Re-Vegetation and Wetland Restoration Year-2 Monitoring Report

Taxiway F Cleanup Action Project
Burlington, Washington
USACE Permit No. NWS-2008019

for

Department of the Army

September 30, 2014

GeoEngineers
Earth Science + Technology

Re-Vegetation and Wetland Restoration Year-2 Monitoring Report

Taxiway F Cleanup Action Project
Burlington, Washington
USACE Permit No. NWS-2008019

for
Department of the Army

September 30, 2014

GeoEngineers

Plaza 600 Building
600 Stewart Street, Suite 1700
Seattle, Washington 98101
206.728.2674

Re-Vegetation and Wetland Restoration
Year-2 Monitoring Report

Taxiway F Cleanup Action Project
Burlington, Washington
USACE Permit No. NWS-2008-19

File No. 5364-013-07

September 30, 2014

Prepared for:

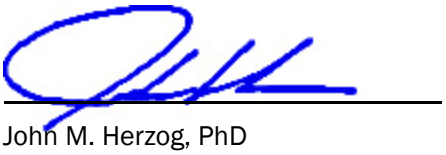
Department of the Army
Seattle District, Corps of Engineers
PO Box 3755
Seattle, Washington 98124-3755

Attention: Randel Perry

Prepared by:

GeoEngineers, Inc.
Plaza 600 Building
600 Stewart Street, Suite 1700
Seattle, Washington 98101
206.728.2674

Fiona McNair, MS, PWS
Wetland Scientist



John M. Herzog, PhD
Principal

FM:AJ:JMH:cam

cc: Sara Young and Heather Haslip/Port of Skagit

GeoEngineers

Table of Contents

LIST OF FIGURES

APPENDICES

1.0 INTRODUCTION

On behalf of Port of Skagit County (Port), this report has been prepared to document the year-2 monitoring event for the wetland restoration areas at the Taxiway F Cleanup Action Project Site (Site) located near the western edge of the Skagit Regional Airport in Burlington, Washington (Figure 1 – Vicinity Map). This Year-2 Monitoring Report has been prepared to meet the requirements of the US Army Corps of Engineers (USACE) - approved Updated Wetland Restoration Plan (WRP; GeoEngineers, 2011a). Restoration of the wetlands has been completed as part of the Port's cleanup actions at the Site as required under a Consent Decree with the Washington State Department of Ecology.

The initial site conditions; wetland impacts due to cleanup action and restoration measures; and monitoring requirements and performance standards are detailed in the WRP and summarized in Section 2, 3 and 5 of this report. As-built conditions of the restored wetlands and results of as-build monitoring event are detailed in the As-Built Monitoring Report (GeoEngineers, 2012) and summarized in Section 4 of this report. The As-Built Monitoring Report was submitted to the USACE in December 2012 and the Year 1 Monitoring Report was submitted in December 2013 (GeoEngineers 2013a). Section 6 of this report summarizes observations made during the year-2 monitoring event, which was completed at the Site on August 1, 2014.

2.0 INITIAL SITE CONDITIONS

The Site contains four wetlands designated as A, B, C, and D as shown on Figure 2. A fenced area at the Site contains the entirety of Wetlands B and C and portions of Wetlands A and D. A Hangar building, asphalt and gravel areas and grass upland areas are also present within the fenced area. Wetland D extends north of the fenced area and Wetland A extends north, east and south of the fenced area.

Wetlands B, C and D are small Category IV wetlands. Vegetation in Wetlands C and D consist primarily of emergent plants while the dominant vegetation in Wetland B consists of shrubs. Wetland A is a Category III wetland and contains both emergent (northern portion) and forested (southern portion) plant communities. The detailed information about the Site wetlands including wetland delineation, classification, functional analysis, and dominant vegetation species is presented in the Critical Areas Report (Hart Crowser, 2007). As described in the Critical Areas Report, the dominant vegetation at the Site consists of a mix of upland and wetland vegetation including Western red cedar (*Thuja plicata*), red alder (*Alnus rubra*), big-leaf maple (*Acer macrophyllum*), black cottonwood (*Populus balsamifera*), hardhack (*Spiraea douglasii*), Scouler's willow (*Salix scoulerana*), salmonberry (*Rubus spectabilis*), vine maple (*Acer circinatum*), Indian plum (*Oemleria cerasiformis*), swamp gooseberry (*Ribes lacustre*), red elderberry (*Sambucus racemosa*), Himalayan blackberry (*Rubus armeniacus*), evergreen blackberry (*Rubus lacinatus*), poison-hemlock (*Conium maculatum*), sword fern (*Polystichum munitum*), lady fern (*Athyrium filix-femina*), stinging nettle (*Urtica dioica*), soft rush (*Juncus effusus*), slough sedge (*Carex obnupta*), piggy-back plant (*Tolmiea menziesii*), large-leaf avens (*Geum macrophyllum*), trailing blackberry (*Rubus ursinus*), false lily-of-the-valley (*Maianthemum dilatatum*), reed canarygrass (*Phalaris arundinacea*), and a variety of native and non-native grasses.

3.0 WETLAND, BUFFER AND UPLAND IMPACTS AND RESTORATION

The cleanup action, described in the Ecology – approved Cleanup Action Plan (CAP) (GeoEngineers, 2011b) and Engineering Design Report (EDR) (GeoEngineers, 2011c), was completed to remove soil that had been contaminated with pesticides and herbicides as a result of historical operations. The cleanup action activities are documented in the Construction Completion As-Built Report (GeoEngineers, 2013b). The cleanup action involved soil excavation within wetlands areas, buffer areas, and paved (asphalt, concrete and gravel) uplands areas. The limit of the remedial excavation is also the restoration boundary as shown relative to the Site on Figure 2. Pre-existing mature coniferous trees identified in Figure 2 were preserved during cleanup action activities.

The wetlands, buffer and grass/herb upland areas that were impacted from cleanup action activities and then restored are summarized below.

- The combined wetland areas that were excavated and restored include Forested Wetland area of Wetland A, Emergent Wetland areas of Wetland A, C and D, and Scrub-Shrub Wetland area of Wetland B. The combined wetland areas that were excavated and restored measured approximately 31,464 square feet (sq ft) in size. Table 1 provides a detailed summary of the wetland impact/restoration areas.

TABLE 1. WETLAND IMPACTS AND RESTORATION AREAS

Wetland	Cowardin Vegetation Class[1] Impacted	Plant Communities Restored	Wetland Impact and Restoration Areas (square feet)
Wetland A	Forested	Tree and shrub	25,519
	Emergent	Grass and emergent	3,897
Wetland B	Scrub-Shrub	Shrub	229
Wetland C	Emergent	Grass and emergent	73
Wetland D	Emergent	Grass and emergent	1,746
		Total	**31,464**

Note:

[1] Cowardin vegetation class assigned based on Classification of Wetland and Deep Water Habitats of the United States (Cowardin et al 1979), as reported in the Hart Crowser Critical Areas Report (Hart Crowser, 2007).

- The buffer area that was excavated and restored includes Forested Buffer of Wetland A. This area measured approximately 21,888 sq ft in size and was restored with native plant communities including a mix of trees and shrubs.
- The Grass/Herb Upland area that was excavated and restored totaled approximately 24,454 sq ft. This area was restored with grass and emergent plant communities.

As-built conditions, documenting restoration and re-vegetation activities completed within Forested Wetland, Emergent Wetland, Scrub-Shrub Wetland, Forested Buffer and Grass/Herb Upland areas following the completion of remedial excavation activities, are described in Section 4 below and shown on Figure 2.

4.0 RE-VEGETATION AND WETLAND RESTORATION AS-BUILT CONDITIONS

Re-vegetation and wetland restoration activities were completed in compliance with the WRP and USACE approved Nationwide Permit 38 No. NWS-2008-19 with the exceptions noted below in Section 4.3 and 4.5. Copies of USACE approved nationwide permit documents and a certificate of compliance with Permit NWS-2008-19 are included in Appendix A and B respectively. Restoration activities including backfilling, grading, planting, mulching and seeding activities are summarized in Sections 4.1 through 4.5. Detailed observations made during the as-built monitoring event are summarized in the As-Built Monitoring Report (GeoEngineers, 2012).

Restoration activities were partly completed by subcontractors to Clearcreek Contractors, the Port's general contractor for the cleanup action.

4.1. Backfilling and Grading

Following remedial excavation activities the wetlands (Forested Wetland area of Wetland A, Emergent Wetland areas of Wetland A, C and D, and Scrub-Shrub Wetland area of Wetland B), wetlands buffer (Forested Buffer of Wetland A), and Grass/Herb Uplands areas were backfilled with clean imported topsoil material to meet the specified design grades and to restore preexisting wetland function and rainwater runoff drainage flow at the Site. Topsoil material that met project specifications requirements as approved by the Port was used for backfilling activities. Backfilling and grading activities were completed in general accordance with the project design drawings and specifications.

4.2. Topsoil Planting Mounds

Topsoil planting mounds were constructed on top of the finished backfill surface at the planting locations of western red cedar and big leaf maple for the purpose of elevating the root balls above the saturated soils. Topsoil planting mound construction activities were completed prior to plant installation activities as generally described in the project design drawings and specifications. Topsoil planting mounds measured approximately 6 feet in diameter and 1 foot tall, and were constructed using topsoil material that met project specifications requirement and/or as approved by the Port.

4.3. Plant Installation

Following completion of the backfill placement and final grading, plant installation was completed within the Forested Wetland and Forested Buffer area of Wetland A, and Scrub-Shrub Wetland area of Wetland B.

The plant quantities installed at the Site are summarized below and are compared to plant quantities required as per the WRP in Table 2.

- The Forested Wetland area of Wetland A was planted with 330 trees, including black cottonwood and western red cedar and 1,295 shrubs, including twinberry (*Lonicera involucrata*), salmonberry (*Rubus spectabilis*) and hardhack (*Spiraea douglasii*).
- The Scrub-Shrub Wetland area of Wetland B was planted with 12 hardhack shrubs.
- The Forested Buffer area of Wetland A was planted with 279 trees, including black cottonwood, western redcedar and bigleaf maple and 1,095 shrubs, including vine maple, lady fern *(Athyrium filix-femina*), and red elderberry.

Plant counts were completed after delivery to the Site and/or verified using purchase records to confirm that the quantity of plant material purchased and imported to the Site met the quantities specified in the WRP. The average plant spacing generally conformed to the plant spacing required as per the WRP.

Plant installation activities were completed in general accordance with the WRP, and USACE approved Nationwide Permit 38 No. NWS-2008-19 with the following exceptions:

- Within the Forested Wetland portion of Wetland A, additional western red cedar (10 additional plants), twinberry (5 additional plants), and hardhack (15 additional plants) were planted as compared to number required per the WRP.
- Within the Forested Buffer for Wetland A, additional western red cedar (5 additional plants) were planted, as compared to number required per the WRP.

4.4. Mulch Placement

To provide erosion and weed control within Forested Wetland and Forested Buffer areas of Wetland A, mulch rings were created around each of the installed plants. Mulch rings were created as generally described in the project design drawings and project specifications. An approximately 4-inch thick mulch ring was placed within a 1-foot radius of plants while ensuring that mulch did not touch the trunk or stem of the plant.

TABLE 2. NUMBER OF PLANTS INSTALLED AT THE SITE

Vegetation Strata	Species	Plant Quantities Required as per the WRP			Plant Quantities Installed		
		Forested Wetland (Wetland A)	Scrub-Shrub Wetland (Wetland B)	Forested Buffer (Wetland A Buffer)	Forested Wetland (Wetland A)	Scrub-Shrub Wetland (Wetland B)	Forested Buffer (Wetland A Buffer)
Trees	Black cottonwood *(Populus balsamifera)*	120	--	75	120	--	75
	Western red cedar *(Thuja plicata)*	200	--	125	210	--	130
	Bigleaf maple *(Acer macrophyllum)*	--	--	74	--	--	74
	Totals	**320**	**--**	**274**	**330**	**--**	**279**

Vegetation Strata	Species	Plant Quantities Required as per the WRP			Plant Quantities Installed		
		Forested Wetland (Wetland A)	Scrub-Shrub Wetland (Wetland B)	Forested Buffer (Wetland A Buffer)	Forested Wetland (Wetland A)	Scrub-Shrub Wetland (Wetland B)	Forested Buffer (Wetland A Buffer)
Shrubs	Twinberry *(Lonicera involucrata)*	425	--	--	430	--	--
	Salmonberry *(Rubus spectabilis)*	425	--	--	425	--	--
	Hardhack *(Spiraea douglasii)*	425	12	--	440	12	--
	Vine maple *(Acer circinatum)*	--	--	365	--	--	365
	Lady fern *(Athyrium filix femina)*	--	--	365	--	--	365
	Red elderberry *(Sambucus racemosa)*	--	--	365	--	--	365
	Totals	**1,275**	**12**	**1,095**	**1,295**	**12**	**1,095**

Notes:

-- Plant species not specified for that planting area.

4.5. Seeding

To provide erosion control and habitat value within the Scrub-Shrub Wetland area of Wetland B, Emergent Wetland area of Wetland A, C and D, and Grass/Herb Upland areas, seed mixes were applied on finished surfaces of these areas following the completion of backfilling and grading activities.

Seeding activities were completed in general accordance with the WRP, and USACE approved Nationwide Permit 38 No. NWS-2008-19 with the following exception:

- Velvet grass (*Holcus lanatus*), which was a specified component of the Wetland/Emergent Seed Mix (GeoEngineers, 2011a), was substituted by Redtop Bentgrass (*Agrostic alba [gigantean]*) due to the commercial unavailability of velvet grass.

The Emergent Wetland areas of Wetland A, C and D was seeded with Wetland/Emergent Seed Mix (Table 3) and Grass-Herb Upland area was seeded with Erosion Control Upland Seed Mix (Table 4). Purchase records provided by the contractor were reviewed to confirm that the seed mixes purchased for the Site complied with the seed mix requirements listed in Table 3 and Table 4.

TABLE 3. WETLAND/EMERGENT SEED MIX

Species Common Name	Species Scientific Name	Percent by Weight
Slender rush	*Juncus tenuis*	15
Colonial bentgrass	*Agrostis tenuis*	30
Redtop Bentgrass	*Agrostic alba (gigantean)*	30
Kentucky bluegrass	*Poa pratensis*	25

TABLE 4. EROSION CONTROL UPLAND SEED MIX

Species Common Name	Species Scientific Name	Percent by Weight
White clover	*Trifolium repens*	20
Annual ryegrass	*Lolium perenne*	20
Creeping red fescue	*Festuca rubra*	60

4.6. As-Built Monitoring

An as-built monitoring event was completed at the Site on September 25, 2012. All dead plants identified during the as-built monitoring event were replaced. The wetlands area, buffer area, and grass/herb upland area impacted as the result of the completed cleanup actions at the Site were successfully restored as required by the WRP (GeoEngineers, 2011a) and USACE Nationwide Permit 38 No. NWS-2008-19 with the minor exceptions noted above.

During the as-built monitoring event, monitoring (transect) locations were established and baseline vegetation inventory data was collected for use in the future monitoring of the Site. Two transects, A1 and A2, measuring approximately 100 feet in length were established within Wetland A. Transects B1, C1 and D1, measuring approximately 32 feet, 20 feet and 67 feet in length were established in Wetland B, C and D respectively. The approximate location of the established transects is shown on Figures 3 and 4. To establish a baseline inventory for subsequent monitoring events, along transects A1, A2 and B1 a GeoEngineers, Inc. (GeoEngineers) biologist counted the installed native plants (trees/shrubs) and documented the approximate location of each plant along the transect. Along transects C1 and D1 the biologist estimated percentage cover of emergent and herbaceous vegetation. Baseline data is documented in the As-Built Monitoring Report (GeoEngineers, 2012) and will be used to evaluate compliance with the established performance standards (Section 5 of this report) throughout the monitoring period (GeoEngineers, 2012).

5.0 MONITORING REQUIREMENTS AND PERFORMANCE STANDARDS

The As-Built Report satisfied the first monitoring requirement for the site by documenting the existing conditions at the site post-construction and post-plant installation. Subsequent monitoring events will be conducted annually at the end of the growing season for Years 1, 2, 3, 4, and 5, and yearly monitoring reports will be generated for each of the monitoring events. This report satisfies the third monitoring requirement for the site by documenting the year-2 monitoring event.

Performance standards, monitoring methods and maintenance and contingency procedures outlined in the WRP are summarized in the following sections.

5.1. Performance Standards

The following performance standards have been established for use in comparing the monitoring results for Years 1 through 5 with the results of the as-built monitoring event.

- Acceptable cover standards for native plants, summed across vegetation classes (native trees, shrubs, and/or native grasses/emergent vegetation), will be as follows:
    - 1st Year Monitoring Event: Minimum of 20 percent cover
    - 2nd Year Monitoring Event: Minimum of 40 percent cover
    - 3rd Year Monitoring Event: Minimum of 60 percent cover
    - 4th Year Monitoring Event: Minimum of 60 percent cover
    - 5th Year Monitoring Event: Minimum of 80 percent cover
- Invasive, exotic and undesirable species aerial coverage shall be 10 percent or less after 5 years.
    - Years 1 through 5: 10 percent or less coverage of invasive, exotic or undesirable species

5.2. Monitoring Methods

Restoration area monitoring includes quantitative and qualitative data collection to measure the success of the restoration activities. A qualified biologist or restoration specialist conducts the Site monitoring field work.

A biologist or restoration specialist makes general observations on the condition of the Site (e.g., plant cover, density, survival and presence of naturally colonizing plants). In addition, wildlife sightings (e.g., bird, amphibian, reptile, and/or mammal) or signs of habitat use (e.g., scat, burrows, woodpecker damage, beaver sign) are recorded during each monitoring event.

Restoration plant communities are sampled along the permanent vegetation transects established during the as-built monitoring event. For each subsequent monitoring event, restoration plantings are visually evaluated to determine survival rate, health, and vigor along each of the established transects. Plants are recorded as live, stressed, or dead/dying. Plant survival is calculated in Years 1 through 5 by dividing the number of installed living plants by the number of initially installed plants. The baseline number of initially installed plants was documented in the As-Built Monitoring Report (GeoEngineers, 2012).

For emergent wetland areas, visual estimation of percent cover for each emergent or herbaceous plant species is made within an area 3 feet on either side of the transect. For scrub-shrub and forested wetland areas vegetation percent cover estimates is made for each plant recorded along the transect (within 3 feet of the transect on either side). Percent cover data is collected for installed native plants, volunteer plants (naturally recruited) and invasive species (e.g., Himalayan blackberry, reed canarygrass, Scot's broom, English ivy). Species coverage values is then summed to determine the total areal coverage for each transect.

5.3. Maintenance and Contingency Procedures

Maintenance and contingency actions shall include, but are not limited to irrigation, removal of noxious and invasive weeds, replacement of dead/dying plants or undesirable volunteer species, plant species substitution, application of repellents or browse control, addition of mulch, and weeding. Application of fertilizers after plant installation is not anticipated. If during a monitoring event, plants are observed to be stressed from lack of water, irrigation may be necessary.

6.0 YEAR-2 VEGETATION MONITORING RESULTS

The year-2 monitoring event was completed at the Site on August 1, 2014 to collect and record plant count, percent cover and condition information to compare with performance standards and determine if the site is meeting permit requirements. A photographic record of the site visit is provided in Appendix C.

6.1. Performance Monitoring Locations

Transects A1 and A2 established within Wetland A and transects B1, C1 and D1 established in Wetland B, C and D respectively during the as-built monitoring event were used for monitoring. The approximate location of the established transects is shown on Figures 3 and 4. The percent cover of emergent/herbaceous vegetation within Wetland C and Wetland D was estimated visually along each transect at transition points between species. Estimation of percent cover of shrub and tree species within Wetland A and Wetland B was completed by visually estimating the average canopy diameter of each plant observed/inventoried along the transect. Where significant numbers of volunteer native emergent plant species (e.g., rush or sedge) were observed along transects A1, A2 and B1, an estimate of their canopy diameter was also completed.

During the year-2 monitoring event, counts and percent cover estimates were completed along transects A1, A2, and B1 by a GeoEngineers biologist of native trees and shrubs and significant volunteer native emergent plants. Along transects C1 and D1 the biologist estimated percentage cover of emergent and herbaceous vegetation.

6.2. General Site Observations

Within Wetland A and adjacent buffer areas shrubs and trees were growing and some were thriving. Twinberry (*Lonicera involucrata*) and western red cedar (*Thuja plicata*) were the best performing plant species with several inches to a foot of new growth, while some hardhack (*Spiraea douglasii*) and black cottonwood (*Populus balsamifera*) were also doing well. Within Wetland A desirable native volunteer, or naturally recruited, plant species that are naturally becoming established include red alder (*Alnus rubra*), black cottonwood, and salmonberry (*Rubus spectabilis*). Other plant species that are continuing to become established in Wetland A include Watson's willowherb (*Epilobium watsonii*), reed canary grass (*Phalaris arundinacea*), lambs quarters (*Chenopodium album*), bull thistle (*Circium vulgare*) and teasel (*Dipsacus sylvestris*). The most prevalent weed in Wetland A is Watson's willowherb, a native herb. It is prevalent throughout Wetland A and has formed monotypic patches in some areas. Reed canary grass cover within Wetland A is low (approximately 2 to 3 percent).

Within Wetland B the hardhack that had died between the as-built and the year-1 monitoring event had been replaced with twinberry, which was performing well. Other than twinberry and hardhack, the

restored portion of Wetland B was dominated by grass species (e.g., bentgrass, bluegrass and reed canary grass) and some weedy herbaceous species (e.g., teasel).

Within Wetlands C and D emergent vegetation generally consisted of a mixture of upland and wetland grasses (e.g., ryegrass and bluegrass) with some reed canary grass. Wetland emergent species (e.g., rush and sedge) had not become established in these wetland areas yet.

6.3. Wildlife Observations

Below is a list of wildlife, wildlife sign or habitats observed during the year-2 monitoring event:

- American goldfinch (*Spinus tristis*) were feeding on thistle and teasel in the adjacent fields.
- Golden-crowned kinglets (*Regulus satrapa*) were perching and flitting among the salmonberry (*Rubus spectabilis*) and elderberry in the buffer for Wetland A.
- Black-capped chickadees (*Poecile atricapillus*) and chestnut-backed chickadees (*Poecile rufescens*) were perching and flitting at the edges of the forest along adjacent to Wetlands A and B.
- Dark-eyed juncos (*Junco hyemalis*) were foraging on the ground in areas with shrub cover (Wetlands B and A, and adjacent buffer).
- A ponded area at the southern end of Wetland A, with ridged stemmed emergent vegetation along its margins, may provide suitable breeding habitat for amphibians. This ponded area did not have standing water in it during the August 1 site visit.

6.4. Transect Results

Results for count, percent survival and percent cover statistics for the 2014 year-2 monitoring event (as compared to As-Built conditions) are presented below in Tables 5, 6, 7 and 8.

TABLE 5. YEAR-2 COUNTS AND SURVIVAL STATISTICS FOR WETLAND A & B TRANSECTS

Transect	As-Built	Year-2					
	Count[1]	Total Count[2] (Live & Dead)	Dead Count	Percent Survival (As-built)[3]	Percent Survival (Year-2)[3]	Stressed Count[4]	Percent Stressed[5]
A1	44	55	2	120%	96%	2	4%
A2	47	66	2	136%	97%	2	3%
B1	8	27	0	338%	100%	0	0%

Notes:

1 – Number of plants documented for the as-built event is the same as the number of plants installed because all dead plants observed during the as-built monitoring event were replaced.

2 – Counts of plants include volunteer/naturally recruited native species such as red alder, cottonwood, salmonberry and soft rush. Counts of plants within Wetland B include twenty-two twinberry plants that were installed within the transect area as part of maintenance and contingency measures in 2013/2014. Not all individual volunteers were counted but instead some were recorded as "clumps" of plants with an associated percent cover statistic.

3 – As-built percent survival statistics were calculated using the number of live plants during the Year-2 event and total count along the transect for the As-Built event. Year-2 percent survival statistics were calculated using the number of live plants during the Year-2 event and total count along the transect for the Year-2 event. Year-2 survival statistics are lower because of the additional naturally recruited plants

4 - "Stressed" is defined as a plant with broken branches/stems; dried, withered or severely discolored leaves; and/or a plant that has shown little growth from the previous year.

5 – Percent stressed is based on Year-2 total counts.

TABLE 6. YEAR-2 PERCENT COVER STATISTICS FOR WETLAND A & B TRANSECTS

Transect	Year-2 Percent Cover	Year-2 Percent Cover Performance Standard	Met the Year-2 Performance Standard for Percent Cover?	Difference
A1	70	40	YES	+30
A2	90	40	YES	+50
B1	25	40	NO	-15

Along transect A1, of the 55 native plants observed, two were dead (one cottonwood that died in 2013 and one vine maple that died in 2014) and two were stressed (one salmonberry and one vine maple). Percent survival of native plants was 120 percent (comparing Year-2 live counts with As-Built counts) or 96 percent (comparing year-2 live counts with year-2 total counts). Low mortality rates and a significant number of naturally recruited individuals resulted in high percent survival rates. The stressed plants along A1 were characterized by broken or browsed tops (with regrowth at the base), presence of powdery mildew and/or discolored leaves, and slow growth since the As-Built event. Percent cover of native plants along A1 was 70 percent, which is 30 percent greater than the year-2 performance standard of 40 percent. There were two small patched of Himalayan blackberry along transect A1 and Watson's willowherb (*Epilobium watsonii*) is prevalent throughout Wetland A.

Along transect A2, of the 66 plants observed, two were dead (hardhack/spirea and cottonwood both of which died the year after installation) and 2 were stressed (hardhack). Percent survival of native plants was 136 percent (comparing Year-2 live counts with As-Built counts) or 97 percent (comparing year-2 live counts with year-2 total counts). Similar to transect A1, low mortality rates and a significant number of naturally recruited plants resulted in high percent survival rates along transect A2. Stressed plants had

moderately desiccated leaves and some broken/browsed branches. Percent cover of native plants along A2 was 90 percent, which is 50 percent greater than the year-2 performance standard of 40 percent. Non-native invasive species along transect A2 included reed canary grass (2 percent) and Himalayan blackberry (1.3 percent). From 83 feet to 100 feet along transect A2, reed canary grass and other grasses were starting to compete with the native plants, however competition was not interfering with growth significantly. Watson's willowherb is prevalent throughout Wetland A.

In November 2013, twinberry plants were installed within Wetland B to compensate for poor survival rate of hardhack observed during year-1 monitoring event. During the year-2 monitoring event, of the 27 native plants observed along transect B1, none were dead (hardhack that had died after installation were no longer visible) and none were stressed. The newly installed twinberry plants were observed to be in good condition. Percent survival of native plants was 338 percent (comparing Year-2 live counts with As-Built counts) and 100 percent (comparing year-2 live counts with year-2 total counts). Percent cover of native plants along B1 was 25 percent, which is 15 percent less than the year-2 performance standard.

TABLE 7. YEAR-2 VEGETATION MONITORING FOR WETLAND C & D TRANSECTS

Transect	Percent Cover of Emergent/ Herbaceous Species (%)	Percent Cover of Bluegrass & Bentgrass (%)	Percent Cover of Other Grasses (%)	Percent Cover of Reed Canary Grass (%)	Percent Cover Bare Ground (%)
C1	97	80	15	2	3
D1	95	45	5	45	5

Percent cover of emergent/herbaceous plant species along transects C1 and D1 is 97 and 95 percent, respectively (Table 7). Plant species observed within Wetlands C and D (bluegrass and bentgrass) are consistent with species specified in the wetland seed mix (Table 3). Upland seed mix species (Table 4) such as ryegrass (*Lolium perenne*) and clover (*Trifolium repens*) which were observed during the as-built and year-1 monitoring events within Wetland C and D, were not observed during the year-2 monitoring event. Percent cover of native species along Wetlands C and D transects exceed the 2nd year performance standard of 40 percent cover.

Reed canary grass aerial coverage along transect within Wetland D was 45 percent, which is 35 percent higher than the performance standards for invasive, exotic and undesirable species (i.e. 10 percent or less for monitoring years 1 through 5). The reed canary grass is growing within the swale portion of the wetland, north of the transect. Adjacent wetland areas along the northern fence line and to the north of the Site contain wetland emergent species such as soft rush (*Juncus effusus*), daggerlead rush (*Juncus ensifolius*), slough sedge (*Carex obnupta*) and small-fruit bulrush (*Scirpus microcarpus*). These species are expected to naturally spread into Wetlands C and D via seed dispersal and spreading rhizomes.

TABLE 8. YEAR-2 VEGETATION MONITORING SUMMARY

Wetland	Transect	Percent Survival of Native Plants[1] (%)	Percent Cover of Native Plants (%)	Percent Cover of Invasive Non-Native Plants (%)
A	A1	120	70	1
	A2	136	90	3.3
B	B1	338	**25**	5
C	C1	100	97	2
D	D1	100	95	**45**

Notes:

1 – Percent survival comparing as-built total counts with year-2 live counts. There are no yearly performance standards for percent survival.

X – Underlined and bold numbers are statistics that do not meet the year-2 performance standards for native plant percent cover (40 percent) and/or non-native invasive percent cover (equal to or less than 10 percent).

7.0 CONCLUSIONS

Results of the year-2 monitoring event indicate that Wetlands A, C and D are exceeding the year-2 performance standard of 40 percent cover for native plants (Table 8, Section 6.4). Within Wetland B new twinberry plants installed in November 2013 to compensate for poor performing hardhack are in good condition. These newly installed twinberry plants have increased cover of native shrubs in Wetland B to 25 percent during year-2 monitoring as compared to 5 percent observed during year-1 monitoring. Percent cover of native plants within Wetland B is below the year-2 performance standard of 40 percent. It usually takes newly installed plants at least one year to recover from being transplanted before they start to put on significant growth. The twinberry plants are expected to grow more substantially during year-3 and year-4.

Reed canary grass covered 45 percent of the transect area within Wetland D during the year-2 monitoring event. Although this constitutes an aerial coverage that exceeds the performance standards for invasive, exotic, and undesirable species (i.e. 10 percent cover or less for monitoring years 1 through 5) by 35 percent, follow-up actions are not recommended. Reed canary grass invasion typically occurs after ground disturbance in an area with a local seed source or where adjacent plants can spread by rhizome. Reed canary grass is growing in the fields adjacent to the Taxiway F site, and also within Wetland D and adjacent buffer areas. Additional disturbance within Wetland D to control the reed canary grass would create an environment where reed canary grass and other weeds (e.g., teasel and thistle) would have an advantage to become established. The reed canary grass is currently providing a thick layer of emergent vegetation cover that facilitates sedimentation to improve water quality and it also creates a tall canopy of grass to provide cover for small mammals and birds.

8.0 LIMITATIONS

We have prepared this report for U.S. Army Corps of Engineers, and Port of Skagit and their authorized agents to document re-vegetation and wetland restoration conditions one year after the as-built monitoring event at the Taxiway F Cleanup Action Project. Within the limitations of scope, schedule and

budget, our services have been executed in accordance with generally accepted practices for restoration monitoring documentation in this area at the time this letter was prepared. The conclusions, recommendations, and opinions presented in this letter are based on our professional knowledge, judgment and experience. No warranty or other conditions, express or implied, should be understood.

9.0 REFERENCES

Cowardin LM, Carter V, Golet FC, and LaRoe ET, (1979). Classification of Wetland and Deep Water Habitats of the United States. Performed for Office of Biological Services, Fish and Wildlife Service, U.S. Department of the Interior, Washington, D.C.

GeoEngineers, Inc., (2013a), "Re-Vegetation and Wetland Restoration Year-1 Monitoring Report, Port of Skagit County - Taxiway F Site, Skagit County, Washington." GEI File No. 5364-013-07, December 18, 2013.

GeoEngineers, Inc., (2013b), "Construction Completion As-Built Report, Taxiway F Site, Skagit Regional Airport, Burlington, Washington." GEI File No. 5364-013-04, April 5, 2013.

GeoEngineers, Inc., (2012), "Re-Vegetation and Wetland Restoration As Built Report, Port of Skagit County - Taxiway F Site, Skagit County, Washington." GEI File No. 5364-013-04, December 17, 2012.

GeoEngineers, Inc., (2011a), "Updated Wetland Restoration Plan, Port of Skagit County - Taxiway F Site, Skagit County, Washington." GEI File No. 5364-013-02, January 27, 2011.

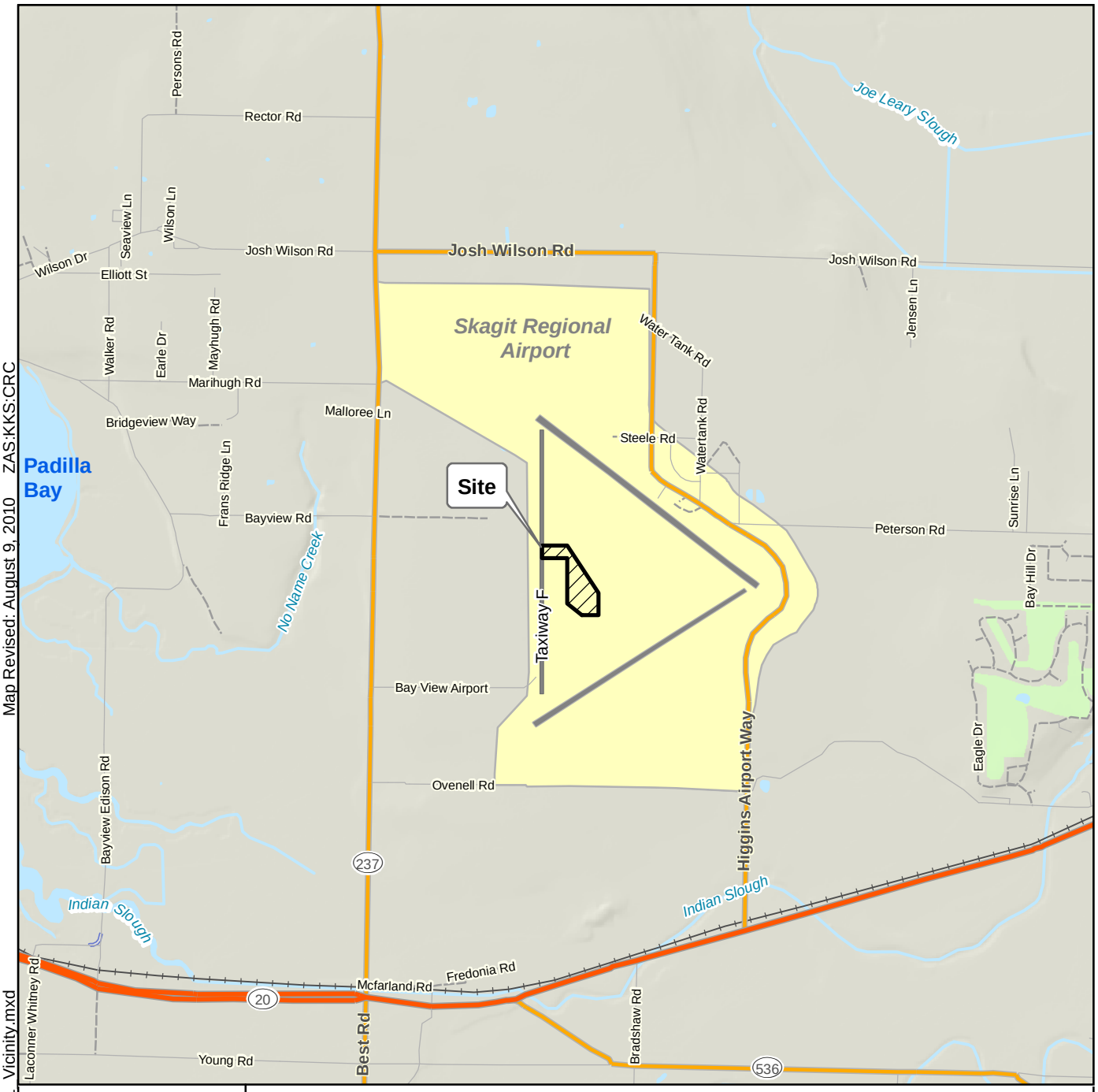
GeoEngineers, Inc., (2011b). "Cleanup Action Plan, Taxiway F Site, Skagit Regional Airport, Burlington, Washington." GEI File No. 5364-013-02, March 16, 2011.

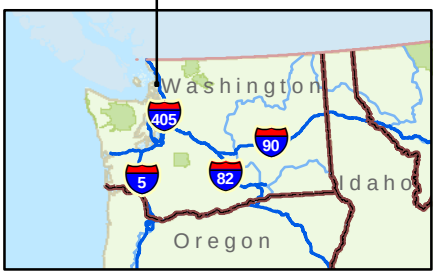
GeoEngineers, Inc., (2011c). "Final Engineering Design Report, Taxiway F Site, Skagit Regional Airport, Burlington, Washington." GEI File No. 5364-013-03, July 13, 2011.

Hart Crowser. 2007. Critical Areas Report – Wetlands. Port of Skagit County Farmers Supply/Tronsdale Site. Skagit County, Washington. Prepared for Port of Skagit County. Hart Crowser Project # 12053-18.

FIGURES

GeoEngineers





N
W E
S

3,000 0 3,000
Feet

Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
3. It is unlawful to copy or reproduce all or any part thereof, whether for personal use or resale, without permission.

Data Sources: ESRI Data & Maps, Street Maps 2005

Transverse Mercator, Zone 10 N North, North American Datum 1983
North arrow oriented to grid north

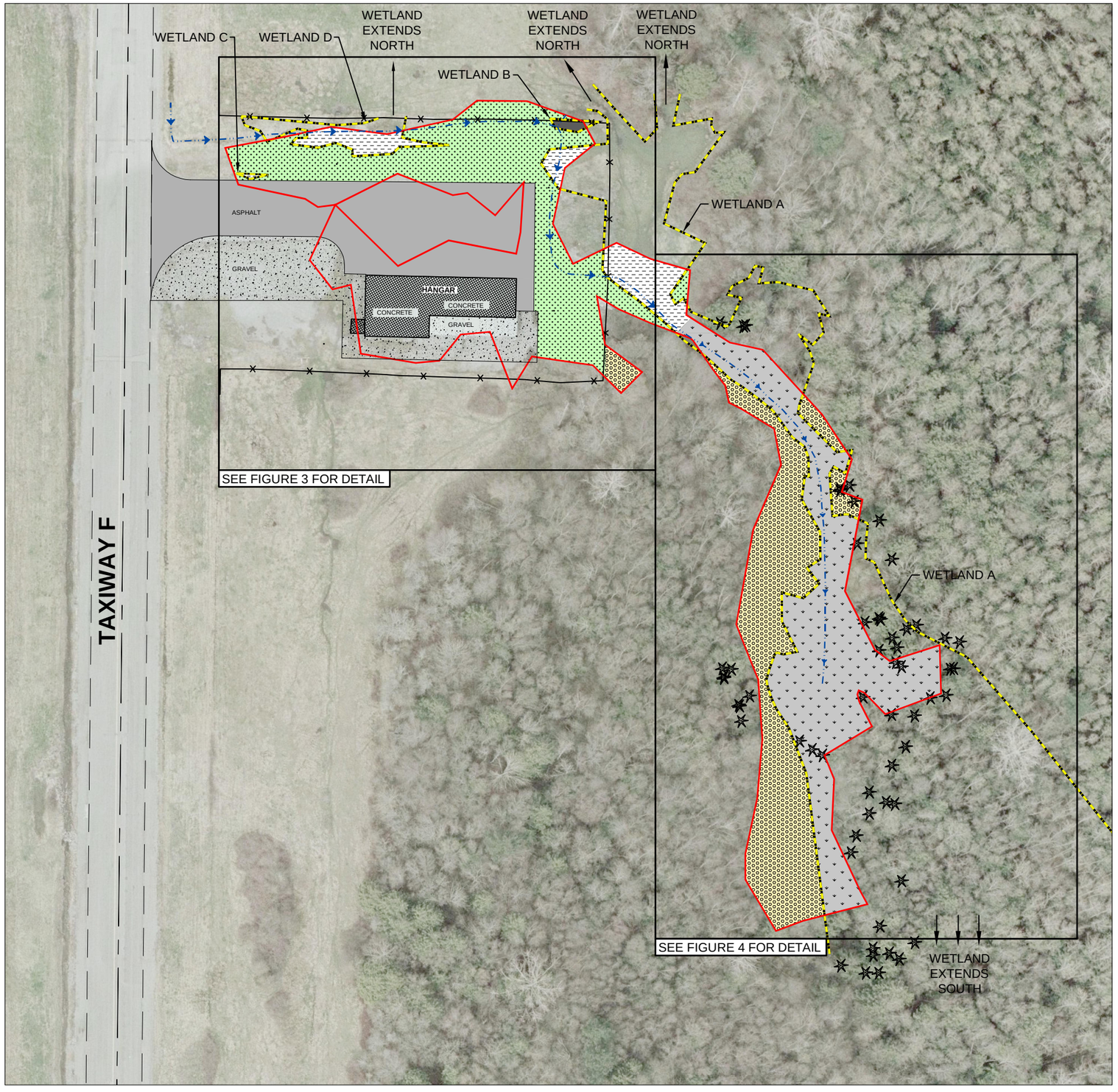
Vicinity Map

Taxiway F Site
Burlington, Washington

GeoEngineers

Figure 1

Office: SEA Path: P:\536401\GIS\536401302 FIG-1 Vicinity.mxd Map Revised: August 9, 2010 ZAS:KKS:CRC



Legend

- Approximate Limits of Remedial Excavation and Restoration
- Approximate Limits of Wetland Areas (Based on Hart Crowser 2007 Survey)
- Pre-Existing Mature Coniferous Trees (Preserved during cleanup action activities)
- Fence Line
- Drainage Channel (Approximate Rainwater Runoff Flow Direction)

Restoration Area

- Forested Wetland (25,519 sq ft)
- Emergent Wetland (5,716 sq ft)
- Scrub-Shrub Wetland (229 sq ft)
- Forested Buffer (21,888 sq ft)
- Grass / Herb Upland (Buffer and Non-Buffer) (24,454 sq ft)

N
W E
S

100 0 100
FEET

Notes

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

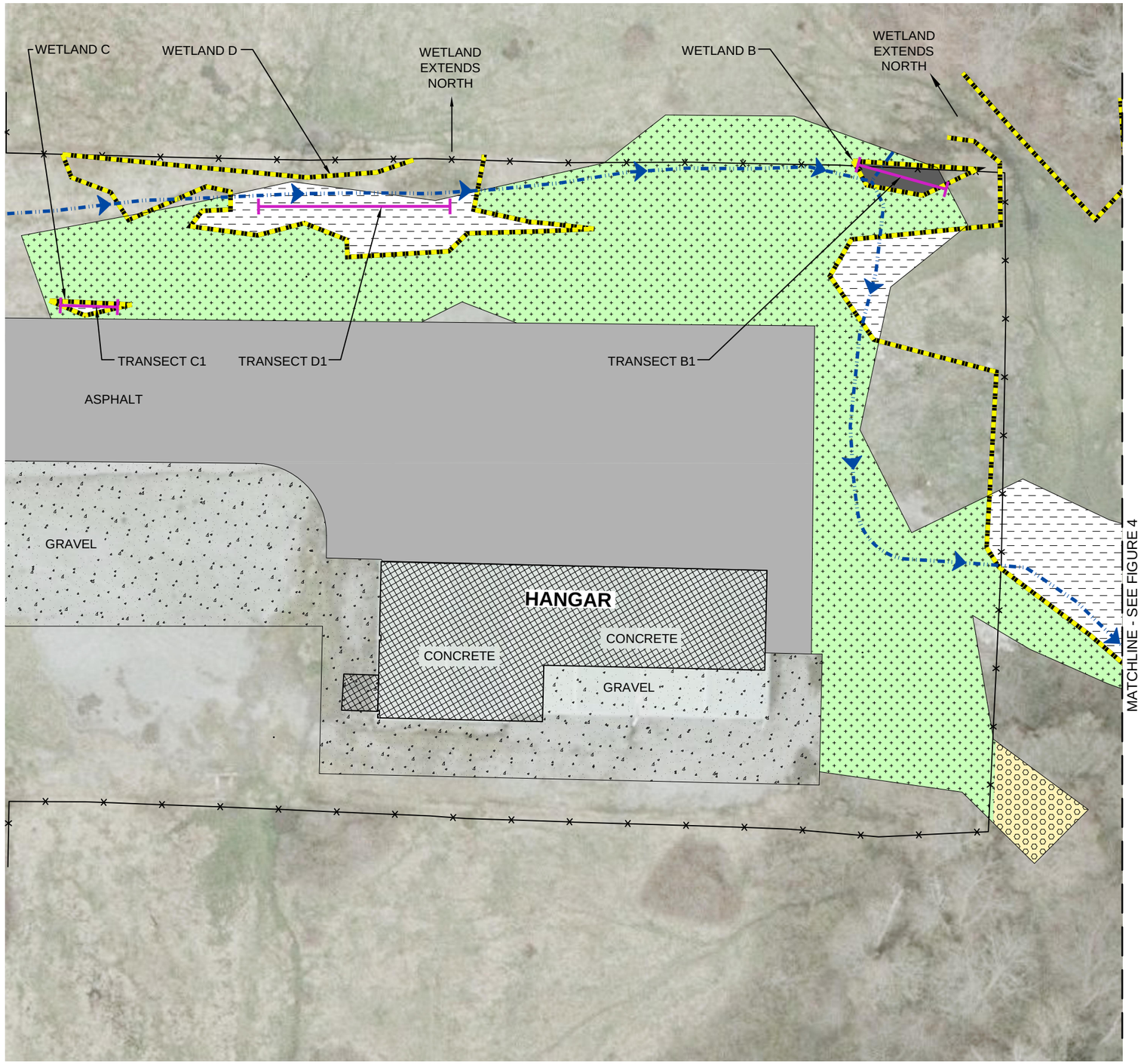
Re-Vegetation and Wetland Restoration As-Built Conditions

Taxiway F Site
Burlington, Washington

GeoEngineers

Figure 2

P:\15\5364013\04\CAD\Wetland As-Built Report\5364013O4 Fig 2 Wetland Asbuilt.dwg\TAB:Fig 2 modified by THICHAUD on Nov 14, 2012 - 18:17



Legend

- Approximate Limits of Wetland Areas (Based on Hart Crowser 2007 Survey)
- Pre-Existing Mature Coniferous Trees (Preserved during cleanup action activities)
- Fence Line
- Drainage Channel (Approximate Rainwater Runoff Flow Direction)

Restoration Area

- Emergent Wetland
- Scrub-Shrub Wetland
- Forested Buffer
- Grass / Herb Upland (Buffer and Non-Buffer)

N
W E
S

40 0 40
FEET

Notes

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Monitoring Locations - Wetlands B, C and D

Taxiway F Site
Burlington, Washington

GeoEngineers

Figure 3

P:\15\15364013\04\CAD\Wetland As-Built Report\15364013O4 Fig 3-4 Wetland Asbuilt.dwg\TAB:Fig 3 modified by TMICHAUD on Nov 14, 2012 - 18:16

MATCHLINE - SEE FIGURE 3

Legend

Approximate Limits of Wetland Areas
(Based on Hart Crowser 2007 Survey)

Pre-Existing Mature Coniferous Trees
(Preserved during cleanup action activities)

Drainage Channel
(Approximate Rainwater Runoff Flow Direction)

Restoration Area

Forested Wetland

Emergent Wetland

Forested Buffer

Grass / Herb Upland (Buffer and Non-Buffer)

TRANSECT A1

TRANSECT A2

WETLAND A

WETLAND EXTENDS SOUTH

N
W E
S

40 0 40
FEET

Notes

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Monitoring Locations - Wetland A

Taxiway F Site
Burlington, Washington

GeoEngineers

Figure 4

P:\1\15364013\04\CAD\Wetland As-built Report\15364013O4 Fig 3-4 Wetland Asbuilt.dwg\TAB:Fig 4 modified by TMichaud on Nov 14, 2012 - 18:13

APPENDICES

GeoEngineers

APPENDIX A
Copies of Approved Permits

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 3755
SEATTLE, WASHINGTON 98124-3755

REPLY TO
ATTENTION OF

JUL 17 2008

RECEIVED
JUL 21 2008
PORT OF SKAGIT COUNTY

Regulatory Branch

Port of Skagit County
Ms. Sara Young
Post office Box 348
Burlington, Washington 98233

Reference: NWS-2008-19-NO
Skagit County, Port of

Dear Ms. Young:

We have reviewed your application to excavate and place fill in wetlands near Burlington, Skagit County, Washington. Based on the information you provided to us, Nationwide Permit 38, *Cleanup of Hazardous and Toxic Waste* (Federal Register, March 12, 2007 Vol. 72, No. 47), authorizes your proposal to clean up contaminated sediments as depicted on the enclosed drawings dated June 2008. In order for this NWP authorization to be valid, you must ensure that the work is performed in accordance with the enclosed *Nationwide Permit 38, Terms and Conditions* and the following special conditions:

a. The permittee must install and maintain sediment and erosion control during construction at the site and until the disturbed soil has been stabilized.

b. The permittee must implement the provisions of the document titled, "*Wetland Restoration Plan, Port of Skagit County Farmer's Supply/Tronsdale Site, Skagit County, Washington*," dated June 24, 2008 and the addendum (planting plan) dated July 7, 2008 in their entirety.

c. A status reports on the wetland and buffer remediation (restoration), including photos, must be submitted to the Corps, Seattle District, Regulatory Branch, 13 months from the date of permit issuance. All reports must be submitted to the Corps, Seattle District, Regulatory Branch and must prominently display the reference number NWS-2008-19-NO.

The authorized work complies with the Washington State Department of Ecology's (Ecology) Water Quality Certification and the Coastal Zone Management Act requirements for this NWP. No further coordination with Ecology is required for these requirements.

We have reviewed your project pursuant to the requirements of the Endangered Species Act (ESA) and the Magnuson-Stevens Fishery Conservation and Management Act in regards to Essential Fish Habitat (EFH). We have determined that this project complies with the requirements of NWP National General Condition regarding ESA and will not adversely affect EFH.

We have completed an approved jurisdictional determination for your project area which can be found on our website at http://www.nws.usace.army.mil/ click on Regulatory, Regulatory/Permits, Recent Jurisdictional Determinations. If you object to this determination, you may request an administrative appeal under our regulations 33 CFR 331 as described in the enclosed *Appeal Process Fact Sheet* and the *Notification of Administrative Appeal Options and Process and Request for Appeal* form.

Our verification of this NWP authorization is valid for 2 years from the date of this letter unless the NWP is modified, reissued, or revoked prior to that date. If the authorized work has not been completed by that date, please contact us to discuss the status of your authorization. Failure to comply with all terms and conditions of this NWP verification invalidates this authorization and could result in a violation of Section 404 of the Clean Water Act and/or Section 10 of the 1899 Rivers and Harbors Act. Also, you must obtain all State and local permits that apply to this project.

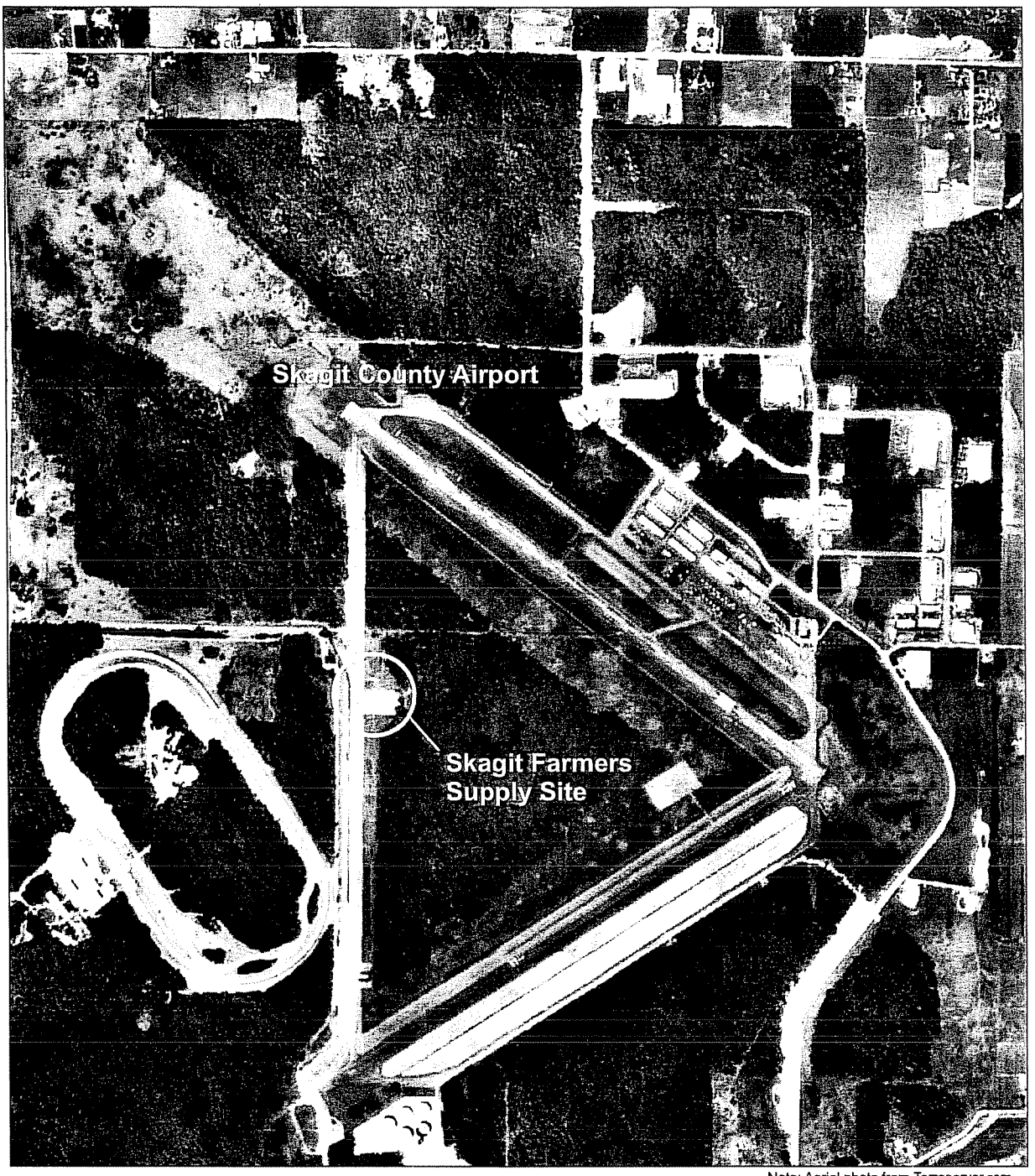
Upon completing the authorized work, you must fill out and return the enclosed *Certificate of Compliance with Department of the Army Permit* form. Thank you for your cooperation during the permit process. We are interested in your experience with our Regulatory Program and encourage you to complete a customer service survey form. This form and information about our program is available on our website.

A copy of this letter with enclosure will be furnished to Celina Abercrombie of Hart Crowser, Inc. at 120 3rd Avenue South, Suite 110, Edmonds, Washington 98020. If you have any questions about this letter, please contact me at (206) 764-6985 or via email at randel.j.perry@usace.army.mil.

Sincerely,

Randel Perry, Project Manager
Regulatory Branch

Enclosures

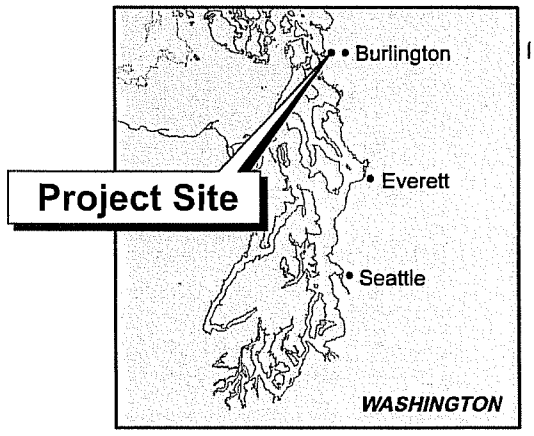


Note: Aerial photo from Terraserver.com

48° 28' 13.88"
122° 25' 46.55"

0 1,400 2,800

Approximate Scale in Feet



Former Skagit Farmers Supply Site
Burlington, Washington

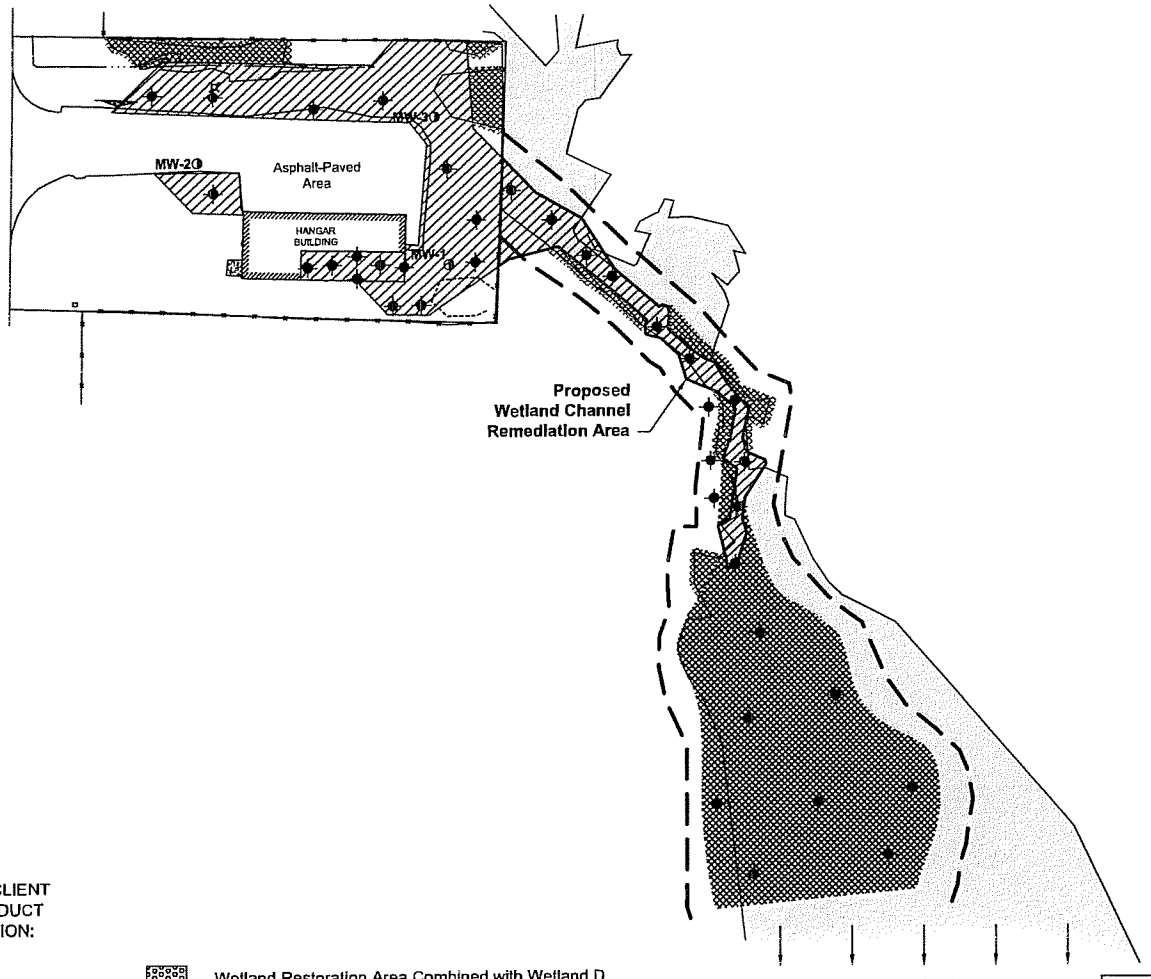
Vicinity Map

12053-18 Corps Ref# NWS-2008-19-NO 6/08

HARTCROWSER

Figure 1 of 2

EAL 06/24/08 1205318-AD.cdr



CONFIDENTIAL: PRIVILEGED ATTORNEY-CLIENT COMMUNICATION ATTORNEY WORK PRODUCT PREPARED IN ANTICIPATION OF LITIGATION: RESTRICTED DISTRIBUTION

MW-1 2004 Groundwater Monitoring Well Location and Number

Proposed Verification Sample Location

Additional Verification Sample Location

Wetland Restoration Area Combined with Wetland D

Original Planned Remediation Area

Additional Remediation Area

Wetland Area (Based on July 2007 Survey)

Expanded Remediation Area (to improve access and reduce risk)

Remediation Contingency Area

Note:

1. Refer to the Wetland Restoration Plan (Hart Crowser 2007) for additional wetland delineation information.
2. Monitoring wells MW-1, MW-2, and MW-3 to be abandoned.

Former Skagit Farmers Supply Site
Burlington, Washington

Facility Remediation Areas and Verification Sample Location Plan

12053-18 NWJ-7008-19-NO 6/08

HART CROWSER

Figure 2 of 2

EAL 06/23/08 1205318-023.dwg

US Army Corps
of Engineers
Seattle District

NATIONWIDE PERMIT 38
Terms and Conditions

Effective Date: September 10, 2007

In addition to any special condition that may be required on a case-by-case basis by the District Engineer, the following terms and conditions must be met, as applicable, for a Nationwide Permit 38 authorization to be valid in Washington State.

A. DESCRIPTION OF AUTHORIZED ACTIVITIES

38. Cleanup of Hazardous and Toxic Waste. Specific activities required to effect the containment, stabilization, or removal of hazardous or toxic waste materials that are performed, ordered, or sponsored by a government agency with established legal or regulatory authority. Court ordered remedial action plans or related settlements are also authorized by this NWP. This NWP does not authorize the establishment of new disposal sites or the expansion of existing sites used for the disposal of hazardous or toxic waste.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 27.) (Sections 10 and 404)

Note: Activities undertaken entirely on a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site by authority of CERCLA as approved or required by EPA, are not required to obtain permits under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act.

B. CORPS NATIONAL GENERAL CONDITIONS FOR ALL NWPs

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation. (b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States. (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable

date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.

15. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

16. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

17. Endangered Species. (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed. (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. (c) Non-federal permittees shall notify the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. (d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs. (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their World Wide Web pages at *http://www.fws.gov/* and *http://www.noaa.gov/fisheries.html* respectively.

18. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied. (b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of

Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed. (d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. (e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, explaining the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

19. Designated Critical Resource Waters. Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment. The district engineer may also designate additional critical resource waters after notice and opportunity for comment. (a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 27, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

20. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal: (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site). (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal. (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10 acre and require pre-construction notification, unless the district engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement. For wetland losses of 1/10 acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered. (d) For losses of streams or other

open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream restoration, to ensure that the activity results in minimal adverse effects on the aquatic environment. (e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2 acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2 acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs. (f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses. (g) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan. (h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

21. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

22. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

23. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

24. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

25. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated

liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)

(Date)

26. Compliance Certification. Each permittee who received an NWP verification from the Corps must submit a signed certification regarding the completed work and any required mitigation. The certification form must be forwarded by the Corps with the NWP verification letter and will include: (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general or specific conditions; (b) A statement that any required mitigation was completed in accordance with the permit conditions; and (c) The signature of the permittee certifying the completion of the work and mitigation.

27. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, as a general rule, will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity: (1) Until notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or (2) If 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 17 that listed species or critical habitat might affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 18 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) is completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee cannot begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information: (1) Name, address and telephone numbers of the prospective permittee; (2) Location of the proposed project; (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided result in a quicker decision.); (4) The PCN must include a delineation of special aquatic sites and other waters of the United States on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters of the United States, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, where appropriate; (5) If the proposed activity will result in the loss of greater than 1/10 acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan. (6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the

PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and (7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level. (2) For all NWP 48 activities requiring pre-construction notification and for other NWP activities requiring pre-construction notification to the district engineer that result in the loss of greater than 1/2-acre of waters of the United States, the district engineer will immediately provide (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy of the PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5. (3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act. (4) Applicants are encouraged to provide the Corps multiple copies of pre-construction notifications to expedite agency coordination. (5) For NWP 48 activities that require reporting, the district engineer will provide a copy of each report within 10 calendar days of receipt to the appropriate regional office of the NMFS.

(e) District Engineer's Decision: In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If the proposed activity requires a PCN and will result in a loss of greater than 1/10 acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any conditions the district engineer deems necessary. The district engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan.

28. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

C. Corps Seattle District Regional General Conditions

1. Aquatic Resources Requiring Special Protection. The following restrictions apply to activities in Washington State requiring Department of the Army authorization:

(a) Activities resulting in a loss of waters of the United States in a mature forested wetland, bog, bog-like wetland, aspen-dominated wetland, or alkali wetland are not authorized by NWP, except the following NWPs:

NWP 3 – Maintenance
NWP 20 – Oil Spill Cleanup
NWP 32 – Completed Enforcement Actions
NWP 38 – Cleanup of Hazardous and Toxic Waste
NWP 47 – Pipeline Safety Program Designated Time Sensitive Inspections and Repairs

(b) For activities in or affecting a mature forested wetland, bog, bog-like wetland, wetland in a dunal system along the Washington coast, vernal pool, aspen-dominated wetland, alkali wetland, camas prairie wetland, or marine water with eelgrass beds (except for NWP 48) *and not prohibited by the preceding general regional condition 1.a.*, the permittee must submit a pre-construction notification to the District Engineer in accordance with Nationwide Permit General Condition 27 (Pre-Construction Notification).

2. Access. You must allow representatives of this office to inspect the authorized activity at any time deemed necessary to ensure that the work is being, or has been, accomplished in accordance with the terms and conditions of your permit.

3. Commencement Bay. Activities requiring Department of the Army authorization and located in the Commencement Bay Study Area are not authorized by the following NWPs:

NWP 12 – Utility Line Activities (substations)
NWP 13 – Bank Stabilization
NWP 14 – Linear Transportation Projects
NWP 23 – Approved Categorical Exclusions
NWP 29 – Residential Developments
NWP 39 – Commercial and Institutional Developments
NWP 40 – Agricultural Activities
NWP 41 – Reshaping Existing Drainage Ditches
NWP 42 – Recreational Facilities
NWP 43 – Stormwater Management Facilities

4. Bank Stabilization. All bank stabilization projects require pre-construction notification to the District Engineer in accordance with Nationwide Permit General Condition 27 (Pre-Construction Notification). Each notification must include a planting plan using native riparian plant species unless the applicant demonstrates that a planting plan is

not appropriate or not practicable. Each notification must also include the following information, except as waived by the District Engineer:

(a) Need for the work, including the cause of the erosion and the threat posed to structures, infrastructure, and/or public safety.

(b) Current and expected post-project sediment movement and deposition patterns in and near the project area.

(c) Current and expected post-project habitat conditions, including the presence of fish, wildlife and plant species in the project area.

(d) Demonstration that the proposed project incorporates the least environmentally damaging practicable bank protection methods. These methods include, but are not limited to, the use of bioengineering, biotechnical design, root wads, large woody debris, native plantings, and beach nourishment in certain circumstances. If rock must be used due to site erosion conditions, explain how the bank stabilization structure incorporates elements beneficial to fish.

(e) Assessment of the likely impact of the proposed work on upstream, downstream and cross-stream properties (at a minimum the area assessed should extend from the nearest upstream bend to the nearest downstream bend of the watercourse). Discuss the methodology used for determining effects.

NOTE: Information on designing bank stabilization projects can be found in the Washington Department of Fish and Wildlife's *Integrated Streambank Protection Guidelines* (*http://www.wdfw.wa.gov/hab/ahg/ispgdoc.htm*); King County's *Reconnaissance Assessment of the State of the Nearshore Ecosystem* (*http://dnr.metrokc.gov/wlr/watersheds/puget/nearshore/sonr.htm*); and three technical (white) papers – *Marine and Estuarine Shoreline Modification Issues*, *Ecological Issues in Floodplains and Riparian Corridors*, and *Over-Water Structures: Marine, Freshwater, and Treated Wood Issues* (*http://wdfw.wa.gov/hab/ahg/ahgwhite.htm*).

5. Cultural Resources and Human Burials. Permittees must immediately stop work and notify the District Engineer within 24 hours if, during the course of conducting authorized work, human burials, cultural resources, or historic properties, as identified by the National Historic Preservation Act, are discovered and may be affected by the work. Failure to stop work in the area of discovery until the Corps can comply with the provisions of 33 CFR 325 Appendix C, the National Historic Preservation Act, and other pertinent laws and regulations could result in a violation of state and federal laws. Violators are subject to civil and criminal penalties.

6. Essential Fish Habitat. An activity which may adversely affect essential fish habitat, as identified under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), may not be authorized by NWP until essential fish habitat requirements have been met by the applicant and the Corps. Non-federal permittees shall notify the District Engineer if essential fish habitat may be affected by, or is in the vicinity of, a proposed activity and shall not begin work until notified by the District Engineer that the requirements of the essential fish habitat provisions of the MSA have been satisfied and the activity is authorized. The notification must identify the type(s) of essential fish habitat (i.e., Pacific salmon, groundfish, and/or coastal-pelagic species) managed by a Fishery Management Plan that may be affected. Information about essential fish habitat is available at *http://www.nwr.noaa.gov/*

7. Vegetation Protection and Restoration. Permittees must clearly mark all construction area boundaries before beginning work and minimize the removal of native vegetation in riparian areas and wetlands to the maximum extent practicable. Areas subject to temporary vegetation removal in wetlands or riparian areas during construction shall be replanted with appropriate native species by the end of the first planting season following the disturbance except as waived by the District Engineer.

D. Corps Regional Specific Conditions for this NWP: None

E. State 401 Certification General Conditions

1. For in-water construction activities. Individual 401 review is required under this condition for projects or activities authorized under NWPs that will cause, or be likely to cause or contribute to an exceedence of a State water quality standard (WAC 173-201A) or sediment management standard (WAC 173-204).
State water quality standards can be located on Ecology's website: http://www.ecy.wa.gov/programs/wq/swqs/.

Sediment management standards can be located on Ecology's website:
http://www.ecy.wa.gov/biblio/wac173204.html
Information is also available by contacting Ecology's Federal Permit staff.

2. Projects or Activities Discharging to Impaired Waters. Individual 401 review is required by this condition for projects or activities authorized under NWPs if the project or activity may result in further exceedences of a specific parameter the waterbody is listed for on the state's list of impaired waterbodies (the 303(d) list).
The current 303(d) listed waterbodies can be identified using search tools available on Ecology's website: *http://www.ecy.wa.gov/programs/wq/303d/2002/2002-index.html* or by contacting Ecology's Federal Permit staff.

3. Notification. For projects or activities that will require individual 401 review, applicants must provide Ecology with the written documentation provided to the Corps (as described in Corps Nationwide Permit General Condition 27, Pre-Construction Notification), including, when applicable:

(a) A description of the project, including site plans, project purpose, direct and indirect adverse environmental effects the project would cause, any other Department of the Army permits used or intended to be used to authorize any part of the proposed project or any related activity.

(b) Delineation of special aquatic sites and other waters of the United States. Wetland delineations must be prepared in accordance with the current method required by the Corps and shall include Ecology's Wetland Rating form. *Note: Forms are available at Ecology's Wetlands website:*
http://www.ecy.wa.gov/programs/sea/wetlands/index.html or by contacting Ecology's Federal Permit staff.

(c) Coastal Zone Management Program "Certification of Consistency" Form if the project is located within a coastal county (Clallam, Grays Harbor, Island, Jefferson, King, Kitsap, Mason, Pacific, Pierce, San Juan, Skagit, Snohomish, Thurston, Wahkiakum, and Whatcom counties).
Note: Forms are available at the Army Corps of Engineers website: http://www.nws.usace.army.mil
or by contacting Ecology's Federal Permit staff.

(d) Other applicable requirements of Corps Nationwide Permit General Condition 27, Corps Regional Conditions, or notification conditions of the applicable NWP.

Ecology's review time shall not begin until the applicable documents noted above have been provided to Ecology and Ecology has received a copy of the final Nationwide Permit verification letter from the Corps.

4. Aquatic resources requiring special protection. Certain aquatic resources are unique, difficult-to-replace components of the aquatic environment in Washington State. Activities that would affect these resources must be avoided to the greatest extent possible. Compensating for adverse impacts to high value aquatic resources is typically difficult, prohibitively expensive, and may not be possible in some landscape settings.
Individual 401 review is required for activities in or affecting the following aquatic resources (and not prohibited by Regional Condition 1), except for:

NWP 20 – Oil Spill Cleanup
NWP 32 – Completed Enforcement Actions
NWP 38 – Cleanup of Hazardous Waste
NWP 47 – Pipeline Safety Program Repair

(a) Wetlands with special characteristics (as defined in the Washington State Wetland Rating Systems for western and eastern Washington, Ecology Publication #s04-06-025 and #04-06-015):

- estuarine wetlands
- Natural Heritage wetlands
- Bogs
- old-growth and mature forested wetlands
- wetlands in coastal lagoons
- interdunal wetlands
- vernal pools
- alkali wetlands

(b) Bog-like wetlands, aspen-dominated wetlands, camas prairie wetlands, and marine water with eelgrass beds (except for NWP 48).

(c) Category I wetlands

(d) Category II wetlands with a habitat score >29 points.

5. Mitigation. 401 Certification is based on adequate compensatory mitigation being provided for wetland and other water quality-related impacts of projects or activities authorized under the NWP Program.
Mitigation plans submitted for Ecology review and approval shall be based on the guidance provided in Wetland Mitigation in Washington State, Parts 1 and 2 (Ecology Publication #s06-06-011a and #06-06-011b) and shall, at a minimum, include the following:

(a) A description of the measures taken to avoid and minimize impacts to wetlands and other waters of the U.S.

(b) The nature of the proposed impacts (i.e., acreage of wetlands and functions lost or degraded)

(c) The rationale for the mitigation site that was selected

(d) The goals and objectives of the compensatory mitigation project

(e) How the mitigation project will be accomplished, including proposed performance standards for measuring success and the proposed buffer widths

(f) How it will be maintained and monitored to assess progress towards goals and objectives. Monitoring will generally be required for a minimum of five years. For forested and scrub-shrub wetlands, 10 years of monitoring will often be necessary.

(g) How the compensatory mitigation site will be legally protected for the long-term.

Refer to Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Ecology Publication #06-06-011b) for guidance on developing mitigation plans.
Ecology encourages the use of alternative mitigation approaches, including advance mitigation and other programmatic approaches, such as mitigation banks and programmatic mitigation areas at the local level. If you are interested in proposing use of an alternative mitigation approach, consult with the appropriate Ecology regional staff person. (see *http://www.ecy.wa.gov/programs/sea/wetlands/contacts.htm*)
For information on the state wetland mitigation banking program go to:
http://www.ecy.wa.gov/programs/sea/wetlands/mitigation/banking/index.html

6. Temporary Fills. Individual 401 review is required for any project or activity with temporary fill in wetlands or other waters of the State for more than 90 days, unless the applicant has received written approval from Ecology.

7. Mill Creek Special Area Management Plan. This condition applies to all NWPs within the boundaries described in the Mill Creek Special Area Management Plan (SAMP), King County, Washington, dated April 2000 (SAMP). The boundaries of the SAMP encompass all sub-basins and tributaries drained by Algona Creek, Auburn Creek, Bingaman Creek, Midway Creek, Mill Creek, and Mullen Slough. The area is bounded roughly on the south by 8th Avenue N in Algona and 4th Street NE in Auburn, on the east and north by the Ordinary High Water Mark of the Green River, and on the west by the plateau that parallels Interstate 5 above the Green River valley.

Individual 401 review is required for projects or activities authorized under the NWPs unless:

(a) The project or activity will result in fill-related impacts to only wetlands designated as developable under Alternative #8, as shown on Figure 4-8 of the SAMP.

(b) Compensatory mitigation for such impacts is onsite and/or within the areas designated on Figure 3-3, "Maximum Areas for Restoration by Target Habitat Type," in the SAMP Aquatic Resources Restoration Plan (April 2000).

(c) Mitigation plans comply with the requirements of the SAMP and, in general, with the guidance in the interagency Wetland Mitigation in Washington State (March 2006; Ecology publications #06-06-011a and #06-06-011b). Note: You can download the SAMP and Aquatic Resources Restoration Plan at *http://www.nws.usace.army.mil/PublicMenu/Menu.cfm?sitename=REG&pagename=Mill_Creek_SAMP*.

8. State Certification for PCNs not receiving 45-day response. In the event the U.S. Army Corps of Engineers does not respond to a complete pre-construction notification within 45 days, the applicant must contact Ecology for Individual 401 review.

F. State 401 Certification Specific Conditions for this NWP

Certified, subject to conditions. Individual 401 review is required for projects or activities authorized under this NWP if the project or activity is not authorized though a Model Toxics Control Act (MTCA) order or a Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) order.

G. EPA 401 Certification General Conditions

In order for any NWP authorization to be valid in Washington State, permittees must comply with all applicable 401 Certification general conditions. EPA 401 Certification general conditions apply to all NWP authorizations involving Section 404 activities on Native American Indian Tribal lands (excluding the tribal lands of the Chehalis Tribes, Port Gamble S'Klallum Tribe, Kalispel Tribe, Makah Indian Tribe, Puyallup Tribe, Spokane Tribe, and Tulalip Tribe) and Federal land with exclusive jurisdiction within Washington State.

A. Special Aquatic Sites. Any activities in the following types of wetlands and waters of the U.S. will need to apply for an individual 401 certification: Mature forested wetlands; bogs; bog-like wetlands; wetlands in dunal systems along the Washington coast; vernal pools; aspen-dominated wetlands; alkali wetlands; camas prairie wetlands; salt marshes; or marine water with eelgrass beds.

B. Soil Erosion and Sediment Controls. An individual 401 certification is based on the project or activity meeting established turbidity levels. EPA will be using as guidance the state of Washington's water quality standards [WAC 173-201a] and sediment quality standards [WAC 173-204]. Projects or activities that are expected to exceed these levels or that do exceed these levels will require an individual 401 certification.

C. Compliance with Stormwater Provisions. Individual 401 certification is required for projects or activities not designed in accordance with Ecology's most recent stormwater manual or Ecology approved equivalent manual.

D. Compliance with requirements of the National Pollutant Discharge Elimination System. For projects and activities requiring coverage under an NPDES permit, certification is based on compliance with the requirements of that permit. Projects and activities not in compliance with NPDES requirements will require individual 401 certification.

E. Projects or Activities Discharging to Impaired Waters. Individual 401 certification is required for projects or activities authorized under NWPs if the project will discharge to a waterbody on the list of impaired waterbodies (the 303(d) List) *and* the discharge may result in further exceedence of a specific parameter the waterbody is listed for.

EPA may issue 401 certification for projects or activities that would result in further exceedence or impairment if mitigation is provided that would result in a net decrease in listed contaminants or less impairment in the waterbody. This determination would be made during individual 401 certification review.

F. Notification. For projects requiring individual 401 certification, applicants must provide EPA with the same documentation provided to the Corps (as described in Corps National General Condition 27, Pre-Construction Notification), including, when applicable:

(a) A description of the project, including site plans, project purpose, direct and indirect adverse environmental effects the project would cause, any other U.S. Department of the Army permits used or intended to be used to authorize any part of the proposed project or any related activity.

(b) Delineation of special aquatic sites and other waters of the United States. Wetland delineations must be prepared in accordance with the current method required by the Corps.

(c) A statement describing how the mitigation requirement will be satisfied. A conceptual or detailed mitigation or restoration plan may be submitted.

(d) Other applicable requirements of Corps National General Condition 27, Corps Regional Conditions, or notification conditions of the applicable NWP.

A request for individual 401 review is not complete until EPA receives the applicable documents noted above and EPA has received a copy of the final authorization letter from the Corps providing coverage for a proposed project or activity under the NWP Program.

G. Mitigation. An individual 401 certification is based on adequate compensatory mitigation being provided for wetland and other water quality-related impacts of projects or activities authorized under the NWP Program. Mitigation plans submitted shall be based on the Joint Agency guidance provided in *Wetland Mitigation in Washington State, Parts 1 and 2* (Ecology Publication #06-06-011a and #06-06-011b) and shall, at a minimum, include the following:

1. A description of the measures taken to avoid and minimize impacts to wetlands and other waters of the U.S.
2. The nature of the proposed impacts (i.e., acreage of wetlands and functions lost or degraded).
3. The rationale for the mitigation site that was selected.
4. The goals and objectives of the compensatory mitigation project.
5. How the mitigation project will be accomplished, including proposed performance standards for measuring success and the proposed buffer widths.
6. How it will be maintained and monitored to assess progress towards goals and objectives. Monitoring will generally be required for a minimum of five years. For forested and scrub-shrub wetlands, 10 years of monitoring will often be necessary.
7. How the compensatory mitigation site will be legally protected for the long-term.

H. Temporary Fills. An individual 401 certification is required for any activity where temporary fill will remain in wetlands or other waterbodies for more than 90 days. The 90 day period begins when filling activity starts in the wetland or other waterbody.

H. EPA 401 Certification Specific Conditions for this NWP

Partially denied without prejudice. Individual 401 review is required for projects authorized under this NWP if the project or activities are not part of an EPA ordered cleanup.

I. Spokane Tribe of Indians 401 Certification General Conditions

Specific to the Reservation and the Tribal Water Quality Standards, the applicant must comply with the following when there could be a discharge to waters of the Spokane Indian Reservation:

1. The applicant shall be responsible for achieving compliance with the Spokane Tribal Water Quality Standards.

2. The applicant shall submit copies of applications materials to the Spokane Tribal Water Control Board for review and approval at the same time they are submitted to Army Corps of Engineers and prior to any disturbance activities.

3. The applicant shall comply with all Spokane Tribal Integrated Resource Management Plan (IRMP) guidelines for land use activities and disturbances.

4. The applicant shall allow the Tribal Water Control board and Interdisciplinary Team to inspect the area in question and adopt recommendations made throughout its operation.

5. Monitoring of the discharge shall occur at a level indicated by EPA and the Tribe, are subject to change, and shall be submitted to both entities.

J. Tribal 401 Certification Specific Conditions for this NWP

Denied without prejudice by the Chehalis, Kalispel, Makah, Port Gamble S'Klallum, Puyallup, and Tulalip tribes. Certified subject to general conditions by the Spokane Tribe.

K. CZM Consistency Response Specific Conditions for this NWP

Concur, subject to the following condition:

1. Where individual 401 review is triggered, an individual CZM Consistency Response must be obtained for projects located within the 15 coastal counties. A "Certification of Consistency" form must be submitted in accordance with State General Condition 3 (Notification).

L. ADDITIONAL LIMITATIONS ON THE USE OF NWPs

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other Federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. NWPs do not authorize interference with any existing or proposed Federal project.

US Army Corps
of Engineers ®
Seattle District

Appeal Process Fact Sheet

27 April 2006

Our letter cites a Department of the Army administrative appeal rule for permit decisions and approved jurisdictional determinations that went into effect March 9, 1999. In accordance with this rule, we have included a *Notification of Administrative Appeal Options and Process and Request for Appeal* form of which Section I is the Notification of Appeal Process (NAP) fact sheet and Section II is the Request for Appeal (RFA) form.

If a permit decision was made, you may decline to accept a permit if you object to any of the terms or conditions, ***and*** you believe that these terms or conditions are based on procedural errors; incorrect data; omission of fact; incorrect application of current Federal manual or guidance associated with wetlands; or incorrect application of a law, regulation, or policy that governs our permit program. Once you accept the permit, you waive the right to further appeal unless we later modify the permit.

If you object to this permit decision or jurisdictional determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. As stated previously, enclosed you will find a *Notification of Appeal Options and Process and Request for Appeal* form. If you request to appeal this determination, you must submit a completed RFA form to the Division Engineer at the following address:

Division Engineer
U.S. Army Corps of Engineers, Northwest Division
Karen Kochenbach, Regulatory Program Manager
Post Office Box 2870
Portland, Oregon 97208-2870
Telephone: (503) 808-3888

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by the 60th day. "Day 1" is designated as the date of the NAP form. "Day 60" is designated as the 60th calendar day after the date of the NAP form, with the official counting of calendar days beginning on "Day 1" as designated above. When "Day 60" is a traditional non-working day (e.g., a holiday or a weekend), the 60 day timeframe is extended to the next business day. Our Division Office has 90 days to resolve the appeal with you once your completed and acceptable NAO-RFA form has been received.

It is not necessary to submit an RFA form to the Division office if you do not object to the decision or determination in our letter.

If you have any questions about your options or the appeal process in general, please contact the project manager indicated on the form.

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Port of Skagit County	File Number: NWS-2008-19-NO	Date: JUL 17 2008
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
x	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://usace.army.mil/inet/functions/cw/cecwo/reg or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also, you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:	If you only have questions regarding the appeal process you may also contact:
Randel Perry, Project Manager U.S. Army Corps of Engineers, Seattle District Post Office Box 3755 Seattle, Washington 98124-3755 Telephone: (206) 764-6985	Division Engineer U.S. Army Corps of Engineers, Northwest Division Karen Kochenbach, Regulatory Program Manager Post Office Box 2870 Portland, Oregon 97208-2870 Telephone: (503) 808-3888

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation, and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 3755
SEATTLE, WASHINGTON 98124-3755

REPLY TO
ATTENTION OF

Regulatory Branch

RECEIVED
JUL 22 2010
PORT OF SKAGIT COUNTY

July 20, 2010

Ms. Sara Young
Port of Skagit County
Post office Box 348
Burlington, Washington 98233

Reference: NWS-2008-19
Skagit County, Port of

Dear Ms. Young:

In your correspondence dated July 15, 2010, you requested a time extension to the referenced Nationwide Permit (NWP) 38 verification issued to you on July 17, 2008. The work authorized by NWP 38 involves excavation and the placement of fill in wetlands to clean up contaminated sediments. The work will occur in wetlands near Burlington, Skagit County, Washington.

We have reviewed your time extension request and verified that NWP 38 authorizes this project under current regulations. In order for this NWP authorization to be valid, you must ensure that the work is performed in accordance with the previously approved plans dated June 2008. You are cautioned that any change in project plans will require that you submit a copy of the revised plans to this office and obtain our approval before you begin work.

This verification is valid until the NWP is modified, reissued, or revoked. All of the existing NWPs are scheduled to be modified, reissued, or revoked on March 18, 2012. It is incumbent upon you to remain informed of changes to the NWPs. We will issue a public notice when the NWPs are reissued. Furthermore, if you commence or are under contract to commence this activity before March 18, 2012, you will have until March 18, 2013 to complete the activity under the present terms and conditions of this NWP.

Failure to comply with all terms and conditions of this NWP verification invalidates this authorization and could result in a violation of Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899. Also, you must obtain all State and local permits that apply to this project. All other terms and conditions contained in the original NWP verification remain in full force and effect.

If you have any questions about this letter, please contact me at (360) 734-3156 or via email at randel.j.perry@usace.army.mil.

Sincerely,

Randel J. Perry

Randel Perry, Project Manager
Regulatory Branch

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 3755
SEATTLE, WASHINGTON 98124-3755

REPLY TO
ATTENTION OF

Regulatory Branch

February 15, 2011

Port of Skagit County
Ms. Sara Young
Post office Box 348
Burlington, Washington 98233

Reference: NWS-2008-19
Skagit County, Port of

Dear Ms. Young:

In correspondence dated January 27, 2011, your agent, Ms. Fiona McNair, requested a modification to the referenced Nationwide Permit (NWP) 38 verification issued to you on July 17, 2008 and re-verified on July 20, 2010. The work authorized by NWP 38 involves excavation and the placement of fill in wetlands to clean up contaminated sediments. The work will occur in wetlands near Burlington, Skagit County, Washington.

We have reviewed your request and verified that NWP 38 authorizes this project under current regulations. In order for this NWP authorization to be valid, you must ensure that the work is performed in accordance with the enclosed approved modified plans dated January 14, 2011 and in accordance with the following modified special conditions "b" and "c":

b. The permittee must implement the provisions of the document titled, "*Updated Wetland Restoration Plan, Port of Skagit County – Taxiway F Site, Skagit County, WA*," dated January 27, 2011 in their entirety.

c. A status reports on the wetland and buffer remediation (restoration), including photos, must be submitted to the Corps, Seattle District, Regulatory Branch, 13 months from the date of this reverification. All reports must be submitted to the Corps, Seattle District, Regulatory Branch and must prominently display the reference number NWS-2008-19.

This verification is valid until the NWP is modified, reissued, or revoked. All of the existing NWPs are scheduled to be modified, reissued, or revoked on March 18, 2012. It is incumbent upon you to remain informed of changes to the NWPs. We will issue a public notice when the NWPs are reissued. Furthermore, if you commence or are under contract to commence this activity before March 18, 2012, you will have until March 18, 2013 to complete the activity under the present terms and conditions of this NWP.

Failure to comply with all terms and conditions of this NWP verification invalidates this authorization and could result in a violation of Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899. Also, you must obtain all State and local permits that apply to this project. All other terms and conditions contained in the original NWP verification remain in full force and effect.

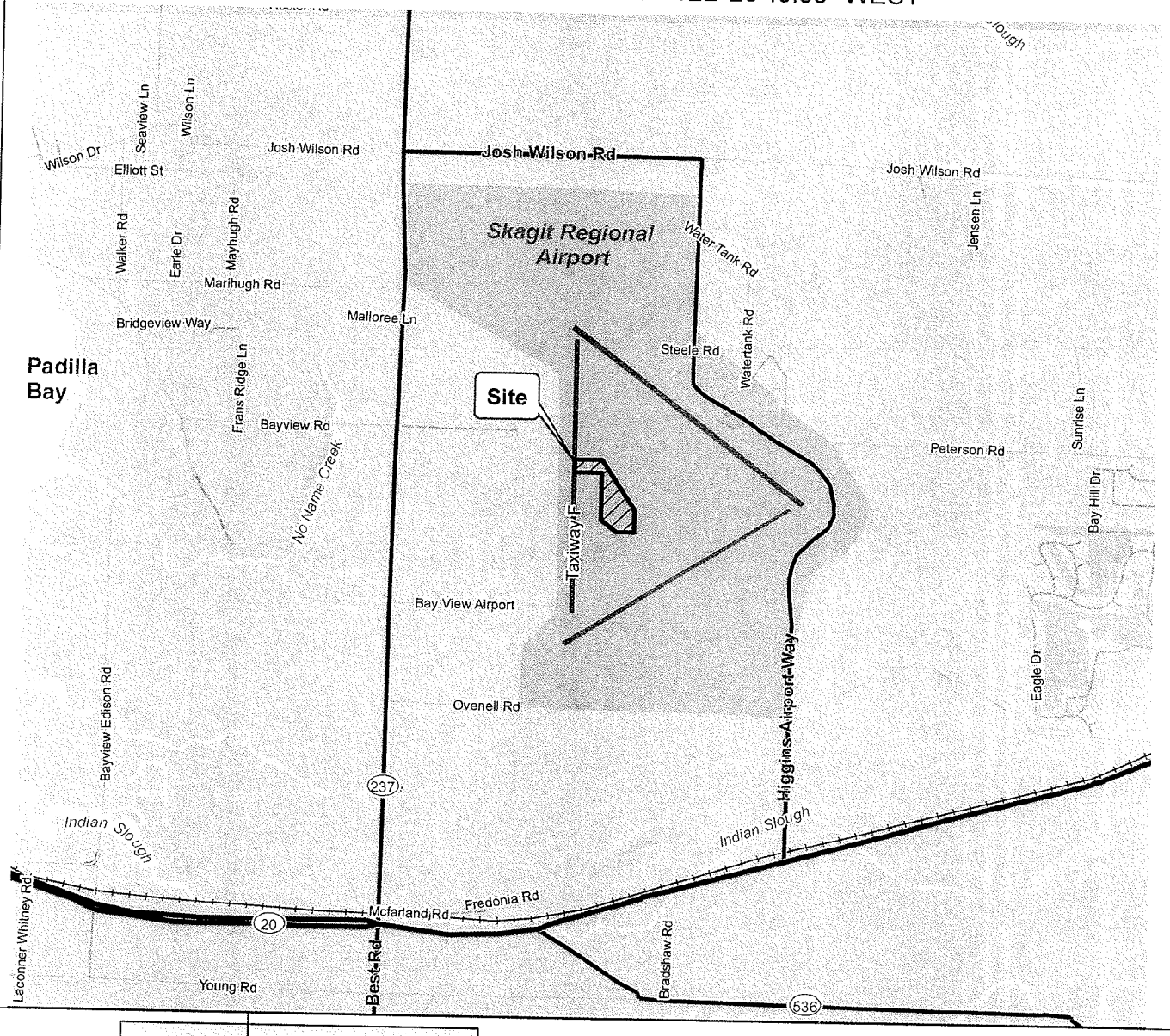
A copy of this correspondence with enclosures will be provided to Ms. Fiona McNair of GeoEngineers, Inc. at 600 Stewart Street, Suite 1700, Seattle, WA 98101. If you have any questions about this letter, please contact me at (360) 734-3156 or via email at randel.j.perry@usace.army.mil.

Sincerely,

Randel Perry, Project Manager
Regulatory Branch

SEC. 4, T34N, R03E, W.M.

LOG.: 48°28'13.85" NORTH - LAT.: 122°25'46.38" WEST



REFERENCE: ESRI DATA & MPAS, STREET MAPS 2005

P:\15538401302\CAD\JARPA\538401302 JARPA Figs.dwg\TAB:VM modified by tmichaud on Jan 13, 2011 - 10:18

OFFICE.SEA

PURPOSE:

REMOVE CONTAMINATED SOIL, PLACE BACKFILL AND RESTORE. REVERIFICATION OF PERMIT (NWS-2008-19-~~NE~~)

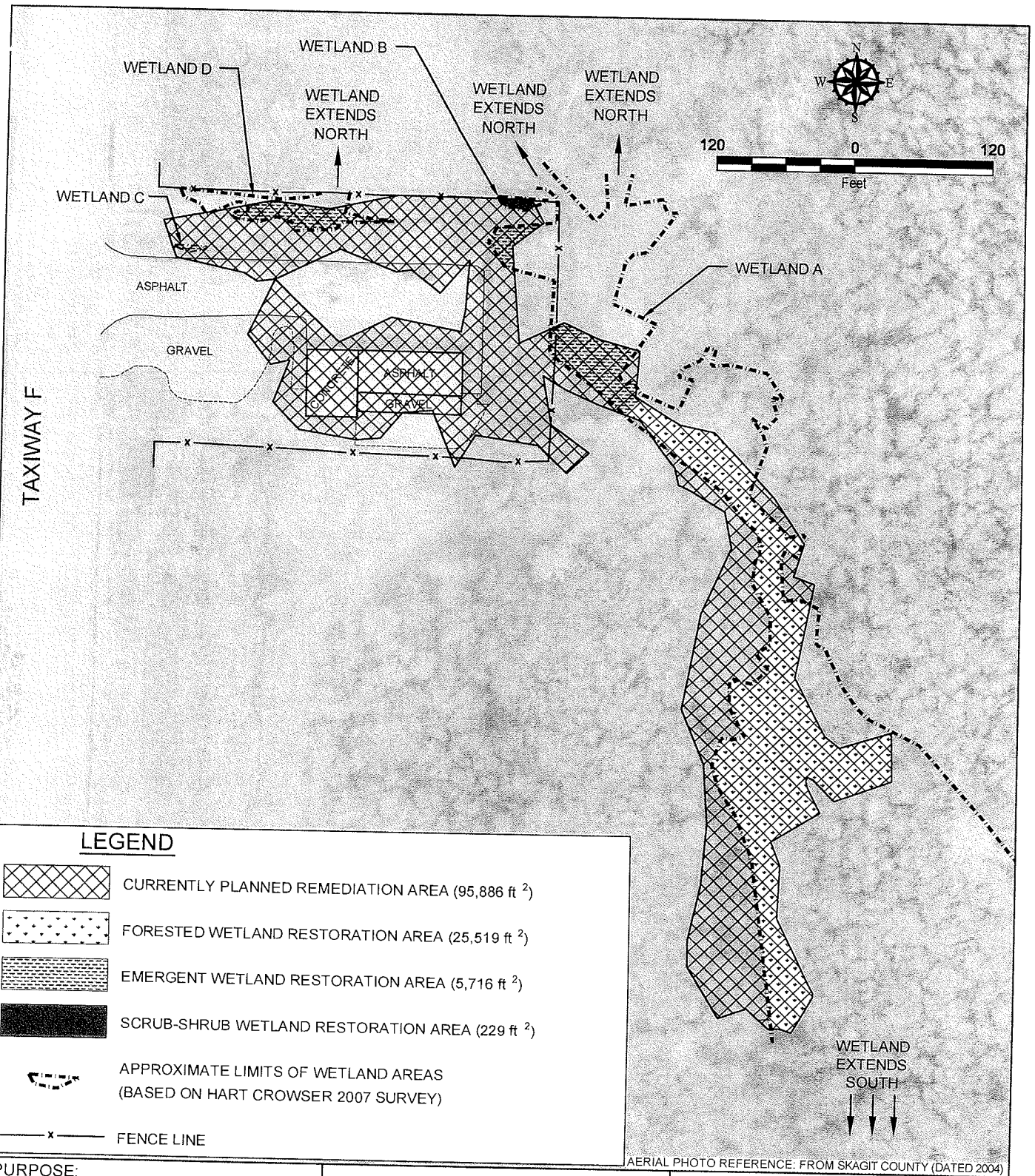
ADJACENT PROPERTY OWNERS:

1. PORT OF SKAGIT COUNTY

VICINITY MAP

TAXIWAY F SITE
SKAGIT COUNTY, WA

IN: SKAGIT COUNTY
COUNTY OF: SKAGIT
STATE OF: WASHINGTON
APPLICATION BY:
PORT OF SKAGIT COUNTY
SHEET: 1 of 3
DATE: 01/14/11
CREATED BY: GEOENGINEERS, INC.



AERIAL PHOTO REFERENCE: FROM SKAGIT COUNTY (DATED 2004)

P:\153640131021CAD\JARPA\53640131302 JARPA Sheet 3.dwg\TAB:Site Plan modified by cvanslyke on Jan 18, 2011 - 12:04

OFFICE:SEA

PURPOSE:

REMOVE CONTAMINATED SOIL, PLACE BACKFILL AND RESTORE. REVERIFICATION OF PERMIT (NWS-2008-19-[illegible])

ADJACENT PROPERTY OWNERS:

1. PORT OF SKAGIT COUNTY

SITE PLAN
WETLAND RESTORATION AREAS

TAXIWAY F SITE
SKAGIT COUNTY, WA

IN: SKAGIT COUNTY
COUNTY OF: SKAGIT
STATE OF: WASHINGTON
APPLICATION BY:
PORT OF SKAGIT COUNTY
SHEET: 3 of 3
DATE: 01/14/11
CREATED BY: GEOENGINEERS, INC.

APPENDIX B
Certificate of Compliance with Department of Army Permit

US Army Corps
of Engineers
Seattle District

CERTIFICATE OF COMPLIANCE WITH DEPARTMENT OF THE ARMY PERMIT

Permit Number: NWS-2008-19-NO

Name of Permittee: Port of Skagit County

Date of Issuance: Letter acknowledging coverage under Nationwide Permit 38 issued on July 17, 2008. Permit extension letter issued on July 20, 2010. Permit re-verification letter issued on February 15, 2011.

Upon completion of the activity authorized by this permit, please check the applicable boxes below, sign this certification, and return it to the following address:

Department of the Army
U.S. Army Corps of Engineers
Seattle District, Regulatory Branch
Post Office Box 3755
Seattle, Washington 98125-3755

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with the terms and conditions of your authorization, your project is subject to suspension, modification, or revocation.

☐ The work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of this permit.

☑ The mitigation required (not including monitoring) by the above-referenced permit has been completed in accordance with the terms and conditions of this permit.

Signature of Permittee

APPENDIX C
Photographic Record

Photograph 1 – Wetland A. Transect A1.

Photograph 2 – Wetland A with twinberry, volunteer alder and cottonwood, Watson's willowherb and reed canary grass.

Photograph 3 – Wetland A, transect A2. Hardhack/spirea, rush and reed canary grass.

Photograph 4 – Wetland B. Newly installed twinberry compensating for poor survival rate/percent cover of hardhack.

Photograph 5 – Wetland C looking northeast.

Photograph 6 – Wetland D looking northeast. Reed canary grass north of transect (tape measure).

Have we delivered World Class Client Service?

Please let us know by visiting **www.geoengineers.com/feedback**.

GeoEngineers