



Washington State
Department of Transportation
 Paula Hammond
 Secretary of Transportation

Transportation Building

310 Maple Park Ave
 P.O. Box 47300
 Olympia, WA 98504-7300

360-705-7000
 TTY: 1-800-833-6388
www.wsdot.wa.gov

March 25, 2011

Washington State Department of Fish and
 Wildlife
 Habitat Program
 600 N. Capitol Way
 Olympia, WA 98501-1091

RE: Interstate 5 Everett HOV, SR 526 to SR 2 Vicinity Mitigation Site

HPA Control Number 100266-1

Dear Interested Parties:

The Washington State Department of Transportation completed qualitative monitoring of the Interstate 5 Everett HOV, SR 526 to SR 2 Vicinity mitigation site on August 24, 2010 to address Year-3 (2011) performance standards. Monitoring activities included an assessment of wetland hydrology, vegetation observations, and photo documentation. HPA Control 100266-1 was addressed quantitatively, a total count of live stems was compared to the total number of alive and dead stems combined. This Year-2 report is being issued for compliance with the reporting requirements of the HPA Control 100266-1 and as an update with the USACE permit 200401448.

General Site Information		
HPA Control Number	100266-1	
Mitigation Location	Adjacent to Lowell River Park in the city of Lowell, Snohomish County	
LLID Number	1221920479525	
Construction Date	2008	
Monitoring Period	2009-2018	
Year of Monitoring	2 of 10	
Area of Project Impact	0.04 acre (0.3 wetland and 0.1 jurisdictional ditch)	
Type of Mitigation	Wetland Establishment	Buffer Enhancement
Area of Mitigation	0.08 acre	1.20 acres

Summary of Monitoring Results and Management Activities

Performance Criteria	2010 Results	Management Activities
Performance Standards (2011)		
Wetland establishment area demonstrates wetland hydrology	Present in all intended areas	
Four plants per 100 square feet in scrub-shrub and forested wetland communities.	Density qualitatively estimated at 6 stems/100ft ²	Plant replacements installed spring 2010.
Less than 15% cover of Snohomish County listed Class A weeds and other selected invasive species in the wetland	Qualitatively estimated at < 1% cover	Weed control completed spring 2010
Native herbaceous facultative or wetter vegetation will achieve 70 percent coverage in emergent wetland	Qualitatively estimated at 70% cover	
Four plants per 100 square feet in the buffer community.	Density qualitatively estimated at 9 stems/100ft ²	Plant replacements installed spring 2010.
Less than 15% cover of Snohomish County listed Class A weeds and other selected invasive species in the buffer	Qualitatively estimated at < 1% cover	Weed control completed spring 2010
HPA Permit Requirement (2010)		
80% survival of planted woody species	94% survival of planted woody species	Plant replacements installed spring 2010.

How is the Site Developing?

In general, this site shows vigorous growth and the development expected of a Year-2 site. The density of native woody species has exceeded the performance standard for both the forested and scrub-shrub wetland communities and the buffer. Invasive cover is low across the site and a diverse plant community is beginning to develop in the wetland. The site is on track to meet or exceed all Year-3 performance criteria.

Results for Performance Standard 1 (Wetland hydrology present):

Wetland hydrology was present in all of the intended areas. On each of the three visits in January and March all the sample points exhibited inundation or saturation within the top twelve inches of soil.

Results for Performance Standard 2

(Density of 4 plants per 100 square feet in the wetland):

The density of native woody species in the wetland is qualitatively estimated at 6 plants per 100 square feet. Overall, the forested and scrub-shrub areas appear to be healthy and vigorous. Willows (*Salix* spp.) are the dominant species with twinberry honeysuckle (*Lonicera involucrata*), and redosier dogwood (*Cornus sericea*) as sub-dominants.

Results for Performance Standard 3

(Less than 15% cover of Snohomish County listed Class A weeds in the wetland):

Cover of non-native invasive species in the wetland is estimated at less than one percent, meeting the performance standard for Year-3. Himalayan blackberry (*Rubus armeniacus*) and reed canarygrass (*Phalaris arundinacea*) were present on site. There is an abundant source of invasive propagates that are present around the entire perimeter of the site, including reed canarygrass, Himalayan blackberry, and common tansy (*Tanacetum vulgare*). The region will continue weed control through 2011.



Photo 1 – Woody density in the buffer (August 2010)

Results for Performance Standard 4

(Native herbaceous facultative or wetter vegetation will achieve 70 percent coverage in emergent wetland):

Cover of native herbaceous facultative or wetter vegetation in the wetland is estimated at seventy percent, meeting the performance standard for Year-3. Dominant species include soft rush (*Juncus effusus*), slough sedge (*Carex obnupta*), and small-fruited bulrush (*Scirpus microcarpus*).

Results for Performance Standard 5

(Four plants per 100 square feet in the buffer community.):

The density of native woody species in the buffer is qualitatively estimated at 9 plants per 100 square feet. This greatly exceeds the performance standard for Year-3 (Photo 1). The buffer is composed of a diverse community with snowberry (*Symphoricarpos albus*) and red flower currant (*Ribes sanguineum*), as the dominant species.

Results for Performance Standard 6

(Less than 15% cover of Snohomish County listed Class A weeds in the wetland.):

Cover of non-native invasive species in the buffer is estimated at less than one percent, meeting the performance standard for Year-3. Himalayan blackberry (*Rubus armeniacus*) and reed canarygrass (*Phalaris arundinacea*) were present on site. The region will continue weed control through 2011.

Results for Permit Requirement 1

(100% survival of planted woody species in HPA area)

Survival of woody species within the HPA was determined to be 94 percent. Based on survival the HPA is divided into two distinct areas one which is along the trail and the other which is within the rip-rap surrounding the culvert. The area along the trail appears healthy and vigorous, while the plantings in the rip-rap exhibited the majority of the mortality.

For questions about this report or the mitigation site please contact me at 360-570-6640 or by e-mail at busht@wsdot.wa.gov.

Sincerely,

Tony Bush
Wetland Assessment and Monitoring Program



