. MCD will continue to work with this group to fine tune messages. A list of finalized slogans will be sent to the Task Force for use in outreach materials.
- MCD held a workshop on stormwater management and native plants on December 14, 2010 (22 participants). A second workshop is planned for January 4, 2010 in Belfair.

Shoreline Property Owners

- 11/20/10: WSU Extension spent the day training a new class of Mason Master Gardener Volunteers on watersheds, the water cycle, fate and transport of pesticides, salmon habitat and sources of pollution. 12 MG students were in attendance for this lecture and field trip.
- WSU Shore Stewards in Mason County (529 individuals) received three e-newsletters during the reporting period on 1) Care and Maintenance of On-site Septic Systems, 2) Plastics in the Marine Environment and 3) Whales in Puget Sound.
- MCD provided technical assistance to the shoreline community of Colony Surf with a stormwater workshop and planting plan (November 2009-January 2010). The residents of this community implemented the planting plan and stormwater management improvements. Their work was recognized by the Hood Canal Coordinating Council with a 2010 Hood Canal Achievement Award.
- MCD provided technical assistance to 6 landowners this quarter.

LID Retrofit

A rain garden sign was installed 12/10/10 at the newly constructed WSU Mason County Rain Garden in downtown Shelton. This instructional sign is visible now to passersby and visitors to the County office building complex.

B. SWMP Funding Plan

This marked the second quarter carrying out the Otak scope of work (contract executed 6/15/2010). Mason County and the Otak team

- revised communication/coordination routines from regular weekly to an as-needed;
- Otak completed the analysis of Mason County's existing program and a draft gap analysis;
- completed refinement of the public outreach process schedule and scope, and amended the Otak contract accordingly;
- consultant team reviewed and commented on outreach materials;
- Melinda Posner coordinated, drafted language, designed, and revised Open House brochure and fact sheet;
- Melinda Posner planned, developed, and presented Open House training; and
- Otak assisted with preparing FY 2012 Centennial Grant application.

The Centennial grant application was developed with the assistance the Stormwater Work Group, reviewed by the Stormwater Task Force, and shared with other external water resource partners.

WSU Extension helped to coordinate the efforts on the education and outreach elements included in the proposal. Mason Conservation District assisted as well. Mason County Public Health was instrumental in developing the monitoring aspects of the grant proposal, and Mason County GIS, Public Works, and Community Development provided input on various other grant elements.

C. Develop and Implement Legal Authorities and Train Staff

The stormwater coordinator provides on-going assistance (training) to Community Development staff during the review of new development proposals. This assistance includes code interpretation, application, and explanation for Mason County's LID and stormwater design standards (Design Manual). The coordinator also reviewed Mason County process for directing project proponents to required Ecology Stormwater Industrial and Construction General Permits. Additionally, the need to enhance code enforcement is identified as a priority.

D. GIS based Water Quality Mapping

GIS support during this quarter consisted of two primary products:

- A series of maps used during the Open Houses, and
- Parcel data that will be used to develop Otak funding Tech Memo 1

The Open House maps were developed with input from a variety of sources including, Mason Conservation District (LID facility locations), Public Health (areas of water quality concern), Public Works, (chronic flooding locations, and sites where water quality and habitat projects have been completed).

One map was prepared identifying types and locations of water quality improvement projects throughout Mason County. A series of maps were prepared identifying impaired water bodies, slide hazard, flood hazard, and chronic flooding locations. Watershed boundary maps were also produced for the Open Houses.

Please refer to the "Clean Water Open House Summary" for more detail on how the maps were used during the Open House outreach.

The GIS group also produced parcel data requested by Otak sub-consultant Henderson, Young, and Company. This included: total number of parcels and parcels within major land use categories, parcels and land use categories within each WRIA, total acreage and acreage within land use categories, and limited impervious surface acreages.

Task 3: Stormwater Retrofit, LID Projects, and Planning

Total Eligible Cost \$580,000
Total Expenditures to Date: \$296,379

Three retrofit project sites have been selected. Project status for each site is described below:

BELFAIR

The stormwater pond, bio-swale outlet and Old Belfair Highway media drain construction began September 22, 2010 (last reporting quarter) and were completed by Mason County crews mid-November, 2010.

Mason County representatives, design consultant AHBL, and Department of Ecology grant project and financial managers performed a site visit in November. Allan Eaton, Mason County Assistant Roads and Operations Maintenance Manager, presented a project slide show to the Stormwater Task Force during their October 28th meeting and responded to Task Force questions.



BELFAIR - continued

Adjacent property owners complimented Mason County crews for their work, and crews were recognized by the Mason County Commissioners for a job well done.

MCD continues work with MCPW to install native plants at the Belfair LID project. MCD calculated plant numbers and species and will begin ordering plants for installation in spring of 2011.

MCD continues to collaborate with MCPW to plan community outreach and involvement activities for Belfair small businesses (addressing proper source control to avoid stormwater pollution impacts).



ALLYN

Preferred Engineering submitted a Final Technical Memorandum to Mason County Public Works in mid-October.

HOODSPORT

Preferred Engineering design consultant, Steve Lee, met on-site with Mason County Public Health representatives and the stormwater coordinator to review project design challenges associated with grade. Grade is so flat, that minimum Filterra design requirements of 2.5 feet of mulch bed and 3.6 feet depth from outlet pipe to top of grate cannot be met. Alternative design solutions were explored on site. Also discussed during this on-site meeting:

- Designing to allow for easy access for water quality sampling, in the event that future effectiveness monitoring is conducted.
- Noting that the current Hoodsport monitoring sites are in different locations that the proposed LID retrofit project.

Preferred Engineering submitted a Final Technical Memorandum to Mason County Public Works in mid-October.

QAPP Modification Request

- The stormwater monitoring QAPP has been revised and resubmitted to Ecology by Mason County Public Health. Mason County Public Health submitted the proposed changes to the sampling QAPP to Ecology September 17th and awaiting feedback. When the QAPP revisions are approved the stormwater sampling can resume.
- Public Health worked on data validation for Ecology EIM database submittal this quarter.

Tasks/Milestones not achieved and why:

- Water quality monitoring efforts were suspended during this quarter while waiting for review and approval of proposed QAPP revisions.
- LID retrofit construction lost momentum this quarter due to a labor-intensive effort to more fully develop the funding outreach plan, and conduct the first public outreach effort.

Potential Future Challenges to Performance (time delays, staff changes, etc.)

General Comments

The Stormwater Coordinator and other Mason County implementation partners (WSU, MCD, Public Health, Community Development, and Utilities) attended and participated in numerous external coordination efforts including:

- WRIA 16/14b meetings
- Oakland Bay Clean Water District meetings
- Hood Canal Coordinating Council technical committee and Watershed Implementation Plan meetings
- Lower Hood Canal Watershed Coalition meetings
- Mason and HECWN ECO-Net meetings
- New Puget Sound LIO for South Sound region
- Shoreline Master Plan update meetings

List the cumulative totals for all numerically measurable accomplishments for this calendar year

(Example: amount of riparian area planted, length of fencing installed, technical assistance, conservation plans, etc)