

USDA. FOREST SERVICE  
 COLUMBIA RIVER GORGE NATIONAL SCENIC AREA  
 902 WASCO AVENUE, SUITE 200  
 HOOD RIVER, OR 97031

**Telephone:** 541-386-2333  
**Fax:** 541-386-1916

## PROJECT REVIEW APPLICATION

DATE OF APPLICATION:

<b>APPLICANT(S)</b>			<b>PROPERTY OWNERS</b>		
United States Fish and Wildlife Service			(same)		
Ridgefield Refuge Complex Steigerwald Lake National Wildlife Refuge					
<b>MAILING ADDRESS</b>			<b>MAILING ADDRESS</b>		
P.O. Box 1136 Washougal, WA 98671					
<b>APPLICANT'S SIGNATURE AND DATE</b>			<b>PROPERTY OWNER'S SIGNATURE AND DATE</b>		
Robert Flores, Project Leader			/s/ Robert Flores		
PHONE: 360-835-8767			PHONE:360-8874106		
E-MAIL: jim_clapp@fws.gov			E-MAIL: bob_flores@fws.gov		
<b>LOCATION OF PROPERTY: (see map)</b>			<b>PROPERTY ADDRESS (IF APPLICABLE)</b>		
TOWNSHIP: 1N	RANGE: 4E	SECTION: 15,16,17,20, 21,22			
QUARTER SECTION: NW		TAX LOT: 135305000			
PARCEL SIZE (ACRES): 1,049 approximately			COUNTY: Clark		
EXISTING LAND USE: wildlife refuge			STATE: Washington		

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**PROJECT DESCRIPTION:** Describe your proposed project, including details (plans, elevations, and/or photos) on structures to be built, location and types of utilities and infrastructure, drainfields, accessory buildings, ground leveling, and filling, or any other relevant activity or mitigation measures proposed. Use additional sheets as necessary:

## **PROJECT DESCRIPTION**

Steigerwald Lake National Wildlife Refuge is located east of the City of Washougal, just inside the Columbia River Gorge Scenic Area Boundary, between State Route 14 and the Columbia River in Clark County, Washington. Construction of the proposed Gateway Kiosk Site and Foot Trail is intended to provide an opportunity for the visiting public to experience compatible wildlife-dependent recreational use (wildlife observation and photography, environmental education and interpretation) on the refuge. In addition, the proposed development will serve as the Western Gateway to the Columbia River Gorge National Scenic Area, providing the visiting public with a general introduction and orientation to the Scenic Area and information on resources in the vicinity of the facility.

The proposed development consists of a gravel parking lot designed to accommodate twenty cars and one bus/RV, a small, open-air timber kiosk with stone base, a concrete restroom facility with vault toilet, electricity and phone line utility extension to operate the automated entrance gate, a water line for irrigation, an overlook platform with masonry façade and stone benches, and an interpretive loop trail that includes a foot bridge spanning Gibbons Creek and a boardwalk crossing a wetland west of Redtail Lake and connecting to the existing Columbia River Dike Trail. Additional description of the proposed work elements are provided below and in the attached conceptual drawings.

The parking area is currently zoned GMA Public Recreation and GMA Recreation Intensity Class 3; the foot trail is located on Refuge land zoned Open Space Recreation Intensity Class 1.

### General

Design and construction of the subject project will follow the Standard Specifications For Construction of Roads and Bridges On Federal Highway Project FP-03 and supplemental requirements as needed to complete the work.

The project will also conform to the following environmental requirements: Mitigation measures from the National Environment Policy Act (NEPA) document, Storm Water Pollution and Protection Plan prepared in compliance with the National Pollutant Discharge Elimination System (NPDES), Conditions outlined in the 404 Nationwide Permit No. 42 for Recreational Facilities issued by the Army Corps of Engineers, Conditions of the 401 Water Quality Certification issued by the Washington State Department of Ecology, and guidance outlined in the FP-03 Federal Highway Standard Specifications cited above.

This narrative of the proposed design is intended to supplement the attached design conceptual drawings. All sheet references refer to the drawings included in the Design Plans included as part of the application package.

## Parking and Kiosk Development

- The entrance road from State Route 14 to the proposed lot is 24 ft. in width. Surfacing consists of a well graded 1” minus crushed aggregate.
- An automated entrance gate located on the entrance road will prevent public access to the site after hours. The gate will open and close at programmed times. Visitors that remain within the refuge beyond the posted times and become locked behind the closed gate will have the ability to open the gate from a call box located on the gate post, see sheet C.13 to C.15.
- Native trees, shrubs, groundcover and grasses will be planted to provide visual screening and enhance the natural concept of the proposed project. A list of species which could be included are attached (Appendix A) as part of this application package.
- The proposed entrance gate requires both power and telephone service. Utility lines will be extended underground to the site from a source located approximately ½ mile to the west of the refuge, near the City of Washougal Sewer Treatment Plant. The power line will require a visible transformer case within the scenic boundary, located just west of the proposed entrance gate; see sheet C.21. (Transformer to be screened with native vegetation)
- An irrigation line will be extended to the parking area to support post construction planting as well as recent and ongoing planting east of the parking site. The irrigation line will originate at the well house, located at the northeast corner of the refuge; see sheet C.20. The irrigation plan for the parking area can be found on sheet C.4a.
- The parking lot is designed to handle 20 cars (including two handicap spaces) and one bus/RV space. The surfacing is the same as that stated above for the entrance road. Traffic is confined to the parking lot through the use of landscape berms, basalt boulders and plantings. Parking spaces are delineated with grey plastic bumpers. Drainage is handled with shallow ditches, at-grade inlets, bubbler outlets and shallow swales; see grading plan sheet C.2. Additional grading outside of the parking lot footprint is planned to add relief to the parking area and limit the visual impacts from Key Viewing Areas. The additional grading will require approximately 12,000 yd<sup>3</sup> of material with approximately 4,500 yd<sup>3</sup> of material generated through excavation at the site. Borrowed material imported from off-site will fill the material deficit. See grading plan sheet C.2.
- The existing gravel service road connecting the refuge approach road to the dike running north and south carrying Gibbons Creek will be removed and replaced with a 12 ft. wide at-grade gravel service road originating at the west end of the parking lot and extending to the existing dike approach; see sheet C.2. The service road will be surfaced with well-graded 1” minus crushed aggregate. A service gate will prevent the public from accessing the service road; see sheet C.12.
- The vault toilet is located on the southwest side of the parking lot. The toilet is self contained and has two stalls; see sheet C.18.
- The informational kiosk is located just west of the parking lot; see sheet C.19.
- Visitor movement areas and trail will be constructed with well graded 5/8” minus crushed aggregate to meet Architectural Barriers Act (ABA) requirements; see sheet C.1.
- The foot trail begins on the west end of the parking lot and leads to the refuge overlook located approximately 70 ft. southwest of the lot. The overlook faces southeast and provides a view of Steigerwald Lake and the surrounding wetlands, the mouth of the Columbia River Gorge, and Mt. Hood; see sheet C.10 – C.11.

## Foot Trail

The foot trail originates at the west end of the parking lot; the trail is approximately 2.25 miles long and 6 ft. wide. Except for the segment of the trail paralleling the north / south dike carrying Gibbons

creek, the trail will be constructed at grade, utilizing fill only when necessary to accommodate the 5% grade limit for ABA accessibility.

After leaving the parking area, the trail runs through an existing willow patch; this 150 ft. segment of the trail is constructed on a timber boardwalk. After leaving the willows, the trail runs parallel to the dike running north and south carrying Gibbons Creek. At the end of the dike the trail veers east following Gibbons creek for approximately 0.1 mile before crossing to the south side of the creek via a foot bridge. The trail then heads west 0.1 mile to the Redtail Lake Boardwalk running south across the wetland. After the boardwalk, the trail tracks southeast and merges with the existing Columbia River Dike Trail, following the trail east for approximately 0.5 miles before diverging from the dike trail and heading northwest along the north bank of Gibbons Creek. The trail loop ends at the south approach to the foot bridge. The alignment and trail features can be found on sheet C.1.

- Trail turnouts are located intermittently along the trail; see sheets C.1 and C.6 for locations and dimensions. The boardwalk through the willows is approximately 150 ft. in length and will lie in the middle of the existing willow stand; see sheet C.9.
- The segment of the trail paralleling the north / south dike carrying Gibbons Creek is constructed at a uniform elevation, 21 ft., to accommodate the potential future high water elevation of 19 ft.; see sheet C.5.
- The fiber reinforced polymer H-Truss pedestrian bridge is 110 ft. in length with a truss height of 6 ft. The deck will be suspended 2.5 ft. above the bottom of the truss, creating a handrail (truss chord) height of 3.5 ft. from the deck. The color of the bridge is brown.
- The boardwalk at Redtail Lake extends through a seasonally flooded “finger” of the lake. The boardwalk is elevated approximately 4.5’ above the existing wetland and is 300 ft. in length; see sheet C.9.
- The Columbia River Dike segment of the trail will not include any improvement to the existing trail.
- Currently there are two design proposals for the Fish Ladder Overlook located at the water control structure at the mouth of Gibbons Creek; see sheet C.1 for the location. The first alternative involves widening the existing gravel turnout by approximately one foot with earth embankment and adding a timber fence around the perimeter of the turnout; see sheet C.6. The second alternative involves construction of a timber deck with stone veneer columns around the perimeter of the existing water control structure; see sheet C.7 for conceptual drawing.

#### Visual Subordinance from Key Viewing Areas (KVA’s)

The proposed development is visible from several Key Viewing Areas (KVA’s): Highway 14, the Columbia River, Crown Point, and Interstate 84. The area of development is adjacent to Highway 14 and will have the most impact to the views of the site from this KVA. A person viewing the site from the other KVA’s is a considerable distance from the site, and therefore the development will only minimally impact views from these KVA’s.

The proposed design was developed to maintain visual subordinance from the affected KVA’s once the project is completed.

The existing site is relatively flat and slopes gradually downhill away from Highway 14; there are no existing topographic features or vegetation that could be utilized to hide the development. The project site is constrained by existing wetlands, and only a small area adjacent to Highway 14 is available to provide the needed visitor site access for the refuge. The site is currently managed as an open grassland area through various agricultural practices, and as such there is no known native vegetation within the

site. The site edges, wetland areas, and edge of the dike are heavily vegetated with non-native reed canary grass and scattered patches of non-native Himalayan blackberry. Efforts are underway to reduce the incidence of blackberry. Native deciduous riparian trees and shrubs are located along the north 600 linear feet of the proposed trail location along the north/south dike carrying Gibbons Creek. The proposed development will expand on existing riparian plant communities by incorporating additional riparian vegetation plantings as part of the completion of the proposed site.

#### KVA: Highway 14

The proposed parking area and trail head are adjacent to Highway 14, approximately 240 feet from the edge of the road. The parking area contains 20 parking spaces plus room for a bus pull-off/drop-off area. The proposed access to the parking area utilizes an existing site access road to minimize the disturbance along Highway 14. The proposed parking is located east of Gibbons creek where it passes under Highway 14.

An existing dike along the western side of the parking areas will screen the development from vehicles traveling east until the point that they pass the dike. The parking area is approximately 11 feet below the level of Highway 14, and the grade of parking area was set an additional three feet lower than existing grade. The grading of the parking area depresses it in relationship to Highway 14 so that from Highway 14 a viewer is looking over the parking area to the views of the refuge and beyond to the Columbia River.

A central landscaped area with end islands divides the parking area, providing stormwater control and tree and shrub planting area. This internal landscaped area reduces the expanse of paving and provides additional screening of the parking area.

Berms are proposed along Highway 14 to screen views of the parking area for viewers as they approach the site from the east and west on Highway 14. In addition to the berms, large masses of native trees and shrubs are located around the parking area to provide further screening. A species list of tree and shrub vegetation to be planted is located in C.4. Components of this prairie and riparian woodland seed mix are provided as a part of this application.

A kiosk, refuge overlook and small restroom will be located at the southwest end of the parking area; these will be screened from Highway 14 with trees and shrub plantings. The structures will also be painted and/or stained a dark brown, and the base of both structures will be clad with a stone veneer. Roofing materials will be dark brown asphalt shingles for the kiosk and dark brown concrete shake texture for the restroom. (See material and color samples.)

An automatic gate will be located at the entrance approximately forty feet from the edge of Highway 14. The gate will be used to restrict the side from vehicles when the site is closed, and the gates will remain in the open position during visiting hours. The gate will be constructed of masonry piers and metal painted with dark, earth tone colors (see color palette). A stylized grass pattern cut from steel and backed by a perforated metal panel will form the gate panels and allow views of the landscape through the gate. Down lighting recessed into the gate piers will allow for visibility of the gate and control panel in the evening.

Portions of the interpretive trail will be visible from Highway 14, including sections of boardwalk and a bridge that allows pedestrian access across a wetland area. The trail itself will be a six foot wide gravel path built at grade. The trail will be screened by the existing grass and shrub vegetation. The board walk and bridge sections will be painted a dark earth tone and will be built low to the ground, they will also be mostly concealed by existing wetland vegetation.

#### KVA: Crown Point

Crown Point is located 10 miles to the east of the site. The viewing distance from this KVA is so great that the proposed improvements will not form a significant feature in the overall landscape. Plantings will help break up and mask most of the development from Crown Point.

Trail improvements, due to their design and proposed materials and the viewing distance will not be visually apparent to viewers.

#### KVA: Columbia River

Views of the proposed development from the areas of the Columbia River adjacent to the refuge property are screened from view by the dike along the river. Some limited views of the proposed development would be available from significant distances up river of the site.

The interpretive trail runs along the top of the existing dike and will not be visible from the river. A small interpretive platform will be located near the existing fish ladder. Two structures are being considered, the first will involve widening the existing gravel turnout by approximately one foot with earth embankment and adding a timber fence around the perimeter of the turnout. If this option is used the existing galvanized chain link fence around the head-gate cover structure to the west may be replaced by a metal fence to match the rest of the fencing on this project. The second alternative will have two masonry piers that support a wood deck with a wood and metal handrail. All new elements will be of dark earth tone colors. If this option is used it will also involve removal of the existing galvanized chain link fence that surrounds the head-gate cover structure. Existing willows will provide screening of the new deck overlook. (Note both design alternatives so choice between options can be made at later date.)

#### KVA: Interstate 84

The proposed development is screened from view from the areas of Interstate 84 south of the refuge property by the dike along the river and the existing vegetation. Some limited views of the proposed site will be possible from areas along Interstate 84 to the east of the site. The proposed berm and plantings will make the parking area and proposed structures visually subordinate in the overall landscape view from the distances of this KVA's viewing area.

Trail improvements due to the viewing distance and their design and proposed materials will not be visual apparent to viewers.

#### Conclusion

The proposed development represents a small area of the refuge, and the parking area and associated improvements have been sited so as to best minimize their impacts on the larger landscape. By keeping the development small and close to the existing highway and neighboring developments at the most westerly edge of the site, the proposed development minimizes the cumulative effect on overall landscape views from the associated Key Viewing Areas. Structures have been designed with non reflective natural material as much as possible, and all other surfaces will be painted with dark colors in keeping with Scenic Area recommendations. The largest area of development, the kiosk/parking/restroom locale, will be planted with a mix of evergreen and deciduous trees and shrubs native to the surrounding region.

**Application Checklist: the following is required to complete your application:**

- Application form completed and signed
- Site Plan
- Key viewing areas checklist (attached)
- Names and addresses of adjacent property owners within 200 feet of parcel
- Any additional information as required:

**KEY VIEWING AREAS:** Key viewing areas are important public viewpoints and areas that afford opportunities to view the Gorge scenery. Key viewing areas are listed below. Please check those sites which can be seen from your property.

- |  |  |
|--|--|
| <input type="checkbox"/> Historic Columbia River Highway               | <input checked="" type="checkbox"/> Washington State Route 14  |
| <input type="checkbox"/> Sandy River                                   | <input type="checkbox"/> Washington State Route 142            |
| <input type="checkbox"/> Portland Women's Forum State Park             | <input type="checkbox"/> Washington State Route 141            |
| <input checked="" type="checkbox"/> Crown Point                        | <input type="checkbox"/> Cook-Underwood Road                   |
| <input type="checkbox"/> Rooster Rock State Park                       | <input type="checkbox"/> Dog Mountain Trail                    |
| <input type="checkbox"/> Multnomah Falls                               | <input type="checkbox"/> Beacon Rock                           |
| <input type="checkbox"/> Larch Mountain                                | <input type="checkbox"/> Cape Horn                             |
| <input checked="" type="checkbox"/> Highway I-84, including rest stops | <input checked="" type="checkbox"/> Columbia River             |
| <input type="checkbox"/> Bonneville Dam Visitor Centers                | <input type="checkbox"/> Pacific Crest Trail Oregon Highway 35 |
| <input type="checkbox"/> Sherrard Point on Larch Mountain              |  |
| <input type="checkbox"/> Rowena Plateau/Nature Conservancy Viewpoint   |  |
| <input type="checkbox"/> Larch Mountain Road                           |  |
| <input type="checkbox"/> Wyeth Bench Road                              |  |
| <input type="checkbox"/> County Road 1230 (Old WA St. Route 14)        |  |

**PROJECT SITE PLAN:** A plan drawn in black ink at a scale of about 1 inch equal to 200 feet (1:2400) or at a scale providing greater detail must be included with the application.

If the parcel is very large, you may show the project on the portion of the parcel affected by the proposed use. Be sure, however, to show enough of the parcel or some adjacent features, such as roads, so that the reviewers can orient themselves on your map. A small vicinity map showing the subject parcel and surrounding parcels may help.

**At a minimum, you must show the following features:**

- Applicant(s) name
- Location and width of existing and proposed roads, driveways, and trails
- Scale and north arrow
- Location and size of existing and proposed structures

[x] Boundaries of parcel with dimensions and size

[x] Location of existing and proposed services including wells or other water supplies, structures, power and telephone poles and lines and outdoor lighting.

[x] Significant terrain features or landforms

[x] Location and depth of all proposed grading and ditching

[x] Groupings and species of trees or other vegetation on the parcel

[x] Location and species of vegetation that would be removed or planted

[x] Water courses and bodies of water

**ADJACENT PROPERTY OWNERS AND EXISTING LAND USE  
ON ADJACENT PARCELS WITHIN 200 FEET OF PROJECT PROPERTY:**

<b><u>TOWNSHIP, RANGE, SECTION, TAX LOT</u></b>	<b><u>NAME AND ADDRESS</u></b>	<b><u>EXISTING LAND USE</u></b>
SE 1/4,S12,T1N,R3E	Port of Camas/Washougal 24 South A Street Washougal, WA 98671	Port for the Cities of Camas/Washougal
SW 1/4, S16, T1N, R4E	City of Washougal - Director of Planning and Development 1701 C Street, Washougal, WA 98671	Sewage treatment plant
NE 1/4,S16,T1N,R4E	Jack and Annie Kruger      34817 SE Evergreen Highway Washougal, WA 98671	Residential
NE 1/4,S16,T1N,R4E	Don Jurgenson              34812 SE Evergreen Highway Washougal, WA 98671	Residential
NE 1/4,S16,T1N,R4E	Grant Johnson, Jr.        34900 SE Evergreen Highway Washougal, WA 98671	Residential
SW 1/4,S10,T1N,R4E	Randy Quarles            35560 SE Evergreen Highway Washougal, WA 98671	Residential
NW ¼,S15,T1N,R4E	D.A. Gjendem             6500 SE 356th Avenue Washougal, WA 98671	Residential
NE ¼, S23, T1N, R4E	Sharleen James 39315 SE Evergreen Blvd Washougal, WA 98671	Residential



NE1/4,S16,T1N,R4E	Robert Danielson, 7885 NW 214th Place, Hillsboro, OR 97124	Mobile Home Park
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For Your Information:

County offices:

**Clark County**

Department of Community Department  
1408 Franklin Street  
P.O. Box 9810  
Vancouver, WA 98666-9810  
360-699-2375

Assessor's Office  
1013 Franklin Street  
P.O. Box 5000  
Vancouver, WA 98668  
360-699-2375

**Skamania County**

Department of Planning and Community  
Development  
P.O. Box 790  
Stevenson, WA 98648  
509-427-9458

Assessor's Office  
Courthouse  
P.O. Box 790  
Stevenson, WA 98648  
509-427-9400

**Klickitat County**

Planning Department  
Courthouse Annex  
228 SW Main, Rm. 150  
Goldendale, WA 98620  
509-773-5703

Assessor's Office  
Courthouse  
205 S. Columbus  
Goldendale, WA 98620  
509-773-3715

**Wasco County**

Planning and Economic Development Office  
2705 East Second Street  
The Dalles, OR 97058  
541-298-5169

Assessor's Office  
Court House  
The Dalles, OR 97058  
541-296-5477

**Hood River County**

Planning and Community Development  
Courthouse  
309 State Street, Room 101  
Hood River, OR 97031-2093  
541-387-6840

Assessor's Office  
Courthouse  
309 State Street  
Hood River, OR 97031-2093  
541-386-4522

**Multnomah County**

Department of Environmental Services  
1600 SE 190<sup>TH</sup> Avenue  
Portland, OR 97233-5910  
503-248-3043

Assessor's Office  
610 SW Alder  
Portland, OR 97204  
503-248-3326

# APPENDIX A

## List of Native Plants for Landscaping Steigerwald Lake National Wildlife Refuge.

(Final plant selection will include many but not all of these species depending on plant site applicability and plant availability)

<p><u>Trees</u>  Acer macrophyllum  Alnus rubra  Cornus nuttalli  Fraxinus latifolia  Populus trichocarpa  Pseudotsuga menziesii  Quercus garryana  Thuja plicata</p> <p><u>Shrubs</u>  Amelanchier alnifolia  Cornus sericea  Gaultheria shallon  Holodiscus discolor  Mahonia aquifolium  Oemieria cerasiformis  Physiocarpus capitatus  Polystichum munitum  Rhamnus purshiana  Rhododendron occidentale  Ribes sanguineum  Rosa gymnocarpa  Rosa nutkana  Spirea douglasii  Symphoricarpos albus  Vaccinium ovatum  Vaccinium parvifolium</p>	<p><u>Forbs &amp; Groundcovers</u> may include the following species:</p> <p>Arctostaphylos uva-ursi  Fragaria chiloensis</p> <p><b>Prairie Seed Mix:</b>  Festuca rubra ‘Rubra’  Festuca idahoensis  Koeleria cristata  Elymus glaucus  Sisyrinchium bellum  Achillea millefolium</p> <p><b>Riparian Seed Mix:</b>  Beckmannia syzigachne  Glyceria occidentalis  Juncus patens  Carex obnupta</p> <p><b>Woodland Seed Mix:</b>  Bromus carinatus  Elymus glaucus  Festuca rubra ‘Rubra’  Lupinus polyphyllus  Deschampsia caespitosa  Achillea millefolium  Gilia capitata</p>

# APPENDIX B

## Cultural Resources Compliance



FISH AND WILDLIFE SERVICE, REGION 1  
Cultural Resources Team

20555 SW Gerda Lane  
Sherwood, Oregon 97140  
503-625-4377 (fax 503-625-4887)

June 8, 2007

To: Jim Clapp, Columbia River Gorge National Wildlife Refuges

From: Alex Bourdeau, R1 Cultural Resources Team

Re: Steigerwald Lake NWR Gateway Kiosk and Interpretive Trail project

On-the-ground surveys and record searches for this project have been completed. As no sites eligible or potentially eligible for inclusion in the National Register of Historic Places were found in the project's Area of Potential Effects, under the terms of the US Fish and Wildlife Service Region 1, Washington State Historic Preservation Office, Advisory Council on Historic Preservation Programmatic Agreement concerning cultural resources, this project may proceed as planned without further cultural resources consultation.

If you have any questions regarding these findings, please contact me.

Alex Bourdeau - Cultural Resources Team



# APPENDIX C

## GMA Guidelines- “Practicable” Alternative Test and Natural Resources Mitigation Plan

The following pertinent GMA guidelines are taken from the Management Plan for the Columbia River Gorge National Scenic Area, dated September 1992, to address projects constructed in wetlands and wetland buffer zones.

### NATURAL RESOURCES

#### GMA Guidelines

**Review Uses** (The proposed project falls within category B)

1. The following uses may be allowed in wetlands and wetland buffer zones, subject to compliance with guidelines for the protection of scenic, natural, cultural, and recreation resources and "Approval Criteria for Modifications to Serviceable Structures and Minor Water-Dependent and Water-Related Structures in Wetlands" in this section.
  - B. The construction of minor water-related recreation structures that are available for public use. Structures in this category shall be limited to boardwalks; trails and paths, provided their surface is not constructed of impervious materials; observation decks; and interpretative aids, such as kiosks and signs.

### **Approval Criteria for Modifications to Serviceable Structures and Minor Water-Dependent and Water-Related Structures in Wetlands**

1. The uses identified in Guideline 1 under "Review Uses," above, may be allowed only if they meet all of the following criteria:
  - A. Practicable alternatives for locating the structure outside of the wetland or wetland buffer zone and/or minimizing the impacts of the structure do not exist.
  - B. All reasonable measures have been applied to ensure that the structure will result in the minimum feasible alteration or destruction of the wetland's functions, existing contour, vegetation, fish and wildlife resources, and hydrology.
  - C. The structure will be constructed using best management practices.
  - D. Areas disturbed during construction of the structure will be rehabilitated to the maximum extent practicable.
  - E. The structure complies with all applicable federal, state, and local laws.

**The following information is presented in response to the above guidelines-**

**A. Practicable alternatives for locating the structure outside of the wetland or wetland buffer zone and/or minimizing the impacts of the structure do not exist.**

**“Practicable” Alternative Test**

The interpretive trail and associated features are within key viewing areas of the CRGNSA and within wetland and stream buffers. The proposed project will provide public access to Steigerwald Lake NWR and present opportunities for the visiting public to experience wildlife through observation while hiking, through photography, and via environmental education and interpretive exhibits. This project fulfills the directive of the Refuge System Improvement Act to recognize and facilitate refuge-compatible wildlife-dependent recreational activities for the public as priority general uses of the Refuge System.

Furthermore, it is consistent with the objectives of the 2005 Comprehensive Conservation Plan for the Steigerwald Lake NWR, Franz Lake NWR, and Pierce NWR. The project will also serve as the Western Gateway to the Columbia River Gorge National Scenic Area, providing the visiting public with a general introduction and orientation to the Scenic Area and information on resources in the surrounding vicinity. It is referenced in the Columbia River Gorge Commission Management Plans:

No. 1, T1 — *Steigerwald Northwest Gateway/Cottonwood Beach Trail*

**Site Description:** The site consists of approximately 15 acres of land on the northern edge of Steigerwald Lake National Wildlife Refuge, southeast of the intersection where Gibbons Creek crosses Highway 14. The USFWS completed a compatibility study in 1990, the results of which indicate the absence of any significant or sensitive natural, cultural, or scenic resources that would substantially constrain recreation facility development. Recreation Intensity Class: 3 (gateway site), 1 (lands traversed by proposed trail route).

The location of the proposed trail to the Columbia River was specifically approved in the USFWS’s Environmental Assessment (July 1999) and further documented in WFLHD’s Categorical Exclusion (August 2007).

Initially the pedestrian trail was planned to be placed on top of the Gibbons Creek Dike. The top of the dike is used for access from Refuge staff vehicles. Washington Department of Fish and Wildlife biologists requested the trail be placed below the dike to minimize impacts to Gibbons Creek and to decrease the disturbance to migratory birds. It was determined that the placement of the trail at the eastern toe of the dike would allow for the least amount of disturbance to wildlife and aquatic resources. The trail was placed as close to the dike as possible to maintain the structural integrity of the dike, to minimize impacts to the wetland natural resources, and to stay within an area that was previously disturbed. In addition, the wetland vegetation to be impacted is currently non-native reed canarygrass. Possible wetland restoration and enhancement work to be accomplished in the future was also considered in the placement of the trail. As part of the project is to provide the public access to refuge resources, consideration was given to allowing access to the least sensitive of the refuge resources. The proposed location of the trail minimizes impacts to the critical salmonid habitat of Gibbons Creek as well as migratory bird habitat. The placement of the trail was also designed to keep to areas that have been used as access for refuge staff, thus minimizing new ground disturbance.

The decision to place the parking lot was made to minimize impacts to environmental resources. The area was selected due to the past and current agricultural history, current conditions of the site, and proximity to SR14. While this is near a key viewing area, berms will be constructed to minimize visual impacts.

Because the purpose of the trail and kiosk features was to enhance environmental educational and recreational opportunities on the refuge, it becomes essential that it enter the riparian and wetland buffers. Since the objective of the trail is to provide access to wetland areas and riparian areas, there is no practicable alternative to building this trail within the buffer zone.

The objective of the pedestrian bridge crossing is to provide a crossing and viewing opportunity of Gibbons Creek, and to provide natural and historical interpretations of the area. If the structure was placed 200 ft from all water resources, the public would not be able to cross or view Gibbons Creek. This would reduce the length of the trail, and subsequently reduce the opportunity for the refuge to provide quality interpretation, environmental education and wildlife-dependent recreation opportunities. The bridge site has been chosen at the narrowest crossing location to minimize impacts to the creek. The pedestrian bridge and connected trail system is water-dependent and there is no practicable alternative to building this structure within the buffer zone.

The components of this project have no “practicable” alternative and thereby meet this test to enter the buffer zones.

**B. All reasonable measures have been applied to ensure that the structure will result in the minimum feasible alteration or destruction of the wetland's functions, existing contour, vegetation, fish and wildlife resources, and hydrology.**

**Natural Resources Mitigation Plan**

A wetland delineation was conducted following the 1987 Army Corps of Engineers Wetland Delineation Manual. Field reviews identified wetland areas based on evidence of hydric soils, hydrophilic vegetation and hydrology. Wetland habitat types were classified using the National Wetlands Inventory Classification. Construction design focused on avoidance and minimization. Where this was not practicable, mitigation may be provided through the planned restoration / enhancement of existing reed canarygrass wetland areas within the project area, or other onsite mitigation measures that would benefit the impacted watershed. A final mitigation plan will be determined after consultation with the US Army Corps of Engineers following their mitigation guidelines.

**Site Monitoring**

Typical monitoring guidelines call for the wetland mitigation site and temporary wetland impact areas to be monitored for five years. The monitoring program would determine the effectiveness of the compensatory mitigation in meeting the goals, objectives, and performance standards previously described in the *Mitigation Measures* section.

For the first and second years, a memorandum summarizing general site conditions, including but not limited to plant health, plant survival, invasive plant presence, and photographs will be submitted to the U.S. Army Corps of Engineers. The memorandum for the first year will include an inventory of plants that need replacement, as determined by WFLHD and/or USFWS biologists. In addition, the memorandum will identify any measures that will be taken to improve the site conditions. During the first monitoring site visit, permanent photo stations will be established and a photo station log developed. Monitoring reports will be submitted to the U.S. Army Corps of Engineers for the third and fifth years; the reports will describe the monitoring methods, performance standards, results, and contingency measures. Each memorandum and monitoring report will include photographic documentation, including photographs taken from the established photo points.

## **Stream and Wetland Buffer Zones**

Gibbons Creek is designated Critical Habitat for Lower Columbia River Steelhead trout (*Oncorhynchus mykiss*), and Lower Columbia River Coho salmon (*Oncorhynchus kisutch*) which have been found in Gibbons Creek at times of the year other than when the project work is proposed. The buffer is 100 feet. Mitigation to enter the buffer to construct the trail and pedestrian bridge will be to limit construction activities to the period of lowest flow (July 15 – September 30) and to minimize in stream work to transport the bridge and place the footings by only allowing a support system to be set up during periods of lowest flow. Sediment logs or other applicable erosion and control measures will be in place along the work areas at Gibbons Creek.

Wetland buffer zones are 50 feet. The proposed project encroaches on the wetland buffers. To mitigate for this encroachment, the contractor will be limited in the construction footprint, construction inspectors will be on site during the construction activities.

### **C. The structure will be constructed using best management practices.**

Best Management Practices (BMP's) will be employed and are conditions of the environmental permits from this action. BMP's include sediment and erosion control measures (silt fence, sediment logs, etc.) scheduling activities for bridge construction around the period of lowest flow, using native plants for revegetation, fencing off environmentally sensitive areas, establishing wetland and stream buffers, and providing for construction inspections and monitoring.

### **D. Areas disturbed during construction of the structure will be rehabilitated to the maximum extent practicable.**

Areas of new ground disturbance will be confined to the parking lot and the construction of the bridge. The construction of the trail will be placement of fill on the existing ground. Upon completion of construction activities areas of new disturbance will be revegetated using native seed material to control the spread of invasives. The implementation of sediment and erosion control features, as well as plans to revegetate the site will stabilize any newly disturbed ground. These areas will also be graded to meet existing elevations and to leave the site with the natural contours. A grading plan has been submitted as part of this application.

In compliance with the Clean Water Act Section 402, these areas will be contained with sediment and erosion control measures such as silt fence and sediment logs as a condition of the National Pollution Discharge Elimination System (NPDES) permit. A Storm Water Pollution and Prevention Plan will be developed and implemented as a condition of the NPDES. In order to terminate the permit, the disturbed areas must reach at least seventy percent of background vegetation.

### **E. The structure complies with all applicable federal, state, and local laws.**

#### **ENDANGERED SPECIES ACT-WILDLIFE**

Current species listed as threatened or endangered under the Endangered Species Act (ESA) which may occur in Clark County and project area are *Gray Wolf*, *Golden Paintbrush*, *Water Howellia*, and *Bradshaw's Lomatium*. Listed species that do occur in the Clark County is *Northern Spotted Owl*. Under new section 7 consultation procedures, the USFWS has delegated the authority to

make effects determinations on National Wildlife Refuges to the Refuge Managers. A May 22, 2007 memo from the Refuge Manager documented the listed species occurring in the project area and analyzed the potential impacts from the proposed action. That memo documented the USFWS determination that the proposed action “May Affect, But Is Not Likely to Adversely Affect” listed species.

### **ENDANGERED SPECIES ACT- FISHERIES**

The Gibbons Creek drainage is within the Evolutionarily Significant Unit (ESU) for listed species under the Endangered Species Act (ESA): Lower Columbia River Steelhead trout (*Oncorhynchus mykiss*); and Lower Columbia River Coho salmon (*Oncorhynchus kisutch*) are both listed as threatened. Gibbons Creek is listed as Critical Habitat and as such is regulated under Section 7 of the Endangered Species Act. Interagency consultation with National Oceanic Atmosphere Administration (NOAA) Fisheries was initiated on July 23, 2007. On August 6, 2007 NOAA concurred with the USFWS’s determination that the proposed action “May Affect, But Is Not Likely to Adversely Effect” listed species and their Critical Habitat in the proposed project area.

### **HYDROLOGY AND FLOODPLAINS**

Executive Order 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. The Federal Highway Administration requirements for compliance are outlined in 23 CFR 650 Subpart A. If a proposed action causes a “significant encroachment” as defined at 23 CFR 650.105, then a finding must be made that it is the only practicable alternative as required by 23 CFR 650, Subpart A. A significant encroachment is defined as a highway encroachment and any direct support of likely base floodplain development that would involve one or more of the following construction or flood related impacts:

- a significant potential for interruption or termination of a transportation facility that is needed for emergency vehicles or provides a community's only evacuation route
- a significant risk (to life or property), or
- a significant adverse impact on natural and beneficial floodplain values

The action proposed in this document does not meet the criteria for a significant encroachment, because it does not meet the requirements cited above. The proposed action is designed as a pedestrian facility and is within the Columbia River Gorge Scenic Management Area which limits the potential for commercial or residential development. Flood management activities were implemented in the 1960’s and is currently managed by the Army Corps of Engineers. Based on the above, no finding is needed under EO11988.

### **SECTION 4(f)**

Section 4(f) of the U.S. Department of Transportation Act of 1966 states that “the Secretary shall not approve any program or project which requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl Refuge of national, state, or local significance as determined by the Federal, State, or local officials having jurisdiction thereof, or any land from a historic site of national, state, or local significance as determined by such officials unless (1) there is no prudent and feasible alternative to the use of such land, and (2) and such program includes all possible planning to minimize harm to such park, recreation areas, wildlife and waterfowl Refuge, or historic sites resulting from such use.”



Section 6009(a) of the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Pub. L. 109-59 amended existing Section 4(f) legislation at Section 138 of Title 23 and Section 303 of title 49, United States Code, to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). This revision provides that once the Department of Transportation (DOT) determines that a transportation use of Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a *de minimis* impact on that property, an analysis of avoidance alternatives is not required, and the Section 4(f) evaluation process is complete.

The FHWA gave notice to the USFWS of their intent to make a *de minimus* finding under Section 4(f) for the proposed activities on Steigerwald Lake National Wildlife Refuge. The USFWS agreed with that finding. On July 4, 2007 a legal notice was published in the Clark County newspaper *The Columbian*. A fifteen day public comment period was given. No public comments were received on the finding.

### **CLEAN WATER ACT (CWA) - WETLANDS**

A wetland delineation was conducted following the 1987 Army Corps of Engineers Wetland Delineation Manual. Field reviews identified wetland areas based on evidence of hydric soils, hydrophilic vegetation and hydrology. Wetland habitat types were classified using the National Wetlands Inventory Classification. Construction design focused on avoidance and minimization. Where this was not practicable, mitigation may be provided through the planned restoration / enhancement of existing reed canarygrass wetland areas within the project area, or other onsite mitigation measures that would benefit the impacted watershed. A final mitigation plan will be determined after consultation with the US Army Corps of Engineers following their mitigation guidelines.

In accordance with *Executive Order 11990, Protection of Wetlands*, WFLHD closely evaluated the proposed transportation improvements and wetland impacts. Overall impacts to wetland areas throughout the projects corridor are estimated to be approximately 0.09 acres. Based on the above considerations, WFLHD has determined that there is no practical alternative to the proposed construction in wetlands, and the proposed action includes all practicable measures to minimize harm to wetlands that may result from such use.

In addition to Section 404, a National Pollution Discharge Elimination System (NPDES) permit will be applied for. The NPDES complies with section 402 of the CWA. A Storm Water Pollution and Prevention Plan (SWPPP) will be developed and implemented as a condition of the NPDES. The SWPPP will have Best Management Practices for sedimentation and erosion control, such as sediment logs to prevent sediment runoff from areas of new ground disturbance to aquatic resources.

### **CULTURAL RESOURCES**

In compliance with the National Historic Preservation Act of 1966, the potential impacts to historic properties from the proposed action have been analyzed. On-the-ground surveys and record searches for this project have been completed by USFWS archaeologists meeting the professional qualification standards of the Secretary of Interior. As no sites eligible or potentially eligible for inclusion in the National Register of Historic Places were found in the project's Area of Potential Effects, the provisions of the 1997 Programmatic Agreement with the Washington State Historic Preservation Office (SHPO), USFWS Region1, and the Advisory Council on

Historic Preservation (ACHP) were met. The type of action meets the conditions of the Programmatic Agreement under Stipulation III A, Appendix B (4). The project will be reported to the State Historic Preservation Office in the FY2007 annual report submitted in 2007. A copy of the USFWS's cultural resources review is included (Appendix B), and a copy of the 1997 Programmatic Agreement with the Washington State Historic Preservation Office is available upon request.

