



**Washington State  
Department of Transportation**

Lynn Peterson  
Secretary 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: SR 509/I-5 Freight and Congestion Relief Project (AMB Property) Mitigation Site  
USACE NWP (14, 23) 200500979

Dear Ms. Terzi:

The Washington State Department of Transportation completed qualitative monitoring of SR 509 AMB mitigation site on July 30, 2014, to address Final-year (2016) performance standards. Monitoring activities included vegetation observations and photo documentation. This Year-8 report is being issued for documentation of early achievement of Final-year performance standards for the sixth year in a row.

<b>General Site Information</b>			
<b>USACE NWP 14, 23 Number</b>	200500979		
<b>Mitigation Location</b>	Southwest of Sea-Tac Airport on west side of Des Moines Drive, south of 188 <sup>th</sup> Way, King County		
<b>LLID Number</b>	1223195474339		
<b>Construction Date</b>	2006-2007		
<b>Monitoring Period</b>	2007-2016		
<b>Year of Monitoring</b>	8 of 10		
<b>Area of Project Impact</b>	None to date		
<b>Type of Mitigation<sup>1</sup></b>	Wetland Re-establishment	Wetland Enhancement	Buffer Enhancement
<b>Area of Mitigation</b>	0.63 acres	0.33 acres	2.01 acres

<sup>1</sup> Mitigation acreage sourced from ADVANCE MITIGATION ADDENDUM FINAL WETLAND MITIGATION REPORT: SR 509/I-5 Freight and Congestion Relief Project AMB Mitigation Site (2009).

Performance Standards (Year-10)	2014 Results	Management Activities
Native facultative or wetter woody species will achieve 75% coverage.	90% native cover	
Native upland buffer woody species will achieve 40% coverage.	85% native cover	
Non-native invasive species, to include reed canarygrass ( <i>Phalaris arundinacea</i> ), non-native blackberries ( <i>Rubus</i> spp.), Scot's broom ( <i>Cytisus scoparius</i> ), Japanese knotweed ( <i>Reynoutria</i> spp.), and thistle sp. ( <i>Cirsium</i> spp.) will not exceed 20 percent coverage in each forested and scrub-shrub wetland and upland buffer community. If Japanese knotweed is found at the mitigation site during monitoring, WSDOT will promptly remove the stems above ground and chemically treat it to facilitate elimination of below ground roots and rhizomes.	10% cover across the site, with a single Japanese knotweed plant observed	Japanese knotweed was sprayed in August 2014

**Site development:**

This is a very successful mitigation site. The site is currently in Year-8 of 10 in the monitoring schedule and has met the Year 10 performance standards six years in a row. The scrub-shrub and forested wetland areas and the buffer have developed into dense and diverse communities. Wetland functions are supported by the successful achievement of the performance standards. The vegetation community slows water velocity and several depressional areas temporarily store flood/stormwater during rain events, allowing toxicants and nutrients to settle out with the sediment.

Results for Performance Standard 1

(75% cover of FAC and wetter species in the wetland):

The native facultative or wetter woody cover is estimated at 90 percent (Photo1). This exceeds the final year standard for the sixth year in a row. The dominant species in the wetland include willows (*Salix* spp.) and Oregon ash (*Fraxinus latifolia*). Tree height is estimated at approximately three to five meters.

Results for Performance Standard 2

(40% cover of upland woody species in the buffer):

Cover of native woody species in the upland buffer zone is 75 percent. This is the sixth year in a row that the result exceeds the final year standard. Dominant species in this zone include willows (*Salix* spp.), hardhack (*Spiraea douglasii*), and black cottonwood (*Populus balsamifera* ssp. *trichocarpa*). The tree and shrub heights range from approximately 0.5 to 3 meters tall.

Results for Performance Standard 3

(Non-native invasive species will not exceed 20% cover in each forested and scrub-shrub wetland and upland buffer community):

The cover of all target species is estimated at 10 percent across the site. Species observed included poison hemlock (*Conium maculatum*), thistles (*Cirsium* spp), Himalayan blackberry (*Rubus armeniacus*), Robert geranium (*Geranium robertianum*), and English holly (*Ilex aquifolium*), Japanese knotweed is present in the southern portion of the site just north of an existing wetland area. The one plant that was located was flagged with blue flagging and eradicated within the week.



**Photo 1** – Facultative and wetter species cover in the wetland.

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

Sincerely,

Tony Bush  
Wetlands Program

