



**Washington State
Department of Transportation**

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March 30, 2015

Ms. Gail Terzi
US Army Corps of Engineers Seattle District
Regulatory Branch CENWS OD RG
PO Box 3755
Seattle, WA 98124-3755

RE: I-5 Blakeslee Junction to Grand Mound Interchange- TDA 11 Mitigation Site

USACE NWS-2008-744

Dear Ms.Terzi:

The Washington State Department of Transportation completed qualitative monitoring of the I-5 TDA 11 mitigation site on July 16, 2014, to address Year-3 (2015) performance standards. Monitoring activities included vegetation observations and photo documentation. This Year-2 report is being issued for compliance with the reporting requirements of the United States Army Corps of Engineers permit number NWS-2008-744 and the Department of Ecology Order 6701.

General Site Information	
USACE NWP IP Number	NWS-2008-744
Ecology WQC#	6701
Mitigation Location	Just north of the Thurston Co./Lewis Co. line on the west side of Interstate 5
LLID Number	1229995467682
Construction Date	2011-2012
Monitoring Period	2013-2022
Year of Monitoring	2 of 10
Type of Impacts	Wetland
Area of Project Wetland Impact	5.61 acres
Type of Mitigation	Wetland Enhancement
Area of Mitigation¹	12 acres

¹ The wetland enhancement/restoration occurs at three total discharge areas (TDA 11, 12, 13) with a combined acreage of approximately 12 acres.

Performance Standards (Year-3)	2014 Results	Management Activities
Minimum density 400 living native trees/acre, minimum density 4,000 living native shrubs/acre, and at least 2 species of native trees and 4 species of native shrubs in the forested areas. No single species will provide more than 60% total aerial cover.	Density of 3,500-4,000 plants/acre	Five western red cedar (<i>Thuja plicata</i>) and five Douglas fir (<i>Pseudotsuga menziesii</i>) trees were planted 2/6/2014.
Minimum density of 4,000 living native shrubs/acre in the scrub-shrub wetland and at least 4 species of native shrubs. No single species will provide more than 60% cover.	Density of 2,000 plants/acre	
At least 50% cover native facultative wet and wetter species within the emergent zone.	70% cover	
Minimum density of 250 living Oregon white oak (<i>Quercus garryana</i>) trees/acre throughout the planted sections of the wetland/enhancement area.	At least 250 trees per acre	
Less than 15% cover Blackberry (<i>Rubus</i> species) and Class A noxious weeds in the combined scrub-shrub and forested planting areas of the onsite mitigation areas.	No Class A weeds; < 1% blackberry	
Less than 10% cover reed canarygrass (<i>Phalaris arundinacea</i>) than existing baseline conditions.	5% cover (no baseline data collected)	Weed control activities were performed on 4/22, 7/9, 8/14, and 9/26 in 2013, and on 4/2, 5/19, 5/27, and 9/15 in 2014.
Japanese knotweed (<i>Fallopia japonica</i>) shall not be present in any amount within the mitigation sites.	None observed	

Site development:

This site is developing as expected for second year establishment. The woody community is thriving and has a low amount of invasive species. The emergent community has nearly 100 percent cover and is diverse in plant species. Density standards in the forested and scrub-shrub zones has not yet been met, however the standards set are high and the site is doing well.

Results for Performance Standard 1

(Minimum density 400 native trees/acre, 4,000 native shrubs/acre and at least 2 tree species and 4 shrub species present in the forested areas. No single species will exceed 60% cover):

Density is estimated at 3,500-4,000 plants per acre. Snowberry (*Symphoricarpos albus*) and Oregon white oak are dominant species. Shrubs present include beaked hazelnut (*Corylus cornuta*) and western serviceberry (*Amelanchier alnifolia*).

Results for Performance Standard 2

(Minimum density 4,000 native shrubs/acre and 4 species of shrubs in the scrub-shrub wetland. No single species will exceed 60% cover):

Density is estimated at 2,000 plants per acre. Dominant species include Sitka willow (*Salix sitchensis*), hardhack (*Spiraea douglasii*), redosier dogwood (*Cornus alba*), and cluster rose (*Rosa pisocarpa*).

Results for Performance Standard 3

(Minimum 50% cover of native facultative wet and wetter species in the emergent wetland):

This area is estimated to have 70 percent cover native facultative wet and wetter species (Photo 1). This exceeds the performance standard. Dominant species include: tufted hairgrass (*Deschampsia caespitosa*), common spikerush (*Eleocharis palustris*), and slough sedge (*Carex obnupta*).

Results for Performance Standard 4

(Minimum density 250 Oregon white oak/acre throughout the planted sections of the wetland restoration/enhancement area):

This standard is likely met. Out of all the Oregon white oak in the buffer, only seven individuals were dead (Photo 2).



Photo 1 – Cover of native facultative wet and wetter species in the emergent wetland (July 2014)



Photo 2 – Density of Oregon white oak (July 2014)

Performance Standard 5

(Maximum 15% cover Blackberry species and Class A noxious weeds in the combined scrub-shrub and forested planting areas of the onsite mitigation areas):

No Class A noxious weeds were observed on site during monitoring activities. The cover of blackberry species is estimated at less than one percent. This is below the performance standard threshold.

Performance Standard 6

(Maximum cover of 10% below baseline conditions for reed canarygrass):

Cover of reed canarygrass is five percent, primarily found in the northeast corner of the riparian buffer. No baseline data was collected.

Performance Standard 7

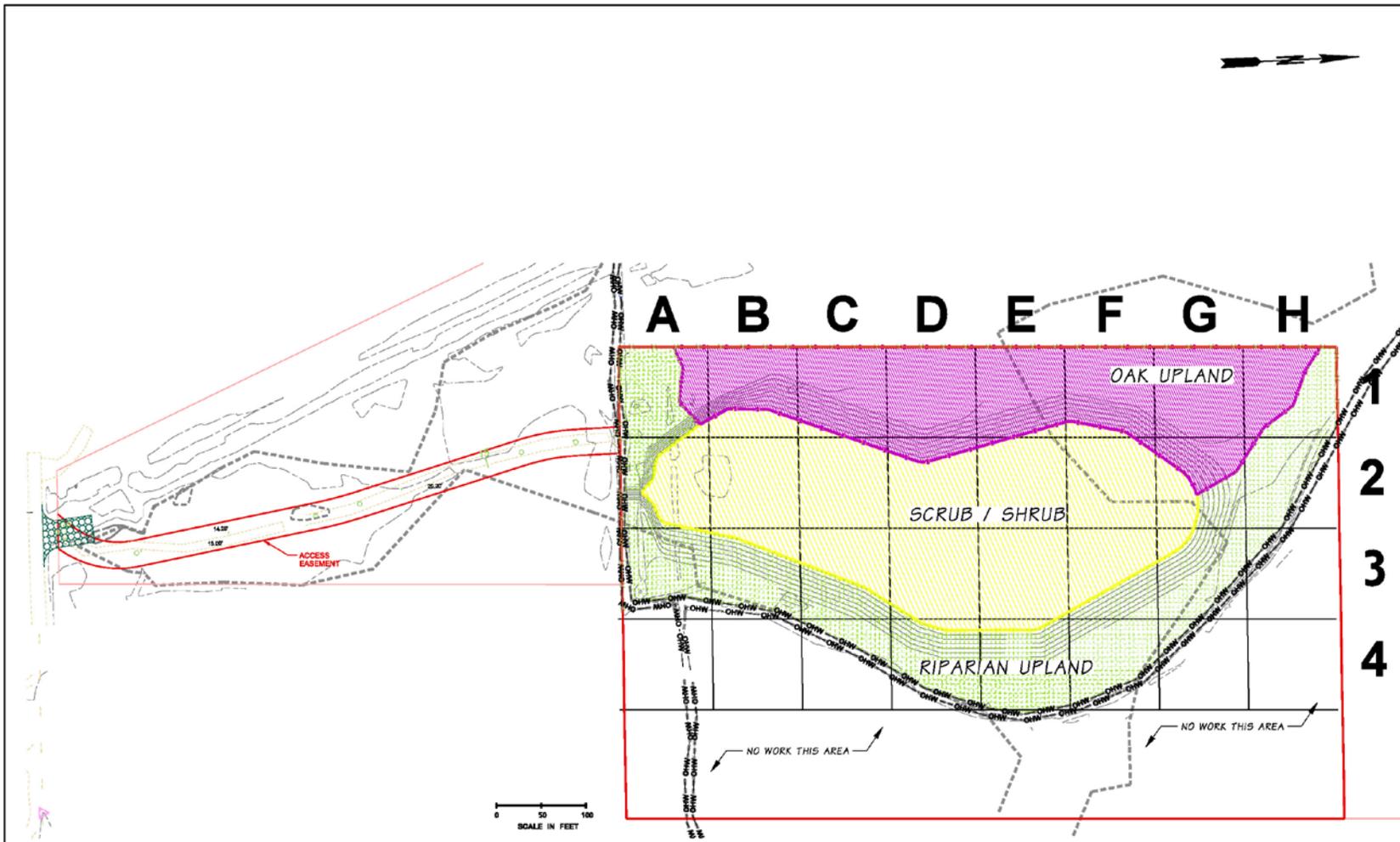
(Japanese knotweed not present in any amount within the mitigation sites):

No Japanese knotweed was observed on site during monitoring activities.

We welcome your questions or comments. Please contact me at 360/570-6640 or by e-mail at busht@wsdot.wa.gov for questions about these mitigation sites.

Sincerely,

Tony Bush
Wetlands Program



FILE NAME: G:\Roadside\01 projects\009117h Mellan Street to Ground Mound (MGM)\03 Construction\CAD\Mitigation Site\1324 PS LS Mill\Plant.dgn		FED.AID PROJ.NO.			I-5 BLAKESLEE JUNCTION RR XING TO GRAND MOUND I/C - ADD LANE PLANTING PLAN - TDA 11	PLAN REF NO 1
TIME: 3:02:08 PM	DATE: 10/24/2011	DESIGNER: 10 WASH JOB NUMBER: 09X318	CHECKED BY: D. CORLETT/R. PHIPPS ENTERED BY: R. PHIPPS CHECKED BY: D. CORLETT PROJ. ENGR. C. NEWELL REGIONAL ADM. B. GERHART			DATE: _____ DATE: _____ DATE: _____ DATE: _____ DATE: _____ DATE: _____