Historic Columbia River Highway State Trail:
Viento to Mitchell Point (Segment E) and Mitchell Point (Segment F)

Cumulative Effects Memorandum

June 2019
1 INTRODUCTION AND PURPOSE OF MEMORANDUM

The Management Plan for the Columbia River Gorge National Scenic Area (Management Plan) calls for the consideration of cumulative impacts when evaluating a proposed project in relation to past, present, and reasonably foreseeable future actions. To specifically address cumulative effects from proposed development, the Hood River County Zoning Ordinance (HRCZO) includes code language providing direction on which National Scenic Area resources must be addressed. These include scenic, natural, and recreational resources.

This memorandum amends the National Scenic Area permit application (2019) for the Historic Columbia River Highway State Trail segments E and F specifically addressing the potential for cumulative effects in the proposed project vicinity (see 2.1 below for vicinity description). Following the requirements of the HRCZO, potential cumulative effects are considered for scenic, natural, and recreational resources. The specific findings contained in this memorandum addressing each resource type are included in the primary narrative of the NSA permit application responses.

2 METHODOLOGY

A detailed methodology for addressing cumulative effects is not provided in the Management Plan or HRCZO. Therefore, this memorandum follows a similar methodology as for NEPA, which means it focuses on identifying and considering the effects of past, present, and reasonably foreseeable other projects or actions in the vicinity of the proposal. When taken together, potential effects to a given landscape or resource can be holistically considered.

To aid the reader’s understanding of the intent of a cumulative analysis, the following definitions are provided:

- From the Management Plan and HRCZO: **Cumulative effects** - *The combined effects of two or more activities. The effects may be related to the number of individual activities, or to the number of repeated activities on the same piece of ground. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.*

- From the procedural provisions of NEPA (1969, as amended): **Cumulative effects** - *the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such actions* (40 CFR § 1508.7)

2.1 Analysis Area and Timeframe

Following a NEPA approach and input from USFS, the analysis area considered for this memorandum was not strictly geographically defined but instead focused on the proposed project area and its vicinity. Vicinity is generally defined as within a buffer of several hundred feet centered on the Historic Highway corridor between Bridal Veil Falls and Ruthton Park. Specifically, other actions (particularly future actions) were identified for consideration if they are proposed to occur within the same general vicinity.
In addition to proximity, the potential for other actions to be seen from identified Key Viewing Areas was considered, specifically when addressing cumulative effects to scenic resources.

As with the geographic analysis area, no strict temporal parameter was set when identifying other projects or actions. Instead, the NEPA language “reasonably foreseeable future actions” was used as a guideline. This means that projects listed in agency management or master plans, capital improvement plans, or similar documents were identified for consideration.

3 PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS

The Management Plan for the Columbia River Gorge National Scenic Area calls for the consideration of cumulative impacts to address the proposed project in relation to past, present, and reasonably foreseeable future actions. This section includes brief descriptions of those actions identified for this evaluation.

3.1 Past Actions

Past actions in the project vicinity include railroad construction, construction of the Historic Highway, and later construction of Interstate 84 (I-84). These facilities introduced linear, human-made visual impacts to the natural landscape, which prior to the development was mainly steep, rocky bluffs and floodplain with dense vegetation, corresponding to the present Landscape Settings designations recognized by the Management Plan. With the addition of transportation facilities in the Gorge, residential and commercial development (e.g. motor inns, service stations) began to occur adjacent to both the Historic Highway and I-84. None of these facilities were intentionally screened from any viewpoint because they predate the National Scenic Area, and so all activities were visually evident from key viewing areas. Over time, the Gorge has been logged, burned in wildfires, and been developed. More recently, however, as conservation groups and the USFS and Oregon State Parks have acquired land, the National Scenic Area has slowly moved toward more natural settings as buildings and pavement have been removed, some areas have been restored and new development is strictly regulated under the NSA designation.

3.2 Present Actions

Present actions in the project vicinity include the recent construction of Historic Columbia River Highway State Trail Segments A-D between Wyeth Campground and Starvation Creek State Park, portions of which are visible from I-84. This project is anticipated to be completed by the end of 2019. In addition, recovery work continues from the damage caused by the Eagle Creek fire of 2017. Specifically, hazardous tree removal staging and laydown areas can currently be seen from I-84 near Ainsworth State Park (this work is temporary, however). The visual effects from the Eagle Creek fire itself are also visible from I-84, Hwy 30 and the Columbia River: large stands of burned and defoliated but standing trees can be seen on the canyon slopes and silhouetted along the ridgetops between Angel’s Rest and Summit Creek.
3.3 Reasonably Foreseeable Future Actions

Foreseeable future actions in the vicinity of the proposed project identified for this analysis are summarized in Table 1. Overall, projects proposed in the vicinity of the analysis area would be driven by one of a small number of agencies (i.e., USFS, ODOT, OPRD) that own or manage lands within the CRGNSA. This means that potential future actions were included in Table 1 if they would be located along the I-84 corridor and could, when taken in combination with the proposed project, pose cumulative effects on the resources of the NSA. Of those future actions, the following would be in close proximity or have the potential to affect the existing character of the Landscape Setting of the proposed project; they are each discussed in more detail below:

- Historic Columbia River Highway State Trail, Segments G and H (Mitchell Point Drive to Ruthton County Park)
- The effects of the 2017 Eagle Creek Fire and on-going recovery work by ODOT and USFS in response to the fire
- Viento State Park River Access Day-Use Area improvements
- Re-Build of existing BPA 115kV transmission line between Bonneville and Hood River
### TABLE 1.

**Historic Columbia River Highway: Viento to Mitchell Point**

**CUMULATIVE EFFECTS: IDENTIFIED PLANNED FUTURE PROJECTS**

**May 2019**

<table>
<thead>
<tr>
<th>Project Owner</th>
<th>Project/Action Name</th>
<th>Location</th>
<th>Category (Transportation, Recreation, etc.)</th>
<th>Type (New facility, Maintenance, etc.)</th>
<th>Timeframe to Anticipated Construction (Short, Medium, Long)</th>
<th>Project Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Federal Lands</td>
<td>Historic Columbia River Highway State Trail (HST) undercrossing to Ruthton Park (Segments G and H)</td>
<td>Southwest of Hood River</td>
<td>Recreation/Transportation</td>
<td>New facility that incorporates existing HCHT segments</td>
<td>Medium</td>
<td>1.6 miles of State Trail to be constructed immediately north of I-84 between an existing undercrossing and Ruthton County Park</td>
</tr>
<tr>
<td></td>
<td>Oregon Tunnel reconstruction</td>
<td>Oregonia Grade</td>
<td>Recreation</td>
<td>Maintenance/Reconstruction of existing HCHT segments</td>
<td>Medium</td>
<td>Reconstruction of previously-restored tunnel and trailhead facilities destroyed by Eagle Creek Fire</td>
</tr>
<tr>
<td></td>
<td>Historic Columbia River Highway State Trail (HST) undercrossing to Lake Ellice (Segments A through E)</td>
<td>Vicinity of Cascade Locks</td>
<td>Recreation/Transportation</td>
<td>New facility that incorporates existing HCHT segments</td>
<td>Short/Under construction, planned opening Fall 2019</td>
<td>9.5 miles of Historic Highway State Trail, Currently under construction. Some portions of trail and structures visible from I-84.</td>
</tr>
<tr>
<td><strong>ODOT</strong></td>
<td>Bridge replacement: I-84 eastbound over McComb Creek</td>
<td>I-84 at McComb Creek</td>
<td>Transportation</td>
<td>Highway bridge replacement</td>
<td>Medium</td>
<td>In-kind replacement of existing I-84 bridge over McComb Creek</td>
</tr>
<tr>
<td></td>
<td>Repairing I-84 between Multnomah Falls and Cascade Locks</td>
<td>I-84 between Multnomah Falls and Cascade Locks</td>
<td>Transportation</td>
<td>Highway maintenance</td>
<td>Medium</td>
<td>In-kind replacement of pavement</td>
</tr>
<tr>
<td></td>
<td>Ongoing burned area removal resulting from Eagle Creek Fire</td>
<td>Corridor-wide within burned area</td>
<td>Transportation</td>
<td>Maintenance</td>
<td>Short</td>
<td>This work is currently inactive, but will continue as resources become available. The trail continues to be considered a high priority.</td>
</tr>
<tr>
<td><strong>US Forest Service</strong></td>
<td>Eagle Creek Trees (2017) (ODOT and WIL stakeholders)</td>
<td>Eagle Creek Trees within site boundaries</td>
<td>N/A</td>
<td>Wildfire</td>
<td>Recovery will be long</td>
<td>Wildfire burned 90,000 acres centered around Eagle Creek</td>
</tr>
<tr>
<td></td>
<td>Cascade Locks Multi Use Trail</td>
<td>Site area of Cascade Locks</td>
<td>Recreation</td>
<td>New facility proposed addition to existing facilities</td>
<td>Short</td>
<td>1.8-mile single track mountain bike trails</td>
</tr>
<tr>
<td><strong>Columbia River County</strong></td>
<td>Ruthton County Park Improvements</td>
<td>Off Westcliff Drive, west side of the Columbia River</td>
<td>Recreation</td>
<td>Site improvements, accessibility</td>
<td>Medium</td>
<td>Improvements at Ruthton Park are currently planned to be included in the HCHT State Trail Segments G and H development project, discussed above. The park property may transfer ownership to ORBD in the future.</td>
</tr>
<tr>
<td><strong>Oregon Parks and Recreation Dept</strong></td>
<td>Viento State Park Access Area Improvements</td>
<td>North of I-84, Viento State Park</td>
<td>Recreation</td>
<td>Maintenance</td>
<td>Short</td>
<td>Re-pave existing parking area</td>
</tr>
<tr>
<td><strong>Bonneville Power Administration</strong></td>
<td>Bonneville-Hood River Transmission Line Re-Build</td>
<td>Various Locations between Cascade Locks and Hood River</td>
<td>Utilities/Transmission Line</td>
<td>Maintenance/Replacement</td>
<td>Short to Medium (construction of line in vicinity of Viento town?)</td>
<td>Replacement of existing 115KV line equipment, incl. poles, towers, conductions. Potentially extending with near mile 19 (segments E/F, new access roads where needed, Schedule: Miles 1-7 planned for construction in 2019)</td>
</tr>
</tbody>
</table>
3.3.1 Historic Highway State Trail, Segments G and H (Mitchell Point to Ruthton Park)

This FHWA-led project is currently in the planning stage and would continue the re-establishment of the Historic Columbia River Highway State Trail from the east side of Mitchell Point into Hood River. Currently, the project would begin at Mitchell Point Drive (south of I-84) with re-grading of the existing rural access road up to an existing undercrossing passing beneath the interstate. This undercrossing would be fully reconstructed to accommodate the trail and vehicles. Via the new undercrossing, new State Trail would be constructed directly north of I-84 (currently proposed to be sited within the roadway prism, as defined by the HRCZO code) to Ruthton Point, where an existing viaduct segment of the original Historic Highway still exists along a dramatic cliffside overlooking the Columbia River. The proposed project would tie into this exiting segment and restore the trail itself in addition to historic features, including railings, viaduct structures and overlook ‘stop and pause’ points. East of Ruthton Point, the trail would continue adjacent to I-84 on the north side, extending the roadway prism. Some of the trail would be constructed on fill, with some portions constructed on concrete viaduct structures, depending on existing topography and utilities. The proposed section of trail would terminate at Ruthton Park, just outside Hood River. At the park, new trailhead facilities are proposed to support users of the HCRH State Trail: a small parking area, plaza with signage, and new ADA accessible trail segments are proposed.

3.3.2 Eagle Creek Fire and Response Activities

The human-caused Eagle Creek wildfire ignited September 2, 2017. It eventually burned nearly 50,000 acres before being declared fully contained on November 30, 2017. 20 miles of I-84 and the Columbia River itself were closed for periods of time between Troutdale and Hood River. Six miles of the Historic Columbia River Highway were also closed for up to eleven weeks. As the fire burned, flames could be seen from points throughout the Gorge and brown, smoky air filled the area.

Recovery efforts by USFS, ODOT and others is ongoing and includes hazardous tree removal, trail restoration and some full facility reconstruction. The response activities have required the temporary placement of cyclone fencing or concrete barriers to restrict public access to damaged facilities. The intensity of the wildfire ranged widely - from minor to intense - within the total perimeter, meaning that in some areas minimal damage is present while other areas fully burned. At the time this memorandum was prepared (spring 2019), burned forest areas, primarily located away from I-84 up on the canyon slopes and ridgelines, could be seen from I-84 and the Columbia River: blackened and defoliated trees still standing in groves with little understory foliage.

3.3.3 Viento State Park River Access Day-Use Area Improvements

This OPRD maintenance project is identified in their Columbia River Gorge Management Units Plan (2015) and is currently in a preliminary scoping stage. The project is located on the Columbia riverbank, directly north of the Viento Campground being improved as part of the proposed project. At the Viento Day-Use Area, an existing gravel parking area is proposed to be paved; a new ADA accessible picnicking area would be added adjacent to an existing plaza area; and an existing kiosk sign would be replaced. Minimal expansion of the existing ‘footprint’ of the existing facility is proposed.
The Viento Day-Use area is not noticeably visible from the Columbia River KVA, and no visible changes or changes to existing facilities are expected at the river’s edge.

### 3.3.4 BPA Hood River Transmission Line Re-Build

The scope of this BPA-led project is to replace 24 miles of existing 115kV transmission line between Bonneville and a substation in Hood River. Most poles and towers would be replaced with modern equivalents or upgraded, in addition to the replacement of the conductors, hardware and fall protection. Limited new access roads and maintenance of existing access ways could also be proposed.

### 4 Cumulative Effects to Scenic Resources

Past and present activities have changed the visual appearance of the Gorge through time. The visual effects of future activities are limited by their need to adhere to the CRGNSA Management Plan. Past actions like the introduction of transportation corridors (I-84, railroads) changed the appearance of the landscape, but they allowed for people to experience and appreciate the unique value of the Gorge.

The current construction of HCRH State Trail between Wyeth and Lindsey Creek has introduced features visible from I-84, such as a new viaduct. The proposed project would include portions (segment E) also visible from I-84, but

FHWA and ODOT continue planning and design efforts for the future HCRH State Trail Segments G and H. OPRD may make minor site improvements to the existing day-use facility at Viento State Park, and the first phase of construction (located at Cascade Locks) to replace the existing BPA Bonneville to Hood River transmission line is planned for 2019. These potential developments would not constitute a cumulative visual impact, because they would involve no new facilities that could be noticed by visitors. Furthermore, with the exception of HCRH State Trail Segments G and H, none of the above described projects are expected to be topographically visible from Key Viewing Areas. All projects or actions will be required to meet the criteria established to preserve scenic quality by the CRGNSA Management Plan. No adverse cumulative impacts to scenic resources are expected to occur.

### 5 Cumulative Effects to Natural Resources

Past actions described in Section 3.1 were also detrimental to the health of the natural environment of the Gorge. Transportation corridors were constructed on fill, impacting the flow of stormwater and stream flow and created barriers to anadromous fish passage. Incremental development has altered the ecology of the Gorge, fragmenting habitats and likely impacting sensitive species. Air and water quality have also been incrementally negatively impacted as increased vehicle traffic has been introduced.

Currently under construction, the HCRH State Trail Wyeth to Starvation Creek project includes 6.1 acres of habitat restoration in the vicinity of Warren Creek, as mitigation for impacts to existing resources or their buffer areas resulting from that trail project. The mitigation area site was previously developed by human settlement and had become dominated by invasive species. Through the restoration efforts, invasive species will be removed and replaced with a diversity of native species. In addition, extensive
native revegetation is being installed along the new trail alignment to provide visual screening but will also contribute to habitat and functions of the natural landscape.

All of the future projects described in Section 3.3 involve maintenance or improvements to existing facilities and are expected to occur within their existing development footprint or the roadway prism footprint, so no additional impacts to natural resources are expected. Considering past, present, and planned future actions, no adverse cumulative impacts to natural resources are expected to occur.

6 Cumulative Effects to Recreational Resources

The identified future projects are described in Table 1. Because land and right-of-way ownership within the project area that is outside of designated Urban Areas is almost entirely federal and state, and because the CRGNSA limits types of development, most of the identified past and future projects are public recreation-, transportation-, or energy-related. The privately-owned Union Pacific railroad runs parallel to I-84.

The projects currently proposed in the HCRH Trail project area, as described in Table 1, are primarily maintenance, restoration, and improvements of existing development. Union Pacific maintains its railroad, and has been making technological upgrades throughout the state such as positive train Control and drone inspections. This proposed HCRH State Trail project would all occur within an existing corridor that pre-dates the establishment of the CRGNSA in 1986. The segments would reconnect sections of the HCRH that were isolated from each other when I-84 was built in 1956 (as I-80N). Taken together, the combined effects of past, present, and planned future projects would be beneficial to recreational resources.

Cumulative impacts may also include the effects of natural processes and events. In the project area, landslides and human- and lightning-caused wildfire do occur. Portions of I-84 were built on landslide deposits, and severe weather events can trigger landslides and sinkholes. For example, in 2018, the 1996 Farley landslide on I-84 was repaired and a retaining wall constructed, in an area within Hood River County but outside the HCRH Trail project area. On September 2, 2017, the human-caused Eagle Creek fire was ignited and burned 50,000 acres. ODOT and the USFS are undertaking restoration work. These natural events are not reasonably foreseeable.