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March 25, 2011

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

RE: SR 164 I/C 196th to Highpoint and SR 164 SE 392nd Street I/C (Ritter Property) Mitigation Site

USACE NWP 23 Number 200401380 and NWP 18 Number 200401525
 WIN #A16407H and WIN #A16405C

Dear Ms. Terzi,

The Washington State Department of Transportation completed qualitative monitoring of the site on June 20th, 2010 to address Year-5 (2011) performance measures. Monitoring activities included an assessment of wetland hydrology, vegetation observations, photo documentation and evaluations of habitat structures, fencing and signs. This Year-4 report is being issued for compliance with the USACE NWP 23 number 200401380 and NWP 18 number 200401525 reporting requirements.

| General Site Information | | | |
|-------------------------------|---|---------------------|---------------------------------|
| USACE NWP Number | 200401380 and 200401525 | | |
| Site Location | SR 164 intersection with 196 th Avenue SE, King County | | |
| Construction Date | 2006 | | |
| Monitoring Period | 2007-2012 | | |
| Year of Monitoring | 4 of 5 | | |
| Type of Project Impact | Wetland | | Buffer |
| Area of Project Impact | 0.19 acre | | 0.14 acre |
| Type of Mitigation | Wetland Establishment | Wetland Enhancement | Buffer Enhancement ¹ |
| Area of Mitigation | 0.40 acre | 0.01 acre | 0.71 |

¹ The 0.71 acre of buffer enhancement mitigates for buffer impacts associated with both SR 164 - 196th Ave. SE to Highpoint as well as SR 164 – SE 392nd St. I/C

Summary of Monitoring Results and Management Activities

| Performance Standards ² | 2010 Results | Management Activities |
|--|--|--|
| Hydrology | Present | |
| Native facultative or wetter woody species will achieve a minimum of 35 percent coverage in the scrub-shrub wetland | Native woody aerial cover estimated at 40% | |
| Three native facultative or wetter woody or herbaceous vegetation species each will achieve at least 5 percent relative cover in the PSS community | Present | |
| Less than 15 percent coverage of invasives in the scrub-shrub wetland creation area | Invasive aerial cover estimated at 3% | Weed control occurred in May, June, July, and Sept. of 2010. |
| Native upland buffer woody species will achieve a minimum of 25 percent coverage in the buffer community | Native woody aerial cover estimated at 40% | |
| Three native upland vegetation species will each achieve at least 5 percent relative cover in the buffer community | Present | |
| Less than 15 percent coverage of invasives in the upland buffer community | Invasive aerial cover estimated < 1% | Weed control occurred in May, June, July, and Sept. of 2010. |
| Habitat structures as shown on the plan are in place | Present | |
| Permit Requirement (USACE) | | |
| The relative cover of red alder shall be less than 30 percent in each wetland community and in the upland buffer | One red alder observed on site, trace aerial cover | |
| Emergent and scrub/shrub systems will be monitored annually for five years. | No planned or intended emergent zone on site. Scrub/shrub see above. | |

How is the Site Developing?

The mitigation site is developing well. The hydrology in the wetland is sufficient to support the scrub-shrub plant community as well as a healthy emergent understory. The buffer plantings are beginning to develop into a high-cover, structurally diverse plant community that is providing both visual and ecological buffering to the wetland as well as quality wildlife habitat. The site appears to be on track to meet all final-year (2011) performance standards on schedule.

Results for Performance Standard 1

(Wetland hydrology present):

Monitoring records from February and March 2010 indicate wetland hydrology is present in all intended areas.

² For performance standards and permit requirements, see:

1. United States Army Corps of Engineers. 2005. Department of the Army Permit Number 200401380, and 200401525.

2. Washington State Department of Transportation. 2005. *SR 164 to 196th Avenue SE to High Point Detailed Wetland Mitigation Plan*. Northwest Region Environmental Services.

Results for Performance Standard 2

(Native facultative or wetter woody species will achieve a minimum of 35 percent coverage in the PSS community):

Cover of native FAC or wetter woody species is visually estimated to be 40 percent in the scrub-shrub community. Dominant woody species in this zone included Pacific willow (*Salix lucida* ssp. *lasiandra*), Sitka willow (*Salix sitchensis*), and twinberry honeysuckle (*Lonicera involucrata*).

Results for Performance Standard 3

(Three native facultative or wetter woody or herbaceous vegetation species each will achieve at least 5 percent relative cover in the PSS community):

At least three FAC or wetter species were visually estimated to comprise five percent or greater relative cover in the scrub-shrub community including Pacific willow, Sitka willow, and twinberry honeysuckle. Nootka rose (*Rosa nutkana*) and a couple of native herbaceous species appeared to comprise close to five percent relative cover as well.

Results for Performance Standard 4

(King County listed Class A and other specified weeds will not exceed 15 percent coverage in the scrub-shrub wetland):

Of the applicable species, only reed canarygrass (*Phalaris arundinacea*) was observed in the wetland. Cover of reed canarygrass in the wetland is visually estimated to be three percent.

Results for Performance Standard 5

(Native upland buffer woody species will achieve a minimum of 25 percent coverage in the upland buffer community):

Cover of native upland buffer woody species (interpreted as FAC or drier) is qualitatively estimated to be 40 percent in the buffer. Sitka willow (FACW) is abundant in the buffer, despite being absent from the planting plan for this zone. Total native woody cover (including FACW species) in the buffer is visually estimated to be 65 percent. The dominant woody species in this zone are Sitka willow and black cottonwood (*Populus balsamifera* ssp. *trichocarpa*).

Results for Performance Standard 6

(Three native upland vegetation species will each achieve at least 5 percent relative cover in the buffer community):

Visual estimates indicate that at least three species likely comprise at five percent or greater relative cover. Relative cover of Sitka willow and black cottonwood is estimated to be greater than five percent each. Relative cover of thimbleberry (*Rubus parviflorus*), snowberry (*Symphoricarpos albus*), western red cedar (*Thuja plicata*), and

Pacific willow (*Salix lucida* ssp. *lasiandra*) is estimated to be about five percent each.

Results for Performance Standard 7

(King County listed Class A and other specified weeds will not exceed 15 percent coverage in the buffer):

The applicable noxious weeds that were observed in the buffer were reed canarygrass, bull thistle (*Cirsium vulgare*), and Scotch broom (*Cytisus scoparius*). Cover of these species in the buffer is visually estimated to be less than one percent.

Results for Performance Standard 8

(Habitat structures as shown on the plans are in place):

All three raptor perches shown on the plans were observed in place and intact



Photo 1 – Woody cover in scrub-shrub wetland (June 2010)

Results for Permit Requirement 1

(Less than 30% relative cover of red alder in each the wetland and buffer):

Only one small red alder (*Alnus rubra*) sapling was observed on site during monitoring amounting to only trace coverage.

Results for Permit Requirement 2

(Emergent and scrub/shrub systems will be monitored annually for five years.):

An emergent zone was not planned or intended within the mitigation site. For scrub/shrub monitoring see Performance Standards 2 and 3 above.

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

