

County: Jefferson  
Grant No: SEANWS-2015-JeCoWS-00007

PROJECT TITLE: Northwest Straits Project: Jefferson County Marine Resources Committee (Operations and Projects)

DELIVERABLES FOR TASK NO: Task 3 – Rain Gardens & Stormwater

Deliverable 3.2. Rain Garden Installation Report w photos, design sketch, inflow-outflow data to date, and volunteer sign-in sheets

PROGRESS REPORT: [ ☐ ]

FINAL REPORT [X ☒ ]

PERIOD COVERED: Oct 1, 2015 – September 30, 2016

DATE SUBMITTED: Oct 20, 2016



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## **2016 Jefferson MRC Rain Garden Installation Report**

### **Jefferson MRC 2015-16 Grant Task 3.2**

#### **Installation Description**

The two new 2016 rain gardens were installed in areas identified as priority storm water management areas in the *2016 Assessment and Prioritization for Bioretention Projects in East Jefferson County Report*. A Jefferson MRC subcommittee prioritized the areas identified as high priority and staff worked with the City of Port Townsend and adjacent landowners to identify the two sites where rain gardens would be installed. The two sites were the Jefferson County Courthouse (corner of Washington and Walker Streets) and the Port Townsend Community Center (corner of Taylor and Clay Streets), both of which are high visibility sites for the public, as well as being priority storm water management areas.

Jefferson MRC worked with our WSU Extension partners on the project. Bob Simmons, WSU Extension Water Resources faculty, also serves as MRC staff for a few specific tasks and allocated hours, including the MRC's rain garden projects. In his MRC staff role, Bob developed the rain garden designs and planting plans, obtained approval from adjacent landowners, and obtained necessary permits. (Those permits included sign permits and permits to Work in the City's ROW. An exemption for the cost of those permits was approved by the City of PT as part of their contribution to the projects.) Bob also supervised and worked with City Public Works staff, who excavated and graded the rain gardens, per the designs, backfilled with the appropriate rain garden soil mix and armor as necessary to prevent erosion. Bob also promoted and taught the evening rain garden workshop on June 15<sup>th</sup>, and recruited, organized and supervised volunteers for both rain garden installations. At a certain point, grant funds allocated to MRC salaries for this project ran out, and Bob continued to work on the projects as part of his WSU Extension duties. Those hours were tracked and included in the MRC grant matching funds report.

The MRC also worked with the Native Plant Salvage Foundation (experts in rain garden installations and affiliated with WSU Extension in Thurston County). Their staff procured the plants and other materials for both rain gardens, and assisted with the public educational workshop about rain gardens. Their staff helped direct the planting and mulch placement, which was done with the assistance of a Washington Conservation Corps crew, Master Gardeners, youth, MRC members and other interested community members.

Excavation of the Jefferson County Courthouse rain garden occurred on June 15, followed by planting on June 15 and 16, 2016. Excavation and planting of the Port Townsend Community Center rain garden occurred on June 16<sup>th</sup>. On June 18<sup>th</sup> approximately 1" of rainfall occurred overnight. This rainfall validated the hydrologic functionality of the rain gardens, as they both

infiltrated the water within 24 hours. It also identified areas where additional armoring was necessary, which was done by Bob Simmons and City staff.

Ongoing maintenance of the two rain gardens has occurred through the efforts of four Master Gardener Rain Garden Mentors, with oversight provided by WSU Extension staff. At the time of this report both rain gardens are functioning well and vegetation is filling in nicely. Bob made presentations about the rain gardens at two County Commissioner meetings (pre- and post-construction) and one additional Commissioner briefing. The Port Townsend Leader published a detailed article about the project. Signs were developed for the rain gardens and reviewed/approved by City of Port Townsend and Jefferson County staff.

### **Inflow - Outflow Data**

In order to measure effectiveness of the Garfield Street rain gardens built early in 2015, we installed small monitoring wells, water flow meters and weirs to measure inflow and outflow. The system did not work well and we were unable to collect useful data. We will redeploy the instruments again in the fall of 2016-2017. The monitoring is intended to measure the reduction in the volume of water entering the Monroe Street storm water pipe (that flows directly to Port Townsend Bay) as a result of the two rain garden installations on Garfield Street. Anecdotally, so far in 2016 no overflow and discharge was observed at the outflow of the second downstream rain garden. During 2015, some outflow was observed. The two rain gardens in combination seem to be functioning well this year in reducing a significant amount of stormwater from the drainage area they are designed to serve. Quantification will occur during the 2016-2017 rainfall season based on the monitoring design in place.

### **Photos--County Courthouse**









Photos-Taylor St







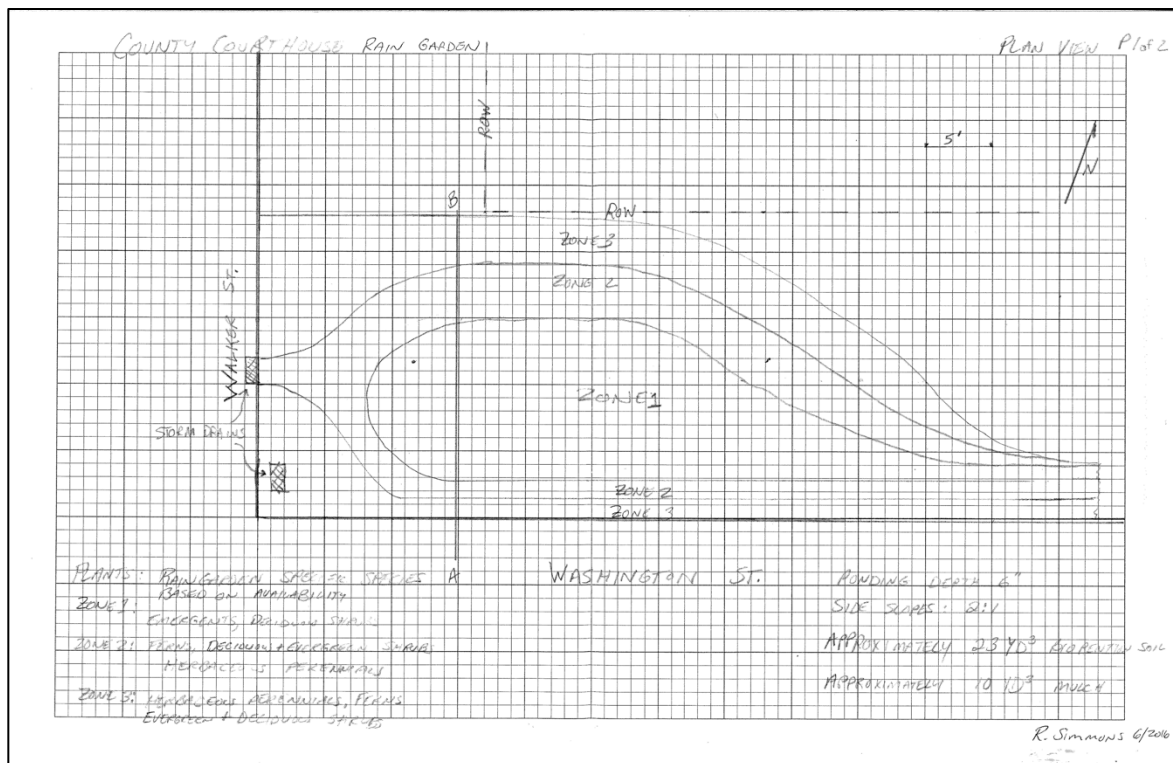
## Design Sketches

Jefferson County Courthouse Rain Garden Location

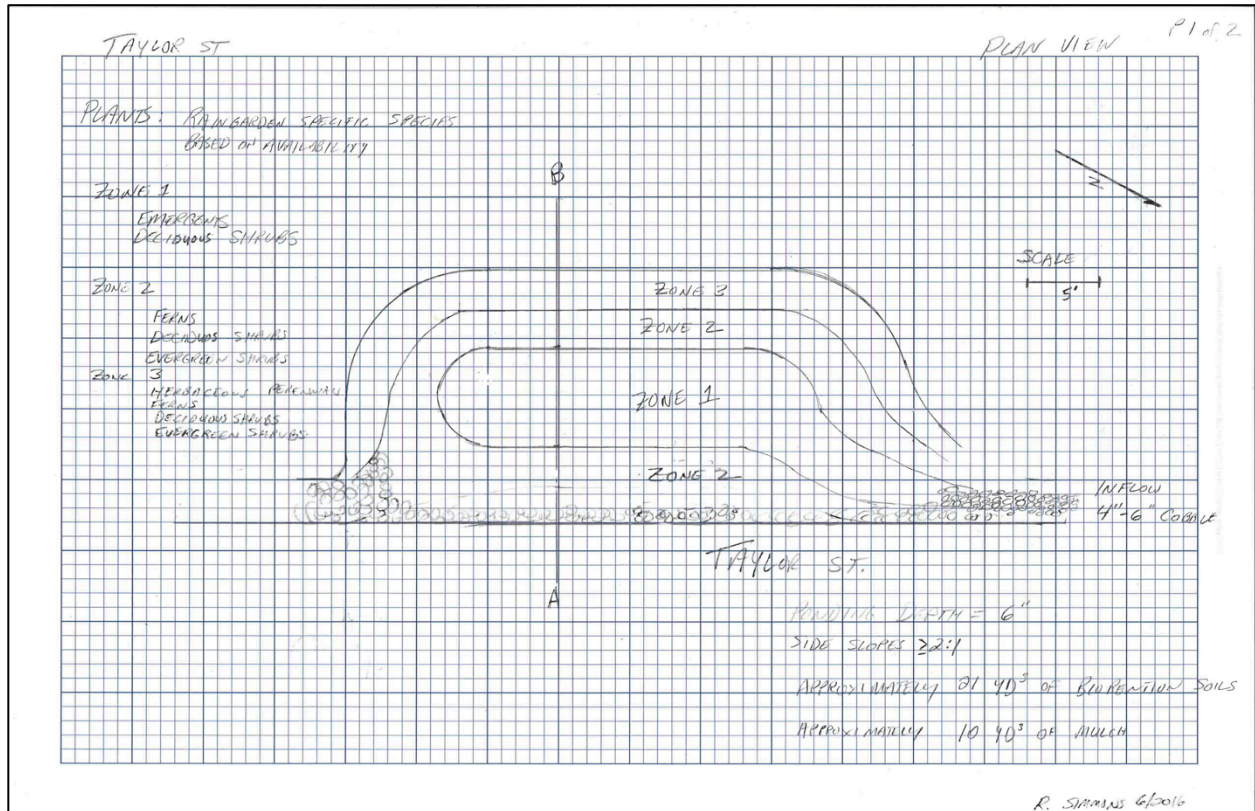


The Jefferson County Marine Resources Committee, in collaboration with the City of Port Townsend and WSU Extension Plan to install a 20'x40' rain garden in the City of Port Townsend ROW on Washington St. near the SW Corner of Washington St. and Walker St. to improve water quality. Construction is planned to occur the second week of June 2016. Staff contact: Bob Simmons, WSU Jefferson County Extension, 360.379.5610 ext. 207 [simmons@wsu.edu](mailto:simmons@wsu.edu)

## County Courthouse Rain Garden Sketch



## Taylor St. Rain Garden Sketch





## Volunteer Sign-in Sheets

Processed list followed by actual sign-in sheets.

Project Title	Date	Name	Hours Served
<b>PT Rain Gardens - Preparation Day</b>	<b>6/14/16</b>	Evelyn McLean	9.25
		Monica Grewal	9.25
		Raven Connolly	3
<b>PT Rain Gardens- Courthouse Planting &amp; prep at Taylor/Clay</b>	<b>6/15/16</b>	Evelyn McLean	14
		Monica Grewal	14
		Theodore Lasky	9.5
		Briana Spencer	9.5
		Audrey Barnes	9.5
		Desire Nordstrom	9.5
		Peter Allen	9.5
		Dylan Harris	9.5
		Michelle Nyman	3
		Wade Crouch	3
		Troy McKelvey	3
		BJ Hedahl	3
		Ellen Larkin	3
<b>Rain Garden Class</b>	<b>6/15/16</b>	Liz Berman	3
		Ellen Larkin	3
		Mike Kail	3
		Pilar Grau	3
		Michelle Nyman	3
		Francesco Tortorici	3
		Evelyn McLean	3
		BJ Hedahl	3
<b>PT Rain Gardens- Courthouse Mulching / Taylor &amp; Clay Planting</b>	<b>6/16/16</b>	Evelyn McLean	14
		Monica Grewal	14
		Theodore Lasky	9.5
		Briana Spencer	9.5
		Audrey Barnes	9.5
		Desire Nordstrom	9.5
		Peter Allen	9.5
		Dylan Harris	9.5
		Ellen Larkin	4.5

		Liz Berman	4
		Matt Berman	4
		Mallorie Weinheimer	3
		Michelle Nyman	3
		Pilar Grau	2
		Tyler Stout	1
		Cody Bircher	1
		Sam Slocter	1
		Mike Loriz	3





NATIVE PLANT  
SALVAGE

VOLUNTEER SIGN IN SHEET

Date: 6/16 Event: ~~Carruthers~~ Carruthers RG Day 2

NAME	EMAIL	VETERAN?	TIME IN	TIME OUT	Join our email list?
Ellen Larkin		N	8:30		
Theodore Lasky		N	08:30		
Brian Spencer		N	8:30		
Andrew Barnes		N	8:30		
<del>Leslie</del> <del>Wright</del>		N	8:30		
<del>Paul</del> Dillon		N	8:30		
Dylan Harris		N	8:30		
Liz Berner		N	9:00		
Matt Berner		N	9:00		
Mallorie Weinheimer		N	10:00		
Nichelle N-ena		N	10:00		
Pilar Genu		N	11:15		
Tyler Stout		N	3:45		
Cody <del>Barnes</del> Bircher		N	3:45		

WCC  
6/15-6/16

SAM Stout & r  
Mike Lore

~~3:45~~  
3:45

Y



NATIVE PLANT  
SALVAGE

VOLUNTEER SIGN IN SHEET

Date: 6/15/16

Event: Rain garden Class Day

NAME	EMAIL	VETERAN?	TIME IN	TIME OUT	Join our email list?
Liz Berman	lizberman@olympus.net		5:30	8:30	yes
Ellen Larkin	Larkellen@me.com	No			yes
Mike Kail	mike@kail.org	Y			yes
Pilar Grau	PGRAU@earthlink.net	No			
Michelle Nyman	michellenyman@1791.com	NC			YES
Francesco Tortorici	francesco@olympicbiochar.com				Yes
BJ HEDAH	bjhedah@hotmail.com				yes
<del>Pilar Grau volunteer list in June 2008</del>					
Michelle Nyman	michellenyman@1791.com	N	9		
Wade Croch	wjstenting@juno.com	N	9		
Troy Mckelvey	troy3@earthlink.net	N	9		
Bin Hedahl	bjhedah@hotmail.com	N	9		