

**Attachment B – Staff Summary with Planning Commission Revisions  
PLASAR-15-01-0004 UPRR**

**File Number:** PLASAR-15-01-0004

**Applicant:** Union Pacific Railroad and consultants, CH2M Hill

**Land Owners:** Union Pacific Railroad  
Oregon Department of Transportation  
Oregon Parks and Recreation Commission  
Skylar and Kathleen Schacht

**Requests:** Expand an existing railroad siding on either side of Mosier, Oregon for 4.02 miles of new second mainline track and realigned existing track; replace five equipment shelters; install drainage structures including ditches and culverts, a retaining wall, new lighting and signage, and wireless communication poles; modify existing utilities, temporary landing zones for construction; construct temporary and permanent access roads; and off-site wetland mitigation.

**Location:** The project area begins at rail MP 66.98, east of the Wasco County line, approximately two miles west of the City of Mosier, and ends at rail MP 72.35, approximately three miles east of Mosier, within Memaloose State Park. The project area roughly parallels the Columbia River and Interstate 84. More specifically, the project crosses Township 3 North, Range 12 East, Sections 31 and 32; Township 3 North, Range 11 East, Section 36; and Township 2 North, Range 11 East, Sections 1, 2, and 3. The replacement of a signal building and two signal lights are also proposed at MP 74.73, approximately 2.4 miles east of the contiguous project area and off-site wetland mitigation is proposed on Wasco County Parcel 2N 13E Section 8 Lot 200 (Account # 1274). The project will be predominantly located on lands owned by Union Pacific Railroad. Portions of the project are also proposed to occur on lands owned by Oregon Department of Transportation and Oregon State Parks and Recreation. Offsite wetland mitigation will occur on lands owned by Skylar and Kathleen Schacht.

**Zoning:** General Management Area Large-Scale and Small-Scale Agriculture (A-1 (40) and A-2 (80)), Open Space, and Water; and Special Management Area Public Recreation, Agriculture, and Open Space.

**Procedure**

**Type:** Type III quasi-judicial hearing before the Wasco County Planning Commission

**Staff Report**

**Prepared for:** Wasco County Planning Commission

**Staff Report**

**Prepared By:** Angie Brewer, Planning Director

**Planning Commission**

**Hearing Dates:** September 6 and 26, 2016.

**At the direction of the Planning Commission, modifications to this document are limited to text addressing conditions of approval that were modified at the September 26, 2016 hearing. Planning Commission revisions are shown in ~~strikes~~ and underlines.**

### **Applicable Standards**

The following Chapters of the Wasco County National Scenic Area Land Use & Development Ordinance (NSALUDO) are applicable to the proposed development and are addressed in detail below:

- Chapter 1 – Introductory Provisions
- Chapter 2 – Development Approval Procedures
- Chapter 3 – Basic Zoning Provisions
- Chapter 5 – Conditional Use Review
- Chapter 6 – Variance Criteria
- Chapter 11 – Fire Safety Standards
- Chapter 14 – Scenic Area Review
- Chapter 23 – Sign Provisions

### **A. Project Description**

1. **Proposed Development:** Union Pacific Railroad (UPRR) has provided an application to the Wasco County Planning Department (the Department) for modification and expansion of an existing railroad mainline and siding between rail mileposts (rail MP) 66.98 and 72.35, including the replacement of existing signage, lighting, communications poles and equipment shelters. As shown on application materials provided by CH2M Hill, the project will begin at the western boundary line of Wasco County and continue east, through the City of Mosier, terminating approximately half way through Memaloose State Park<sup>1</sup>. Additionally, the replacement of an existing signal building and two signal lights are proposed to occur at rail MP 74.73, and an off-site wetland mitigation area is proposed outside of the railroad right-of-way, adjacent to Tooley Lake; both sites are east of the primary development.

The purpose of the project is described in Section 2.1 of the application materials; it states:

*“The purpose of the project is to improve operational efficiency of train movement along UPRR’s existing mainline track near the City of Mosier while maintaining safe operating conditions. Operational efficiency is improved by maintaining standard operating speed and system fluidity, improving the ability of trains to safely pass one another, reducing idling time at the short Mosier siding, and reducing barriers to the use of industry-standard train lengths.”*

The project need is described in Section 2.2 of the application materials, and cites existing operational inefficiencies and constraints as well as existing safety concerns near the city of Mosier. Section 3 contains an alternatives analysis required by staff for completeness.

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<sup>1</sup> A landowner consent form signed by Oregon State Parks and Recreation was provided as part of a complete application. Please note implementation of the development, as conditioned for approval, is at the discretion of the landowner.

As proposed, the project will occur in the General Management Area (GMA), the Special Management Area (SMA), and the designated Urban Area (UA) of Mosier. In total, the project will occur in seven different land use designations (zones) within the Columbia River Gorge National Scenic Area (NSA) in Wasco County.

Pursuant to the Columbia River Gorge National Scenic Area Act<sup>2</sup>, the portion of the project occurring within the designated UA of Mosier is not subject to consistency with NSA rules and regulations. Furthermore, Wasco County does not have land use regulatory authority within the incorporated community of Mosier. Therefore, the following staff report addresses only those portions of the proposed development located outside of the Mosier UA, and within the Columbia River Gorge National Scenic Area (CRGNSA) portion of Wasco County.

Elements of the proposed development subject to compliance with the rules and regulations of the *Management Plan for the Columbia River Gorge National Scenic Area* (Management Plan) and the NSALUDO include:

- 3.58 miles of the 4.02 miles existing mainline and siding to result to be modified and expanded into second mainline, extending east and west of the Mosier UA. More specifically:
  - West of the Mosier UA, the existing siding will be extended west to create second mainline track north of the existing mainline (south of Interstate 84) between rail MP 66.98 and 68.58 (length of 1.6 miles);
  - East of the Mosier UA, the existing mainline and existing siding between rail MP 70.37 and 70.74 will be realigned, south of the current mainline track (length of 0.37 miles);
  - Further east of the Mosier UA, the existing siding will be extended to create second mainline track between rail MP 70.74 to 72.35, south of the current mainline track (length of 1.61 miles);
  - A third track to maintain a siding is not proposed or included in this review.
- Construct and improve drainage ditches as shown on the site plans;
- Extend six existing culverts and install three new culverts to improve fish passage;
- Remove five existing signal buildings and replace them with five new signal buildings that range in size from 6'L x 6'W x 9'H (36 square feet) to 8'L x 10'W x 9'H (80 square feet). Replacement will include some changes in location and relocated utility connections as shown in the site plan and engineering drawings;
- Remove existing telephone poles and antennae poles and install five new 53-foot tall wooden wireless signaling appurtenances (spaced several miles apart from each other);
- Relocate an existing pump house building within Memaloose State Park;
- Relocate existing utilities in areas of construction as shown on the site plan;
- Install twelve 22-foot tall combination signal lights;
- New signage as required by federal law for directional and safety requirements;
- Blast and excavate basalt rock walk within an existing open tunnel;
- Onsite rock crushing of blasted materials to repurpose onsite for expanded rail ballast;
- Construct a 170-foot long, 25-foot tall concrete retaining wall (stamped and dyed to emulate natural basalt rock wall face);
- Construct four temporary access roads and rail crossings;

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<sup>2</sup> Columbia River Gorge National Scenic Area Act, Section 6(c)(5)(B)

- Regrade and re-gravel two existing gravel access roads and road shoulders to allow for ongoing maintenance needs (note: these existing roads are described as new permanent access roads in the application materials);
- Replace and extend portions of existing guardrail along Interstate 84;
- Temporary construction areas labeled “landing areas” on application materials; and
- The creation of a new wetland adjacent to Tooley Lake, which is proposed to mitigate the impacts to several wetlands along the length of the project.

With the exception of a portion of land within Memaloose State Park and the off-site wetland mitigation area, the development is proposed to occur within the existing railroad right of way and on the shoulder of Interstate 84 on ODOT lands. A table of impacted zones and disturbed areas (excluding the wetland mitigation site) was included as part of the application materials.

2. **Surrounding Landscape and Existing Development:** The project is located along the relatively level shoreline of the Columbia River. East of the Mosier UA, most of the project is north of and adjacent to Interstate 84; west of the Mosier UA, the project is south of and adjacent to Interstate 84. Throughout the entire length of the project, development will be near the base of basalt rock cliff faces containing a mixture of natural rock patterns and human-made cut patterns from the past construction of highway and railroad related infrastructure. The project will travel through a rock mesa by way of an open, at-grade tunnel. Although the tunnel through it is level, the rock mesa around it visibly rises in elevation and slopes upwards and then downwards, towards Mosier. The top of the mesa is comprised of slopes that contain Interstate 84, commercial orchards, vineyards, rural residences and a Department of Transportation rest area. The slope then rises again to the south, with additional rock outcroppings and mixed forests. Between the rest area and the tunnel, a topographic depression slopes towards the Columbia River and contains the Memaloose State Park campground.

As with most of the Columbia River Gorge, the landscape is ecologically diverse. The project area occupies a transitional landscape between the wet western forests and the dry eastern grasslands - and as a result contains a mixture of native and non-native grasses, forbs, and shrubs, poison oak, blackberries, ocean spray and a variety of wildflowers. Trees in the area consist of ponderosa pine, Oregon white oak, Douglas fir and big leaf maple trees. The landscape contains shorelines, wetlands, grasslands, mixed forests and basalt rock walls and cliff faces.

Existing development in the project area and vicinity includes the existing railroad mainline and siding, five equipment shelters, two informal access roads, six culverts, water and electrical utility lines that provide service to railroad equipment and adjacent properties, including Memaloose State Park and a private commercial orchard and associated agriculture residences. The site of the proposed wetland mitigation is currently farmed for row crops and contains an existing dwelling and agriculture buildings.

According to available information, it appears much of the large-scale development in the vicinity of the project – including the railroad (late 1800’s), State Park (established in in 1925 and expanded in 1953) and Interstate 84 (1950’s through 60’s) – was constructed prior to the enactment of the WCLUDO (9/4/74) and prior to the passing of the Columbia River Gorge National Scenic Area Act (11/17/86).

3. **Legal Parcel Status:** Deed documentation of all affected properties was provided to verify land ownership and legal parcel status. The railroad right of way has been in its current configuration since the late 1890's. Landowner consent forms for the purpose of Scenic Area review and permitting were provided from the Oregon Department of Transportation, Oregon Parks and Recreation, and Skylar and Kathleen Schacht (wetland mitigation site).

## **B. Chapter 1 – Introductory Provisions**

The National Scenic Area Land Use and Development Ordinance for Wasco County (NSALUDO) is enacted pursuant to Oregon Revised Statutes Chapters 92, 197, 203, and 215, and Public Law 99-663, Section 7 (Columbia River Gorge National Scenic Area Act).

Section 1.030 defines the purpose of the Wasco County NSALUDO as:

*“The purposes of this Ordinance are: To promote public health, safety, convenience, and general welfare; to reduce congestion upon the streets and highways; to prevent excessive population density and the overcrowding of land; to provide for adequate air and light; to conserve natural resources and encourage the orderly growth of the County; to promote safety from fire and natural disaster; to assist in rendering adequate police and fire protection; to facilitate adequate and economic provision for public improvements, for recreation areas, and for public utilities and services; to conserve, stabilize, and protect property values; and to encourage the most appropriate use of land, all in accordance with the Comprehensive Plan for Wasco County and the Management Plan for the Columbia River Gorge National Scenic Area.”*

Section 1.080 – Compliance Required, states:

*“No structure or premises in the Columbia River Gorge National Scenic Area portion of Wasco County shall hereafter be used or occupied and no part or structure or part thereof shall be erected, moved, reconstructed, extended, enlarged, or altered contrary to the provisions of this Ordinance...”*

Section 1.200 – Definitions, is referenced throughout this document and can be viewed in its entirety online at [http://co.wasco.or.us/planning/nsa\\_ludo.html](http://co.wasco.or.us/planning/nsa_ludo.html), at the Wasco County Planning Department Office, or by contacting the Department to request a mailed copy.

## **C. Chapter 2 – Development Approval Procedures**

1. Section 2.050(B) – Wasco County Application Authority, identifies non-administrative variances and any matters the Director elects not to review pursuant to 2.050(A), as a Type III quasi-judicial action to be heard by the Planning Commission, subject to Sections 2.100 Notice Requirements, 2.180 Hearing Procedure, 2.190 Establishment of Party Status, 2.200 Official Notice, 2.210 General Conduct of All Hearings and 2.220 Approval, Rejection, Modification.
2. Section 2.100 provides notice requirements for new land use applications to ensure interested parties and the general public have an opportunity to contribute information and other input during the planning process. Consistent with the requirements of this Section, staff provided resource consultation notice to agencies identified for administrative coordination on February 24, 2015 for recreation resources, September 22, 2015 for cultural resources, February 20, 2016

for natural resources, and March 11, 2016 and April 26, 2016, June 1, 2016, June 23, 2016, and August 11, 2016 for the general public and affected adjacent property owners. The application materials have been available for public review at the office and on the Department's website since March 11, 2016.

As of August 30, 2016 (the date of this document) approximately 1,008 comments from 472 individuals have been received from the general public; a large number of these comments are of the same template. Comments received have been summarized into the following categories:

1. Inconsistent with the purpose of the NSA Act:
  - a. Impacts to scenic resources from key viewing areas,
  - b. Impacts to natural resources and should require professional resource surveys
    - i. Impacts to wetlands, sensitive plants, salmon species,
  - c. Impacts to cultural resources and should require professional resource surveys
  - d. Impacts to recreation at Memaloose State Park
  - e. Does not protect treaty rights of NSA Treaty Tribes
  - f. The project could be accomplished in a different location and meet the same need
  - g. The project is not in the public's best interest
  - h. Sale of Oregon Parks land is not in public's best interest
2. Community impacts (local and regional):
  - a. Impacts to public health (air quality, water quality, safety, noise)
  - b. Impacts to residents of Mosier
  - c. Lack of local economic benefit
  - d. Safety risks from more trains, faster trains, longer trains, more parked trains, longer duration of idle times and parked trains.
3. Scope of review: the project should be reviewed as "new" not "expansion" of existing
4. Fossil fuel and fossil fuel related emergencies:
  - a. Fossil fuel consumption and climate change concerns, the proposed development may facilitate future extraction and related proposals.
  - b. Safety concerns due to more rail traffic including increased spill and explosion risks
  - c. Concern for cleanup needs and responsibilities of cleanup following a spill or explosion
  - d. Concern for cumulative effect of uncovered rail cars carrying loose commodities such as coal that could contribute to water quality degradation
  - e. Concern for cumulative effects to air quality resulting from more diesel train engines

In addition to public comment, written comments were received from the following individuals on behalf of treaty tribes, government agencies and non-government organizations:

Treaty Tribes:

- Catherine Dickson, Principal Investigator, Cultural Resources Protection Program, Confederated Tribes of the Umatilla Indian Reservation
- Audie Huber, Intergovernmental Affairs Manager, Department of Natural Resources, Confederated Tribes of the Umatilla Indian Reservation

- Holly Shea, Tribal Archeologist, Warm Springs Geo Visions, Confederated Tribes of the Warm Springs Reservation of Oregon

Government Agencies:

- Jason Allen, Historic Preservation Specialist, Oregon State Historic Preservation Office
- Ross Curtis, Archaeologist, Oregon State Historic Preservation Office
- MG Devereaux, Deputy Director, Oregon State Parks and Recreation
- Marge Dryden, Heritage Program Manager, U.S. Forest Service Columbia River Gorge National Scenic Area Office
- Rod French, Mid-Columbia District Fish Biologist, Oregon Department of Fish and Wildlife
- Nancy Nelson, Archaeologist, Oregon State Parks and Recreation
- John Pouley, Assistant State Archeologist, Oregon State Historic Preservation Office
- Robin Shoal, Staff Officer, Natural Resources and Planning, U.S. Forest Service Columbia River Gorge National Scenic Area Office
- Katie Skakel, Planner, Columbia River Gorge Commission
- Jeremy Thompson, Wildlife Biologist, Oregon Department of Fish and Wildlife
- Sue Vrilakas Botanist, Data Manager, Oregon Biodiversity Information Center

Non-Government Organizations:

- Lauren Goldberg, Columbia Riverkeeper
- Steve McCoy, Friends of the Columbia Gorge
- Laura Akerman, The Lands Council
- Regna Merritt, Oregon Physicians for Social Responsibility
- Matt Krogh, Stand

**FINDING:** Where NSALUDO regulatory authority allows, staff has addressed these concerns throughout this document. Agency comments are discussed in greater detail below, under Section 14 – Scenic Area Review.

3. Section 2.120 requires the Director to consider the information provided by the applicant, determine consistency with the Management Plan and NSALUDO and the goals and policies of all other applicable referenced plans. Consistent with the requirements of this section, the Staff Recommendation and the following Staff Report provide findings of fact, conclusions of law and supplemental conditions of approval recommended for inclusions in the final decision of the Wasco County Planning Commission.
4. Section 2.130 provides notice of decision requirements, including minimum information requirements and affected parties to receive the notice. Consistent with this section, staff provided this document and the Staff Recommendation to the Wasco County Planning Commission for PLASAR-15-01-0004 to the applicant and property owners, affected property owners within 500 feet, affected government agencies, the U.S. Forest Service National Scenic Area Office (USFSNSA), the Columbia River Gorge Commission (CRGC), and the four treaty tribes of the National Scenic Area Act: Confederated Tribes and Bands of the Warm Springs Indian Reservation (Warm Springs), Confederated Tribes and Bands of the Umatilla Reservation (Umatilla), Confederated Tribes and Bands of the Yakama Indian Nation (Yakama), and the Nez Perce Tribe (Nez Perce).

5. Section 2.140 requires this land use decision to be recorded with the deeds of the affected parcel. A condition of approval will be included in the Notice of Decision to alert the landowner of this requirement.
6. Section 2.180 Hearing Procedure, specifies the conduct of the hearing and order of procedure. Section 2.190 Establishment of Party Status, identifies the requirements of a party to preserve standing and establish “party status”. Section 2.200 Official Notice and 2.210 General Conduct of All Hearings, provides guidance on how the approving authority may take official notice and the rules that apply to the general conduct of County hearings. Staff has prepared a script for the Planning Commission to assist in the accurate implementation of requirements specified in these sections.

#### **D. Chapter 3 – Basic Provisions**

1. Chapter 3 – Basic Provisions contains zoning and environmental protection districts. As noted above, the proposed development will occur in seven land use designations (zones) in the NSA, including GMA Large-Scale Agriculture, GMA Small-Scale Agriculture, SMA Agriculture, SMA Public Recreation, GMA and SMA Open Space, and GMA Water. Portions of the proposed development will also occur in Environmental Protection Division 1 – Flood Hazard Overlay. Please see findings below for more information.

2. The purpose statements listed in the NSALUDO for each of the applicable zones are as follows:

Section 3.120 –Large Scale Agriculture Zone (GMA & SMA Agriculture): *“Protect and enhance large scale agriculture land for agriculture uses...”*

Section 3.130 – Small Scale Agriculture Zone (GMA Only): *“Protect and enhance the small scale agriculture land for agriculture uses...”*

Section 3.170 – Public Recreation (GMA & SMA): *“To protect and enhance opportunities for publically-owned, moderate and high intensity resource-based recreation uses on lands most suitable for such uses.”*

Section 3.180 – Open Space (GMA & SMA): *“Protect those most significant, sensitive and representative, scenic, cultural, natural and recreation resources on unimproved lands and enhance them where appropriate.”*

GMA Water is a designation indicated on the official maps provided with the Management Plan. However, the Management Plan does not explicitly described GMA Water as a land use designation and does not provide specific zoning regulations. Consistent with past policy interpretations made by Wasco County Planning, the Columbia River Gorge Commission, the US Forest Service National Scenic Area Office and the other five NSA county planning departments, new development in GMA Water must comply with the scenic, cultural, natural and recreation resource requirements of the NSALUDO and is reviewed by this staff report for consistency.

3. According to the application materials, the project will include the following area of potential affect in each zone (this table does not include the off-site wetland mitigation proposed):

**TABLE 1-1  
NSA Zoning Districts Crossed by the Project in Wasco County**

NSA Zoning District	Zoning Abbreviation	Project Component	Total Length of Zone Crossed (miles)	Total Area of Zone Crossed (acres)*
GMA Large Scale Agriculture	GMA A-1 (40)	Existing UPRR ROW Mainline Track Construction Staging Temporary Access Road	0.74	3.30
GMA Small Scale Agriculture	GMA A-2 (80)	Existing UPRR ROW Mainline Track Temporary Access Road	0.26	0.90
GMA Open Space	GMA OS	Existing UPRR ROW Mainline Track Construction Staging Temporary Access Road Permanent Access Road	1.34	6.41
GMA Water	GMA W	Temporary Construction Area	0	0.01
SMA Agriculture	SMA Ag	Existing UPRR ROW Mainline Track	0.24	1.85
SMA Open Space	SMA OS	Existing UPRR ROW Mainline Track ROW Acquisition Construction Staging	0.37	8.93
SMA Public Recreation	SMA PR	Existing UPRR ROW Mainline Track ROW Acquisition Construction Staging Permanent Access Road	0.63	9.40
<b>TOTAL</b>			<b>3.58 miles</b>	<b>30.80 acres</b>

\* Area of zone crossed includes the proposed area of disturbance within existing UPRR ROW, the entire area of proposed ROW acquisition, and temporary construction easement. For calculation of detailed project disturbance areas, refer to Table 4-1 in Section 4.2.2.

*Note: In response to staff's request to minimize disturbances to Open Space zones, the applicant provided a revised site plan for temporary construction areas, reducing the impacted area referenced above by 1.21 acres.*

4. Section 3.100, which applies to all GMA and SMA zones except GMA and SMA Open Space and Agriculture Special, and 3.180(B), which applies specifically to GMA and SMA Open Space, provide lists of uses that are allowed without review.
5. Section 3.100(D) and 3.180(B)(1) lists:

*Repair, maintenance, and operation of existing structures, including but not limited to, dwellings, agriculture structures, trails, roads, railroads, and utility facilities.*

Repair is defined in Section 1.200 as:

*Replacement or reconstruction of a part of a serviceable structure after damage, decay or wear. A repair returns a structure to its original and previously authorized and undamaged condition (in kind). It does not change the original size, scope, configuration or design of a structure, nor does it excavate beyond the depth of the original structure.*

*Repair includes, but is not limited to, re-roofing a building, replacing damaged guardrails, reconstructing a rotten deck or porch, replacing a broken window or door, replacing a utility pole and associated anchors, replacing a section of broken water or sewer line, replacing a damaged or defective utility line, reconstructing a portion of a building damaged by fire or a natural event, and replacing railroad ties or rails.*

Maintenance is defined in Section 1.200 as:

*Ordinary upkeep or preservation of a serviceable structure affected by wear or natural elements. Maintenance does not change the original size, scope, configuration or design of a structure.*

*Maintenance includes, but is not limited to, painting and refinishing, regrouting masonry, patching roofs, grading gravel roads and road shoulders, cleaning and armoring ditches and culverts, filling potholes, controlling vegetation within rights-of-way, removing trees and other roadside hazards within rights-of-way, and testing and treating utility poles.*

**Finding:** The proposed rail modification and replacement will result in new track and an expanded ballast in areas of siding extensions, changes in existing track location in areas proposed to be rerouted, and changes to equipment shelters, communications signals, lighting and signage – some in the same location, some in different locations. Given this information, the proposed development exceeds the scope of repair and maintenance and is subject to compliance with the review and requirements of the NSALUDO.

6. Section 3.100(H) and 3.180(B)(2) allows limited development for transportation facilities without review in all zones, including:
  - a. *Replace existing safety or protective structures, including guardrails, access control fences and gates, barriers, energy attenuators, safety cables, and traffic signals and*

*controllers, as well as existing traffic detection devices, vehicle weighing devices, and signal boxes provided the replacement structures are:*

- (1) The same location and size as the existing structures and*
- (2) The same building materials as the existing structures, or building materials that are dark brown with a flat, non-reflective finish, or building materials consistent with the Historic Columbia River Highway Master Plan for the Historic Columbia River Highway or the scenic highway corridor strategy for Interstate 84 prepared according to the GMA policies in the section of the Scenic Resources chapter of the Management plan title "Scenic Travel Corridors"...*

**Finding:** The proposed development includes the removal and replacement of several transportation facilities, including signal buildings, signal lights, directional and safety signage, guardrail, fencing, gates, and other development associated with the modification of the railroad. Development that is proposed to be a different size or in a different location is subject to review and is further discussed below. The proposed development does include the removal and replacement of guardrail along Interstate 84 and existing access roads to allow temporary construction access and permanent maintenance access. The applicant consulted with the Oregon Department of Transportation and has proposed to replace the removed portions of guardrail with an in kind material – to continue the visual aesthetic and ensure consistent use of materials for each guardrail system – as required by the Interstate 84 Corridor Strategy. In the event an entire guardrail system is removed and replaced, it shall be replaced with low-reflective, earth-tone, corten material guardrail system encouraged by the Interstate 84 Corridor Strategy document for long term aesthetic improvements.

- b. New raised pavement markers, guide posts, object markers, inlay markers, and pavement markings and striping.*

**Finding:** No new paved roads or associated road markers are proposed.

- c. Permanent public regulatory, guide, and warning signs, except those excluded below, provided:*

*The signs comply with the Manual for Uniform Traffic Control Devices and*

*The support structures and backs of all signs are dark brown with a flat, non-reflective finish. This category does not include specific service signs; destination and distance signs; variable message signs; or signs that bridge or are cantilevered over the road surface.*

**Finding:** The applicant has proposed several directional and safety signs including those that say: "Station and Control Point", "Whistle Signal", "Vertical Control Point", "Private Property", "No Dumping", "Speed Restriction", and mile marker signage. According to the applicant, the signs will be non-reflective black and white signage and will be posted at approximately 10-feet. A condition of approval is included to require all sign support

structures and the backs of single sided signs to be dark brown or black with a flat, non-reflective finish.

- d. *Extensions of existing guardrails less than or equal to 50 feet in length and new guardrail ends for existing guardrails, provided the guardrails and guardrail ends are*
  - (1) *Located inside rights-of-way that have been disturbed in the past; and*
  - (2) *Constructed of materials that match the existing structure, natural wood, weathering steel (e.g., Corten), or materials consistent with the Historic Columbia River Highway Master Plan for the Historic Columbia River Highway or a scenic highway corridor strategy for Interstate 84 prepared according to the GMA policies in the section of the Scenic Resources chapter of the Management Plan titled "Scenic Travel Corridors."*
  
- e. *New guardrails and guardrail ends, provided the structures are*
  - (1) *Located inside rights-of-way that have been disturbed in the past and*
  - (2) *Constructed of natural wood, weathering steel (e.g., Corten), or materials consistent with the Historic Columbia River Highway Master Plan for the Historic Columbia River Highway or a scenic highway corridor strategy for Interstate 84 prepared according to the GMA policies in the section of the Scenic Resources chapter of the Management Plan titled "Scenic Travel Corridors." This category does not include jersey barriers.*

**Finding:** Guardrails are addressed above in the finding for (a). A condition of approval is included to ensure compliance with this requirement.

- f. *Replace and/or expand existing culverts, provided the entity or person owning or operating the culvert shall obtain all necessary federal and state permits that protect water quality and fish and wildlife habitat before construction. (GMA Only)*
  
- g. *Replace and/or expand existing culverts for ephemeral streams or ditches, provided the visible ends of culverts shall be dark and non-reflective. (SMA Only)*

**Finding:** The proposed development includes the installation of three new culverts to improve fish passage and the extension of six existing culverts to maintain service with the existing and proposed track embankment. The applicant has obtained and provided a Biological Opinion from the United States Department of Commerce National Oceanic and Atmospheric Administration National Marine Fisheries Service and a determination from the U.S. Army Corps of Engineers that concludes the proposed action is not likely to jeopardize the continued existence of salmon or steelhead species, or impact critical habitat. Oregon Fish and Wildlife was included in the analysis for these determinations and provided confirmation of consistency with state regulations through their review (see Chapter 14 – Natural below for more information about natural resource impacts). A condition of approval is included to ensure visible ends of new culverts in the SMA are a dark color and non-reflective.

*h. Resurface or overlay existing paved roads, or grade and gravel existing road shoulders provided the activity does not:*

*(1) Increase the width of the road,*

*(2) Disturb the toe of adjacent embankments, slopes, cut banks, or*

*(3) Change existing structures or add new structures.*

**Finding:** No paved roads are proposed to be modified; existing gravel roads are proposed to be graveled, within their current footprints, consistent with this rule.

*i. Apply dust abatement products to non-paved road surfaces.*

**Finding:** No dust abatement products are proposed. However, if they are to be used, the applicant shall take extra caution to ensure the product does not reach or drain into nearby wetlands, streams, or the Columbia River.

*j. Replace the superstructure of bridges (e.g., decks, beams) for bridges less than or equal to 30 feet in length and less than or equal to 1,000 square feet in area. This category does not include guardrails or the substructure of bridges (e.g., foundations, abutments).*

**Finding:** The proposed development does not include any bridge work outside of the Mosier UA. Therefore, this rule is not applicable.

7. Sections 3.100(I) and 3.180(B)(3) allow limited underground utility facilities in all zones without review, including:

*a. Replace or modify existing underground utility facilities located inside road, utility or railroad rights-of-way or easements that have been disturbed in the past or co-locate new underground utility facilities with existing underground facilities located inside road, utility or railroad rights-of-way or easements that have been disturbed in the past, provided no excavation would extend beyond the depth and extent of the original excavation.*

*b. Replace or modify existing underground utility facilities located inside road, utility or railroad rights-of-way or easements that have been disturbed in the past or co-locate new underground utility facilities with existing underground facilities located inside road, utility or railroad rights-of-way or easements that have been disturbed in the past, provided:*

*(1) No excavation would extend more than 12 inches beyond the depth and extent of the original excavation;*

*(2) No ditch for linear facilities would be more than 24 inches wide;*

- (3) *No excavation for non-linear facilities would exceed 10 cubic yards, and;*
- (4) *No recorded archaeological site is located within 500 feet of the development. To comply with (4), the entity or person undertaking the development shall contact the Oregon State Historic Preservation Office and obtain a letter or other document stating no recorded archaeological site is located within 500 feet of the development.*

**Finding:** The proposed development is a large-scale use and was thus required to provide a professionally prepared cultural resource survey and assessment of potential effect to be considered a complete application. The development includes the modification of existing utilities in several locations, some of which will remain in their current location and others that will be relocated to serve the new alignment and associated signal equipment buildings and lights. All proposed modifications to utilities have been indicated on the provided site plans and engineering drawings, and are reviewed below for any NSA resource impacts.

- 8. Sections 3.100(J) and 3.180(B)(4) allow limited aboveground and overhead utility facilities in all zones without review, including:
  - a. *Replace existing aboveground and overhead utility facilities including towers, pole/tower-mounted equipment, cables and wires, anchors, pad-mounted equipment, service boxes, pumps, valves, pipes, water meters, and fire hydrants, provided the replacement facilities would have:*
    - (1) *The same location and size as the existing facilities and;*
    - (2) *The same building materials as the existing facilities, or building materials that are dark brown with a flat, non-reflective finish, or building materials consistent with the Historic Columbia River Highway Master Plan for the Historic Columbia River Highway or the scenic highway corridor strategy for Interstate 84 prepared according to the GMA policies in the section of the Scenic Resources chapter of the Management plan title "Scenic Travel Corridors"*
  - b. *Replace existing utility poles, provided the replacement poles are*
    - (1) *Located within 5 feet of the original poles;*
    - (2) *No more than 5 feet taller and 6 inches wider than the original poles, and;*
    - (3) *Constructed of natural wood, weathering steel (e.g., Corten), materials that match the original poles, or materials that are dark brown with a flat, non-reflective finish.*
  - c. *New whip antennas for public service less than or equal to 8-feet in height and less than or equal to 2 inches in diameter, cables, wires, transformers, and other*

*similar equipment, provided all such structures are on existing utility poles or towers.*

**Finding:** The proposed development includes the removal of existing communications equipment, including telephone poles and lines, communication poles and other appurtenances related to communication. The applicant proposed to replace the existing equipment with fewer, more effective wooden monopole communication poles. The replacement structures will be of different materials, different size and in different locations, and are thus subject to review for consistency with resource protections.

9. Sections 3.100(K) and 3.180(B)(5) allow additional signage in all zones without review, including those needed for construction and to prevent trespass without review:

...

*c. Temporary construction site identification, public service company, safety, or information signs not greater than 32 square feet. Exceptions may be granted for public highway signs necessary for public safety and consistent with the Manual for Uniform Traffic Control Devices. Removal must be accomplished within 30 days of project completion.*

*d. Signs posted on private property warning the public against trespassing, danger from animals, the private nature of a road, driveway or premise, or signs prohibiting or otherwise controlling fishing or hunting, provided such signs are not greater than 6 square feet in the GMA and 2 square feet in the SMA.*

...

**Finding:** The signs listed in (c) and (d) above, are allowed without review. A condition of approval is included to make the applicant aware of the 30-day time constraint for construction signs, and the size limitations of private property warning signs.

10. Sections 3.110(A) list uses that qualify for the expedited review process, subject to the resource protections of Section 3.110(B).

**Finding:** Pursuant to the resource protection thresholds identified in 3.110(B)(2) Cultural and (4) Natural and 3.110(C) Treaty Rights, the proposed development does not qualify for expedited review and is therefore subject to the full review to ensure the appropriate resource protection process has occurred; see Chapter 14 below.

11. Pursuant to Sections 3.120(D)16, 3.130(D)(11) and 3.180(D)(5) the demolition and removal of existing structures more than 50 years old is a use permitted to occur in all three agriculture zones and both open space zones, subject to a full review and compliance with Subsection G - Property Development Standards, Chapter 11 - Fire Safety Standards, and Chapter 14 - Scenic Area Review, as well as all other listed or referenced standards. Similarly, Section 3.170(E)(23) lists this use as conditional use in the Public Recreation zones (GMA and SMA):

*Removal/demolition of structures that are 50 or more years old, including wells, septic tanks and fuel tanks. (GMA & SMA)*

**Finding:** The proposal includes the removal of existing equipment shelters, signal lights, signage, communications facilities, utilities, and other associated structures. As noted above, and described further below, a cultural resources survey and assessment of potential effect were prepared for the application to verify any potential effects to historic resources. Compliance with Subsection G, Chapter 11 and Chapter 14 are discussed below. Conditional Use provisions for portions of this activity proposed to occur in the SMA Public Recreation are discussed below.

12. Pursuant to Sections 3.120(D)17 and 3.130(D)(12) construction, reconstruction and modifications of roads is permitted to occur in both GMA Large-Scale and Small-Scale agriculture zones, subject to a full review and compliance with Subsection G - Property Development Standards, Chapter 11 - Fire Safety Standards & Chapter 14 - Scenic Area Review, as well as all other listed or referenced standards. Sections 3.120(D)17 and 3.130(D)(12) state:

*Construction, reconstruction, or modifications of roads not in conjunction with agriculture if designated in the Adopted Wasco County Transportation System Plan or designed and constructed as part of an approved, active development order. (GMA Only).*

**Finding:** The proposal includes the construction and reconstruction of six 10-foot wide roads, including four new temporary roads and the improvement of two existing gravel roads to be used as permanent maintenance access. Much of the temporary roads are proposed to occur within the existing gravel shoulder of Interstate 84 and the railroad right-of-way – requiring minimal improvements for vehicular access. One temporary road is proposed to occur in the GMA Large-Scale Agriculture Zone, and one permanent road will be located partially in the GMA Small-Scale Agriculture Zone. The roads are accessory to the existing railroad, which is designated in the adopted Wasco County Transportation System Plan. As proposed, the roads are a permitted use in the GMA Agriculture Zones. Compliance with Subsection G - Property Development Standards, Chapter 11 - Fire Safety Standards and Chapter 14 - Scenic Area Review, are discussed below.

13. Railroad related development is proposed to occur in each of the seven affected zones. This table intends to provide an abbreviated list of regulations that specifically list railroad related development as an allowed review use, subject to full review and compliance with the NSALUDO. Each of these zones contain unique language and are discussed in more detail below:

<b>Proposed Use: Railroad construction, reconstruction, replacement, and expansion</b>		
<b>Zone:</b>	<b>Listed as allowed review use?</b>	<b>Applicable Section NSALUDO:</b>
GMA Large Scale Agriculture	Yes, subject to full review	Section 3.120(E)(20)
SMA Agriculture	Yes, subject to full review	Section 3.120(E)(18)
GMA Small Scale Agriculture	Yes, subject to full review	Section 3.130(E)(14)
GMA Open Space	Yes, subject to full review	Section 3.180(D)(2)
SMA Open Space	Yes, subject to full review	Section 3.180(D)(3)
SMA Public Recreation	Yes, subject to full review	Section 3.170(E)(27)
GMA Water	There are no uses listed for GMA Water. Consistent with past policy, the proposed use is subject to compliance with Chapter 14.	

14. Sections 3.120(E) and 3.130(E) list uses subject to a full review and permitted only conditionally in the GMA Large-Scale and SMA Agriculture zone, and GMA Small-Scale Agriculture zone, subject to compliance with Subsection G – Property Development Standards, Chapter 5 – Conditional Use Review, Chapter 11 – Fire Safety Standards, Chapter 14 – Scenic Area Review, and all other referenced standards applicable to the proposed development. Section 3.120(E)(18), and (20) and Section 3.130(E)(14) allow the proposed development as a conditional use, subject to compliance with resource protections listed above. They state:

*18. Road and railroad construction and reconstruction. (SMA Only)*

**Finding:** As noted above in Finding D. 11, six roads are proposed to be constructed and reconstructed for the development. None of these roads are proposed to occur within the SMA Agriculture zone. Portions of the realignment of existing mainline track and expansion of existing siding track to create new second mainline track (railroad reconstruction and construction) are proposed to occur in SMA Agriculture, as shown on the site plan materials. Compliance with Subsection G - Property Development Standards, Chapter 5 – Conditional Use Review, Chapter 11 - Fire Safety Standards and Chapter 14 - Scenic Area Review, are discussed below.

*20. Utility facilities and railroads necessary for public service upon a showing that:  
(GMA & SMA)*

- a. There is no practicable alternative location with less adverse effect on the scenic, cultural, natural, recreational, agricultural or forest lands; and*
- b. The size is the minimum necessary to provide the service.*

**Finding:** The proposed development includes railroad development - including the creation of a second mainline by extending an existing siding, realigning an existing mainline, and the relocation and addition of associated railroad utilities and support structures. As part of their application, the applicant provided draft findings of consistency. Beginning on page 5-93 of their summary, the applicant makes the following finding:

*“The proposed project serves a major public interest and satisfies the Public Interest Test included in the NSA-LUDO. UPRR currently moves a wide array of commodities through Oregon that support the regional and local economies. Grain, automobiles, lumber, cement, apparel and consumer electronics are commonly moved through this corridor. UPRR has been handling this traffic mix for years and plans to continue moving a similar product mix in the future. UPRR has typically moved 20 to 25 trains a day through this area; with seasonal increases of shipments in commodities such as grains resulting in upwards of 30 trains using the corridor over the period of a month. Oregon is a critical part of UPRR’s service to customers. UPRR has invested more than \$1 billion in the state in the last 10 years to improve its rail yards and enhance railroad track, strengthening the reliability of Oregon’s transportation infrastructure. The project is required to support the needs of UPRR’s current customers throughout the state and region and will eliminate one of its most significant operational bottleneck in the Pacific Northwest.*”

*In addition, the proposed second mainline track would reduce the need for trains idling near the City of Mosier. Converting the existing Mosier Siding to mainline track in this way would have the secondary effect of reducing noise and idling emissions near the City of Mosier. Trains idling on the existing siding also pose a potential safety hazard because the public often perceives an idling train as stationed at a siding for an extended period of time. This results in increased occurrences of high-risk pedestrian and vehicle crossings in front of active trains at siding locations relative to trains moving at standard operating speed along the adjacent mainline track. In addition, unauthorized pedestrian crossings between rail cars, train boarding, and vandalism are more common at siding locations in general. Operating fewer and longer trains reduces safety risks associated with collisions at pedestrian or vehicle crossing locations because longer trains present fewer occurrences of a train passing through a particular portion of a route. Accordingly, the economic and safety-related public benefits of the project outweigh the associated disturbance to aquatic and other resources. As discussed throughout this narrative and supported by the attached Mitigation Plan (Appendix D) and Sensitive Species and Wildlife Habitat Protection and Rehabilitation Plan (Appendix K), UPRR proposes to avoid, minimize and mitigate for unavoidable disturbance resulting from the proposed project.*

*Therefore, the project meets the public interest test required by NSA-LUDO Section 14.600(F).*

**Finding:** Staff required the applicant to prepare an Alternatives Analysis to verify the preferred alternative was the minimum scale of development in the best possible location to reduce known resource impacts. As a part of their analysis, the applicant provided six alternatives and proposed to further reduce Open Space impacts of the preferred alternative by 1.21 acres.

According to the information prepared by CH2M Hill on behalf of the applicant (including sensitive resource surveys and an analysis of potential resource impacts), and consistent with this rule, the applicants have proposed the alternative that will result in the least impacts to scenic, cultural, natural, recreational, and agricultural lands, while still meeting the project need.

It is important to note that public comments were received voicing concerns that the proposed development will not directly benefit Mosier area residents or the Columbia River Gorge region because it does not stop in or service any specific local businesses. Staff does not have sufficient information to verify the number of local business served by regional rail operations in the Gorge. Generally speaking however, having, maintaining, and making continual improvements to regional infrastructure, including transportation infrastructure, is an important part of planning for resilient communities and continued resource protection. Minimizing the number of heavy trucks on the highways and providing a critical redundancy in transportation in the event of an emergency is also beneficial to local and regional residents. This finding is also made in greater detail for Chapter 14 below.

15. Sections 3.120(G) and 3.130(G) contains property development standards for agriculture zones. Sections (G)(1) include the size requirements for new parcels; (G)(2) provides general setbacks for all structures; G(3) provides agriculture setbacks for new buildings adjacent to lands zoned for agriculture use; (G)(4) provides irrigation ditch setbacks; (G)(5) provides floodplain setbacks;

(G)(6) specifies a maximum height for new structures; (G)(7) provides vision clearance requirements for corner lots; and (G)(8) refers new off street parking to provisions in Chapter 4.

**Finding:** No new parcels, irrigation ditches, development on corner lots, or parking areas are proposed. The development will occur within the existing railroad right-of-way and will be sited near the track to support the communication and utility needs of the rail traffic. Buildings will be a height of 9 feet. The height of the communications tower is discussed below. Given this information, Staff finds the proposed development to be consistent with these requirements.

16. Pursuant to Section 3.170(E) The following uses and activities may be allowed with conditions on legal parcels designated **Public Recreation**, subject to Subsection G – Conditional Use Approval Standards (GMA only), Subsection H - Property Development Standards, Chapter 5 - Conditional Use Review, Chapter 11 - Fire Protection Standards & Chapter 14 - Scenic Area Review, as well as any other listed or referenced standards.

*27. Road and railroad construction and reconstruction. (SMA Only)*

**Finding:** Portions of the proposed road and railroad construction and reconstruction are proposed in SMA Public Recreation, without conditional review, consistent with this provision. An analysis of consistency with property development standards, fire protection standards and Scenic Area requirements is included below.

17. Pursuant to Section 3.180(D)(2) and (3), the following may be allowed on a legal parcel designated **Open Space**, subject to Chapter 14 - Scenic Area Review, Subsection G - Property Development Standards, as well as any other listed or referenced standards.

2. *Repair, maintenance, operation, and improvement and expansion of existing serviceable structures, including roads, railroads, hydro facilities and utilities that provide sewer, transportation, electric, gas, water, telephone, telegraph, telecommunications. (GMA Only)*
3. *Changes in existing use, including reconstruction, replacement, and expansion of existing structures and transportation facilities, except for commercial forest practices (SMA Only)*

**Finding:** The proposed development includes the improvement and expansion of an existing railroad structure and transportation facility, within the GMA and SMA Open Space zones. Pursuant to Section 3.180(D)(2) and (3) the proposed development is an allowed use in the zone and can be permitted, subject to compliance with the resource protection requirements of the NSALUDO; see findings below.

18. Section 3.180(E) Special Management Area – Open Space, states:

1. *The primary managing agency for open space areas for the SMA shall prepare an open space management plan. The management plan shall be completed prior to any new land uses or development, and shall be reviewed by the Forest Service.*

2. *The open space management plan shall include the following:*
  - a. *Direction for resource protection, enhancement, and management.*
  - b. *Review of existing uses to determine compatibility with open space values.*
  - c. *Consultation with members of the public, and agency and resource specialists.*
  
3. *Upon request, the Forest Service will help located mapped boundaries of Open Space areas in cases of new land uses or developments.*

**Finding:** The development is located on SMA Open Space lands included in the *Rowena Plan-Columbia River Gorge National Scenic Area*, prepared by the U.S.D.A. Forest Service Columbia River Gorge National Scenic Area Office in 2005. Consistent with the requirements listed above, this document provides direction for resource protection, enhancement and management. The *Rowena Plan* also provides a review of existing uses to determine compatibility with Open Space values and was produced in consultation with members of the public, and agency and resource specialists.

On April 25, 2016, Robin Shoal, Staff Officer, Natural Resources and Planning for the USFS CRGNSA Office confirmed by email to Department staff that no other SMA Open Space plans applied to the development area. Specific resource protection requirements and recommendations to achieve desired future conditions are addressed below under Chapter 14.

The *Rowena Plan* addresses new development and uses on page 55, it states: “*Proposed new developments and uses in SMA Open Space would be consistent with this Open Space Plan if they: 1. Do not conflict with the plan, and 2. Meet the CGRNSA Plan guidelines or county ordinances for Open Space and for protection of scenic, natural, cultural and recreational resources.*” Consistent with this rule and the *Rowena Plan*, the proposed development is reviewed for consistency with the Open Space Plan and County NSA Ordinance to ensure implementation of the CRGNSA Plan guidelines.

19. Pursuant to Sections 3.120(G)(2), 3.130(G)(2), 3.170(H)(2), 3.180(G)(2) General Setbacks apply to all new structures other than approved signs and fences – as listed here for each zone:

Zone	Setback Front	Setback Side	Setback Side Exterior	Setback Rear
GMA Large-Scale and Small-Scale Agriculture; SMA Agriculture	25 feet	25 feet	n/a	40 feet
SMA Public Recreation	25 feet	15 feet	20 feet	20 feet
GMA and SMA Open Space	25 feet	15 feet	20 feet	20 feet
GMA Water	n/a	n/a	n/a	n/a

The proposed development will occur within a traditionally narrow, linear railroad corridor for existing railroad infrastructure development. Wasco County has consistently<sup>3</sup> allowed approved signs, fences, transportation facilities and utilities to exist within these setback areas, inside rights-of-way of existing transportation and utility facilities. Application of setback requirements

<sup>3</sup> See Wasco County Land Use Application PLASAR-14-12-0022

in these instances would necessitate the acquisition of larger right-of-way widths, resulting in unnecessary loss of resource and agricultural lands. Consistent with past practice, staff does not believe the general setback standards were intended to apply to transportation and utilities facilities and finds the proposed development to be consistent with the intent of the Management Plan and requirements of the NSALUDO.

20. Sections 3.120(G)(3), 3.130(G)(3), 3.170(H)(3), 3.180(G)(3), requires new buildings located on parcels adjacent to lands that are designated Large-Scale or Small-Scale Agriculture and are currently used for or are suitable for agriculture use, to comply with the following agriculture setback standards:

Adjacent Use	Open or Fenced	Natural or Created Vegetation Barrier	8 foot Berm or Terrain Barrier
Orchards	250'	100'	75'
Row Crops/vegetables	300'	100'	75'
Livestock, grazing, pasture, haying	100'	15'	20'
Grains	200'	75'	50'
Berries, vineyards	150'	50'	30'
Other	100'	50'	30'

**Finding:** The proposed development includes five new signal buildings that will replace existing signal buildings in new, but nearby locations. One of the new signal buildings is proposed to be located in the GMA Small-Scale Agriculture zone. Adjacent lands zoned for agriculture are owned by the Oregon Department of Transportation and are managed for the use of Interstate 84 and the recreation portions of the Historic Columbia River Highway State Trail. Given this information, the westernmost signal building is exempt from agriculture setbacks. Agriculture zoned lands suitable for agriculture uses exist south of the project area, east of Mosier. This area contains commercial orchards and vineyards. In all instances, natural vegetation and topography provide a barrier greater than eight feet in height. A condition of approval is included to ensure the signal buildings on lands adjacent to agriculture zoned lands that are suitable for agriculture use, comply with the 30-foot setback from vineyards and 75-foot setback from orchards. With conditions, the signal buildings are consistent with the agriculture setbacks of Chapter 3.

21. Section 3.120(G)(6) 3.130(G)(5), 3.170(H)(4), 3.180(G)(4) state the maximum height for all new structures shall be 35 feet, unless further addressed by scenic resource provisions in Chapter 14.

**Finding:** According to application materials, the railroad track modifications and expansion will occur at grade with few exceptions. All five signal buildings will be 9-feet tall, signs will be posted at a height of approximately 10-feet, twelve new signal lights will be 22-feet tall, a 120-foot long retaining wall will be 25-feet tall, and five new communication poles will be 53-feet tall. It is worth noting that most of the proposed development is replacement or medication of existing development. With the exception of the new communication poles, the proposed development is less than 35-feet tall and is consistent with this requirement. The 35-foot height maximum has historically not been applied to communications towers, which typically exceed 75-feet in height. As discussed below for Chapter 14, Scenic, the proposed poles will not

adversely affect scenic resources and recommended for approval with conditions. As proposed staff finds the development consistent with the height requirements of NSALUDO Chapter 3.

22. Section 3.120(5), 3.130(4), 3.170(5), and 3.180(6) provide for floodplain protections in each of the affected zones. The guidelines state: *“Any development including but not limited to buildings, structures or excavation, proposed within a FEMA designated flood zone, or sited in an area where the Planning Director cannot deem the development reasonably safe from flooding shall be subject to Section 3.240, Flood Hazard Overlay”.*

**Finding:** Consistent with the requirements of these rules, development proposed to occur in the Flood Hazard Overlay is addressed below in Finding 25.

23. Section 3.200 – Environmental Protection Districts, provides the following purpose statement:

*The purpose of the Environmental Protection District is to permit the regulation of environmental hazards, the qualification of lands for floodplain insurance programs and preferential taxation assessment, and the protection of the health, safety and welfare of residents of Wasco County. The specific intent of this district is:*

- A. To combine with present zoning requirements certain restrictions to promote the general health, welfare, and safety of the County.*
- B. To prevent the establishment of certain structures and land uses in areas unfit for human habitation because of the danger of flooding, unsanitary conditions, mass earth movement, unstable soils, or other hazards.*
- C. To minimize danger to public health by protecting the water supply and promoting safe and sanitary drainage.*
- D. To reduce the financial burden imposed on the public and governmental units by frequent and periodic flooding.*
- E. To permit certain uses which can be located on flood plains and which will not impede the flow of flood waters, or otherwise cause danger to life and property at, above, or below their locations within the flood plain.*
- F. To permit uses on lands subject to mass earth movement or unstable soils which will not increase the potential for environmental degradation.*
- G. To require that uses vulnerable to hazards, including public facilities which serve such uses be provided with protection at the time of initial construction.*
- H. To protect individuals, as much as possible through education and information from buying lands which are unsuited for intended purposes.*

24. Section 3.210 identifies district divisions, Division 1 – Flood Hazard Overlay, and Division 2 – Geologic Hazards Overlay. Portions of the project will occur in each of these districts and are reviewed for consistency below. Section 3.230 contains a non-liability clause, which states:

*The granting of approval of any structure or use shall not constitute a representation, guarantee or warranty of any kind or nature by Wasco County, or the County Court, the Planning Commission, or by any officer or employee thereof, of the practicability or safety of any structure or use proposed and shall create no liability upon or cause action against such public body, officer or employee for any damage that may result pursuant thereto.*

**Finding:** Staff’s analysis is based upon the application materials provided by the applicant and inventories provided by State and Federal agencies.

25. Section 3.240 Division 1 – Flood Hazard Overlay, provides the following purpose statement: *“It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by implementing provisions designed to...”*

Section 3.240(A) provides background, findings of fact, statement of purpose and methods to reduce flood losses; Section (B) provides applicability, the basis for establishing areas of special flood hazard, and direction for abrogation and greater restrictions; Section (C) provides guidance on interpretation; and Section (D) provides a warning and disclaimer of liability for the County and any officer or employee of the Federal Insurance Administration.

Section 3.241 contains a list of special definitions to be used for this chapter only, including a unique definition for “structures”, it states: “Structure (Flood Hazard Overlay Section only) – A walled and roofed building, as well as any gas or liquid storage tank, that is principally above ground.”

Section 3.42 identifies the role, duties, and responsibilities of the Planning Director as the appointed administrator to implement this chapter.

Section 2.43 – Development Permit, identifies when a development permit is required in the Flood Hazard Overlay, it states: Wasco County National Scenic Area Land Use & Development Ordinance (NSALUDO)

*Section 3.243, Division 1 – Flood Hazard Overlay – Development Permit*

*(\*\*\*)*

**B. Application Requirements**

*Any application for a Development Permit shall be made on forms furnished by the Planning Director and may include, but not limited to: plans drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing structures, proposed structures, fill, storage of materials, utilities, septic facilities, and drainage facilities.*

*Specifically, the following information is required:*

1. *General elevation to mean sea level of building site using best information available.*
2. *Elevation of the lowest floor (including basement) of all structures.*
3. *Distance between ground elevation and level to which a structure is to be flood-proofed.*
4. *Certification by a registered professional engineer or architect that the flood-proofing methods for any non-residential structure meet the flood-proofing criteria in Section 3.243.D.6 – Specific Standards.*
5. *Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.*
6. *Copies of all permits required from any governmental agency, together with a certification under penalties of perjury that all certificates and permits requested have been obtained.*

**Finding:** The application submitted includes a Floodplain Development Application with maps and a technical memorandum prepared by Branden Strahm, PE. According to the application, the proposed application includes the following development: widening of the existing railroad track embankment approximately 30-ft along the north embankment for 12, 200 feet to the west between MP 66.98 and 69.54 and 10,500 feet to the south between MP 70.45 and MP 72.35 to accommodate the new mainline track and access road; the 8 foot extension of an existing culvert at mile post 68.57; the 16 foot extension of an existing culvert at mile post 70.67; the 12 foot extension of an existing culvert at mile post 70.93; the 28 foot extension of an existing culvert at mile post 71.89; the creation of two 60 inch culverts for fish passage at mile post 71.84; the creation of a new 90 foot Bridge over Rock Creek at mile post 68.88; and the construction of a new 210 foot bridge over Mosier Creek at mile post 69.35.

The application and memorandum includes the general elevation of several proposed development sites, the post development elevation of the sites, and a description of the developments. Statements made by the applicant on the application and memorandum indicated that no alteration or relocation of any watercourse will result from the development.

A filed application serves to certify under penalties of perjury that all certificates and permits have been obtained based on language included on Page 5 of the application.

A condition of approval will require certification by a registered professional engineer or architect that the flood-proofing methods for any non-residential structure meet the flood-proofing criteria in Section 3.243.D.6-Specific Standards.

### *C. General Standards*

*In all areas of special flood hazards the following standards are required:*

1. *Anchoring*

- a. *All new construction and substantial improvements shall be anchored to prevent flotation, collapse, and lateral movements of the structure.*
- 2. *Construction Materials and Methods*
  - a. *All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.*
  - b. *All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.*
  - c. *Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.*

**Finding:** In the memorandum, attached specification sheets indicate the culverts will be constructed using concrete with steel reinforcements. According to the definition listed in the NSA LUDO, flood resistant material includes any building product capable of withstanding direct and prolonged (at least 72 hours) contact with floodwaters without sustaining significant damage. Generally, reinforced concrete is capable of sustaining such prolonged contact with waters with minimal impact. The culverts will be anchored using steel and concrete construction.

According to specification sheets submitted by applicant, the new bridges will also be constructed with steel and concrete and therefore be considered constructed from flood resistant materials. The proposed construction methods indicate the bridges will be anchored with cast-in place concrete drilled shafts with permanent steel casing.

Additional material submitted demonstrate the second track will be constructed using 12 inch ballast and subballast on an elevated subgrade adjacent to existing subgrade and track.

A condition of approval will require the applicant to submit final specification sheets and an explanation of all building materials and methods utilized to demonstrate anchoring, flood proofing and flood damage resistance and minimization.

#### *D. Specific Standards*

*In all areas of special flood hazards where base flood elevation data has been provided as set forth in Section 3.242.B.4 Use of Other Base Flood Data, the following standards are required:*

##### *6. Non-residential construction*

*New construction and substantial improvement of any commercial, industrial or other non-residential structure shall either have the lowest floor, including basement, elevated at or above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:*

- a. *Be flood-proofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;*
- b. *Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and,*
- c. *Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the official as set forth in Section 3.242.B.6.e.*
- d. *Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in Section 3.243.D.1 – Specific Standards.*
- e. *Applications floodproofing nonresidential building shall be notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level (e.g. a building constructed to the base flood level will be rated as one foot below that level).*

**Finding:** The memorandum submitted by the applicant indicates that the post development water surface elevation (WSE) will remain at the current WSE level. Therefore, the non-residential construction as proposed will maintain the lowest floor at the base flood elevation.

26. Section 3.250 Division 2 – Geologic Hazards Overlay provides the following purpose statement: *“The purpose of the Geologic Hazards Overlay District is to protect the public health, safety and welfare by assuring that development in hazardous or potential hazardous areas is appropriately planned to mitigate the threat to man's life and property.”*

**Finding:** According to data provided by the Oregon Department of Geology and Mineral Industries (DOGAMI), the proposed development will occur outside of the Geologic Hazards Overlay. Given this information, the proposed development is not subject to the requirements of Section 3.250- Division 2 – Geologic Hazards Overlay. The applicant provided professional engineering drawings to clearly identify areas of excavation, blasting and fill. Typical cross sections of these areas were also provided to confirm that roads and structures were thoughtfully placed to ensure compliance with the purpose of this overlay.

## **F. Chapter 5 – Conditional Use Review**

1. As noted above for several land use designations, much of the proposed development must also comply with Chapter 5, Conditional Use Review. The purpose of this chapter is to ensure new uses are compatible with the permitted uses in that zone, and with the general and specific purposes of the applicable County ordinances, Comprehensive Plan and the Management Plan for the Columbia River Gorge National Scenic Area. Section 5.020 provides the conditional use review criteria; Section 5.030 allow the application of reasonable conditions of approval to

ensure the compatibility of the conditional use with the surrounding permitted uses as necessary to comply with this ordinance. Section 5.020 states:

- A. The proposal is consistent with the goals and objectives of the Management Plan for the Columbia River Gorge National Scenic Area, and consistent with the provisions of the County's implanting ordinances.*

**Finding:** The County's NSALUDO was acknowledged by the Columbia River Gorge Commission and the Secretary of Agriculture as the mechanism with which to implement the Management Plan in Wasco County. The proposed development is reviewed for consistency with the NSA rules and regulations throughout this document. The Staff Recommendation contains recommended conditions of approval to ensure consistency with applicable rules.

- B. Taking into account location, size, design and operational characteristics of the proposed use, the proposal is compatible with the surrounding area and development of abutting properties by outright permitted uses.*

**Finding:** The surrounding area includes other transportation infrastructure, rural residences, the Columbia River and other sensitive resources, commercial agriculture and recreation facilities. As the only sea level passage through the Cascade Mountain Range, the Columbia River Gorge contains extensive transportation infrastructure on both sides of the River and in the River that serve an expansive region. The proposed development will modify and expand an existing railroad in the same general location. The applicant provided an Alternatives Analysis to verify the location, size and design of the development minimize impacts to sensitive resources and the general public, to the maximum extent practicable.

Public comments received express concerns regarding the compatibility of increased rail traffic. The application materials discuss existing and proposed operational characteristics, including the general speed, length and number of trains. Application materials explain that the proposed modifications will directly increase efficiencies in velocity, but not necessarily directly increase traffic (number of trains or number of cars) – which is currently driven by the commercial market. Application materials state the average daily traffic includes 20 to 30 individual trains. The applicant provided proprietary train volume records from the last ten years to confirm that this number is factual. The proprietary information also demonstrates no visible increase in cars due to any one or more unique commodity.

The application materials state that the speed and length of trains, as currently regulated by federal law, will not be directly affected, but the need to slow down or stop to pass one another will be reduced in an effort to increase rail “fluidity”, passing safety, and other operational efficiencies.

A Mosier City Council town hall meeting was held in Mosier in November of 2014 to increase local awareness of the proposed development and solicit feedback to regulatory agencies, including Wasco County and the U.S. Army Corps of Engineers.

Adjacent property owners were provided notice of the proposed project and encouraged to provide feedback. Tom Garnier, owner of the commercial farm adjacent to the project area east of Mosier, initially wrote to staff and the applicant inquiring about access to existing farm irrigation equipment north of the railroad tracks and concerns about trespass on their private property by longtime beach goers. Mr. Garnier ultimately corresponded directly with UPRR and did not request any changes or modifications to staff.

Adjacent lands east and west of Mosier used for recreation at Memaloose State Park and portions of the Historic Columbia River Highway State Trail, do not provide legal access to the river for recreation but do experience trespass and informal access. As described in more detail below for Chapter 14 provisions regarding recreation resource impacts, nearby established recreation sites were developed after the railroad, highway and interstate were constructed. The parks are located immediately adjacent to several major transportation facilities.

The applicant provided a map produced by the Columbia River Inter-Tribal Fisheries Commission that illustrates the location of known in-lieu/treaty fishing access sites and amenities. No sites are indicated on this map for the affected area. However, it is important to note that not all sites are known or mapped. Comments were received from the Confederated Tribes of Umatilla Indian Reservation. Treaty rights impacts and protections are discussed in greater detail below. With conditions of approval to require improved access, the proposed development is not anticipated to directly impact treaty rights.

Application materials also state that the proposed development will decrease the instances of parked or idling trains on the existing siding, within the community of Mosier or near the commercial orchards and agriculture.

In sum, Staff finds that - with conditions to ensure resource protection - the proposed development will be compatible with the surrounding area and current and future development of abutting properties.

- C. The proposed use will not exceed or significantly burden public facilities and services available to the area, including but not limited to: roads, fire, and police protection, sewer and water facilities, telephone and electrical service, or solid waste disposal facilities.*

**Finding:** The proposed development includes the expansion of existing railroad infrastructure. Although some onsite utilities are proposed to be relocated, no new utilities will be constructed. According to the applicant, the project will not increase use of sewer and water facilities, telephone and electrical service, or solid waste disposal facilities. Notice of the proposed development was provided to the State Fire Marshall's Office, Mid-Columbia Fire and Rescue, Mosier Rural Fire Department, Oregon Department of Transportation, Wasco County Public Works, the City of Mosier, Wasco County Sheriff's Office, local PUD offices and the Wasco County Health Department. No concerns about the proposed development were expressed by these organizations or any others that provide public facilities and services. The project was publically noticed

multiple times following the 2014 city town hall meeting in Mosier. Staff also solicited verbal feedback during a 2015 Wasco County Fire Board meeting, and did not receive any written or oral concerns. Given this information, Staff concludes the proposed development will not exceed or significantly burden public facilities or services in the area.

*D. The proposed use will not unduly impair traffic flow or safety in the area.*

**Finding:** The proposed development will require several temporary roads along the shoulder of Interstate 84 to access the project area. The applicant provided the following information regarding traffic impacts in the application:

*“During the project design phase, UPRR coordinated with ODOT District 9 Manager, Pat Cimmiyotti and confirmed that ODOT did not foresee any potential for operational or safety concerns associate with the project. UPRR incorporated minor changes to the project area and access adjacent to I-84 based on ODOT’s comment, following which ODOT indicated they had no further concerns regarding potential increased site traffic volume, intersection traffic, or use of adjacent roads, and indicated that a TIA is not required (ODOT, Personal communication, 2014). UPRR also consulted the Wasco County Roadmaster, Marty Matherly, who indicated he had no concerns or foresaw any potential impacts to roads under the County’s jurisdiction (Wasco County, Personal communication, 2014a).*

*During operation, an average of one to two maintenance vehicles per month will access the project site using existing access roads along the project’s corridor. Two 10-foot-wide permanent access roads will be established to provide maintenance access to the existing rail and new second mainline track. The first will be located at the western side of the project at MP 66.98 from eastbound I-84 to the proposed second mainline. A break in the guardrail will be required to facilitate this access road, however, no improvement to the road shoulder and existing ROW will be required. The second access point will be located within Memaloose State Park at approximately MP 71.79. This complete road length will total approximately 0.6 mile, and will use an existing travel corridor for much of the route (see Figure 4-1). The majority of this road is currently paved and will not require additional upgrades to support maintenance equipment. Maintenance activities will not result in an impact to the flow of traffic. Accordingly, site traffic related to operational maintenance will not exceed site traffic volumes designated in NSA-LUDO 120(C)(1)(c).*

*Temporary traffic delays may occur during construction along portions of I-84; however, these delays will be brief and construction flaggers will be onsite to safely direct traffic as needed. Therefore, UPRR will comply with the provisions of NSA-LUDO Section 4.120 and Section 303(c) DOT Act (49 CFR 303).*

Application materials were provided at the time of notice; no comments were received from ODOT or Public Works requesting additional information or corrections. Given this information, it is reasonable to conclude that the anticipated traffic impacts to occur during construction have been coordinated, and that no significant permanent impacts

are anticipated. A condition of approval is included in the Staff Recommendation to require ongoing traffic coordination with ODOT and Wasco County Public Works.

*E. The effects of noise, dust and odor will be minimized during all phases of development and operation for the protection of adjoining properties.*

**Finding:** Application materials describe construction related noise, dust, and odor:

*“The effects of noise, dust and odor will be minimized during all phases of construction and operation of the project for protection of adjoining properties. In Oregon, ODEQ regulates noise; however, ODEQ does not regulate construction noise per Oregon Administrative Rule (OAR) 340-035-0035(5)(g). During construction, noise will be generated from construction equipment, but noise levels will be consistent with other heavy construction projects. Any increase in noise level from construction activities will be temporary, will take place during designated construction hours, and will comply with applicable railroad standards, as federally regulated by Title 49 CFR Part 210. Noise generated during operation of the project will not be greater than noise levels currently generated by use of the existing mainline track. Railroad operations are currently and will continue to be required to meet applicable federal regulations.*

*Limited dust may be generated by construction equipment during construction, primarily during grading activities. Fugitive dust associated with construction vehicles will be minimized through the use of BMPs, including dust suppression and limiting the duration of exposed soil. During operations, any effects related to fugitive dust from trains and maintenance vehicles will be negligible. No significant odors will be generated during project construction or operation. Therefore, the project complies with this provision.”*

Some of the comments heard from the citizens of Mosier at the Mosier Town Hall included concerns for the sound of slowing trains (screeching brakes), parked or slowed locomotive engines idling, powering up and powering down, whistle blowing, and the noises of general freight movement. Throughout the application materials, the applicant describes impacts to long-term operation of the development as a project that will increase fluidity in rail movement, resulting in fewer parked or idling trains, and less noise overall due to a decrease in the need to stop and wait for other trains to pass (less noise from brakes and less frequent powering down and powering up). Application materials also described operational efficiencies provided by the use of standard length trains, including the more efficient use of diesel locomotive engines.

As noted below, a condition of approval is required to move blasted rock materials out of the project area for offsite crushing. Although this will reduce noise and dust in the project area, the transportation of the materials out (to be crushed) and back (to be used as new ballast materials), may create temporary dust and noise on the road shared with OPRD for the Memaloose State Park Campground. A condition of approval is included to ensure that either construction in this area occurs outside of the peak recreation season, or trucks used for hauling the blasted and crushed materials are covered to minimize dust and related impacts to visitors at the park.

- F. *The proposed use will not significantly reduce or impair sensitive wildlife habitat, riparian vegetation along streambanks and will not subject areas to excessive soil erosion.*

**Finding:** The development is proposed to occur in areas containing sensitive plant and wildlife habitat and wetlands. As further explained in the natural resource sections of Chapter 14, Staff recommends conditions of approval to require the implementation of the off-site wetland mitigation, the Sensitive Species and Wildlife Habitat Protection and Rehabilitation Plan provided by the applicant and confirmed by resource protection agencies, the use best management practices to prevent erosion and control noxious weeds from encroaching disturbed areas, and to eliminate the landing zone/rock crushing site from the Open Space zone. As conditioned, the proposed development is consistent with (F) above.

- G. *The proposed use will not adversely affect the air, water, or land resource quality of the area.*

**Findings:**

**Air:** For the protection of air quality in the CRGNSA, the Management Plan refers to the *Columbia River Gorge Air Study and Strategy* prepared by the Oregon Department of Environmental Quality and the Washington State Ecology Southwest Clean Air Agency. The primary goal of this strategy is to reduce regional haze and air pollution through several identified strategies, including a bi-state solutions effort called the “Columbia River Regional Diesel Emissions Reduction Project.”

Specific to locomotives (pages 10, 12, and 24), the Strategy States:

*“Rail also serves an important function in the Gorge, carrying freight from Portland/Vancouver to eastern parts of Oregon and Washington. While the federal government regulates railroads and interstate transport, Oregon and Washington have been working with railroads to seek local efforts to reduce rail emissions. In 2004, SWCAA worked with Burlington Northern and Santa Fe Railway Company, the U.S. Environmental Protection Agency and Kim Hotstart Manufacturing Company to install three retrofit devices on diesel switchyard locomotive engines in Vancouver’s switchyard. These devices keep critical fluids warm and flowing, allowing the locomotive engines to be shut down when not performing work and then quickly restart when needed. Reductions from the retrofits have reduced NOx and particulate matter by 9 tons a year and saved over 47,000 gallons of fuel a year.”*

The application materials note in several instances that the development would allow for more efficient use of diesel engines by allowing industry standard length trains and thus, fewer currently shorter trains. Based on this information, it appears that proposed development will result in the more efficient use of diesel locomotive engines, consistent with the *Columbia River Gorge Air Quality Strategy*.

Staff is also aware of a recent, peer reviewed article produced by the University of Washington titled: *Diesel particulate matter and coal dust from trains in the Columbia River Gorge*,

Washington State, USA<sup>4</sup>. It is worth noting the lead author of this article, Dr. Daniel Jaffe, is also one of the authors of the *Columbia River Gorge Air Quality Strategy*.

The article specifically evaluates diesel particulate matter and coal dust collected from trains on the Washington side of the Columbia River. Anecdotal information including staff observation of existing rail traffic observes that much of the coal and oil transported through the Gorge is currently carried by BNSF on the Washington side of the Gorge, which may indicate why the study was focused on that one side of the River. The conclusion of the article abstract states: *“Our results demonstrate that, on average, passage of a diesel powered open-top coal train result in nearly twice as much respirable PM2.5 compared to passage of a diesel-powered freight train.”*

According to the applicant, commodities are not proposed to be altered by the proposed track development. The applicant has also provided information to demonstrate commodities are driven by current market demand and regulated federally. Approximately 1,000 comments of concern were received regarding the project’s potential to increase the freight movement of coal and oil. Although much of the commodities of public concern are carried in Washington, it is within the Gorge on similarly sited tracks and we can use the conclusions to inform this review.

The proposed development includes physical improvements to an existing railroad corridor which currently contains an average of 20 to 30 trains per day, carrying a variety of commodities. The development does not propose changes to specifically enable any more of any one particular commodity and does not proposed to significantly increase rail traffic. In sum, the proposed project does not appear to directly impact the amount of particulate matter resulting from any one commodity, but does appear to have some potential to decrease diesel locomotive emissions. ~~A condition of approval is included to require the covering of coal cars.~~

**Water:** Water resources were evaluated by the US Army Corps of Engineers 404 process. The Water Master and local water districts, was provided notice of the project and did not raise any concerns for community water resources. The applicant has obtained and provided a Biological Opinion from the United States Department of Commerce National Oceanic and Atmospheric Administration National Marine Fisheries Service and a determination from the U.S. Army Corps of Engineers that concludes the proposed action is “not likely to jeopardize the continued existence” of salmon or steelhead species, or impact critical habitat. Oregon Fish and Wildlife was included in the analysis for these determinations and provided confirmation of consistency with state regulations through their review (see Chapter 14 – Natural below for more information about natural resource impacts). With conditions to ensure best management practices are implemented to prevent erosion and sedimentation, to implement off-site wetland mitigation plans, and to protect the Flood Hazard Overlay Zone, the proposed development will not adversely affect water resources.

**Land Resource Quality:** As previously described above, the development will occur within an existing railroad corridor. The proposed expansion includes development or construction related activities on lands owned by UPRR, Oregon Department of Transportation, Oregon State Parks and Recreation, and offsite wetland mitigation will require development on privately owned

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<sup>4</sup> October 20, 2015 Journal of Atmospheric Pollution Research ([www.journals.elsevier.com/locate/apr](http://www.journals.elsevier.com/locate/apr))

lands adjacent to Tooley Lake. The referenced landowners have provided written consent for the review of this development. According to the application materials, temporary construction areas are proposed to occur adjacent to the track expansion, and include:

*Two 10-foot-wide permanent access roads will be established to provide maintenance access to the existing rail and new second mainline track. One will be located at the western side of the project at MP 66.98 from eastbound I-84 to the proposed second mainline track. A break in the guardrail will be required to facilitate this access road; however, no improvement to the road shoulder and existing ROW will be required. The second access point will be located within Memaloose State Park, at approximately MP 71.79. This complete road length will total approximately 0.6 mile, and will use an existing travel corridor for much of the route. The majority of this road is currently paved and will not require additional upgrades to support maintenance equipment. A small, approximately 800-foot segment of the road will require minor grading, vegetation removal, and placement of crushed gravel to accommodate vehicles as they exit the existing paved road and connect to the existing ROW near Thompson's Lake.*

*Four temporary 10-foot-wide construction access roads will be established to provide construction access to the project area. The complete length of construction roads required will total approximately 0.64 mile, will consist of crushed gravel road surfaces, and will use existing travel corridors for much of the route. Access to temporary construction roads will be made by existing roads, including I-84.*

*The project will require nine construction staging areas, of which six will be located partly or entirely outside of the permanent project footprint. Materials to be stored at staging areas may include soil, rock, track materials (ballast, ties, rail, track hardware), construction materials (filter fabric, riprap, erosion control material, water) and construction equipment and support material. These materials will generally be transported to and from the staging areas by truck. Temporary staging areas will be restored as closely as practical to their original condition following construction, including replanting with native vegetation in accordance with all permit requirements.*

The project will also include rock blasting to expand the width of a passage through the basalt walls and allow for two mainline tracks. Staff required the applicant to provide an Alternatives Analysis to demonstrate the proposed location and scope of development is the minimum size necessary to meet the need and will occur in a manner that minimizes impacts to sensitive resources, agricultural lands, and area residents. Findings are contained in this document to address natural resource impacts, established recreation sites and any potential conflicts with nearby agriculture; please see Chapter 14 below for additional information. As addressed in the findings below, conditions of approval are recommended to further reduce resource impacts. With conditions of approval contained in the Staff Recommendation, Staff finds the proposed development will not have an adverse effect on land resource quality.

*H. The location and design of the site and structures for the proposed use will not significantly detract from the visual character of the area.*

**Finding:** As discussed in findings that address scenic resource impacts protected by Chapter 14 below, the proposed development will not significantly detract from the visual character of the area and is therefore consistent with this rule.

- I. *The proposal will preserve areas of historic value, natural or cultural significance, including archaeological sites, or assets of particular interest to the community.*

**Finding:** Cultural resources, including historic resources, archaeological resources, traditional cultural properties, are discussed below under Cultural Resources for Chapter 14. Natural resources and assets of particular interest, include nearby recreation areas and the scenic resources viewed from scenic travel corridors and key viewing areas, are discussed below for the natural and scenic resource protection sections of Chapter 14.

*For properties located within or adjacent to farm or forest zones or located nearby agricultural and forest operations, the following shall apply:*

- J. *The proposed use is compatible with agricultural uses and will not force a change in, or significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to, or available for, farm or forest use.*
- K. *The proposed use or development will be sited in such a way to minimize the loss of forest or agricultural land suitable for the production of crops or livestock and to minimize the chance of interference and not force a change in accepted farm or forest practices on surrounding lands devoted to, or available for, farm or forest use.*
- L. *The use or development will not significantly increase fire hazard, fire suppression costs or risks to fire suppression personnel.*
- M. *A declaration shall be signed by the landowner and recorded into county deeds and records specifying that the owners, successors, heirs and assigns of the subject property are aware that adjacent and nearby operators are entitled to carry on acceptable agriculture or forest practices on lands designated Large-Scale or Small-Scale Agriculture, Agriculture-Special, Commercial Forest Land, or Large or Small Woodland.*

**Finding:** As explained above, the proposed development expands an existing railroad siding to create second mainline in the same general location. Rock blasting and vegetation removal is proposed to occur in areas near an existing farm east of Mosier. The adjacent farm has worked with the applicant directly to ensure there will be no conflicts with current farm practices, access to irrigation lines, or any other conflicts. Additionally, no concerns were received from other nearby farmers with concerns regarding possible conflicts. Given this information, staff recommends the proposed development is compatible with adjacent farm uses. A condition is included to require compliance with (M) above. Staff solicited feedback from the Wasco County Fire Board at a quarterly meeting and has provided multiple project notices to the City of Mosier and Mosier Fire Department; no comments on the subject application have been received to date. Based on several conversations with local emergency response personnel, Staff assumes

that this is partly due to the fact that the existing railroad has an inherent fire risk and that an expanded track would become part of the existing risk – not a new risk. Based on the lessons learned from a recent derailment within the vicinity of the project, staff recommends including a condition of approval that requires UPRR to provide regular training to Gorge fire departments included in the Mid-Columbia Five County Mutual Aid Agreement and requires UPRR to solicit feedback about local needs for combatting a railroad related fire incident and ~~make a good faith effort to~~ assist in meeting those needs. With conditions, staff finds the development to be consistent with this provision.

2. Section 5.040 authorizes the revocation of a conditional use permit is the conditions of approval are not being met, or the use is no longer compliant with the applicable rules. It states:

*Noncompliance with any condition placed on a conditional use permit shall be grounds for revocation of the permit. Revocation of a conditional use permit shall be considered a land use action and reviewed by the Planning Commission...*

**Finding:** A condition of approval will be included in the Notice of Decision to alert the landowner and future owners of this requirement.

3. Section 5.050 provides additional criteria for transportation projects not part of the Wasco County Transportation System Plan.

**Finding:** The existing railroad and related infrastructure, including recommendations for future development, are included in the Wasco County TSP. As proposed, the development is consistent with the Wasco County TSP and is therefore not subject to Section 5.050.

## **G. Chapter 6 – Variances from Building Heights, Slope, Setbacks and Buffers**

### ***SECTION 6.010 Purpose***

- A. *When building height, setbacks, buffers or other review criteria specified in this Ordinance for protection of scenic, cultural, natural, recreational, agricultural or forestry resources overlap or conflict, building height, setbacks, or buffers should be varied in a manner to achieve, to the greatest extent possible, the overall protection of the affected resources.*

...

- B. *Building height, setbacks and buffers specified in this Ordinance for protection of scenic, cultural, natural, recreational, agricultural or forestry resources shall not be applied in the General Management Area in such a manner as to deprive the owner of a tract of land of the opportunity to establish a residence on the land if that opportunity is otherwise authorized by the land use designation. (GMA Only)*

**SECTION 6.020 Criteria for Decision**

*A. Authority*

1. Administrative Variance

*The request shall be for a variance to a building height, setback or buffer which is less than 50% of the stated standard for the building height, setback or buffer as stated in this ordinance.*

2. Planning Commission Variance

*The request shall be for a variance to a building height, setback or buffer which is 50% or greater of the stated standard for the building height, setback or buffer as stated in this ordinance.*

**Finding:** Application materials include variance requests that are 50% or greater of the stated standard contained in the NSA-LUDO and acknowledges the need for a Planning Commission variance and Type III Quasi-Judicial approval from the Wasco County Planning Commission. The applicant requests the following variances:

- Planning Commission variance to the Columbia River development setback standards contained in NSALUDO Section 14.200(G).
- Planning Commission variance to the Scenic Travel Corridor (I-84) setback standard contained in NSALUDO Section 14.300(B)(2).
- Planning Commission variance to the wetland buffer standards contained in NSALUDO Section 14.600(A)(3)(c).
- Planning Commission variance to the sensitive plant buffer zones contained in NSALUDO Section 14.600 (D)(3).

*B. When building height, setbacks or buffers specified in the standards for protection of scenic, cultural, natural, recreational, agricultural or forestry resources overlap or conflict, the building height, slope setbacks or buffers may be varied upon a demonstration that: (GMA Only)*

1. *A building height, setback or buffer specified in this Ordinance to protect one resource would cause the proposed use to fall within a setback or buffer specified in this ordinance to protect another resource; and*
2. *Variation from the specified building height, setbacks or buffer would, on balance, best achieve the protection of the affected resources.*

**Finding:** The applicant provides the following statement to justify the requested variances: “The proposed project has been designed and sited to utilize primarily the existing, previously disturbed ROW in order to minimize the project footprint and its impacts on scenic, cultural, natural, recreational, and agricultural resources to the greatest extent feasible. Avoidance of the Scenic Travel Corridor setback of 100 feet, and the Columbia River development setback of 100 feet in the GMA and 200 feet within the SMA would require construction of an entirely new railroad corridor and result in significantly greater impacts to all resource areas and their associated buffer areas. Due to the pre-existing, linear nature of the railroad, avoidance of all wetland and sensitive plant buffer areas would render the project

unbuildable and impracticable. The proposed project's use of the existing ROW for the majority of the project alignment will best achieve the protection of affected resources. Therefore, the project complies with these provisions." Because there is no way to repair, maintain or modify the railroad without requiring a variance, Staff recommends granting variances, reducing Open Space impacts and requiring the mitigation plans prepared for the application.

*D. All setbacks and buffer zones in the SMA shall remain undisturbed unless:*

- 1. It has been shown that no practicable alternatives exist, as evidenced by completion of a practicable alternative test; and*
- 2. The natural resources mitigation plan completed in accordance with Chapter 14 of this ordinance ensures that the development can be mitigated to ensure no adverse effects would result.*

**Finding:** The applicant has demonstrated that no practicable alternative exists for the proposed development. A condition of approval is included to ensure the resources mitigation plan is completed as proposed and developed in accordance with Chapter 14. With a condition of approval to reduce impacts to SMA Open Space (addressed in more detail below), staff concludes the proposed development will have no adverse effects on setbacks or buffer zones for resource protection.

#### **H. Chapter 11 - Fire Safety Standards**

1. WCNSALUDO Chapter 11 provides fire safety standards applicable to all new development in Wasco County. This chapter was developed in conjunction with an inter-agency team of fire protection districts. The intent of this chapter is to inform, notify and educate rural residents of their fire risks and limited fire protections services; reduce threats to life, safety, property, and resources by improving access and defensible spaces; provide clear communication of fire department needs; establish consistency in fire prevention requirements; and encourage participation in the local volunteer fire programs.
2. WCNSALUDO Section 11.020 through 11.150 provide requirements and considerations for new structural development including requirements for siting to avoid steep slopes, provide and maintain defensible spaces of a 50-foot fuel break, provide onsite fire protection water, meet fire safe construction standards, and meet access standards to ensure fire and other emergency equipment can access the property. The applicant has completed a Fire Safety Standards Self Certification Application, verifying that the proposed development complies with the required Fire Safety Standards. A condition of approval is included in the Notice of Decision to ensure the landowner, and future landowners, comply with Chapter 11 for wildfire safety and prevention.
3. WCNSALUDO Section 11.210 requires compliance with the applicable fire safety standards for all new, replacement, and modified structures in rural zones. It states:
  - A. Compliance with applicable fire safety standards is required by the ordinance for new, replacement, and modified structures in all rural zones.*

1. *Fire standards shall be made a part of the conditions of approval when a conditional use permit, site plan or subject to standards review, partition, subdivision, or other land use action is required prior to construction.*
2. *Structures or alterations to structures that are subject to ministerial review must also comply with all applicable fire standards prior to receiving zoning approval on a building permit application.*
3. *In all cases compliance with applicable fire standards shall be self-certified prior to receiving zoning approval on a building permit.*
4. *Certifications shall be verified within one year of approval and may be verified by staff site visits at any time.*

**B. Continued compliance with fire safety standards is required.**

1. *Compliance is the responsibility of the land owner.*
2. *An illustrative checklist will be provided to land use permit applicants and building permit applicants that explains all necessary steps to comply with applicable fire safety standards.*
3. *Required compliance with fire safety standards shall be disclosed to future land owners prior to sale of any parcel.*

*Where fire safety standards, or a modification of the standards pursuant to 11.220 below, are applied through a land use review as conditions of approval, the conditions of approval shall be recorded along with the notice of decision.*

**Finding:** The applicant provided a completed and signed Fire Safety Standard Self-Certification Checklist to confirm compliance with the requirements of Chapter 11. A condition of approval is included in the Notice of Decision document to be recorded with the deed of the subject property.

As discussed further in this report, a condition of approval is included to require the development of a Spill Response Plan for derailments and other railroad accidents and to provide regular training to Gorge fire departments included in the Mid-Columbia Five County Mutual Aid Agreement and requires UPRR to solicit feedback about local needs for combatting a railroad related fire incident and ~~make a good faith effort~~ to assist in meeting those needs.

**I. Chapter 14 – Scenic Area Review**

Pursuant to Section 14.010, the purpose of the Scenic Area review is to preserve, protect and enhance the scenic, natural, cultural and recreational values of the Gorge and to assure that development occurs in a manner that is compatible with its unique qualities.

**Scenic Resources (GMA and SMA)**

1. Section 14.020 contains a list of information and materials required for a complete application. The application was submitted on January 9, 2015. The application became complete November 18, 2016 upon the submittal of a complete wetland mitigation plan and associated cultural and natural resource surveys.

2. Section 14.100 contains scenic resource protection guidelines applicable to all new development except those uses allowed without review or allowed through the expedited review process. As noted above, the proposed development is not allowed without review or eligible for the expedited review process. Applicable provisions from Section 14.100 are addressed below.
3. Section 14.100(B) pertains to siting, it states:

*New buildings and roads shall be sited and designed to retain the existing topography and to minimize grading activities to the maximum extent practicable.*

**Finding:** The intent of this rule is to ensure the visibility of cut banks and fills slopes associated with development are minimized and the existing visual character of the landscape is retained, to the maximum extent practicable. An Alternatives Analysis was required for completeness to demonstrate the proposed development was sited and designed to minimize impacts to the surrounding landscape. The proposed development (the preferred alternative from the Alternatives Analysis) extends an existing siding to create new double mainline track within an existing rail corridor; siting the development in the existing rail corridor and extending an existing siding minimizes grading when compared to a new corridor or second line elsewhere.

Construction will require blasting rock walls, the addition of a significant retaining wall, temporary landing zones for construction, and the fill of wetlands. Much of the visual impacts however, will be minimized by topographic screening from the very rock wall feature that will be partially blasted. Most of the excavation and extensive construction projects will occur within or immediately adjacent to an open tunnel through a large rock mesa. A portion of the blasting will be visible, and a portion of the retaining wall will be as well. However, much of this construction will occur in an area screened by topography.

As explained in the application narrative and Alternatives Analysis, the project location is the only location that addresses the capacity constraints of the railroad. If the project had been proposed in a different location, the amount of excavation may have been different, but it would not have been practicable for the applicant's need. Vegetation impacts are addressed below.

Given this information, Staff concludes the proposed development has been sited and designed to retain the existing topography and minimize grading activities to the greatest extent practicable.

4. Section 14.100(C) pertains to design, it states:

*New buildings shall be compatible with the general scale (height, dimensions, and overall mass) of existing nearby development. Expansion of existing development shall comply with this guideline to the maximum extent practicable.*

**Finding:** The proposed development includes the replacement of five existing signal buildings (equipment shelters) with five new signal buildings that range in size from 6'L x 6'W x 9'H (36 square feet) to 8'L x 10'W x 9'H (80 square feet). Surrounding development includes rural residences, public recreation facilities, and commercial agriculture – all of which include

buildings larger than 80 square feet. Staff finds the replacement buildings to be consistent with the general scale of existing nearby development, consistent with this rule.

5. Section 14.100(D) and (E) pertain to color, they state:

*(D) Unless expressly exempted by other provisions, colors of all exterior surfaces of structures not visible from key viewing areas shall be earth-tones found at the specific site or in the surrounding landscape. The specific colors or list of acceptable colors shall be included as condition of approval. The Scenic Resources Implementation Handbook will include a recommended palette of colors.*

*(E) Additions to existing buildings smaller in total square area than the existing building may be the same color as the existing building. Additions larger than the existing building shall be of dark earth-tone colors found at the specific site or in the surrounding landscape. The specific colors or list of acceptable colors shall be included as a condition of approval. The Scenic Resources Implementation Handbook will include a recommended palette of colors.*

**Finding:** Consistent with (D), and as discussed in greater detail below, are required to be dark earth-tone colors found at the site or surrounding landscape. Because no additions to buildings are proposed, (E) does not apply.

6. Section 14.100(F) pertains to exterior lighting, it states:

*Outdoor lighting shall be directed downward, sited, limited in intensity, shielded and hooded in a manner that prevents the lighting from projecting onto adjacent properties, roadways, and the Columbia River as well as preventing the lighting from being highly visible from Key Viewing Areas and from noticeably contrasting with the surrounding landscape setting. Shielding and hooding materials shall be composed of nonreflective opaque materials. There shall be no visual pollution due to the siting or brilliance, nor shall it constitute a hazard for traffic.*

**Finding:** The application includes twelve new 22-foot tall combination signal lights; the application states this is the minimum necessary to comply with federal law for safe operation requirements. According to the application narrative, the proposed lights will be “side-shielded to limit the amount of light directed away from the rail centerline to minimize contrasts with the visual character of the area” and “Lighting will be directed to prevent projection onto adjacent properties, roadways, and the Columbia River as well as preventing the lighting from being highly visible from KVAs.” Site plans indicating the location of the proposed lights and technical drawings of the typical appearance of the proposed lights were provided (see application Appendix B, Detail 8). These drawings illustrate “signal combination back to back side ladder” lights. The side view depicts a ladder to the top of the structure, and three three-light signals that are hooded and shielded to direct light down the track. The front view shows a maximum of two three-light signals, mounted at 8’4” and 16’4”. This elevation indicates that the lights will be visible from the direction of the track. The purpose of these lights is to communicate with rail traffic, not vehicle traffic. The lights are angled and shielded to focus on the track in both directions. It is anticipated that the lights will be visible from KVAs from some angles, but that

they will not cause visual pollution due to the siting or brilliance. The lights intend to provide safety to rail traffic; Staff does not anticipate the lights posing a hazard for vehicle traffic. With a condition of approval to require the structures to be treated with a dark earth tone color where it does not interfere with UPRR Uniform Signal Systems and Standards, the proposed lighting structures are consistent with this rule.

7. Sections 14.100(G) and (H) pertain to landscaping, it states:

*(G) All ground disturbance as a result of site development shall be revegetated no later than the next planting season (Oct-April) with native species. The property owners and their successors in interest shall be responsible for the survival of planted vegetation, and the replacement of such vegetation if it does not survive.*

*(H) Except as necessary for site development or fire safety purposes, the existing tree cover screening the development area on the subject parcel from Key Viewing Areas and trees that provide a back drop on the subject parcel which help the development area achieve visual subordination, shall be retained. Additionally, unless allowed to be removed as part of the review use, all trees and vegetation within the buffer zones for wetlands, streams, lakes, ponds and riparian areas shall be retained in their natural condition. Any of these trees or other trees required to be planted as a condition of approval that die or any reason shall be replaced by the current owner or successors in interest no later than the next planting season (Oct – April) after their death with trees of the same species or from the list in the landscape setting for the property.*

*To ensure survival, new trees and replacement trees shall meet the following requirements...*

**Finding:** To the extent practicable, and as required by conditions of approval, native trees will be preserved and protected during construction. Disturbed areas will be revegetated with a native seed mix; A condition of approval is also included in the Notice Decision to require revegetation of disturbed areas no later than the next planting season (October – April).

8. Section 14.200 contains additional scenic resource protection requirements for new development that is topographically visible from designated key viewing areas. The proposed development will be topographically visible from the Historic Columbia River Highway (Highway 30), Interstate 84, the Columbia River, and State Route 14; Section 14.200 is addressed below. Please note the visibility of development proposed within the Mosier UA is not included in the following analysis.

9. Section 14.200(A) requires new development to be visually subordinate to its setting, it states:

*Each development and land use shall be visually subordinate to its setting in the GMA and meet the required scenic standard (visually subordinate or visually not evident) in the SMA as seen from Key Viewing Areas. The extent and type of conditions applied to a proposed development to achieve visual subordination shall be proportionate to its potential visual impacts as seen from Key Viewing Areas.*

1. *Decisions shall include written findings addressing the factors influencing potential visual impact including but not limited to:*
  - a. *The number of Key Viewing Areas it is visible from;*
  - b. *The distance from the building site to the Key Viewing Areas it is visible from;*
  - c. *The linear distance along the Key Viewing Areas from which the building site is visible (for linear Key Viewing Areas, such as roads and the Columbia River);*
  - d. *The difference in elevation between the building site and Key Viewing Areas;*
  - e. *The nature and extent of topographic and vegetative back screening behind the building site as seen from Key Viewing Areas;*
  - f. *The amount of area of the building site exposed to Key Viewing Areas; and*
  - g. *The degrees of existing vegetation providing screening.*

**Finding:** The proposed development will be visible from four key viewing areas. As noted above, these include the Historic Columbia River Highway, The Columbia River, Interstate 84 and State Route 14. All four of these key viewing areas are linear features with prolonged views that extend a great distance. Based on Wasco County GIS data and field visits by Staff, the proposed development will be topographically visible intermittently from the foreground (up to one half mile) middle ground (between one half and three miles) and in some cases, the background (greater than three miles) of each of these protected public viewsheds. The existing railroad corridor is an at grade rail service, and closely parallels the Columbia River for an elevation of approximately 40 feet above sea level (ABSL).

Historic Columbia River Highway: The development west of Mosier will be visible in the foreground and middle ground from the pedestrian portion (a State Trail) of the Historic Columbia River Highway for an approximate length of one mile. Intermittent topographic screening is provided by basalt rock formations and the curve of the natural landscape and river bend surrounding the trail. From this angle, the key viewing area is approximately 40 feet higher in elevation and the viewer is looking down upon the tracks from the trail in the foreground or out to the far east, viewing a small portion of the eastern development as it curves underneath Interstate 84 in the far middle ground. Portions of the development are also visible from drivable portions of the Historic Columbia River Highway, chiefly the Memaloose Overlook – from which the rock to be blasted and the landing zones are visible in the middle ground, and for a short distance east of Mosier, traveling west – from which the western bend of the rail expansion can be viewed in the far middle ground. Both of these sites are higher in elevation than the development site; the Interstate 84 infrastructure and existing topographic features occur between these viewing locations and the proposed development, resulting in only partial topographic visibility. Scattered tree cover exists on either side of the railroad corridor, providing some screening and a backdrop for any equipment shelters, communications poles, signage and lighting structures may also be visible.

Columbia River: According to Wasco County GIS inventories, the proposed rail development is approximately 40 feet higher in elevation than the River. Due to the presence of a gentle berm that exists between the rail ballast and the shore of the River, it is not anticipated that the proposed track will be visible or any more visible than the current track. It is also anticipated that all equipment shelters, communications poles, signage and lighting structures visible from this key viewing area will have sufficient background vegetation and rock wall backdrop to allow the development to blend with the surrounding landscape. This determination is based on staff observations of existing railroad development in the same landscape. The proposed rock blasting, vegetation clearing for landing zones, and a portion of the proposed retaining wall is expected to be topographically visible from the foreground and middle ground of the River. In the area of proposed rock blasting and vegetation clearing, very little vegetation exists north of the existing rail bed. Due to the height of the rock to be blasted, it is unlikely that any mature native tree could have provided effective screening from this location. The proposed vegetation clearing east of the rock blasting site will have the visible effects of a timber harvest in a sensitive landscape – and will not be substantially screened from views along the River or from State Route 14. As discussed below for natural resources, a condition of approval is recommended to prohibit the clearing of this area due to the sensitive natural resources that exist, and the landscape constraints that would prevent any proposed impact from being “temporary” for scenic or natural resources. With conditions to prohibit this clearing, the most visible portions of the project from the Columbia River will be the eastern edge of the blasted rock wall and the western edge of the retaining wall. The retaining wall site will be partially screened by existing trees and woody shrubs that exist north of the tracks.

Interstate 84: Staff has driven the length of Interstate 84 through this project site many times since the application was provided, each time assessing the overall visibility of the proposed development. Staff observes that the site is more visible when traveling west due to the bends in the highway and intervening topography. While traveling west, a portion of the site (limited to rock blasting and possibly vegetation clearing) begins to be topographically visible just west of the Memaloose Public Rest Stop, which is higher in elevation than the proposed development. From this angle, the casual traveler can topographically view the southern aspect of the eastern edge of the rock face to be blasted, partially screened by mature coniferous trees; visible for approximately one half of a mile. The project is then screened to viewers by topography or Interstate 84 until you reach the portion of the project west of the Mosier UA, which is topographically visible and partially screened with limited vegetation for approximately 1.6 miles. This portion of the project occurs at roughly the same elevation and within the immediate foreground of Interstate 84. Existing vegetation and a basalt wall back drop provide a background and shadows that will allow equipment shelters, communications poles, signage and lighting structures to blend with the surrounding landscape. This determination is based on staff observations of existing railroad development in the same landscape.

State Route 14: Based on staff observations and Wasco County GIS data, the eastern edge of the rock blasting, western half of the retaining wall, the vegetation clearing proposed for temporary construction zones, and some of the equipment shelters, communications poles, signage and lighting structures will likely be visible from this key viewing area. The elevation of the state highway changes dramatically from east to west, affording a variety of views in the middle ground and background. In most locations, topography between the state highway and the Columbia River screens the visual impacts from casual travelers viewing the landscape. There are several locations however, that the site will be visible and unscreened in the middle ground.

From these locations, the most visible portions of the project will include the vegetation clearing and rock blasting. As noted above, staff recommends a condition of approval to prohibit the clearing of Open Space areas east of the rock blasting site.

2. *Conditions may be applied to various elements of proposed developments to ensure they are visually subordinate to their setting in the GMA and meet the required scenic standard (visually subordinate or visually not evident) in the SMA as seen from Key Viewing Areas, including but not limited to:*
  - a. *Siting (location of development on the subject property, building orientation, and other elements);*
  - b. *Design (color, reflectivity, size, shape, height, architectural and design details and other elements); and*
  - c. *New landscaping.*

**Finding:** The visual quality objective, or scenic standard, is dependent upon the landscape setting and zoning of the land to be affected. For all landscape settings and zones in the GMA, the scenic standard is Visually Subordinate. For some zones in the SMA, the standard is Visually Not Evident. The SMA areas affected by this proposal have landscape settings of River Bottomlands and Oak Pine Woodland. Lands with these landscape settings zoned Open Space are required to meet the standard of Visually Not Evident. Lands with this landscape setting zoned Agriculture or Public Recreation are required to meet the standard of Visually Subordinate. Section 1.200 defines these terms:

Visually Subordinate:

*A description of the relative visibility of a structure or use where that structure or use does not noticeably contrast with the surrounding landscape, as viewed from a specified vantage point. As opposed to structures which are fully screened, structures which are visually subordinate may be partially visible. They are not visually dominant in relation to their surroundings. Visually subordinate forest practices in the SMA shall repeat form, line, color, or texture common to the natural landscape, while changes in their qualities of size, amount, intensity, direction, pattern, etc., shall not dominate the natural landscape setting.*

Visually Not Evident:

*A visual quality standard that provides for development or uses that are not visually noticeable to the casual visitor. Developments or uses shall only repeat form, line, color, and texture that are frequently found in the natural landscape, while changes in their qualities of size, amount, intensity, direction, pattern, etc., shall not be noticeable.*

Siting: As proposed, the railroad expansion would occur within the existing railroad corridor. An Alternatives Analysis was provided to demonstrate the proposed location was the preferred

alternative and minimized impacts to all protected resources in the NSA. With the exception of Open Space zones proposed to be cleared for temporary construction uses, Staff does not recommend changes to the location or orientation of the track or support structures listed above to achieve the required visual quality objective. Staff recommends prohibiting the proposed vegetation clearing in Open Space zones east of the rock blasting site because it would adversely affect the natural resources in that area (see natural findings below), as well as result in the long-term visual appearance of an unscreened logging practice – which is inconsistent with the uses allowed in this zone and therefore unable to achieve the visual quality objective for this landscape. Based on information included in the Rowena Open Space Plan prepared by the US Forest Service for resource management in this area, it is unlikely that vegetation clearing of this scale could be easily mitigated and truly temporary, due to harsh environmental constraints such as limited water, severe winds, steep slopes and limited soils.

Design: The colors provided by the applicant for the equipment shelters, communications poles, lighting structures and signage match existing development in an effort to comply with past NSA color requirements for earth tone colors. The NSA rules currently require dark earth tone colors found in the shadows of the surrounding landscape. Staff recommends a condition of approval to require all new buildings, structures and appurtenances be treated with the colors identified by the Interstate 84 Corridor Strategy Plan for the eastern Gorge, including: Sherwin Williams “Otter” for equipment shelters, any railing, support structures for signage, and retaining wall; and Federal Color 30099 for any new painted fences, lighting, and other associated equipment.

The proposed retaining wall will be a concrete wall stamped with an “Oregon Basalt” pattern and treated with colors found in the surrounding landscape. Staff recommends the retaining wall also be consistent with the Corridor Strategy Plan, and implement a color palette that uses “Otter” as the predominant base color, and Sherwin Williams “Black Fox” and Miller Paint “Dapper” as highlights. If different brands are used, they must match the color codes of these paint colors. To achieve a more natural appearance, colors are to be applied to the retaining wall surface as a multi-step, multi-colored staining process applied in the field. The Oregon Department of Transportation implements these requirements and may be source of technical assistance.

The visible development includes: an extension of existing track to create a double mainline track, the blasting of a rock wall to create space for the new track, a 170-foot long and 25-foot tall retaining wall, five replacement equipment shelters that range in size from 6’L x 6’W x 9’H (36 square feet) to 8’L x 10’W x 9’H (80 square feet), twelve 22-foot tall signal lighting structures, required safety signage, and the extension of six culverts and addition of three new culverts. Several miles of existing telephone poles will be removed and replaced with five 53-foot tall wooden monopoles carrying communication equipment, spaced several miles apart. Other visible impacts will be construction related and in most cases, temporary (e.g. graveling existing road shoulders and replacing guardrail in the same location). Improving drainage ditches, and updating existing utilities may also have some temporary visible impacts. Wetlands west of Mosier will be reduced – which will have a permanent change to the landscape, but not so significant that it would be considered an adverse effect to the landscape as a whole. Vegetation and natural impacts associated with wetland fill and wetland creation are discussed below under Natural.

As previously noted, Staff has been able to observe existing equipment shelters, lighting and signage in the field to evaluate the level of visual contrast with the surrounding landscape. The backdrop of basalt rock walls, existing trees and woody shrubs, and the shadows cast by those features as a north facing slope, allow the proposed development to blend. With conditions the conditions described above, Staff finds the proposed design, color, reflectivity, size, shape, height, architectural design details, and other elements to be consistent with the visual quality objectives for each zone.

10. Section 14.200(B) through (H) pertain to siting, they state:

*B. New development shall be sited to achieve visual subordination from Key Viewing Areas, unless the siting would place such development in a buffer specified for protection of wetlands, riparian corridors, endemic and listed plants, sensitive wildlife sites or conflict with standards to protect cultural resources. In such situations, development shall comply with this standard to the maximum extent practicable (GMA) only.*

**Finding:** As note above, the proposed development minimizes impacts to scenic resources and achieves visual subordination by being collocated with existing railroad development. An Alternatives Analysis was prepared to verify the proposed development (the preferred alternative) minimizes impacts to sensitive resources to the maximum extent practicable. Please see the Cultural and Natural findings below for more information regarding unavoidable resource impacts and mitigation strategies.

*C. New development shall be sited to achieve visual subordination utilizing existing topography, and/or existing vegetation as need in the GMA and meet the require scenic standard (visually subordinate or visually not evident) in the SMA from Key Viewing Areas.*

**Finding:** With the exception of the rock blasting and proposed Open Space clearing, the applicant has used existing topography and vegetation to meet the required scenic standards. Rock blasting is not common in the NSA but has certainly been used before, enabling the construction, maintenance, rock fall safety improvements, and expansions of Highway 30, Interstate 84, and State Route 14 - which has shaped many of the walls we see today. With conditions of approval to ensure rock blasting occurs in a random pattern (using a half cast removal method often employed by ODOT) to appear as natural as possible, the implementation of the color treatment plan discussed above for the basalt stamped concrete retaining wall, and the prohibition of clearing in Open Space, the proposed development is consistent with this requirement.

*D. Driveways and buildings shall be designed and sited to minimize visibility of cut banks and fill slopes from Key Viewing Areas.*

**Finding:** No new driveways are proposed, however six access roads will be improved. Four of these roads are existing gravel shoulder that will be improved with gravel to facilitate construction access. The other two roads also exist but are used infrequently and require regrading and re-graveling; they will be used for construction access and long-term maintenance access. Only minimal grading will be necessary to level and add new gravel to all six of the proposed roads; no new cut banks or fill slopes have been identified. New buildings are limited

to replacement of existing buildings. The buildings will be placed in the same or similar locations, within the level, graveled, right-of-way of the railroad. Given this information, the roads and buildings have been designed to minimize the visibility of cut banks and fill slopes from key viewing areas, consistent with this rule.

- E. *The silhouette of new buildings shall remain below the skyline of a bluff, cliff or ridge as seen from Key Viewing Areas. A variance in the General Management Area may be granted according to Chapter 6 if application of the guidelines would leave the owner without a reasonable economic use. The variance shall be the minimum necessary to allow the use and may be applied only after all reasonable efforts to modify the design, building height and site to comply with the criteria have been made.*
- F. *An alteration to a building built prior to November 17, 1986, which already protrudes above the skyline of a bluff, cliff or ridge as seen from Key Viewing Areas, may itself protrude above the skyline if:*
  - 1. *The altered building, through use of color, landscaping and/or other mitigation measures, contrasts less with its setting than before the alteration; and*
  - 2. *There is no practicable alternative means of altering the building without increasing the protrusion.*

**Finding:** The proposed replacement buildings are 9-feet tall. As noted above, significant backdrop exists behind the development from all affected key viewing areas. Consistent with this rule, no new building will protrude above the skyline, bluff, cliff, or ridge as seen from key viewing areas. No alterations to existing buildings are proposed; (F) does not apply.

- G. *Except for water-dependent development and for water-related recreation development, development shall be set back 100 feet from the ordinary high water mark of the Columbia River below Bonneville Dam, and 100 feet from the normal pool elevation of the Columbia River above the Bonneville Dam, unless the setback would render a property unusable. In such cases, variances to this guideline may be authorized according to Chapter 6 of this Ordinance. In the SMA the setbacks described above shall be 200 feet.*

**Finding:** The proposed development is not water dependent or water related recreation development, but it will occur within 100 feet of the Ordinary High Water Mark (OHWM) of the Columbia River in several instances (see site plan). The *Management Plan* and subsequent NSA land use ordinances were prepared and adopted after the railroads were established, and contain specific review uses that allow railroad development and expansion; Staff notes that the use was anticipated, and finds that the statement “unless the setback would render a property unusable” applies to the subject development. Given this information, Chapter 6 is addressed by this analysis.

- H. *New buildings shall not be permitted on lands visible from Key Viewing Areas with slopes in excess of 30 percent. Variances to this guideline may be authorized according to Chapter of this Ordinance if its application would render a property unbuildable. In*

*determining the slope, the average percent slope of the proposed building site shall be utilized.*

**Finding:** New buildings will be placed within the existing railroad corridor, at grade and on gravel. Consistent with this rule, no new buildings visible from key viewing areas will be placed on slopes greater than 30%.

11. Section 14.200(I) pertains to color, it states:

*Unless expressly exempted by other provisions in this chapter, colors of all exterior surfaces of structures visible from Key Viewing Areas shall be dark earth-tones found at the specific site or in the surrounding landscape. The specific colors or list of acceptable colors shall be included as a condition of approval. The Scenic Resources Implementation Handbook will include a recommended palette of colors.*

**Finding:** The applicant proposed colors to match existing development, which had been addressed by an older scenic resource standard (earth tone instead of a dark earth tone). To ensure compliance with this requirement, Staff recommends a condition of approval to require the color palette prescribed by the Interstate 84 Corridor Strategy for all elements of this development.

12. Section 14.200(J) pertains to reflectivity, it states:

*The exterior of buildings in the GMA and structures in the SMA on lands seen from Key Viewing Areas shall be composed on nonreflective materials or materials with low reflectivity, unless the structure would be fully screened from all Key Viewing Areas by existing topographic features. The Scenic Resource Implementation Handbook will include a list of recommended exterior materials. These recommended materials and other materials may be deemed consistent with this criterion, including those where the specific application meets recommended thresholds in the "Visibility and Reflectivity Matrices" in the Implementation Handbook (once they are created). Continuous surfaces of glass unscreened from Key Viewing Areas shall be limited to ensure visual subordination. Recommended square footage limitations for such surfaces will be provided for guidance in the Implementation Handbook.*

**Finding:** As proposed, the equipment shelters will be prefabricated metal structures that measure 36 square feet and 80 square feet, with a height of 9 feet. At the widest visible face, the 80 square foot structures will be 10 feet wide and 9 feet tall. With the exception of boaters on the Columbia River and hikers and bikers on the Historic Columbia River Highway, most public views of these buildings will occur at 65 miles per hour in the immediate foreground and middle ground. That said, there is no exception to this requirement and staff has only approved limited exceptions for public health and safety (e.g. fuel tanks that must be white due to heat). To comply with this requirement, a condition of approval is included to require the use of a low-reflective material or to treat the surface of the buildings with an approved matte finish polyacrylic paint and sand mixture to add texture and thus reduce reflectivity. Although this treatment may not be as effective on large building, staff finds it to be an effective treatment for small structures, and consistent with this rule.

13. Section 14.200(K) provides requirements applied to new landscaping necessary to screen development from key viewing areas. Some new landscaping is necessary for the proposed development to achieve visual subordination with the surrounding landscape.

**Finding:** No new screening vegetation is proposed. Natural resource mitigation, including the creation of a new wetland, is proposed, and is addressed below in findings for Natural. In the case of the proposed development, the backdrop of vegetation and rock wall provides a landscape for the small structures to recede and blend into. No new screening vegetation is required, but a condition of approval is included requiring the retention of existing screening vegetation, existing backdrop vegetation, and the prohibition of the clearing in Open Space.

14. Section 14.200(L) considers the possible cumulative effects of the proposed development, it states:

*Determination of potential visual effects and compliance with visual subordination policies shall include consideration of the cumulative effects of proposed development.*

**Finding:** The proposed development is a large-scale use of railroad expansion. Since the NSA Act was passed in 1986, this use has been proposed and approved only one other time in the NSA, at Doug's Beach in Klickitat County. The proposed development's visibility is discussed in detail above for Section 14.200(A)(1) and (2). NSALUDO defines Cumulative Effects as:

*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.*

To evaluate the cumulative impact to scenic resources, Staff identified the Study Area to be from the Wasco-Hood River County line (on the west) to the Memaloose Rest Area (on the east). As noted above, only portions of the development will be visible from key viewing areas due to topographic screening and existing interstate infrastructure blocking views of the tracks. With the prohibition of the proposed Open Space clearing, the visible development has sufficient screening and backdrop landscape to achieve the required scenic standard.

Based on zoning, land use patterns and existing ownership, future development likely to occur in this area includes public recreation, commercial agriculture and rural residential development. The volume of applications and discussions with staff over the last 20 years, indicate very few railroad projects exceed the scope of repair and maintenance activities – which are allowed by Section 3.100(D) without review. When projects do exceed this scope, it is still usually confined to the replacement of a single structure, such as a signal light or and communications pole.

The application materials provided information explaining that this specific location was the primary bottleneck for their larger network – and did not list any other sites in the region as a challenge. No other large-scale rail projects are proposed in Wasco County and Staff is not aware of any proposed in other NSA counties that are similar in scope.

The site of the proposed development is confined by rock walls, Interstate 84 and the City of Mosier to the south and the Columbia River to the north. The expansion is limited to extending an existing siding in either direction, and yet will still require rock blasting and wetland fill. Future expansion is limited in these areas, especially as it terminates at a rock tunnel on the county line. Required by the NSALUDO, the development scope was limited to the minimum size necessary to meet the current need. If the need were to increase in the future, Staff can reasonably foresee (because the topography is permitting) a future request to further extend the track to the east. Zoning in this area is SMA Open Space, which would limit the amount of ground disturbing activities that could be allowed outside of the existing and previously disturbed ballast and railroad right-of-way.

Public comments were received with concerns regarding the visual impact of train cars on the rails, and a concern that the proposal would result in an increase in the number of train cars on the rails at any given time, thus blocking views of the river from key viewing areas, recreation sites and private residences. Potential cumulative visual effects of increased railroad traffic (e.g. rail cars blocking views) could ultimately have an adverse effect to the scenic resources experienced from several key viewing areas. The application states that the project will not add more trains, but will allow industry standard length trains. Staff interprets this to mean that at least some trains will be at least slightly longer than they have been in the past. ~~A condition of approval to ensure the current average of rail cars (20-30 cars per train) is maintained, the development should not significantly change the railroads current impact to scenic resources.~~

~~Given this information and recommended conditions of approval, staff feels it is reasonable to conclude that in the foreseeable future, this development will not be combined with any similar rail development that would further magnify resource impacts and that a project of this scale will not be repeated on the same piece of ground. With conditions of approval to ensure rail traffic does not significantly increase beyond the current average of 20-30 trains per day, the individually minor, but collectively significant impacts of blocked views should not result in a cumulatively adverse effect to scenic resources.~~

15. Section 14.200(M) contains provisions for new mainlines on lands visible from key viewing areas for the transmission of electricity, gas, oil, other fuels or communications, and requires them to be built in existing transmission corridors unless it can be demonstrated that the use of existing corridors is not practicable. This rule also requires new lines to be undergrounded as a first preference unless it can be demonstrated to be impracticable.

**Finding:** No new mainlines for the transmission of electricity, gas, oil, other fuels, or communications are proposed; this rule is not applicable. However, it should be noted that smaller, individual user utilities are being replaced near equipment shelters and Memaloose State Park. The applicant proposes to collocate these replacement lines in the same location or closer the track (in previously disturbed trenches) where ever possible. Buried utilities will consist of water and electricity; communication structures are addressed below in (N) and (O).

16. Section 14.200(N) and (O) address new communication facilities, they state:

*N. New communication facilities (antennae, dishes, etc.) on lands visible from Key Viewing Areas, which require an open and unobstructed site shall be built upon*

*existing facilities unless it can be demonstrated that use of existing facilities is not practicable.*

*O. New communications facilities may protrude above a skyline visible from a Key Viewing Area only upon demonstration that:*

- 1. The facility is necessary for public service;*
- 2. The break in the skyline is seen only in the background; and*
- 3. The break in the skyline is the minimum necessary to provide the service.*

**Finding:** The proposed development includes the removal of several miles of telephone poles and installation of five new 53-foot tall wooden mono-poles with communications equipment attached to the top. The poles will serve as one element of the communication system for railroad traffic. The poles will be individually spaced several miles apart and near equipment buildings with support equipment. The antennas cannot be built upon existing facilities because they must run with the length of the track, and no other poles exist to meet the needs. Staff has observed these structures in other parts of the Gorge and is familiar with the anticipated visual impacts. As noted above, the railroad is at the base of a rock wall that provides significant backdrop for the proposed structures to blend into. Staff does not anticipate any of the proposed communications poles exceeding the skyline from a key viewing area. As proposed, staff finds the communications poles to be consistent with this rule.

17. Section 14.200(P) provides guidelines for the visual impacts of overpasses, safety and directional signs and other road and highway facilities that may protrude above the skyline visible from key viewing areas. Now highway development or signage is proposed; (P) is not applicable to the proposed request.
18. Section 14.200(Q) provides a reference for additional criteria that apply to mineral and aggregate related uses. Although this typically applies to commercial aggregate uses only, public comments were received that the proposed development should be reviewed as a mineral and aggregate related use. In response to this, Staff has confirmed with the applicant that the rock blasting activities will remove rock that will be crushed and used onsite for ballast development. Based on this information, Staff finds this to be part of the construction necessary for development, not a commercial aggregate operation where rock is removed, crushed or processed and then sold for profit. As noted throughout this report, staff recommends a condition of approval to prohibit vegetation clearing in Open Space, which will require the blasted materials to be trucked offsite (outside the GMA or SMA) for crushing and brought back in for ballast development. In sum, Staff finds that (Q) is not applicable to the proposed development.
19. Section 14.200(R) provides additional scenic resource protection standards for development in the SMA. Section 14.200(R)(1) provides a table to identify the applicable scenic standard. This is addressed above in Scenic Finding 9 for Section 14.200(A)(2).
20. Section 14.200(R)(2) states:

*Structure height shall remain below the average tree canopy height of the natural vegetation adjacent to the structure, except if it has been demonstrated that meeting this criterion is not feasible considering the function of the structure.*

**Finding:** The height of the equipment shelters will be 9 feet tall, the light structures will be 22 feet tall, the retaining wall will be 25 feet tall, and the communications poles will be 53 feet tall; some of these structures will occur in the SMA. The development will be located within the existing gravel railroad corridor, which is kept clear of vegetation that might interfere with safe operations. As noted above, the rock wall south, east and west of the development provides good backdrop for all of the proposed development to blend into. Mature trees in the backdrop include ponderosa pine, Oregon white oak, big leaf maple and some Douglas fir. Based on observations made at several site visits and drives through the area to evaluate scenic impacts, the development will be within the height of the average tree canopy. If the event that the wooden monopoles are not immediately adjacent to trees (as some were observed in the west Gorge), the material itself is a dark wood, and blends into the natural elements of the surrounding landscape. In sum, staff finds the development to be consistent with this rule.

21. Section 14.200(R)(3) addresses seasonal lighting displays and is not applicable to the proposed development.

22. Section 14.200(R)(4) states:

*Proposed developments or land uses shall be sited to achieve the applicable scenic standard. Development shall be designed to fit the natural topography, to take advantage of landform and vegetation screening, and to minimize visible grading or other modifications of landforms, vegetation cover, and natural characteristics. When screening of development is needed to meet the scenic standard from key viewing areas, use of existing topography and vegetation shall be given priority over other means of achieving the scenic standard such as planting new vegetation or using artificial berms.*

**Finding:** As explained above for the GMA and SMA portions of the project, the proposed development was sited to achieve the applicable scenic standard the extent practicable. With conditions of approval regarding existing vegetation, colors, and materials, the proposed development will be consistent with this rule.

23. Section 14.200(S) provides a list of uses that are not required to meet scenic standards because they are (a) located in a Developed Setting as specified in Section 14.400(J), Landscape Settings; (2) the rehabilitation or modification of a significant historic structure; or (3) shoreline developments on the main stem of the Columbia River that adjoin an Urban Area.

**Finding:** The proposed development does not occur in a developed setting, will not modify a significant historic structure, and will not include development within the Columbia River immediately adjacent to an Urban Area. Given this information, (S) is not applicable to the proposed development.

24. Section 14.300 provides scenic resource protections for designated Scenic Travel Corridors in the GMA and SMA. Section 14.300(A) provides chapter context, Section(B) states:

*The Historic Columbia River Highway and Interstate 84 are designated as Scenic Travel Corridors. Development along these corridors shall be subject to the following standards:*

- 1. For the purposes of implementing this section, the foreground of a Scenic Travel Corridor shall include those lands within one-quarter mile of the edge of pavement of the Scenic Travel Corridor roadway.*
- 2. All new buildings and alterations to existing buildings shall be set back at least 100 feet from the edge of pavement of the Scenic Travel Corridor roadway. A variance to this setback requirement may be granted pursuant to Chapter 6. All new parking lots and expansions of existing parking lots shall be set back at least 100 feet from the edge of pavement of the Scenic Travel Corridor Roadway, to the maximum extent practicable.*
- 3. Additions to existing buildings or expansion of existing parking lots located within 100 feet of the edge of pavement of a Scenic Travel Corridor roadway shall comply with standard 2 of this subsection to the maximum extent practicable.*
- 4. All proposed vegetation management projects in public rights-of-way to provide or improve views shall include the following:*
  - a. An evaluation of potential visual impacts of the proposed project as seen from Key Viewing Areas;*
  - b. An inventory of any rare plants, special wildlife habitat, wetlands or riparian areas on the project site. If such resources are determined to be present, the project shall comply with the applicable Management Plan guidelines to protect the resources.*

**Finding:** The application states: “The only new buildings that would be located within 100 feet of the edge of the pavement of a National Scenic Highway would be two of the five small signal buildings that are required for safe rail operations. Of the five total signal buildings that will be installed as a result of the project, five existing signal buildings will be removed. This results in no net increase of structures throughout the project area. Each of these signal buildings will have a footprint that will range from approximately 6 feet by 6 feet to approximately 8 feet by 10 feet and will be approximately 9 feet in height (see Appendix B). Because it is necessary for two of these buildings to be located within 100 feet of the pavement for I-84, UPRR will obtain a setback variance pursuant to NSA-LUDO Chapter 6.”

25. Section 14.300(B)(5) states: When evaluating which locations to consider undergrounding of signal wires or powerlines, railroads and utility companies shall prioritize those areas specifically recommended as extreme or high priorities for undergrounding in the *Columbia River Gorge National Scenic Area Corridor Visual Inventory*, prepared in April, 1990.

The CRGNSA Corridor Visual Inventory provides management reports, landscape assessments and recommendations for protecting and enhancing views experienced from Scenic Travel Corridors. A specific management report was prepared for railroad signal wires, it states:

*The railroad is a vital part of the transportation network of the Columbia River Gorge. Tracks run the length of the National Scenic Area on both sides of the river. While the tracks are of little consequence visually and the trains themselves are an interesting visual element, there are other elements associated with the railroad that are very discordant in this scenic landscape. Perhaps the most noticeable of these are signal wires that run adjacent to the tracks. This corridor analysis proposes having sections of these wires put underground to greatly enhance the scenic quality of the SR14 and I-84 highway corridors...It is hoped, however, that serious consideration can be given to undergrounding signal wires of extreme or high priorities, situations where wires totally dominate an otherwise spectacular view of the river or stack up as a long line of discordant vertical elements. This could be accomplished either as a special project or in conjunction with other rail work.*

**Finding:** The proposed development will remove telephone poles that currently impact the views of the Columbia River from key viewing areas and replace them with five wooden monopole communications towers. Staff finds this proposal to be an improvement to viewshed, and to be consistent with this rule.

26. Section 14.300(B) (6) and (7) provide requirements for the production of mineral resources and the expansion of existing quarries. The proposed development does not include mineral resource development. Given this information, Sections 14.300 (6) through (7) do not apply to the proposed development.
27. Section 14.300(C) provides additional criteria for projects proposed in the SMA, it states:

*In the SMA the following additional criteria shall apply to development within the immediate foregrounds of Key Viewing Areas. Immediate foregrounds are defined as within the developed prism of a road or trail KVA or within the boundary of the developed area...*

**Finding:** Development located within the development prism of a Scenic Travel Corridor is limited to the use of existing gravel shoulders for construction access and the replacement of guardrail following construction. A condition of approval is included to ensure the applicant adheres to the requirements of the Interstate 84 Corridor Strategy Plan.

28. Section 14.400 provides landscape settings. The proposed development will occur in the Pastoral landscape setting in the GMA, the Oak Pine Woodland Landscape Setting in the SMA, River Bottomlands Landscape Setting in the GMA and SMA, the Gorge Walls, and the Canyonlands and Wildlands Landscape Setting in the GMA.

Requirements of the Pastoral Landscape Setting are listed in Section 14.400(A)(1) and (2), which state:

1. *Accessory structures, outbuildings, and accessways shall be clustered together as much as possible, particularly towards the edges of existing meadows, pastures and farm fields.*
2. *In portions of this setting visible from Key Viewing Areas, the following standards shall be employed to achieve visual subordination for new development and expansion of existing development:*
  - a. *Vegetative landscaping shall, where feasible, retain the open character of existing pastures and fields.*
  - b. *At least half of any trees planted for screening purposes shall be species native to the setting or commonly found in the area. Such species include fruit trees, Douglas fir, Lombardy poplar (usually in rows), Oregon white oak, bigleaf maple, and black locust (primarily in eastern Gorge).*
  - c. *At least one-quarter of any trees planted for screening shall be coniferous for winter screening.*

**Finding:** The application narrative addressed this setting with the following statement: “The project area crosses the Pastoral landscape setting from MP 70.37 to MP 70.62 in Segment 2 West where I-84 crosses over the rail corridor. The only KVA from which this 0.25-segment has the potential to be seen would be I-84. As described in Section 5.2.3 and in the response to NSA-LUDO Section 14.200(A), the visibility of any project-related changes in this area will likely be limited given the location of the rail corridor in a trench 30 feet or more below the overcrossing and the presence of obstructions to views from the roadway, and are likely to be fleeting given the speeds of the vehicles on the interstate. One of the five new signal buildings is proposed within the Pastoral landscape setting. Because of its small dimensions and its surface textures and colors that would conform to the specifications set out in the *Scenic Resources Implementation Handbook*, the structure would be visually subordinate. Additionally, because of the limited visibility from I-84 into this area along the track, it is unlikely that screening landscaping would be necessary. Should a determination that landscaping of the area around any signal building located in this area be required, UPRR will provide landscaping that will be consistent with the provisions of NSA-LUDO Section 14.400(A)(2) and will use the recommended species for the Pastoral Landscape setting as provided by the *Scenic Resources Implementation Handbook*. Therefore, the project will comply with the applicable provisions of NSA-LUDO Section 14.400(A).” Staff concurs with this finding.

29. Section 14.400(C)(3) contains the Oak Pine Woodland Landscape Setting SMA only:

3. *Woodland areas should retain the overall appearance of a woodland landscape. New developments and land uses shall retain the overall visual character of the natural appearance of the Oak/Pine Woodland landscape.*

- a. *Use of plant species native to the landscape setting shall be encouraged. Where non-native plants are used, they shall have native appearing characteristics.*
- b. *Buildings shall be encouraged to have horizontal overall appearance.*

**Finding:** The project narrative provides the following information about impacts to this landscape setting: “The project includes an area of the Oak-Pine Woodland Landscape in the segment from MP 71.16 to MP 71.48 at the eastern end of Segment 2 West, where the UPRR alignment passes through a cut in the rock mesa that extends to the edge of the river in this area. In addition, the three staging areas that will be located south of the alignment segment from UPRR MP 71.53 to MP 71.79 include portions of the Oak-Pine Woodland landscape setting. None of the proposed five signal buildings will be installed in the area of Oak-Pine Woodland Landscape between MP 71.16 and 71.48. The excavation required for widening of the cut through the rock mesa to accommodate the new track may result in clearing of vegetation in the area of Oak-Pine Woodland Landscape on the top of the mesa along the southern end of the cut. In addition, installation of the construction staging area will require some clearing of vegetation in Oak-Pine Woodland Landscape area. After construction of the project is complete, the cleared construction staging areas along the southern edge of the cut will be replanted, and all of the cleared areas that lie within the Oak-Pine Woodland Landscape will be replanted with the species specified for this landscape area in the *Scenic Resources Implementation Handbook*. Because of these measures, the project will be compliant with the applicable provisions of NSA-LUDO Section 14.400(C).” With conditions to reduce vegetation impacts by prohibiting the clearing of the 6.62 acre SMA Open Space landing zone, staff finds the proposed development to be consistent with this landscape setting to the maximum extent practicable.

30. Section 14.400(H) River Bottomlands Landscape Setting GMA and SMA:

*GMA Only*

- 1. *In portions of this setting visible from Key Viewing Areas, the following standards shall be employed to achieve visual subordination for new development and expansion of existing development:*
  - a. *At least half of any trees planted for screening purposes shall be species native to the River Bottomland setting. Public recreation developments are encouraged to maximize the percentage of planted screening vegetation native to this setting. Such native species include: black cottonwood, bigleaf maple, red alder, Oregon white ash, Douglas fir, western red cedar and western hemlock (west Gorge) and various native willow species.*
  - b. *At least one-quarter of any trees planted for screening purposes shall be coniferous for winter screening.*

*SMA Only*

- 2. *River bottomlands shall retain the overall visual character of a floodplain and associated islands:*

- a. *Buildings shall have an overall horizontal appearance in areas with little tree cover.*
- b. *Use of plant species native to the landscape setting shall be encouraged. Where non-native plants are used, they shall have native-appearing characteristics.*

**Finding:** The application narrative provides the following statement in response to these provisions in the GMA: “In Segment 1, the project alignment crosses areas of GMA-zoned River Bottomlands Landscape from MP 66.98 to 67.04, 67.18 to 67.22, and 67.34 to 67.75 along I-84. In Segment 2 West, the alignment travels through a GMA-zoned area of River Bottomlands Landscape from UPRR MP 70.62 to 71.27. In Segment 2 East, there are some areas of River Bottomlands Landscape, but because all of Segment 2 East lies in an area that has an SMA designation, they are not governed by this provision. As established in Section 5.2.2 and in the response to NSA-LUDO Section 14.200(A), project changes in the River Bottomlands Landscape areas within Segment 1 along I-84 will be visually evident but not visually dominant in views from eastbound I-84, and will not be visually evident in views from the westbound I-84, SR-14, and Columbia River KVAs. In Segment 2, project features will not be visually evident in views from the SR-14 and Columbia River KVAs of the River Bottomlands Landscape areas. Given that the project will be either not visually evident or will be visually subordinate in all views from KVAs within the GMA-zoned River Bottomlands Landscapes, this provision does not apply.”

And for the SMA: “In Segment 2 East (MP 71.43 to MP 72.35), the alignment is located within an SMA-zoned River Bottomlands Landscape area, as are the three proposed construction staging areas. As established in Section 5.2.4 and in the response to NSA-LUDO Section 14.200(A), in the River Bottomlands Landscape of Segment 2 East, the second mainline track and associated facilities will not be visually evident in views from KVAs. As a consequence, development of the second mainline track will be consistent with this provision. Installation of the construction staging areas will require removal of existing vegetation from portions of River Bottomland Landscape area. UPRR will comply with this provision by restoring the site after completion of the project, and will plant the site with native species as specified in the *Scenic Resources Implementation Handbook*.”

Consistent with the intent of Section 14.400, the development is subject to landscape setting requirements regardless of topographic visibility. New buildings are limited to replacement buildings that will be 9 feet tall and should blend with the surrounding landscape. Staff recommends that with the conditions of approval noted above and below for Natural, the proposed development complies with this setting.

31. Section 14.400(l) contains the Gorge Walls Canyonlands and Wildlands Landscape Setting. The GMA rules state:

1. *New development and expansion of existing development shall be screened so as to not be seen from Key Viewing Areas to the maximum extent practicable.*
2. *All trees planted to screen permitted development and uses from Key Viewing Areas shall be native to the area.*

3. *All buildings shall be limited in height to 1 1/2 stories.*
4. *The exteriors of structures shall be non-reflective.*
5. *Signage shall be limited to natural materials such as wood or stone, and natural colors (GMA only) or earth-tone colors (SMA or GMA), unless public safety concerns or federal or state highway standards require otherwise.*

**Finding:** The applicant has provided the following information in response to these requirements: “The project alignment crosses areas of GMA-zoned Gorge Walls, Canyonlands and Wildlands Landscape in Segment 1 along I-84 from MP 66.90 to 67.34, and 67.75 to 68.58. As established in the Section 5.2.2 and in the response to NSA-LUDO Section 14.200(A), in the Gorge Walls, Canyonlands and Wildlands Landscape areas along I-84, the project changes will be visually evident but not visually dominant in views from eastbound I-84, and will not be visually evident in views from westbound I-84 and from the SR-14 and Columbia River KVAs. At present, there is little to no vegetation in the area between the southern edge of the interstate’s eastbound lanes and the UPRR ROW. To conform with highway and railroad safety standards, this area will continue to be kept free of any large, woody vegetation. The only project-related structures that will be visible along the rail corridor would be two new signal buildings that will be installed in this area. Because the signal buildings will be no more than 9 feet in height, they will be well below the one and a half story height limit. The exteriors of the signal buildings will be non-reflective, and will be treated with dark colors intended to help them blend into the landscape backdrop, in conformance with the *Scenic Resources Implementation Handbook* (see Detail 10 of Appendix B). Signage posted in this landscape area will include Station and Control Point, Whistle Signal, Vertical Control Point, Private Property, No Dumping, Speed Restriction, and Mile Marker signage. Most signage will be non-reflective black and white signage and will be posted at an approximate height of 10 feet. All signage installed will be the minimal amount required under federal law for the safe operation of the railroad and, to the extent that is consistent with safety requirements, the surfaces of sign posts will be treated with colors that are consistent with their landscape backdrop. Images of example standard railroad signage are included in Appendix B. Therefore, the project will comply with the applicable provisions of NSA-LUDO Section 14.400(I).

Regardless of topographic visibility, the landscape settings apply to the proposed development. With a condition of approval to require the implementation of the colors and materials identified in the Interstate 84 Corridor Strategy Plan, staff finds the proposed development to be consistent with this setting.

### **Cultural Resources GMA**

32. Section 14.500 contains cultural resource protection provisions for projects occurring within the GMA. The purpose of this section is to protect and enhance cultural resources and to ensure that proposed development and uses do not have an adverse effect on significant cultural resources. There are three types of cultural resources: archaeological resources, traditional cultural properties, and historic buildings and structures.
33. Section 14.500(B) explains when a reconnaissance survey and historic survey are required. Section (B)(1)(a) provides a list of exemptions; the proposed development is a large scale use and was required to provide a professionally prepare archeological survey for completeness.

Section 14.500(B)(2) requires a historic survey for all proposed uses that would alter the exterior architectural appearance of buildings and structures that are 50 years old or older, or compromise features of the surrounding area that are important in the defining the historic or architectural character of the buildings or structures that are 50 years old or older. The proposed development included the alteration of buildings and structures older than 50 years old, and as a large scale use, was required to provide a historic resource survey for completeness.

Pursuant to (B)(3) through (5) the applicant was required to bear the expense of hiring a qualified professional to prepare cultural and historic resource surveys. The application narrative states:

*“UPRR completed the Cultural Resources Survey Union Pacific Railroad Second Mainline Track Project Wasco County, Oregon (Cultural Resources Survey Report; provided as Appendix L) to comply with the applicable provisions of NSA-LUDO Section 14.500(B). The report provides an inventory of archaeological investigations conducted within 1 mile of project areas in the GMA. The inventory was compiled through a file search conducted on April 14, 2014. The search was carried out at the Oregon State Historic Preservation Office (SHPO) in Salem. The file search was used to determine if previously recorded pre-contact and historic sites are located within or near the study area, and to determine whether any part of the study area had been surveyed previously for cultural resources. In addition to the file search, UPRR conducted a reconnaissance survey from April 30, 2014, through May 1, 2014. The Cultural Resource Survey Report, included as Appendix L, was prepared by CH2M HILL archaeologists. The research design for the project was reviewed and approved by CRGNSA Heritage Resources Director Marge Dryden on April 18, 2014 (see Appendix B of the Cultural Resources Survey Report). The results of this survey are described in Appendix L. Therefore, the project complies with the applicable provisions of NSA-LUDO Section 14.500(B)(1)....”*

*“The Cultural Resources Survey Report presents the results of CH2M HILL’s cultural resources and historic properties investigation for the UPRR project. CH2M HILL conducted a detailed review of historic and potentially historic properties in the vicinity of the project area in accordance with NSA-LUDO Section 14.500(B)(2). The Cultural Resources Survey Report (see Appendix L) shows that two historic properties have been recorded in the vicinity of the project area. One is the ...which has been recommended eligible for listing in the NRHP (Donovan, 1994). The Cultural Resources Survey Report also shows that one building in poor condition and five UPRR signal buildings are located in the project area.”*

Staff finds the applicant provided professionally prepared cultural resource surveys for the proposed development, consistent with this rule.

34. Section 14.500(B)(5) also includes a practicable alternatives test, it states:

*An alternative site for a proposed use shall be considered practicable if it is available and the proposed use can be undertaken on that site after taking into consideration cost, technology, logistics, and overall project purposes.*

*A practicable alternative does not exist if a project applicant satisfactorily demonstrates all of the following:*

- a. The basic purpose of the use cannot be reasonably accomplished using one or more other sites in the vicinity that would avoid or result in less adverse effects on cultural resources;*
- b. The basic purpose of the use cannot be reasonably accomplished by reducing its size, scope, configuration, or density as proposed, or by changing the design of the use in a way that would avoid or result in less adverse effects on cultural resources; and*
- c. Reasonable attempts were made to remove or accommodate constraints that caused a project applicant to reject alternatives to the use as proposed. Such constraints include inadequate infrastructure, parcel size, and land use designations. If a land use designation or recreation intensity class is a constraint, an applicant must request a management plan amendment to demonstrate that practicable alternatives do not exist.*

**Finding:** An Alternatives Analysis was prepared by the application to verify the proposed development would have the least impacts on sensitive resources as possible. The railroad expansion is dependent upon the location of the existing railroad corridor and the Columbia River Gorge as a passageway through the Cascade mountain range. Based on the application materials provided by the applicant, Staff concludes that no alternative that better protects resources exists and that reasonable attempts have been made to accommodate constraints and to minimize cultural resource impacts, consistent with this rule.

35. Sections 14.500(C)(1) through (3) specify notice and coordination requirements for cultural resource surveys:

1. *Gorge Commission/Tribal Government Notice*

- a. In addition to other public notice requirements that might exist, the County shall notify the Indian tribal governments when:
  - (1) a reconnaissance survey is required; or*
  - (2) cultural resources that are prehistoric or otherwise associated with Native Americans exist in the project area.**
- b. Notices sent to Indian tribal governments shall include a site plan as stipulated in Section 14.040.*
- c. Indian tribal governments shall have 20 calendar days from the date a notice is mailed to submit written comments to the County Planning Office.*

(1) *Written comments should describe the nature and extent of any cultural resources that exist in the project area and identify individuals with specific knowledge about them.*

(2) *The County shall send a copy of all comments to the Gorge Commission.*

2. *Consultation and Ethnographic Research*

a. *When written comments are submitted to the County Planning Office in a timely manner, the project applicant shall offer to meet with interested persons within 10 calendar days.*

(1) *The 10 day consultation period may be extended upon agreement between the project applicant and the interested persons.*

(2) *Consultation meetings should provide an opportunity for interested persons to explain how the proposed use may affect cultural resources. Recommendations to avoid potential conflicts should be discussed.*

(3) *All written comments and consultation meeting minutes shall be incorporated into the reconnaissance or historic survey report. In instances where a survey is not required, all such information shall be recorded and addressed in a report that typifies a survey report; inapplicable elements may be omitted.*

b. *A project applicant who is proposing a large-scale use or development shall conduct interviews and other forms of ethnographic research if interested persons submit a written request for such research.*

(\*\*\*)

3. *Notice of Survey Results*

a. *The County shall submit a copy of all cultural resource survey reports to the State Historic Preservation Office and the Indian tribal governments.*

(1) *Survey reports may include measures to avoid affected cultural resources, such as a map that shows a reasonable buffer zone.*

(2) *The State Historic Preservation Office and tribes shall have 30 calendar days from the date a survey report is mailed to submit written comments to the County Planning Office.*

(3) *The County shall record and address all written comments in its development review order.*

**Finding:** The applicant was required to solicit feedback from tribal governments during the preparation of their survey materials. Upon receipt of the final survey addendum, a cultural resource notice and project description was provided September 22, 2015. The project has since been publically noticed and re-noticed for the public hearing multiple times; notices have

been sent to tribal governments March 10, 2016, April 26, 2016, June 1, 2016, June 23, 2016, and August 11, 2016.

Following the initial notice, there was a request for onsite consultation regarding cultural resources from Holly Shea of the Warm Springs Tribe, Catherine Dickson of the Confederated Tribes of the Umatilla Indian Reservation, and Nancy Nelson, Oregon State Parks and Recreation Archaeologist. Consistent with the GMA provisions, the applicant offered to meet onsite, and consistent with the SMA provisions, the Forest Service offered to participate in the onsite consultation. Through email exchanges, the request for consultation evolved into a request for more information. The additional information was provided for the cultural resource protection process and ultimately, the consultation was no longer desired. Please see Cultural above for more information.

36. Section 14.500(C)(4) describes the conclusion of the cultural resource protection process; it states:

*a. The County Planning Office will make a final decision on whether the proposed use would be consistent with the cultural resource goals, policies, guidelines, and standards.*

*b. If the final decision contradicts the comments submitted by the State Historic Preservation Office, the County must justify how it reached an opposing conclusion.*

*c. The cultural resource protection process may conclude when one of the following conditions exist:*

*(1) The proposed use does not require a reconnaissance or historic survey, no cultural resources are known to exist in the project area, and no substantial concerns were voiced by interested persons within 20 calendar days of the date that a notice was mailed.*

*(2) A reconnaissance survey demonstrates that cultural resources do not exist in the project area and no substantiated concerns were voiced by interested persons within 20 calendar days of the date the notice was mailed.*

*(3) The proposed use would avoid archaeological resources and traditional cultural resources that exist in the project area.*

*(\*\*\*)*

*(4) A historic survey demonstrates that the proposed use would not have an effect on historic buildings or structures because:*

*(a) The State Historic Preservation Office concludes that the historic buildings or structures are clearly not significant, as determined using the criteria in the "National Register Criteria for Evaluation" (36 CFR Part 60.4) ; or*

(b) *The proposed use would not compromise the historic or architectural character of the affected buildings or structures, or compromise the features of the site that are important in defining the overall historic character of the affected buildings or structures, as determined by the guidelines and standards in The Secretary of the Interior's Standards for Rehabilitation (U.S. Department of the Interior 1990) and The Secretary of the Interior's Standards for Historic Preservation Projects (U.S. Department of the Interior 1983).*

(\*\*\*)

**Finding:** The surveys were provided to the four tribal governments, the State Historic Preservation Officer and the Heritage Program Manager for the Columbia River Gorge National Scenic Area. As previously noted, there were several requests for additional information. These requests were addressed by the applicant and also through the U.S. Army Corps of Engineers Section 106 review and consultation process, which entered into government-to-government consultation. No outstanding requests exist for the NSA review process.

Marge Dryden, Cultural Heritage Program Manager for the Columbia River Gorge National Scenic Area provide multiple letters throughout the cultural review process. Her most recent letter, dated April 28, 2016 states:

*"...I reviewed three cultural resource reports that address the cultural resource process (letters dated July 31 and August 24, 2015). Subsequent to my review, questions and concerns were submitted by archaeologists with Oregon State Parks and the Confederated Tribes of the Umatilla Reservation. Both I and the Army Corps have responded to these emails (December 13, 2015 and March 16, 2016).*

*I have reviewed the project record and find that, taken in combination, the three reports provided by CH2M Hill comply with the cultural resource provisions in the Management Plan and Wasco County Ordinance. The Army Corps of Engineers (ACE) is responsible for review of the project as a federally permitted undertaking under Section 106 of the National Historic Preservation Act. The ACE made the determination that there would be "no adverse effect" (letter to SHPO dated September 8, 2015). The Oregon State Historic Preservation Office accepted these reports and concurred that there would be "no adverse effect" from the implementation of the proposed project (letters dated September 21 and September 23, 2015) They affirmed these findings in an email dated April 25, 2016. As I stated in my previous letters, I concur with these findings of "no adverse effect..."*

*It is my understanding that the ACE has requested additional information from the Confederated Tribes of the Umatilla Reservation (April 25, 2016) regarding "how this proposal may affect cultural resources and/or Tribal treaty rights". It is also my understanding that Oregon State Parks have requested that supplementary cultural resource survey/testing be conducted on Oregon State Parks land. Should either of these requests result in cultural resource concerns, I will review my findings again."*

Ross Curtis, SHPO Archaeologist provided a response to the initial cultural resource notice in a letter dated September 23, 2016 that states:

*“...We concur that the two sites containing railroad segments...would not be eligible for the National Register because of their condition and poor integrity. The additional information from supplemental shovel probes... verifies the sites do not extend in the current project area and will not be impacted by the proposed project. Avoidance flagging to ensure there are no impacts to ...as proposed in the reports is supported by our office. We agree that the project activities...will likely have no adverse effect on these or any other known archaeological sites...”*

Jason Allen, M.A. Historic Preservation Specialist for the SHPO provided a letter dated September 21, 2015 that states:

*“We have reviewed the reviewed the revised and supplemental materials...and concur with the following determinations: ...1. Not Eligible, No Effect...2. ...Not Eligible, No Effect...3...Eligible, No Adverse Effect...We therefore concur with the overall finding of no adverse effect for the proposed project...”*

**Finding:** Based on the feedback received from the tribes, SHPO and the Heritage Program Manager, Staff finds the proposed development, will not have an adverse effect to cultural resources and the Cultural Resource Protection Process may conclude.

37. Section 14.500(D) provides the required criteria, evaluation process and information needs necessary for the evaluation of significance. Section 14.500(E) Specifies the evaluation criteria and information needs for the assessment of effect. The archaeologist contracted by the applicant coordinated with National Scenic Area Heritage Program Manager, Marge Dryden to ensure the correct process, evaluation criteria and information needs had been met, consistent with this rule.

38. Section 14.510 provides cultural resource protection requirements for the SMA. It states:

*D. This section is applicable to all Federal agencies for new developments and land uses on all Federal lands, federally assisted projects and forest practices. The Forest Service will provide for completing the requirements of this Section for forest practices and National Forest system lands.*

*C. All projects that are not included for review in B above shall be reviewed under Section 14.500 of this Chapter.*

**Finding:** The proposed development will not occur on federal lands. Consistent with (C), the proposed development was reviewed for compliance with Section 14.500 of this Chapter.

39. Section 14.500(G) provides requirements for the protection of cultural resources discovered after construction begins; Section 14.500(H) provides requirements for the protection of human remains discovered during construction. These procedures are included as a condition of

approval in the Notice of Decision. With a condition requiring the current landowner and any successors or heirs to adhere to these procedures, the proposed development is consistent.

**Wetlands, Streams, Ponds, Lakes and Other Bodies of Water (GMA)**

40. Section 14.600 provides natural resource protection policies, guidelines and requirements for new development in the GMA only. Pursuant to Section 14.600(A)(1), the purpose of this chapter is to (a) achieve no net loss of wetlands, acreage and functions, and (b) increase the quantity and quality of wetlands. Section (A) also provides rules for proper delineation of wetland boundaries, establishes wetland buffer zones, lists uses allowed and relevant approval criteria, and mitigation requirements. Section (B) pertains to the protection of streams, ponds, lakes and other bodies of water. Section (C) provides regulations for wildlife habitat and (D) addresses the protection of rare plants. A similar framework exists in Section 14.610 for natural resource protection in the SMA, and is discussed below in greater detail.

As part of their application (see application Appendix D: Mitigation), the applicant provided a table of wetland and waterbody disturbances to confirm anticipated impacts in the GMA and SMA designations. Information from this table is used below to address resource impacts.

Wetland ID	GMA/SMA	Approx. Milepost(s)	Total Wetland/ Waterbody Area (acres)	Open Water Permanent Impacts (acres)	Vegetated Wetland Permanent Impacts (acres)	Total Buffer Zone Impact (acres)
Wetland 1	SMA	71.82 – 71.97	0.61	0.00	0.24	
Lake 1/ Thompson Lake	SMA	71.82 – 71.92	1.59	0.24	0.00	1.61
Wetland 3	SMA	72.21 – 72.22	0.06	0	0	
Wetland 4	SMA	72.24	0.02	0	0	1.73 <sup>1</sup>
Wetland 5	SMA	72.24 – 72.25	0.06	0	0	
Wetland 6	SMA	72.25 – 72.33	0.24	0	0	

**Table 1  
 Wetland and Water Body Disturbance**

Wetland ID	GMA/SMA	Approx. Milepost(s)	Total Wetland/ Waterbody Area (acres)	Open Water Permanent Impacts (acres)	Vegetated Wetland Permanent Impacts (acres)	Total Buffer Zone Impact (acres)
Wetland 7	SMA	72.28 – 72.34	0.17	0	0.17	
Wetland 9	SMA	71.46 – 71.51	0.24	0	0	1.59 <sup>1</sup>
Wetland 9B	SMA	71.47 – 71.51	1.78	0	0	
Wetland 11	GMA	70.72 – 70.95	1.15	0.00	0.25	
Lake 11	GMA	70.78 – 70.94	1.86	0.14	0.00	1.01 <sup>1</sup>
Wetland 12	GMA	70.69 – 70.72	0.14	0	0.03	
Wetland 17	GMA	68.55 – 68.57	0.08 <sup>2</sup>	0.00	0.06 <sup>2</sup>	
Wetland 18	GMA	68.56 – 68.58	0.09 <sup>2</sup>	0	0	0.20 <sup>1</sup>
Lake 18	GMA	68.56 – 68.58	1.21 <sup>3</sup>	0	0	
Wetland 20	GMA	66.97 – 67.12	0.15	0	0	0.55
Lake 20	GMA	66.97 – 67.12	1.66	0.02	0	
Columbia River/Bonneville Reservoir	GMA/SMA	North of project area for full project length	-	0.00 <sup>3</sup>	0	5.58 <sup>4</sup>
<b>Total Impacts to Wetlands, Waterbodies &amp; Buffers</b>				<b>0.41</b>	<b>0.75</b>	<b>Temp: 3.52 Perm: 8.75</b>

<sup>1</sup> The buffer zones of adjacent wetlands and/or waterbodies overlap in some cases, necessitating buffer disturbance to be reported as a combined acreage.

<sup>2</sup> A portion of Wetlands 17 and 18 are located within the NSA-designated Urban Area; the total wetland/waterbody and impact areas provided in this table constitute only the portions within the NSA and outside of the designated Urban Area.

<sup>3</sup> No permanent disturbance to the Columbia River/Bonneville Reservoir will result from the project; however, approximately 0.01 acres will be temporarily affected during the installation of two culverts proposed to mitigate for potential impacts to fish habitat.

<sup>4</sup> Acreage excludes Columbia River buffer impact areas that intersect with wetland buffers accounted for in above calculations.

41. Section 14.600(A)(2) provides rules for delineating wetland boundaries, it states:

- a. *The approximate location and extent of wetlands in the Scenic Area is shown on the National Wetlands Inventory (U.S. Fish and Wildlife Service 1987). In addition, the list of hydric soils and the soil survey maps shall be used as an indicator of wetlands.*
- b. *Some wetlands may not be shown on the wetland inventory or soil survey maps. Wetlands that are discovered by the County planning staff during an inspection of a potential site shall be delineated and protected unless the proposed development is clearly sited beyond the wetland buffers as stated in A(3).*
- c. *Determining the exact location of a wetlands boundary shall be the responsibility of the project applicant.*

- (1) *Wetlands boundaries shall be delineated using the procedures specified in the Corps of Engineers Wetlands Delineation Manual (Wetlands Research Program Technical Report Y-87-1, on-line edition, updated through March 21, 1997)*
  - (2) *All wetlands delineations shall be conducted by a professional who has been trained to use the federal delineation procedures, such as a soil scientist, botanist, or wetlands ecologist.*
- d. *The County may verify the accuracy of, and may render adjustments to, a wetlands boundary delineation.*
  - e. *In the event the adjusted boundary delineation is contested by the project applicant, the County shall, at the applicant's expense, obtain professional services to render a final delineation.*

**Finding:** Appendix E of the application contains a wetland delineation report. It states: “CDM Smith was retained by Union Pacific Railroad (UPRR) to conduct a delineation of wetlands under the jurisdiction of the Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act. The delineation was conducted to identify potential jurisdictional waters of the United States that occur within the project area for the proposed Second Mainline Track Project in Wasco County, Oregon. CDM Smith conducted a field investigation for wetlands within the proposed project area on October 15-17, 2013. This delineation report documents our findings regarding the occurrence and extent of wetlands located in the project area. This report documents the field investigation, best professional judgment, and conclusions of CDM Smith scientists. However, the jurisdictional determination of wetland boundaries and associated permitting requirements for this region are the responsibility of the Portland District Regulatory Branch of USACE.”

Upon receipt of the application, Staff began coordination with the Army Corps of Engineers, who are also reviewing the proposed development for resource impacts. Pursuant to (b) above, the NSALUDO regulations apply to all of the wetlands identified in the survey (shown in the table above). Army Corps of Engineers resource specialists verified the accuracy of the delineations in the field and confirmed that no revisions were required. Based on this information, Staff finds the professionally prepared wetland delineation to comply with Section 14.600(A)(2).

42. Section 14.600(3) defines the width of wetland buffer zones in the NSA, it states:

- b. *The width of wetlands buffer zones shall be based on the dominant vegetation community that exists in a buffer zone.*
- b. *The dominant vegetation community in a buffer zone is the vegetation community that covers the most surface area of that portion of the buffer zone that lies between the proposed activity and the affected wetland. Vegetation communities are classified as forest, shrub, or herbaceous.*
  - (1) *A forest vegetation community is characterized by trees with an average height equal to or greater than 20 feet, accompanied by a shrub layer; trees must form*

*a canopy cover of at least 40 percent and shrubs must form a canopy cover of at least 40 percent.*

*(2) A forest community without a shrub component that forms a canopy cover of at least 40 percent shall be considered a shrub vegetation community.*

*(3) A shrub vegetation community is characterized by shrubs and trees that are greater than 3 feet tall and form a canopy cover of at least 40 percent.*

*(4) A herbaceous vegetation community is characterized by the presence of herbs, including grass and grasslike plants, forbs, ferns, and nonwoody vines.*

*c. Buffer zones shall be measured outward from a wetlands boundary on a horizontal scale that is perpendicular to the wetlands boundary. The following buffer zone widths shall be required.*

*(1) Forest communities: 75 feet*

*(2) Shrub communities: 100 feet*

*(3) Herbaceous communities: 150 feet*

*d. Except as otherwise allowed, wetlands buffer zones shall be retained in their natural condition.*

*e. When a buffer zone is disturbed by a new use, it shall be replanted with native plant species.*

**Finding:** The applicant was required to use the information contained within this ordinance to prepare their delineation, conceptual mitigation plan, and final mitigation plan to comply with NSA requirements. The application materials state: "Figure 4-3 includes the wetlands and waterbodies located within the NSA and outside of a designated Urban Area in the vicinity of the project area, with buffer zones delineated pursuant to protocol outlined in NSA-LUDO Sections 14.600 and 14.610." The US Army Corps of Engineers verified the accuracy of the delineation and mitigation plans, as did the National Marine Fisheries Service for an assessment discussed below for wildlife impacts. Given this information, Staff finds the application materials to be accurate and in compliance with (a) through (c) above.

The proposed development will have impacts to wetlands and wetland buffer zones. As shown in the table above from Appendix D and in the delineations contained within Appendix E, 0.34 acres of vegetated wetlands and 7.34 acres of wetland buffers will be permanently displaced by the proposed development (total of 7.68 acres). Mitigation plans for permanent impacts are discussed below. Section 4.2.5.6 of the Project Narrative states: "Disturbed areas will be restored as closely as practical to their original condition, permanent erosion control measures will be installed as appropriate, and revegetation measures will be implemented in accordance with federal permit requirements. Permanent seeding and stabilization measures will be placed prior to track construction and final stabilization is expected prior to the completion of track construction activities. An ODOT-recommended native grass seed mixture appropriate to the

region will be used to revegetate the specified areas. Mitigation associated with disturbance of fish habitat and loss of wetland form and function will be completed in accordance with UPRR's Mitigation Plan, included as Appendix D. This mitigation plan has been prepared to satisfy NSA-LUDO and MSA-MP standards, and has been designed through coordination with NMFS, U.S. Fish and Wildlife Service, and Oregon Department of Fish and Wildlife (ODFW)."

With a condition of approval to require use of the NSA eastern gorge seed mix and revegetation of all temporary impacts to buffer zones with native plant species in the next possible planting season, the proposed development is consistent with this rule.

43. Section 14.600(A)(4) allows for the modifications of serviceable structures in wetlands and wetland buffer zones, subject to approval criteria and additional requirements found in section (5) and (7) below, as well as the remaining sections of this chapter. Section (4) lists the following uses:

*c. The modification, expansion, replacement, or reconstruction of serviceable structures, if such actions would not:*

*(1) Increase the size of an existing structure by more than 100 percent;*

*(2) Result in a loss of wetlands acreage or functions; and*

*(3) Intrude further into a wetland or wetlands buffer zone.*

*New structures shall be considered to be intruding further into a wetland or wetlands buffer zone if any portion of the structure is located closer to the wetland or wetlands buffer zone than the existing structure.*

**Finding:** The proposed rail expansion is a long, linear project along a long linear piece of infrastructure. The railroad currently travels the entire length of Wasco County, the Oregon side of the NSA, and continues in either direction. Given this information, the size of the existing structure will not increase by more than 100 percent. As noted above, the applicant has provided a professionally prepared wetland mitigation plan and habitat rehabilitation plan to achieve a no net loss of wetland acreage or function. Staff finds the use to be consistent with (1) and (2).

Application materials state that there will be permanent displacement of wetlands not currently impacted; the use is therefore inconsistent with (3) and subject to compliance with Section 14.600(A)(6).

*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 interpretive aids, such as kiosks and signs.*

*c. The construction of water-dependent structures that are placed on pilings, if the pilings allow unobstructed flow of water and are not placed so close together that they effectively convert an aquatic area to dry land. Structures in this category shall be*

*limited to public and private docks and boat houses, and fish and wildlife management structures that are constructed by federal, state, or tribal resource agencies.*

**Finding:** The proposed development does not include water related structures available for public use or on pilings. Therefore, guidelines (b) and (c) are not applicable.

44. Section 14.600(A)(6) lists other uses and activities allowed in wetlands and wetland buffer zones, it states:

*Except for uses permitted without review in Section 3.100 and 3.180(B) (Open Space) and Modifications to Serviceable Structures and Placement of Minor Water-Dependent and Water-Related Structures in Wetlands as specified in (4) above, other uses authorized by the applicable zoning designation may be allowed in wetlands and wetland buffer zones subject to (7) below, Site Plans, the remaining applicable sections of this Chapter and the following criteria:*

*a. The proposed use is water-dependent, or is not water-dependent but has no practicable alternative as determined by E, Practicable Alternative Test.*

**Finding:** Although the railroad is dependent upon the Columbia River channel through the Cascade Mountain range, it is not a directly water depended use. Consistency with (E) the No Practicable Alternative Test is discussed below.

*b. The proposed use is in the public interest as determined by F, Public Interest Test.*

**Finding:** Compliance with this provision is discussed below in Finding 77.

*c. Measures will be applied to ensure that the proposed use results in the minimum feasible alteration or destruction of the wetland's functions, existing contour, vegetation, fish and wildlife resources, and hydrology.*

**Finding:** The application narrative explains that several design changes were made to reduce the scale and therefore the overall impact. Section 3.1.1 of the Project Narrative states:

*Alternative A [the alternative reviewed by this report] also implements the following design measures to further avoid and minimize disturbance to sensitive resources:*

- *Track Alignment and Centerline Offset Width Reduction. In determining the alignment for the proposed track in the project area, UPRR reduced the centerline offset from 20 feet to 15 feet (the minimum allowable centerline offset) to significantly reduce the project footprint and avoid waters and wetlands to the north and south of the track. On the west end of the project (MP 66.98 to MP 69.38), an alignment to the north of the track was selected because it would have fewer aquatic disturbances, and avoid additional excavation of a tall rock face. On the east end of the project (MP 70.73 to MP 72.35), an alignment primarily to the south of the existing track was selected to avoid*

*direct effects to the Columbia River. The reduction of centerline-track offsets decreased the project footprint by 2.1 acres along the 4.02 miles of new track.*

- *Embankment Design Minimization. UPRR design standards for track embankments are for a 2:1 horizontal to vertical (H:V) slope, which provides stability to the rail roadbed and incorporates safety considerations for maintenance work along the tracks. Geotechnical design options to steepen the embankment slope (standard 2H:1V slopes to vertical retaining walls) were assessed to reduce project footprint and adjacent aquatic disturbance. Based on site-specific considerations, UPRR selected 1.5H:1V slopes in waters and wetland areas to provide the greatest effective reduction in aquatic disturbance while retaining the safe functioning of the railroad. Riprap/rock fill can provide the steepest slope at 1.5H:1V achievable with natural materials.*
  - *Reduced Access Road and Drainage Ditches. UPRR design standards include construction of a 10-foot-wide access road outside the tracks for ease of operation and maintenance and to construct a 10-foot-wide flat bottom drainage ditch adjacent to the track embankment in cut sections. To reduce the project footprint and associated disturbance, UPRR eliminated the access road in all but one location and reduced the widths of associated drainage ditches where compliant with UPRR-required hydraulic design guidelines. The elimination of the access road and reduced ditch width reduced the potential project footprint by roughly 5.5 acres along the 4.02 miles of new track construction.*
- d. Groundwater and surface-water quality will not be degraded by the proposed use.*

**Finding:** The applicant has responded to this requirement, stating: “UPRR will avoid impacts to groundwater and surface water quality during construction of the project through implementation of BMPs as well as specific requirements contained within the state and federal permits listed in Table 1-4 of this narrative, which will be obtained prior to the start of project construction. BMPs will include, but not be limited to:

- Areas for fuel storage, refueling, and servicing of construction equipment must be located in an upland location.
- Prior to use, clean all equipment to remove external oil, grease, dirt, or mud.
- Wash sites must be located in upland locations so that dirty wash water does not flow into stream channel or wetlands.
- Erosion control measures will be in place at all times during construction. Construction will not start until all temporary control devices (straw bales, silt fences, etc.) are in place downslope or downstream of project site.”

Based on this information, Staff does not anticipate the construction related activities to degrade the quality groundwater or surface water, and finds the development to be consistent with this rule.

- e. *Those portions of a proposed use that are not water-dependent or have a practicable alternative will not be located in wetlands or wetlands buffer zones.*

**Finding:** As noted above, and further explained below in (E), the proposed use has no practicable alternative. Because it has no practicable alternative, (e) allows the use, subject to compliance with all applicable regulations in this chapter. The applicant proposes to extend an existing siding to maximize existing infrastructure, has provided information to demonstrate that it is the minimum length to meet the current need and has taken measures to reduce the width of the track by changing angles and materials. Based on the application materials, it appears the development has been minimized to prevent impacts to wetlands and wetland buffer.

- f. *The proposed use complies with all applicable federal, state, and local laws.*

**Finding:** According to the application materials, and as confirmed by staff participation in agency coordination conference calls, the applicant has prepared application materials with several federal, state and local agencies including the Wasco County Planning Department for NSA review, the U.S. Army Corps of Engineers, the U.S. Forest Service, U.S. National Marine Fisheries Service, U.S. Fish and Wildlife Service, Oregon Department of Fish and Wildlife, Department of State Lands, the Oregon State Water Master, and others. A condition of approval included to remind the applicant that this requirement is applicable during and after construction.

- g. *Areas that are disturbed during construction of the proposed use will be rehabilitated to the maximum extent practicable.*

**Finding:** Consistent with (g), the applicant has prepared a Wetland Compensation Plan; please see below for more detail. The application materials outline best management practices to be implemented during and after construction activities in several locations, including the following:

*The construction schedule will also consider best management practices to minimize potential effects to species and habitats to the maximum extent practicable.*

*Specifically listed on Project Narrative page 4-3:*

- *Land clearing will begin between May 15 and June 1, after the end of the rainy season.*
- *Work timing will be coordinated with the biological needs of special-status species. For example, no tree removal or blasting in riparian areas will occur until migratory bird species have completed nesting activities, after August 15 and before April 15, unless biological surveys indicate the absence of nesting.*
- *Vegetation clearing will take advantage of the dry season.*

On page 4-5:

*... During non-working hours, this equipment will be parked near the location where it is to be used the next day with consideration for applicable stormwater protection best management practices (BMPs) such as cleaning of equipment and buffers from wetlands and waters for equipment parking.*

And, on page 4-6:

- *An Erosion and Sediment Control Plan will be implemented, which will include a variety of erosion control and spill prevention measures.*
- *Erosion control measures from the Construction Stormwater Best Management Practices Manual published by the ODEQ will be implemented at applicable locations based on existing and proposed site topography as well as construction phasing considerations.*
- *A spill prevention plan will be implemented to reduce the risk of a potential hazardous materials spill. The plan will incorporate the following guidelines:...*

**Finding:** Additional references to the use of best management practices are contained throughout the application materials and mitigation plans. With a condition of approval to require the implementation of these referenced practices, the proposed use will be consistent with (d) above. As explained in Finding #37 above, the application states that the disturbed areas “will be restored as closely as practical to their original condition, permanent erosion control measures will be installed as appropriate, and revegetation measures will be implemented in accordance with federal permit requirements. Permanent seeding and stabilization measures will be placed prior to track construction and final stabilization is expected prior to the completion of track construction activities.”

- h. Unavoidable impacts to wetlands will be offset through the deliberate restoration, creation, or enhancement of wetlands. Wetlands restoration, creation, and enhancement are not alternatives to the guidelines listed above; they shall be used only as a last resort to offset unavoidable wetlands impacts. Wetlands restoration, creation, and enhancement shall be in accordance with Subsection (8) below, Wetlands Compensation Plans.*

*The following wetlands restoration, creation, and enhancement guidelines shall apply:*

- (1) Impacts to wetlands shall be offset by restoring or creating new wetlands or by enhancing degraded wetlands. Wetlands restoration shall be the preferred alternative.*
- (2) Wetlands restoration, creation, and enhancement projects shall be conducted in accordance with a wetlands compensation plan.*

- (3) *Wetlands restoration, creation, and enhancement projects shall use native vegetation.*
- (4) *The size of replacement wetlands shall equal or exceed the following ratios. The first number specifies the acreage of wetlands requiring replacement and the second number specifies the acreage of wetlands altered or destroyed.*
  - (a) *Restoration: 2:1*
  - (b) *Creation: 3:1*
  - (c) *Enhancement: 4:1*
- (5) *Replacement wetlands shall replicate the functions of the wetland that will be altered or destroyed such that no net loss of wetlands function occurs.*
- (6) *Replacement wetlands should replicate the type of wetland that will be altered or destroyed. If this standard is not feasible or practical due to technical constraints, a wetland type of equal or greater benefit may be substituted, provided that no net loss of wetlands functions occurs.*

**Finding:** According to the application, the project “will result in direct impacts to three delineated wetlands and five buffer zones within designated GMA zones. Measures will be applied to ensure that the project results in the minimum amount of disturbance practicable to the affected wetlands, pursuant to NSA-LUDO Section 14.600 (A)(6), and in accordance with applicable federal permit conditions. These measures will include, but not be limited to, restoration of temporarily disturbed areas to pre-construction conditions to the greatest extent feasible. Permanent wetland impacts will be mitigated through compensatory mitigation, as described in the Mitigation Plan (see Appendix D). Therefore, the project complies with these provisions.”

According to the application (Appendix D page 2), the development will permanently disturb 7.68 acres of wetlands in the GMA. The application states, “Temporary impacts to wetland buffers will be mitigated through onsite, in-kind restoration following construction. There will be no temporary impacts to wetlands.” Because the impacts are predominantly permanent, restoration was not an effective option. The applicant has provided professionally prepared wetland delineation (with habitat functions assessment), conceptual mitigation plan with general mitigation and rehabilitation plans for temporary disturbance sites, and a site specific wetland mitigation plan that includes the creation of a new wetland and wetland buffers consistent with the ratios identified above (3:1 for creation). The Tooley Lake Mitigation Plan proposes to convert a low elevation agricultural field into a new wetland that specifically addresses habitat values and functions that will be destroyed, and at the ratio required, consistent with (1) through (6) above.

- (7) *Wetlands restoration, creation, or enhancement should occur within 1,000 feet of the affected wetland. If this guideline is not practicable*

*due to physical or technical constraints, replacement shall occur within the same watershed and as close to the altered or destroyed wetland as practicable.*

**Finding:** A thorough evaluation of potential wetland restoration, creation, and enhancement options occurred over several months and included coordination with the U.S. Army Corps of Engineers, U.S. National Marine Fisheries Service, U.S. Fish and Wildlife, Oregon Fish and Wildlife, the Oregon State Water Master, and Wasco County Planning. Sites within 1,000 feet of the development were either not large enough to absorb the required mitigation ratios (individually or cumulatively), or did not provide an opportunity to mitigate for the same functions lost at the site – and would not have complied with this requirement. Before agreeing to creation, Staff required the applicant to verify no sites for restoration or enhancement capable of complying with these rules were available within the Columbia River watershed. Sites as far as the Sandy River Delta and vernal ponds on the Chenoweth table were explored and discussed. Ultimately, the multi-agency team agreed that of the sites proposed, the Tooley Lake wetland proposal was the most appropriate location for mitigation efforts. The reason for this is in part due to the (1) proximity of the site to the site of disturbance, the Columbia River, and the railroad; (2) existing and available water resources that would provide a self-sustaining feature (once created); and (3) because it seems to be the most "in kind" mitigation option for the habitat function that will be impacted by the proposed development. As proposed, the Tooley Lake wetland creation will occur within the same watershed (the Columbia River watershed) and as close to the altered or destroyed wetland as possible, and is therefore consistent with (7).

*(8) Wetlands restoration, creation, and enhancement efforts should be completed before a wetland is altered or destroyed. If it is not practicable to complete all restoration, creation, and enhancement efforts before the wetland is altered or destroyed, these efforts shall be completed before the new use is occupied or used.*

**Finding:** A condition of approval is included to ensure compliance with this requirement.

*(9) Five years after a wetland is restored, created, or enhanced at least 75 percent of the replacement vegetation must survive. The project applicant shall monitor the hydrology and vegetation of the replacement wetland and shall take corrective measures to ensure that it conforms with the approved wetlands compensation plan and this guideline.*

**Finding:** The Tooley Lake wetland mitigation plan and Sensitive Species and Wildlife Habitat Protection and Rehabilitation Plan (see Section 12 of Appendix K) describe a three year monitoring plan that includes annual monitoring, reporting and maintenance to ensure survival of planted vegetation. A condition of approval is included to ensure that it is implemented for the full five years required by (9) above.

45. Section 14.600(A)(7) contains additional site plan requirements for proposed uses in wetlands or wetland buffer zones. It states:

*In addition to the information required in all site plans, site plans for proposed uses in wetlands or wetlands buffer zones shall include: a site plan map prepared at a*

*scale of 1 inch equals 100 feet (1:1,200), or a scale providing greater detail; the exact boundary of the wetland and the wetlands buffer zone; and a description of actions that would alter or destroy the wetland.*

**Finding:** Consistent with this requirement, the application materials included a professionally prepared wetland delineation report with appropriate scale site plan maps and provided sufficient information for the analysis of resource impacts by Staff and partner agencies that provided technical assistance.

46. Section 14.600(A)(8) specifies requirements for wetland compensation plans. It states:

*Wetlands compensation plans shall be prepared when a project applicant is required to restore, create, or enhance wetlands. They shall satisfy the following guidelines:*

- a. Wetlands compensation plans shall be prepared by a qualified professional.*
- b. The primary responsibility and cost of preparing wetland compensation plans shall be borne by the applicant. If the applicant has no practicable alternative, according to E below, Practicable Alternative Test, to locating within the wetland or wetland buffer area, the Forest Service has agreed to provide assistance in the preparation of the plan, to the greatest extent possible.*
- c. Wetland compensation plans shall provide for land acquisition, construction, maintenance, and monitoring of replacement wetlands.*
- d. Wetlands compensation plans shall include an ecological assessment of the wetland that will be altered or destroyed and the wetland that will be restored, created, or enhanced. This assessment shall include information on flora, fauna, hydrology, and wetlands functions.*
- e. Compensation plans shall also assess the suitability of the proposed site for establishing a replacement, wetland, including a description of the water source and drainage patterns, topography, wildlife habitat opportunities, and value of the existing area to be converted.*
- f. Plan view and cross-sectional, scaled drawings; topographic survey data, including elevations at contour intervals no greater than 1 foot, slope percentages, and final grade elevations; and other technical information shall be provided in sufficient detail to explain and illustrate:*
  - (1) Soil and substrata conditions, grading, and erosion and sediment control needed for wetland construction and long-term survival.*
  - (2) Planting plans that specify native plant species, quantities, size, spacing, or density; source of plant materials or seeds; timing, season, water, and nutrient requirements for planting; and where appropriate, measures to protect plants from predation.*

*(3) Water-quality parameters, water source, water depths, water-control structures, and water-level maintenance practices needed to achieve the necessary hydrologic conditions.*

*g. A 5-year monitoring, maintenance, and replacement program shall be included in all plans. At a minimum, a project applicant shall provide an annual report that documents milestones, successes, problems, and contingency actions. Photographic monitoring stations shall be established and photographs shall be used to monitor the replacement wetland.*

**Finding:** As noted above, a condition of approval is included to ensure the proposed monitoring plan is implemented for the full five years, consistent with this rule.

*h. A project applicant shall demonstrate sufficient fiscal, technical, and administrative competence to successfully execute a wetlands compensation plan...*

**Finding:** The applicant has contracted with CH2M Hill and CDM Smith to prepare delineation and mitigation materials in a manner that demonstrates fiscal, technical and administrative competence to successfully execute the proposed wetland compensation plan. Staff considers his binding land use decision, with the recommended conditions of approval, sufficient to ensure the plan is implemented prior to wetland disturbances in the project area.

47. Section 14.600(B) contains provisions for streams, ponds, lakes, and riparian areas. The purposes listed in (B)(1) for this section include: (1) protect water quality, natural drainage, and fish and wildlife habitat of streams, ponds, lakes, and riparian areas; and (2) enhance aquatic and riparian areas. Section 14.600(B)(2) provides guidelines for measuring buffer zones and determining the exact location of the ordinary high water mark, it states:

*d. Buffer zones shall generally be measured landward from the ordinary high water-mark on a horizontal scale that is perpendicular to the ordinary high water-mark. On the main stem of the Columbia River above Bonneville Dam, buffer zones shall be measured landward from the normal pool elevation of the Columbia River. The following buffer widths shall be required:*

*(1) Streams used by anadromous or resident fish (tributary fish habitat), special streams, intermittent streams that include year-round pools, and perennial streams: 100 feet.*

*(2) Intermittent streams, provided they are not used by anadromous or resident fish: 50 feet.*

*(3) Ponds and lakes:*

*(a) The pond or lake buffer zones shall be based on the dominant vegetation community that exists in a buffer zone.*

*(b) The dominant vegetation community in a buffer zone is the vegetation community that covers the most surface area of that portion of the buffer zone that lies between the proposed activity and the affected pond or lake. Vegetation communities are classified as forest, shrub, or herbaceous.*

*(i) A forest vegetation community is characterized by trees with an average height equal to or greater than 20 feet, accompanied by a shrub layer; trees must form a canopy cover of at least 40 percent and shrubs must form a canopy cover of at least 40 percent.*

*(ii) A forest community without a shrub component that forms a canopy cover of at least 40 percent shall be considered a shrub vegetation community.*

*(iii) A shrub vegetation community is characterized by shrubs and trees that are greater than 3 feet tall and form a canopy cover of at least 40 percent.*

*(iv) A herbaceous vegetation community is characterized by the presence of herbs, including grass and grasslike plants, forbs, ferns, and nonwoody vines.*

*(c) Buffer zones shall be measured outward from a pond or lake boundary on a horizontal scale that is perpendicular to the pond or lake boundary. The following buffer zone widths shall be required.*

*(i) Forest communities: 75 feet*

*(ii) Shrub communities: 100 feet*

*(iii) Herbaceous communities: 150 feet*

*(d) When a buffer zone is disturbed by a new use, it shall be replanted with native plant species.*

*b. Determining the exact location of the ordinary highwater-mark or normal pool elevation shall be the responsibility of the project applicant. The County may verify the accuracy of, and may render adjustments to, an ordinary high water-mark or normal pool delineation. In the event the adjusted boundary delineation is contested by the project applicant, the County shall, at the project applicant's expense, obtain professional services to render a final delineation.*

*c. Except as otherwise allowed, buffer zones shall be retained in their natural condition. When a buffer zone is disturbed by a new use, it shall be replanted with native plant species.*

**Finding:** As explained above, the applicant provided a wetland delineation and mitigation plans prepared by a qualified professional. The delineation identified wetlands and lakes, but no streams. The application narrative states (page 5-75):

*“Delineated ponds and lakes and their associated buffers in the project vicinity are described in Table 4-3 and shown in Figure 4-3 in Appendix A, in accordance with NSA-LUDO Section 14.600(B)(2). The vegetation communities surrounding Lakes 11, 17, and 18 delineated in the GMA zones conform to the definition of shrub communities, and therefore are shown with a 100-foot buffer zone. The area between the project area and Lake 20 between MP 66.98 and MP 67.12 consists of previously disturbed, unvegetated area immediately adjacent to the existing mainline track embankment, and therefore does not conform to the vegetation communities defined in this provision.*

*The Columbia River and its associated buffer zone are delineated based on the boundaries of the GMA Open Water zone, according to geospatial data provided by the CRGC. No streams, special streams, or intermittent streams are located within the project area. Therefore, the project complies with these provisions.*

*The project will result in impacts to two delineated waterbodies and three waterbody buffer zones within designated GMA zones. Temporary and permanent buffer zone disturbance will be mitigated to the greatest degree feasible through onsite, in-kind restoration following construction, including replanting with native plant species. Buffer areas that are currently unvegetated, including the existing railroad track embankment, will not be revegetated. Detailed restoration measures are described in the Mitigation Plan and the Sensitive Species and Wildlife Habitat Protection and Rehabilitation Plan, included as Appendixes D and K to this narrative, respectively. Therefore, the project complies with these provisions.”*

**Finding:** As previously noted, staff has coordinated with several natural resource agencies to verify the accuracy of the delineation (including buffers), restoration opportunities, and ability for the proposed mitigation plans to meet the mitigation need. With conditions of approval to require the use of best management practices, restoration where possible, implementation of the proposed mitigation plans, and a five year monitoring plan, Staff finds the proposed development to be consistent with these rules.

48. Section 14.600(B)(3) allows limited modifications to existing serviceable structures in aquatic riparian areas, subject to approval criteria. Similar to the finding above for Section 14.600(A)(4), the proposed use does not qualify for this use because it will cause the railroad infrastructure to intrude further into two lakes and three lake buffer zones. Give this information, the proposal is subject to compliance with (B)(5) *Other Uses and Activities Located in Aquatic and Riparian Areas*, which states:

*Except for uses permitted without review in 3.100 and 3.180(B) (Open Space) and modifications to serviceable structures and placement of minor water-dependent and water-related structures in aquatic and riparian areas as specified in (3) above, other uses authorized by the applicable zoning designation may be allowed in*

*aquatic and riparian areas subject to (6) below, Site Plans, the remaining applicable sections of this Chapter, and the following criteria:*

- a. The proposed use is water-dependent, or is not water-dependent but has no practicable alternative as determined by E below, Practicable Alternative Test of this section.*
- b. The proposed use is in the public interest as determined by F below, Public Interest Test of this section.*

**Finding:** Please see Findings 76 and 77 below.

- c. Measures have been applied to ensure that the proposed use results in minimum feasible impacts to water quality, natural drainage, and fish and wildlife habitat of the affected stream, pond, lake and/or buffer zone.*

*As a starting point, the following mitigation measures shall be considered when new uses are proposed in streams, ponds, lakes, and buffer zones:*

- (1) Construction shall occur during periods when fish and wildlife are least sensitive to disturbance. Work in streams, ponds, and lakes shall be conducted during the periods specified in "Oregon Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Resources" (Oregon Department of Fish and Wildlife 2000) unless otherwise coordinated with and approved by the Oregon Department of Fish and Wildlife.*
- (2) All natural vegetation shall be retained to the greatest extent practicable, including aquatic and riparian vegetation.*
- (3) Nonstructural controls and natural processes shall be used to the greatest extent practicable.*
- (4) Bridges, roads, pipeline and utility corridors, and other water crossings shall be minimized and should serve multiple purposes and properties.*

**Finding:** As noted in Finding 39 above, the development has been sited and designed to minimize impacts to all hydrologic features and sensitive habitats using nonstructural controls and preserving natural processes to the maximum extent practicable. Where restoration is not possible, offsite mitigation has been proposed. Within the buffer of Appendix D provides information regarding anticipated impacts, and open water mitigation plans. The project narrative defines construction schedules in Section 4.2.1 and states intended compliance with the timelines set forth by Oregon Department of Fish and Wildlife and taking advantage of the dry season. With conditions to use best management practices during construction, retain natural vegetation to the greatest extent practicable, and abide by the ODFW timing of water work requirements, Staff finds the proposed development to be consistent with these rules.

- (5) Stream channels shall not be placed in culverts unless absolutely necessary for property access. Bridges are preferred for water crossings to reduce*

*disruption to streams, ponds, lakes, and their banks. When culverts are necessary, oversized culverts with open bottoms that maintain the channel's width and grade should be used.*

**Finding:** No streams are proposed to be placed in culverts. Several culverts connecting existing lakes to the Columbia River will be extended to ensure the wider ballast does not impede water flow or fish passage. The mitigation also plan includes the placement of two new culverts at Thompsons Lake (in the SMA) to improve fish passage and the overall habitat function of this feature. The changes to culverts have been coordinated with several federal and state natural resource agencies to ensure habitat is retained or improved. Based on this information, staff finds the proposed development to be consistent with this rule.

*(6) Temporary and permanent control measures shall be applied to minimize erosion and sedimentation when riparian areas are disturbed, including slope netting berms and ditches, tree protection, sediment barriers, infiltration systems, and culverts.*

**Finding:** Please see Finding 44.

49. Section 14.600(B)(5)(d) requires the use not to degrade quality of groundwater or surface-water. The application narrative states (page 5-78):

*UPRR will avoid disturbance to groundwater and surface water quality during construction of the project through implementation of BMPs as well as requirements contained in the state and federal permits listed in Table 1-4, which will be obtained prior to the start of project construction. BMPs will include, but not be limited to:*

- Areas for fuel storage, refueling, and servicing of construction equipment must be located in an upland location.*
- Prior to use, clean all equipment to remove external oil, grease, dirt, or mud.*
- Wash sites must be located in upland locations so that dirty wash water does not flow into stream channel or wetlands.*

*Erosion control measures will be in place at all times during construction. Construction will not start until all temporary control devices (straw bales, silt fences, etc.) are in place downslope or downstream of project site. Therefore, the project complies with this provision.*

**Finding:** With a condition of approval to implement the proposed best management practices, conceptual mitigation plan, habitat protection and rehabilitation plan, and the Tooley Lake mitigation plan, Staff does not believe the proposed use will have unduly amounts of erosion or sedimentation and therefore will not degrade the quality of groundwater or surface water, consistent with this rule.

50. Section 14.600(B)(5)(e) states: "Those portions of a proposed use that are not water-dependent or have a practicable alternative will be located outside of stream, pond, and lake buffer zones."

The applicant provided the following statement: "...the location of the existing railroad depends directly on proximity to the Columbia River. Furthermore, UPRR demonstrates in its finding to NSA-LUDO Section 14.600(E) below that the project has no practicable alternative that would result in fewer impacts to natural resources. Due to the nature of the railroad as a pre-existing, interstate transportation system, there are no portions of the proposed project which do not meet these criteria. Therefore, the project complies with this provision."

**Finding:** The development is not directly water dependent, but does rely on the Columbia River Gorge for passage through the Cascade Mountain range. There is no other at-grade passage, making it difficult to have any other practicable alternative that would avoid hydrologic features. Staff required an Alternatives Analysis for application completeness and agrees that the proposed alternative minimizes impacts to sensitive resources to the maximum extent practicable, consistent with this rule.

51. Section 14.600(B)(5)(f) require the use to comply with all applicable federal state and local laws. As explained in Finding 39 on page 69 above, staff finds the application to be consistent with this requirement.
52. Section 14.600(B)(g) provides rehabilitation and enhancement standards that apply to unavoidable aquatic and riparian areas impacted by development. It states:

*Unavoidable impacts to aquatic and riparian areas will be offset through rehabilitation and enhancement.*

*Rehabilitation and enhancement shall achieve no net loss of water quality, natural drainage, and fish and wildlife habitat of the affected stream, pond, lake, and/or buffer zone. When a project area has been disturbed in the past it shall be rehabilitated to its natural condition to the maximum extent practicable.*

*When a project area cannot be completely rehabilitated, such as when a boat launch permanently displaces aquatic and riparian areas, enhancement shall also be required.*

*The following rehabilitation and enhancement standards shall apply:*

- (1) Rehabilitation and enhancement projects shall be conducted in accordance with a rehabilitation and enhancement plan.*
- (2) Natural hydrologic conditions shall be replicated, including current patterns, circulation, velocity, volume, and normal water fluctuation.*
- (3) Natural stream channel and shoreline dimensions shall be replicated, including depth, width, length, cross-sectional profile, and gradient.*
- (4) The bed of the affected aquatic area shall be rehabilitated with identical or similar materials.*

- (5) *Riparian areas shall be rehabilitated to their original configuration, including slope and contour.*
- (6) *Fish and wildlife habitat features shall be replicated, including pool-riffle ratios, substrata, and structures. Structures include large woody debris and boulders.*
- (7) *Stream channels and banks, shorelines, and riparian areas shall be replanted with native plant species that replicate the original vegetation community.*
- (8) *Rehabilitation and enhancement efforts shall be completed no later than 90 days after the aquatic area or buffer zone has been altered or destroyed, or as soon thereafter as is practicable.*
- (9) *Three years after an aquatic area or buffer zone is rehabilitated or enhanced, at least 75 percent of the replacement vegetation must survive. The project applicant shall monitor the replacement vegetation and take corrective measures to meet this standard.*

**Finding:** As previously explained, the applicant provided several mitigation strategies prepared by a qualified professional, designed to comply with the NSALUDO and several other federal and state natural resource regulatory requirements. The application narrative, Appendix D and K, and the Tooley Lake mitigation plan provide sufficient information to demonstrate compliance with Section 14.600(B)(5). To comply with Section 14.600(A) above, conditions of approval are included in the staff recommendation that exceed the requirements of (8) and (9), and instead require a five year monitoring plan and that the creation of the new water feature prior to any impacts at existing features. With conditions, staff finds the application to be consistent with this rule.

53. Section 14.600(B)(6) contains additional site plan requirements, similar to Section 14.600(A)(7) above.

**Finding:** Consistent with this requirement, the application materials included a professionally prepared delineation report with appropriate scale site plan maps, providing sufficient information for the analysis of resource impacts by Staff and partner agencies that provided technical assistance.

54. Section 14.600(B)(7) provides standards for rehabilitation and enhancement plans:

*Rehabilitation and enhancement plans shall be prepared when a project applicant is required to rehabilitate or enhance a stream, pond, lake, and/or buffer zone. They shall satisfy the following standards:*

- a. *Rehabilitation and enhancement plans shall be primarily the responsibility of the applicant. If the applicant has no practicable alternative, according to E below, Practicable Alternative Test, to locating within the stream, pond, lake, riparian zone, or buffer area, the Forest Service has agreed to provide assistance in the preparation of the plan, to the greatest extent possible.*

- b. *Rehabilitation and enhancement plans shall be prepared by qualified professionals, such as fish or wildlife biologists.*
- c. *All plans shall include an assessment of the physical characteristics and natural functions of the affected stream, pond, lake, and/or buffer zone. This assessment shall include hydrology, flora, and fauna.*
- d. *Plan view and cross-sectional, scaled drawings; topographic survey data, including elevations at contour intervals of at least 2 feet, slope percentages, and final grade elevations; and other technical information shall be provided in sufficient detail to explain and illustrate:*
  - (1) *Soil and substrata conditions, grading and excavation, and erosion and sediment control needed to successfully rehabilitate and enhance the stream, pond, lake, and buffer zone.*
  - (2) *Planting plans that specify native plant species, quantities, size, spacing, or density; source of plant materials or seeds; timing, season, water, and nutrient requirements for planting; and where appropriate, measures to protect plants from predation.*
  - (3) *Water-quality parameters, construction techniques, management measures, and design specifications needed to maintain hydrologic conditions and water quality.*
- e. *A 3-year monitoring, maintenance, and replacement program shall be included in all rehabilitation and enhancement plans. At a minimum, a project applicant shall prepare an annual report that documents milestones, successes, problems, and contingency actions. Photographic monitoring shall be used to monitor all rehabilitation and enhancement efforts.*
- f. *A project applicant shall demonstrate sufficient fiscal, administrative, and technical competence to successfully execute and monitor a rehabilitation and enhancement plan.*

**Finding:** The proposed development will impact lake and lake buffers within the project area. As noted above in Finding 47, the applicant provided several mitigation strategies prepared by a qualified professional, designed to comply with the NSALUDO and several other federal and state natural resource regulatory requirements. The application narrative, Appendix D and K, and the Tooley Lake mitigation plan provide sufficient information to demonstrate compliance with Section 14.600(B)(7), including the required information listed above. To comply with Section 14.600(A), conditions of approval are included in the staff recommendation that exceed the requirements of (e), and instead require a five year monitoring plan. With conditions, staff finds the application to be consistent with this rule. In preparation of the application materials provided, staff finds the applicant has demonstrated sufficient fiscal, administrative and technical competence to successfully execute and monitor the mitigation plan, consistent with this rule.

## Wetlands, Streams, Ponds, Lakes and Other Bodies of Water (SMA)

55. Section 14.610 addresses natural resources in the SMA. Section 14.610(A) provides resource protection requirements for water resources. Section 610(A)(1) states the purpose of this chapter is to protect and enhance the quantity and quality of water resources and their functions. Section 14.610(A)(2) identifies requirements for delineations and establishing buffers. It states:

*Buffer zones shall be measured outward from the bank full flow boundary for streams, the high water mark for ponds and lakes, the normal pool elevation for the Columbia River, and the wetland delineation boundary for wetlands on a horizontal scale that is perpendicular to the wetlands, stream, pond or lake boundary. On the main stem of the Columbia River above Bonneville Dam, buffer zones shall be measured landward from the normal pool elevation of the Columbia River. The following buffer zone widths shall be required:*

*(a) A minimum 200 foot buffer on each wetland, pond, lake, and each bank of a perennial or fish bearing stream, some of which can be intermittent.*

**Finding:** On page 5-94, the application materials state: “Delineated wetlands, ponds, lakes, and riparian areas and their associated 200-foot buffers in the project vicinity within the SMA are described in Table 4-3 and shown in Figure 4-3 in Appendix A, in accordance with NSA-LUDO Section 14.610(A)(2). The project will result in unavoidable impacts to three delineated wetlands or waterbodies, and nine wetland or waterbodies buffer zones within designated SMA zones. Temporary waterbody impacts will be mitigated through onsite, in-kind restoration following construction. Permanent wetland and waterbody impacts will be mitigated through compensatory mitigation, as described in the Mitigation Plan, included as Appendix D to this narrative. The final Mitigation Plan will satisfy all requirements of NSA-LUDO Section 14.610(E). Therefore, the project complies with these provisions.” Staff finds that the delineation report includes the appropriate buffers identified by this rule, and is therefore consistent.

*(b) A 50-foot buffer zone along each bank of intermittent (including ephemeral), non-fish bearing streams.*

**Finding:** As proposed, no streams exist within the vicinity of the proposed development. Streams do exist in the UA of Mosier but the buffers do not extend into the GMA or SMA and are therefore not subject to this review.

*(c) Maintenance, repair, reconstruction and realignment of roads and railroads within their rights-of-way shall be exempted from the wetlands and riparian guidelines upon demonstration of all of the following:*

- i. The wetland within the right-of-way is a drainage ditch not part of a larger wetland outside of the right-of-way.*
- ii. The wetland is not critical habitat.*

- iii. *Proposed activities within the right-of-way would not adversely affect a wetland adjacent to the right-of-way.*

**Finding:** Several ditches located within the railroad right of way will be improved by the proposed development to improve drainage and decrease erosion risks. The application also includes the creation of trackside ditches, to move storm waters away from the track. The wetland delineation report was prepared by a qualified professional, using the NSA LUDO as a guide to address these requirements as well as other applicable federal and state natural resource protection requirements. Based on the provided documents and discussions with partner agencies, staff concludes that all wetlands that do not qualify for the exemption listed above, are contained within the delineation report and any impacts are proposed to be mitigated, as indicated in Appendix D and K, and the Tooley Lake mitigation plan.

56. Section 14.610(A)(3), (4), (5) and (6) provide instances in which buffer zones can be modified, they state:

*(3) The buffer width shall be increased for the following:*

- (a) When the channel migration zone exceeds the recommended buffer width, the buffer width shall extend to the outer edge of the channel migration zone.*
- (b) When the frequently flooded area exceeds the recommended riparian buffer zone width, the buffer width shall be extended to the outer edge of the frequently flooded area.*
- (c) When an erosion or landslide hazard area exceeds the recommended width of the buffer, the buffer width shall be extended to include the hazard area.*

*(4) Buffer zones can be reconfigured if a project applicant demonstrates all of the following:*

- (a) the integrity and function of the buffer zones is maintained,*
- (b) the total buffer area on the development proposal is not decreased,*
- (c) the width reduction shall not occur within another buffer, and*
- (d) the buffer zone width is not reduced more than 50% at any particular location. Such features as intervening topography, vegetation, man made features, natural plant or wildlife habitat boundaries, and flood plain characteristics could be considered.*

*(5) Requests to reconfigure buffer zones shall be considered if an appropriate professional (botanist, plant ecologist, wildlife biologist, or hydrologist), hired by the project applicant*

- (a) *identifies the precise location of the sensitive wildlife/plant or water resource,*
  - (b) *describes the biology of the sensitive wildlife/plant or hydrologic condition of the water resource, and*
  - (c) *demonstrates that the proposed use will not have any negative effects, either direct or indirect, on the affected wildlife/plant and their surrounding habitat that is vital to their long-term survival or water resource and its long term function.*
- (6) *The County shall submit all requests to re-configure sensitive wildlife/plant or water resource buffers to the Forest Service and the appropriate state agencies for review. All written comments shall be included in the project file. Based on the comments from the state and federal agencies, the County will make a final decision on whether the reconfigured buffer zones are justified. If the final decision contradicts the comments submitted by the federal and state agencies, the County shall justify how it reached an opposing conclusion.*

Finding: No requests have been made by the applicant or natural resource partner agencies involved in the review of the provided application materials, which included the U.S. Army Corps of Engineers, U.S. National Marine Fisheries, U.S. Fish and Wildlife, U.S. Forest Service National Scenic Area Office, and the Oregon Department of Fish and Wildlife. Staff concludes the 200-foot buffer applies to the bodies of water located within the vicinity of the project area (in the SMA).

57. Section 14.610(A)(2)(b) requires any buffer zone disturbance to be replanted with only native species found within the Columbia River Gorge. The proposed mitigation plans included planting plans and seed mixes of native species that were reviewed and acknowledged by the partner agencies listed above. No changes were requested however Staff is recommending a condition of approval that the eastern gorge seed mix provided by the Forest Service be used instead of the ODOT mix referenced in the application. Staff concludes the mitigation plans and best management practices described in the application materials are consistent with this requirement.

58. Section 14.610(2)(c) through (f) state that the applicant is responsible for identifying all water resource boundaries and buffers (c), and provides delineation requirements. It states:

*d. Wetlands Boundaries shall be delineated using the following:*

- (1) *The approximate location and extent of wetlands in the Scenic Area is shown on the National Wetlands Inventory (U. S. Department of the Interior 1987). In addition, the list of hydric soils and the soil survey maps shall be used as an indicator of wetlands.*
- (2) *Some wetlands may not be shown on the wetlands inventory or soil survey maps. Wetlands that are discovered by the local planning staff during an inspection of a potential project site shall be delineated and protected.*

- (3) *The project applicant shall be responsible for determining the exact location of a wetlands boundary. Wetlands boundaries shall be delineated using the procedures specified in the '1987 Corps of Engineers Wetland Delineation Manual (on-line Edition)'.*
- (4) *All wetlands delineations shall be conducted by a professional who has been trained to use the federal delineation procedures, such as a soil scientist, botanist, or wetlands ecologist.*
- e. *Stream, pond, and lake boundaries shall be delineated using the bank full flow boundary for streams and the high water mark for ponds and lakes. The project applicant shall be responsible for determining the exact location of the appropriate boundary for the water resource.*
- f. *The County may verify the accuracy of, and render adjustments to, a bank full flow, high water mark, normal pool elevation (for the Columbia River), or wetland boundary delineation. If the adjusted boundary is contested by the project applicant, the County shall obtain professional services, at the project*

**Finding:** As noted throughout this report, the application materials included a professionally prepared wetland delineation, a list of best management practices to be used during construction, a conceptual mitigation plan, a habitat protection and rehabilitation plan, and a compensatory mitigation plan that will create a new feature adjacent to Tooley Lake. All of these documents were shared and discussed with the partner agencies listed above to ensure all resources were adequately documented using the appropriate methodologies, assessed for impacts, and proposed for mitigation where necessary. Staff finds the application materials contain accurate wetland boundaries, consistent with this requirement.

59. Section 14.610(A)(2)(g) states:

*Buffer zones shall be undisturbed unless the following criteria have been satisfied:*

- (1) *The proposed use must have no practicable alternative as determined by the practicable alternative test.*

*Those portions of a proposed use that have a practicable alternative will not be located in wetlands, stream, pond, lake, and riparian areas and/or their buffer zone.*

**Finding:** The proposed development relies on the location of the existing railroad and the Columbia River Gorge as the only at grade passage through the Cascade Mountains; there is no portion of the project that could have an alternative location and still meet the project need. As noted above, an Alternatives Analysis was prepared to verify the proposed development has been sited and designed to minimize unavoidable impacts to sensitive resources and buffers. Staff finds the proposed development to be consistent with this requirement.

- (2) *Filling and draining of wetlands shall be prohibited with exceptions related to public safety or restoration/enhancement activities as permitted when all of the following criteria have been met:*
- (a) *A documented public safety hazard exists or a restoration/ enhancement project exists that would benefit the public and is corrected or achieved only by impacting the wetland in question, and*
  - (b) *Impacts to the wetland must be the last possible documented alternative in fixing the public safety concern or completing the restoration/enhancement project, and*
  - (c) *The proposed project minimizes the impacts to the wetland.*
- (5) [(3)] *Unavoidable impacts to wetlands and aquatic and riparian areas and their buffer zones shall be offset by deliberate restoration and enhancement or creation (wetlands only) measures as required by the completion of a Mitigation Plan as described in E below.*

**Finding:** The applicant provided the following statement in response to the criteria: “...UPRR notes that idling trains tend to attract trespassers. Thus, by reducing (if not eliminating) the time that trains idle at this location, the project will increase public safety. Also, as described in the finding in response to NSA-LUDO Section 14.610(E), the project will enhance existing degraded wetlands and mitigate for project-related disturbance. Therefore, the project complies with these provisions.”

The application materials describe the perceived safety of slow and idling trains as a public safety hazard that currently exists because people continue to trespass informally, and dangerously, for river access. In the Scenic Area, access to the Columbia River is typically related to treaty tribe fishing practices and public recreation uses. The project is not a restoration or enhancement project as proposed or defined by the NSA LUDO. However, as required below to mitigate impacts to treaty rights identified by the Confederated Tribes of the Umatilla Indian Reservation, and established recreation sites identified by Oregon State Parks, Staff is recommending conditions of approval to require safe crossings in several locations. The crossings will mitigate impacts by providing safe crossings, and thus enhancing treaty rights protections and recreation access. Coupled with the development of safe crossings, staff agrees that a reduction in idling trains could improve the public safety concern and be consistent with this requirement.

As noted above, the application materials include an accurate delineation of potential impacts and several strategies for rehabilitation of temporary impacts, improvements of fish passage and habitat, and offsite mitigation to create a new wetland feature that can replace the habitat values that will be lost within the project area. As proposed and conditioned, the development is consistent with Section 14.610(A)(2)(g).

**Wildlife Habitat (GMA)**

60. Section 14.600(C) provides wildlife habitat resource regulations; Section (C)(1) states the purpose of this chapter is to:

- e. *Ensure that new uses do not adversely affect sensitive wildlife areas and sites.*
- b. *"Sensitive wildlife areas" means the 17 land and water areas that are included in the wildlife inventory of the Management Plan.*

*"Sensitive wildlife sites" is used here in a generic sense to refer to sites that are used by species that are:*

- (1) *Listed as endangered or threatened pursuant to federal or state endangered species acts,*
- (2) *Listed as sensitive by the Oregon Fish and Wildlife Commission, or*
- (3) *Considered to be of special interest to the public, limited to great blue heron, osprey, mountain goat, golden eagle, and prairie falcon.*

- c. *Enhance wildlife habitat that has been altered or destroyed by past uses.*

**Finding:** The application included a professionally prepared survey of sensitive wildlife and rare plant populations. The survey identified several sensitive wildlife areas, as shown in Table 4 of Appendix J, Plant Survey and Habitat Mapping Report includes the following table:

TABLE 4  
Sensitive Wildlife Areas and Sites Mapped within the Project Area

Sensitive Wildlife Area	CRGC Habitat Inventory Mapping	Habitat within Project Area <sup>1</sup> (acres)	Project Area within Buffer Zone (acres)
Deer and elk winter range	Big Game Turkey		
Elk habitat	Big Game Turkey	0.02 <sup>2</sup>	
Turkey Habitat	Big Game Turkey		5.95 <sup>2</sup>
Waterfowl Area	Shallow Water - Waterfowl	0.06	
Shallow water fish habitat (Columbia River)	Shallow Water/ Shallow Water Waterfowl	---	
Waterfowl Area	Special Habitat - Waterfowl	---	

<sup>1</sup> Project area calculations include the proposed area of disturbance within existing UPRR ROW, the proposed ROW acquisition area, and the temporary construction easements.

<sup>2</sup> Sensitive wildlife areas and sites and their buffer zones overlap in several cases, necessitating disturbance to be reported as a combined acreage.

Source: Wasco County National Scenic Area Land Use Development Ordinance (Wasco County, 2010)

61. Section 14.600(C)(2) provides approval criteria for new fences in deer and elk winter range. Temporary silt fences will be used during construction to prevent erosion, and existing guardrail will be replaced as necessary, but no new permanent fences are proposed by this application. Given this information, staff concludes that this rule is not applicable.
62. Section 14.600(C)(3) allows uses within 1,000 feet of sensitive wildlife areas or sites subject to (C)(4) for additional site plan requirements and the remaining applicable portions of this chapter. It states:
- a. *Uses that are proposed within 1,000 feet of a sensitive wildlife area or site shall be reviewed by the Oregon Department of Fish and Wildlife.*
    - (1) *The approximate locations of sensitive wildlife areas and sites are shown in the wildlife inventory.*
    - (2) *State wildlife biologists will help to determine if a new use would adversely affect a sensitive wildlife area or site.*
  - b. *The Site plan shall be submitted to the Oregon Department of Fish and Wildlife by the County. State wildlife biologists will review the site plan and their field survey records. They will:*
    - (1) *Identify/verify the precise location of the wildlife area or site,*
    - (2) *Ascertain whether the wildlife area or site is active or abandoned,*
    - (3) *Determine if the proposed use may compromise the integrity of the wildlife area or site or occur during the time of the year when wildlife species are sensitive to disturbance, such as nesting or rearing seasons, and*
    - (4) *In some instances, state wildlife biologists may conduct field surveys to verify the wildlife inventory and assess the potential effects of a proposed use.*

**Finding:** The applicant provided a Plant Survey and Wildlife Habitat Mapping Report (Appendix J) that states: "CH2M HILL conducted special-status plant surveys and mapped existing vegetation communities in support of the project to identify potential populations of special-status species or priority habitats within and immediately adjacent to the proposed construction corridor. The project will avoid sensitive populations and priority habitats to the greatest extent possible."

According to the Wasco County natural resource inventories provided by the State and the Columbia River Gorge Commission, and the results of the survey and mapping report, the proposed development will occur within 1,000 feet of deer and elk winter range, wild turkey range, shallow water habitat, waterfowl habitat areas. On February 20, 2016, Staff provided the application and Wildlife Mapping Report to Rod French, Mid-Columbia District Fish Biologist, and Jeremy Thompson, Wildlife Biologist, at the Oregon Department of Fish and Wildlife.

- c. *The following factors may be considered when site plans are reviewed:*

- (1) *Biology of the affected wildlife species.*
  - (2) *Published guidelines regarding the protection and management of the affected wildlife species. The Oregon Department of Forestry has prepared technical papers that include management guidelines for osprey and great blue heron.*
  - (3) *Physical characteristics of the subject parcel and vicinity, including topography and vegetation.*
  - (4) *Historic, current, and proposed uses in the vicinity of the sensitive wildlife area or site.*
  - (5) *Existing condition of the wildlife area or site and the surrounding habitat and the useful life of the area or site.*
- d. *The wildlife protection process may terminate if the County, in consultation with the state wildlife agency, determines:*
- (1) *The sensitive wildlife area or site is not active, or*
  - (2) *The proposed use would not compromise the integrity of the wildlife area or site or occur during the time of the year when wildlife species are sensitive to disturbance.*
- e. *If the County, in consultation with the State wildlife agency, determines that the proposed use would have only minor effects on the wildlife area or site that could be eliminated through mitigation measures recommended by the state wildlife biologist, or by simply modifying the site plan or regulating the timing of new uses:*
- (1) *A letter shall be sent to the project applicant that describes the effects and measures needed to eliminate them.*
  - (2) *If the project applicant accepts these recommendations, the County will incorporate them into its development review order, and*
  - (3) *The wildlife protection process may conclude.*

**Finding:** On March 14, 2016, Rod French responded to Staff by email:

*“The ODFW supports the UPRR conceptual mitigation plan for their Second Mainline Track Project. As you are aware, ODFW along with NOAA Fisheries staff, has had considerable coordination in the development, and support the open water mitigation plan for Thompsons Lake. The Wetland Mitigation Plan, including the Tooley Lake mitigation site, while less developed than the open water plan, is also supported by ODFW.*”

*We request that applicant work with ODFW, and NOAA Fisheries on developing in-water timing guidelines for all proposed work in Columbia River Tributaries, and the culvert work associated with Thompsons Lake.*

*Thanks for the opportunity to comment.*

*Rod A. French  
Mid-Columbia District Fish Biologist"*

Mr. French later clarified by email that the in-water timing guidelines had already been developed in the manner he requested and that no additional work was required. Based on this information, staff concludes that the proposed mitigation plans included with this application will offset any known or unknown impacts to sensitive wildlife habitat areas in the GMA, consistent with this rule.

63. Sections 14.600(C)(4) Site Plans and Field Surveys and (5) Wildlife Management Plans are not addressed in detail because the wildlife protection process concluded in (3) above. However, it is worth noting that the applicants were required to prepare detailed site plans and field surveys for completeness of a large-scale application. The surveys were conducted by qualified professionals and their inventory included sensitive plants, wildlife, critical habitat areas and a mapped inventory of existing trees. The report provides the following conclusions and recommendations:

*"The surveys identified 134 plant species and 3 special-status plant species. The surveys identified five general habitat types that have the potential to support 22 special-status wildlife species. Within those habitats, the survey identified 7.35 acres of priority habitats including riparian, wetland, cliffs, dunes, talus, and oak woodland within the proposed project grading limits. These priority habitats have the potential to support 16 special-status terrestrial wildlife species. The surveys confirmed the presence of six Sensitive Wildlife Areas. These areas may support deer, elk, turkey, peregrine falcon, fish, and waterfowl. To the extent practicable, special-status species and priority habitats will be avoided.*

*A Protection, Management, Rehabilitation, & Mitigation Plan has been prepared to address unavoidable impacts to special-status plant species and their buffer zones, priority habitats, and special-status terrestrial wildlife species. The proposed project will avoid and/or minimize impacts to special-status plant species or habitats to the extent practicable during construction as follows:*

- Avoid areas of identified special-status plant populations to the maximum extent practicable.*
- Where possible, avoid or minimize impacts to priority habitats.*
- Implement micro-siting slight relocations of proposed project facilities to avoid special-status plant populations if practicable.*
- Implement weed control procedures to prevent spread of noxious weeds to native plant habitats.*
- Implement all appropriate best management practices as outlined in the Protection and Rehabilitation Plan."*

**Finding:** As required for the wetlands mitigation and below for rare plants mitigation, Staff recommends a condition of approval to implement all of the mitigation plans and best management practices proposed by the applicant.

### Rare Plants (GMA)

64. Section 14.600(D) provides resource protections for rare plants in the GMA. The purpose statements include:

a. *Ensure that new uses do not adversely affect plant species that are, according to lists kept current by the Gorge Commission:*

(1) *endemic to the Columbia River Gorge and vicinity,*

(2) *listed as endangered or threatened pursuant to federal or state endangered species acts, or*

(3) *listed as endangered or threatened on list (1) or list (2), by the Oregon Natural Heritage Program. (For brevity, these species will be referred to as "sensitive" plant species.)*

b. *Encourage the protection of plant species that are classified "Review" {list 3}, or "Watch" {list 4} by the Oregon Natural Heritage Program.*

c. *Enhance the natural habitat of rare plant species.*

**Finding:** As noted above in Finding 58, the field survey provided by the applicant documented the occurrence of 134 plant species total, and 3 special-status plant species. Wasco County natural resource inventories provided by the Gorge Commission and the Oregon Biodiversity Information Center (ORBIC), indicate that the up to 7 special status plant species may be within 1,000 feet of the proposed development (note: plant names withheld from this report to reduce risk of vandalism and other forms of intentional resource damage).

65. Section 14.600(D)(2) defines sensitive plant buffer zones, it states:

f. *A 200 foot buffer zone shall be maintained around sensitive plants. Buffer zones shall remain in an undisturbed, natural condition.*

b. *Buffer zones may be reduced if a project applicant demonstrates that intervening topography, vegetation, manmade features, or natural plant habitat boundaries negate the need for a 200 foot radius. Under no circumstances shall the buffer zone be less than 25 feet.*

**Finding:** According to the survey provided by the applicant, development will occur within the 200-foot buffer of sensitive plants and in some cases remove or relocate the plants. The application narrative states (on page 5-86): "All efforts will be made to avoid disturbance to special-status species and priority habitats. If disturbance cannot be avoided, efforts will be employed to minimize disturbance to the maximum extent practicable. A Sensitive Species and

Wildlife Habitat Protection and Rehabilitation Plan has been prepared to address unavoidable impacts to special-status plant species and their buffer zones, as well as priority habitats in the GMA (see Appendix J).” A variance request to this buffer is addressed on page 35 for Chapter 6.

- c. *Requests to reduce buffer zones shall be considered if a professional botanist or plant ecologist hired by the project applicant:*
  - (1) *identifies the precise location of the sensitive plants,*
  - (2) *describes the biology of the sensitive plants, and*
  - (3) *demonstrates that the proposed use will not have any negative effects, either direct or indirect, on the affected plants and the surrounding habitat that is vital to their long-term survival.*
  - (4) *All requests shall be prepared as a written report. Published literature regarding the biology of the affected plants and recommendations regarding their protection and management shall be cited. The report shall include detailed maps and photographs.*
  
- d. *The County shall submit all requests to reduce sensitive plant species buffer zones to the Oregon Natural Heritage Program.*
  - (1) *The state heritage program will have 20 days from the date that such a request is mailed to submit written comments to the County Planning Office.*
  - (2) *The County shall record and address any written comments submitted by the state heritage program in its development review order.*

**Finding:** As part of their request for a variance to the buffer requirements, the applicant provided surveys and recommendations prepared by qualified professionals: Plant Survey and Habitat Mapping Report (Appendix J), Sensitive Species and Wildlife Habitat Protection and Rehabilitation Plan (Appendix K), and wetland mitigation strategies that overlap geographically. On February 20, 2016, Staff provided the surveys and reports to Sue Vrilakas, Botanist and Data Manager for ORBIC and Robin Dobson, Botanist for the Forest Service National Scenic Area Office.

Sue Vrilakas responded to Staff by email on April 4, 2016 and provided the following comment:

*“Of the 3 rare plants that will be impacted, I am only really concerned with the [redacted for resource protection] and then for only 1 plant. It sounds like they will avoid if possible or transplant if not. When they built the “new” locks for Bonneville Dam (must be about 30+ years ago) they had to transplant the [redacted], and as I recall, the plants did OK. They used mud and slingshots to plaster the plants against their new home, a high cliff wall.*”

Staff requested confirmation to which Ms. Vrilakas responded on April 6, 2016:

*“Yes, I’m comfortable with their plans.”*

Robin Dobson did not respond to the review request. Robin Shoal, the Natural Resources Office for the Forest Service National Scenic Area Office provided comment regarding rare plants and priority habitats in the SMA. Ms. Shoal’s comments are included below.

*(3) Based on the comments from the state heritage program, the County will make a final decision on whether the reduced buffer zone is justified. If the final decision contradicts the comments submitted by the state heritage program, the local government shall justify how it reached an opposing conclusion.*

**Finding:** Based on the extensive survey and mitigation plans that have been coordinated with several federal and state natural resource protection agencies, and the level of comfort exhibited by Ms. Vrilakas (ORBIC equivalent to the state heritage program manager), staff recommends a variance for reduced plant buffers as specified in the applicants proposal - in the GMA. The recommendation is consistent with the comments received by the state heritage program and thus consistent with this rule.

66. Section 14.600(D)(3) lists uses and activities permitted within 1,000 feet of sensitive plants:

*Except for uses permitted without review in Section 3.100 and 3.180(B) (Open Space) uses and activities authorized by the applicable zoning designation may be allowed within 1,000 feet of a sensitive plant subject to (4) below, Site Plans and Field Surveys, the remaining applicable sections of this Chapter and the following criteria:*

*a. Uses that are proposed within 1,000 feet of a sensitive plant shall be reviewed by the Oregon Natural Heritage Program.*

*(1) The approximate locations of sensitive plants are shown in the rare plant species inventory.*

*(2) State heritage staffs will help determine if a new use would invade the buffer zone of sensitive plants.*

*b. Site plans shall be submitted to the State Natural Heritage Program by the County.*

*(1) The State Heritage staff will review the site plan and their field survey records.*

*(2) The State Heritage Office will identify the precise location of the affected plants and delineate a 200 foot buffer zone on the project applicant's site plan.*

*(3) If the field survey records of the state heritage program are inadequate, the project applicant shall hire a person with recognized expertise in botany or plant ecology to ascertain the precise location of the affected plants.*

- c. *The rare plant protection process may conclude if the local government, in consultation with the State Heritage Program, determines that the proposed use would be located outside of a sensitive plant buffer zone.*

**Finding:** Consistent with this rule, a survey was prepared by the applicant and shared by County Staff to the State Natural Heritage Program (ORBIC). The state natural heritage program manager said she was comfortable with the materials provided by the applicant and did not have any concerns. The rare plant protection process may conclude, consistent with (c). Please see Finding 60 above for more detail.

67. Section 14.600(D)(3)(d) states: “New uses shall be prohibited within sensitive plant species buffer zones, except for those uses that are allowed outright.”

**Finding:** Consistent with past practice and regional implementation of the *Management Plan*, alterations, modifications, and expansion of existing uses are not considered “new” uses. The proposed expansion will impact sensitive plants however, and is subject to resource protection requirements contained throughout this document. Staff concludes that with conditions of approval to ensure resource impacts are prevented to the maximum extent practicable and mitigated where necessary, the proposed development will not have an adverse effect to sensitive plants in the GMA.

68. Section 14.600(D)(3)(e) states that if a use must be allowed within a sensitive plant buffer zone, then the applicant shall comply with Chapter 6 Variances, and prepare a protection and rehabilitation plan that complies with (D)(7) below.

**Finding:** Variance requests made by the applicant are addressed above on page 35. Consistent with this requirement, the applicant prepared a protection and rehabilitation plan that complies with (D)(7). The plans were reviewed by ORBIC and confirmed to be effective for resource protection in the GMA.

69. Similar to Section 14.600(D)(2)(d) above, Section 14.600(D)(3)(f) requires the County to provide a copy of all field surveys and protection and rehabilitation plans to ORBIC for review, and based on that consultation, make a final decision as to whether the proposed use would be consistent with the rare plant protection policies and guidelines. As noted above in more detail, staff recommends the proposed development is consistent with rare plant protection requirements in the GMA.

70. Consistent with Section 14.600(4), site plans and field surveys were prepared in a manner consistent with the requirements of the NSALUDO.

71. Consistent with Section 14.600(5), protection and rehabilitation plans were prepared in a manner consistent with the requirements of this section, which states:

*Protection and rehabilitation plans shall minimize and offset unavoidable impacts that result from a new use that occurs within a sensitive plant buffer zone as the result of a variance granted according to Chapter 6. All plans shall meet the following guidelines:*

- a. *Protection and rehabilitation plans shall be prepared by a professional botanist or plant ecologist.*
- b. *The primary responsibility and cost of preparing protection and rehabilitation plans shall be borne by the applicant. Recognizing the limited number of situations in which an applicant will be forced to locate within a sensitive plant buffer area, the Forest Service has agreed to provide assistance in the preparation of these plans, to the greatest extent possible.*
- c. *Construction, protection, and rehabilitation activities shall occur during the time of the year when ground disturbance will be minimized and protection, rehabilitation, and replacement efforts will be maximized.*
- d. *Sensitive plants that will be destroyed shall be transplanted or replaced to the maximum extent practicable.*
  - (1) *Replacement is used here to mean the establishment of a particular plant species in areas of suitable habitat not affected by new uses.*
  - (2) *Replacement may be accomplished by seeds, cuttings, or other appropriate methods.*
  - (3) *Replacement shall occur as close to the original plant site as practicable.*
  - (4) *The project applicant shall ensure that at least 75 percent of the replacement plants survive three years after the date they are planted.*
- e. *Sensitive plants and their surrounding habitat that will not be altered or destroyed shall be protected and maintained. Appropriate protection and maintenance techniques shall be applied, such as fencing, conservation buffers, livestock management, and noxious weed control.*
- f. *Habitat of a sensitive plant that will be affected by temporary uses shall be rehabilitated to a natural condition.*
- g. *Protection efforts shall be implemented before construction activities begin. Rehabilitation efforts shall be implemented immediately after the plants and their surrounding habitat are disturbed.*
- h. *Protection and rehabilitation plans shall include maps, photographs, and text. The text shall:*
  - (1) *Describe the biology of sensitive plant species that will be affected by a proposed use.*
  - (2) *Explain the techniques that will be used to protect sensitive plants and their surrounding habitat that will not be altered or destroyed.*

- (3) *Describe the rehabilitation and enhancement actions that will minimize and offset the impacts that will result from a proposed use.*
- (4) *Include a 3-year monitoring, maintenance, and replacement program. The project applicant shall prepare and submit to the local government an annual report that documents milestones, successes, problems, and contingency actions.*

The application provides the following response (see page 5-91):

*“All efforts will be made to avoid disturbance to special-status species and priority habitats. Where disturbance cannot be avoided, efforts will be employed to minimize disturbance to the maximum extent practicable. The proposed project will require construction within the sensitive plant buffer zones within the GMA. UPRR completed a Special-status Species Plant Survey and Habitat Mapping Report (see Appendix J) which includes field surveys covering all areas affected by the proposed project. Field surveys were conducted by a professional wildlife biologist hired by the project applicant. All sensitive wildlife areas and sites discovered in the project area are described and shown on the site plan map (Appendix J).*

*Accordingly, UPRR prepared a Sensitive Species and Wildlife Habitat Protection and Rehabilitation Plan to address unavoidable impact to special-status plant species and their buffer zones, as well as priority habitats (see Section 8 of Appendix K to this application narrative). The Sensitive Species and Wildlife Habitat Protection and Rehabilitation Plan was prepared by a professional botanist and specifically addresses the provisions included in NSA-LUDO Section 14.600(D)(5)(a-h). The proposed project will avoid and/or minimize impacts to special-status plant species or habitats as follows:*

- *Avoid areas of identified special-status plant populations, priority habitats, and sensitive wildlife and plant areas to the maximum extent practicable.*
- *Implement micrositing slight relocations of proposed project facilities to avoid special-status plant populations or habitats if practicable.*
- *Remove and conserve plants that will be directly affected; replant following construction (see Rehabilitation below)*
- *Implement weed control procedures to prevent spread of noxious weeds to native plant habitats.*

*The purpose of the rehabilitation activities is to revegetate areas of temporary disturbance, enhance altered or degraded plant and wildlife habitat, re-establish populations of special-status plant species, and offset unavoidable impacts that result from project construction activities within sensitive plant buffer zones. Rehabilitation measures include seeding of all areas of temporary disturbance, planting of trees and shrubs for re-establishment of temporarily disturbed priority habitats and sensitive wildlife and plant habitats, replanting of special-status plant*

*species removed for construction, and enhancement of existing vegetation communities within or immediately adjacent to the proposed project to compensate for loss of trees or priority habitats.*

*The following methods will be used for all areas of temporary ground and/or vegetation disturbance throughout the project area:*

- Removal of woody vegetation shall be the minimum necessary to achieve the project purposes. Trees that are removed will be replaced with planted stock of the same or equivalent species on a 1 for 1 basis and planted according to supplier specifications.*
- Large downed wood will be stockpiled onsite and distributed throughout restoration and enhancement area upon completion of construction.*
- Restoration areas will be maintained and monitored as stipulated in the monitoring and maintenance plans for the project to meet success criteria of 80% survival of planted species, and 80% cover of all disturbed soils.*

*In addition, Section 8 the Sensitive Species and Wildlife Habitat Protection and Rehabilitation Plan provides specific methods for seeding, seed planting methods, and habitat restoration and enhancement planting which includes guidance for site preparation, planting schedules, maintenance, tree and shrub planting, special-status plant species relocation, and erosion control.*

*Section 11 of the Sensitive Species and Wildlife Habitat Protection and Rehabilitation Plan provides a specific maintenance and monitoring program to guide rehabilitation and enhancement actions that will be conducted for a period of 3 years in affected project areas following final installation by a qualified botanist. Therefore, the project complies with the applicable provisions of NSA-LUDO Section 14.600(D)(5)."*

## **Wildlife and Plants (SMA)**

72. Section 14.610(B) provides resource protection requirements for sensitive wildlife and plants in the SMA. Section (B)(1) provides the following purpose statement:
- a. Protect (ensure that new uses do not adversely affect, including cumulative effects) and enhance the wildlife and plant diversity of the Gorge.*
  - b. Encourage the protection of plant species that are classified as "List 3 (Review)" or "List 4 (Watch)" by the Oregon Natural Heritage Program.*
  - c. Ensure that new uses do not adversely affect natural areas that are potentially eligible for the Oregon Register of Natural Heritage Resources.*

**Finding:** The application provided the following statement in response to (B)(1): "UPRR is committed to ensuring that the project does not adversely affect natural areas that are

potentially eligible for the Oregon Register of Natural Heritage Resources. UPRR prepared a Special-status Species Plant Survey and Habitat Mapping Report (see Appendix K) and a Sensitive Species and Wildlife Habitat Protection and Rehabilitation Plan (see Appendix J) to identify and enhance the wildlife and plant diversity of the Gorge within the project area. These plans were developed to ensure that new uses do not adversely affect natural areas that are potentially eligible for the Oregon Register of Natural Heritage Resources..." (Page 5-97)

Consistency with the purposes of this chapter is discussed below.

73. Section 14.610(B)(2) contains provisions for all new development within 1,000 feet of sensitive wildlife and plants, it states:

*All new developments and uses, as described in a site plan prepared by the applicant, shall be evaluated using the following guidelines to ensure that natural resources are protected from adverse effects. Comments from state and federal agencies shall be carefully considered.*

- g. Protection of sensitive wildlife/plant areas and sites shall begin when proposed new developments or uses are within 1000 ft of a sensitive wildlife/plant site and/or area.*

*Sensitive Wildlife Areas and endemic plants are those areas depicted in the wildlife inventory and listed in the Priority Habitats Table below, including all Priority Habitats listed in this Chapter. The approximate locations of sensitive wildlife and/or plant areas and sites are shown in the wildlife and rare plant inventory.*

**Finding:** The proposed development was determined by Staff to be a large-scale use and thus required biological surveys as part of a complete application. The surveys were prepared to comply with the requirements of the NSALUDO and delineate the existence of sensitive wildlife and plant sites and areas, as well as priority habitats shown in the table below. According to Appendix J: Plant Survey and Habitat mapping Report, the survey determined the project would occur in seven SMA priority habitats, including: Oregon White Oak, Riparian, Wetlands, Snags and Logs, Talus, Cliffs, and Dunes. The field survey confirmed the presence of three sensitive plants within or adjacent to the development site as well as the presence of deer and elk winter habitat, turkey habitat, and waterfowl areas.

- b. The County shall submit site plans (of uses that are proposed within 1,000 feet of a sensitive wildlife and/or plant area or site) for review to the Forest Service and Oregon Department of Fish and Wildlife and Oregon Natural Heritage Program for plant issues.*
- c. The Forest Service wildlife biologists and/or botanists, in consultation with the appropriate state biologists, shall review the site plan and their field survey records. They shall:*

*(1) Identify/verify the precise location of the wildlife and/or plant area or site,*

- (2) *Determine if a field survey will be required,*
- (2) [3] *Determine, based on the biology and habitat requirements of the affected wildlife/plant species, if the proposed use would compromise the integrity and function of or result in adverse affects (including cumulative effects) to the wildlife or plant area or site. This would include considering the time of year when wildlife or plant species are sensitive to disturbance, such as nesting, rearing seasons, or flowering season, and*
- (4) *Delineate the undisturbed 200 ft buffer on the site plan for sensitive plants and/or the appropriate buffer for sensitive wildlife areas or sites, including nesting, roosting and perching sites.*
- (a) *Buffer zones can be reconfigured if a project applicant demonstrates all of the following:*
- i. the integrity and function of the buffer zones is maintained,*
  - ii. the total buffer area on the development proposal is not decreased,*
  - iii. the width reduction shall not occur within another buffer, and*
  - iv. the buffer zone width is not reduced more than 50% at any particular location. Such features as intervening topography, vegetation, man made features, natural plant or wildlife habitat boundaries, and flood plain characteristics could be considered.*
- (b) *Requests to reduce buffer zones shall be considered if an appropriate professional (botanist, plant ecologist, wildlife biologist, or hydrologist), hired by the project applicant,*
- i. identifies the precise location of the sensitive wildlife/plant or water resource,*
  - ii. describes the biology of the sensitive wildlife/plant or hydrologic condition of the water resource, and*
  - iii. demonstrates that the proposed use will not have any negative effects, either direct or indirect, on the affected wildlife/plant and their surrounding habitat that is vital to their long-term survival or water resource and its long term function.*
- (c) *The County shall submit all requests to re-configure sensitive wildlife/plant or water resource buffers to the Forest Service and the appropriate state agencies for review. All written comments shall be included in the record of application and based on the comments from the state and federal agencies, the County will make a final decision on whether the reduced buffer zone is justified. If the final decision*

*contradicts the comments submitted by the federal and state agencies, the County shall justify how it reached an opposing conclusion.*

- d. The County, in consultation with the State and federal wildlife biologists and/or botanists, shall use the following criteria in reviewing and evaluating the site plan to ensure that the proposed developments or uses do not compromise the integrity and function of or result in adverse affects to the wildlife or plant area or site:*
- (1) Published guidelines regarding the protection and management of the affected wildlife/plant species. Examples include: the Oregon Department of Forestry has prepared technical papers that include management guidelines for osprey and great blue heron; the Washington Department of Wildlife has prepared similar guidelines for a variety of species, including the western pond turtle, the peregrine falcon, and the Larch Mountain salamander (Rodrick and Milner 1991).*
  - (2) Physical characteristics of the subject parcel and vicinity, including topography and vegetation.*
  - (3) Historic, current, and proposed uses in the vicinity of the sensitive wildlife/plant area or site.*
  - (4) Existing condition of the wildlife/plant area or site and the surrounding habitat and the useful life of the area or site.*
  - (5) In areas of winter range, habitat components, such as forage, and thermal cover, important to the viability of the wildlife must be maintained or, if impacts are to occur, enhancement must mitigate the impacts so as to maintain overall values and function of winter range.*
  - (6) The site plan is consistent with the "Oregon Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Resources" (Oregon Department of Fish and Wildlife 2000).*
  - (7) The site plan activities coincide with periods when fish and wildlife are least sensitive to disturbance. These would include, among others, nesting and brooding periods (from nest building to fledgling of young) and those periods specified.*
  - (8) The site plan illustrates that new developments and uses, including bridges, culverts, and utility corridors, shall not interfere with fish and wildlife passage.*
  - (9) Maintain, protect, and enhance the integrity and function of Priority Habitats (such as old growth forests, talus slopes, and oak woodlands) as listed on the following Priority Habitats Table. This includes maintaining structural, species, and age diversity, maintaining connectivity within and*

*between plant communities, and ensuring that cumulative impacts are considered in documenting integrity and function.*

- e. *The wildlife/plant protection process may terminate if the County, in consultation with the Forest Service and state wildlife agency or Heritage program, determines*
  - (1) *the sensitive wildlife area or site is not active, or*
  - (2) *the proposed use is not within the buffer zones and would not compromise the integrity of the wildlife/plant area or site, and*
  - (3) *the proposed use is within the buffer and could be easily moved out of the buffer by simply modifying the project proposal (site plan modifications). If the project applicant accepts these recommendations, the local government shall incorporate them into its development review order and the wildlife/plant protection process may conclude.*
- f. *If the above measures fail to eliminate the adverse affects, the proposed project shall be prohibited, unless the project applicant can meet the Practicable Alternative Test in D below, and prepare a Mitigation Plan pursuant to E below to offset the adverse effects by deliberate restoration and enhancement.*
- g. *The County shall submit a copy of all field surveys (if completed) and mitigation plans to the Forest Service and appropriate state agencies. The County shall include all comments in the record of application and address any written comments submitted by the state and federal wildlife agency/heritage programs in its development review order.*

*Based on the comments from the state and federal wildlife agency/heritage program, the County shall make a final decision on whether the proposed use would be consistent with the wildlife/plant policies and guidelines. If the final decision contradicts the comments submitted by the state and federal wildlife agency/heritage program, the County shall justify how it reached an opposing conclusion.*
- h. *The County shall require the project applicant to revise the mitigation plan as necessary to ensure that the proposed use would not adversely affect a sensitive wildlife/plant area or site.*

**Finding:** The applicant is seeking a variance to resource buffers protected by these rules. As noted above for GMA natural resources, field surveys and mitigation plans prepared by a qualified professional were required for completeness. Staff provided a copy of the site plans, survey documents and mitigation proposals to the Forest Service National Scenic Area Office, Oregon Department of Fish and Wildlife, and the Oregon Biodiversity Information Center on February 20, 2016.

Although ODFW and ORBIC expressed support for the proposed mitigation plans; the Forest Service provided two letters expressing concerns about natural and scenic resource impacts. On May 3, 2016, Robin Shoal wrote:

*“...This proposal includes activities and development in or near numerous sensitive wildlife and plant areas and sites and their associated buffers.*

*The proposal includes several staging areas. The largest of these staging areas is described in the application narrative as a “6.62-acre site near project MP 71.53.” Construction of this staging area would require removal of the trees on the site and grading to level the sloped terrain. This site is located in SMA Open Space, in an area of Oregon white oak woodland and mixed coniferous-deciduous habitat that contains a notable Oregon white oak component. Oregon white oak habitats are considered a Priority Habitat in the CRGNSA Management Plan. Priority habitats are considered sensitive wildlife areas. The proposed staging area is also topographically visible from several KVAs.*

*Because the project as propose would potentially result in adverse effects to sensitive wildlife and plants and their buffers, a practicable alternative test must be conducted. Avoiding adverse effects is preferred to mitigation. Mitigation is not a substitute for avoidance if a practicable alternative is available. If the County determines that there are no practicable alternatives to the uses and development proposed in and near these areas, a complete mitigation plan must be submitted to offset the adverse effects by deliberate restoration and enhancement. Impacts to sensitive wildlife and plant sites and areas and their buffers may require the establishment of off-site replacement or enhancement areas, as close to the original as possible.*

*The mitigation plan submitted by UPRR relies on revegetation of disturbed sites rather than proposing deliberate restoration and enhancement to offset project impacts. Revegetation of disturbed sites is separately required by other Management Plan guidelines. County staff must determine whether there are practicable alternatives for the components of the project that impact sensitive sites and buffers, including alternative locations for the proposed staging areas. Any mitigation plan must sufficiently offset the impacts of the proposed uses and development.”*

In a May 11, 2016 email, Robin Shoal states:

*“Here is some additional input regarding the UPRR proposal and mitigation for the proposed 6.62 acres of staging area west of Memaloose Park, and for disturbance to other sensitive plant sites and their buffers.*

*The area proposed for staging is currently good quality, relatively undisturbed Oregon white oak woodland in SMA Open Space. Oregon white oak woodland is identified as both a priority habitat and as sensitive wildlife habitat in the Management Plan. Disturbance in this habitat type is long-term, and the habitat currently on the site has been present for many decades. There needs to be*

*extremely strong rationale for clearing and grading in this location. Avoidance of the adverse effects of clearing and grading is definitely preferred to mitigation. One alternative would be to limit the grading and staging area to the area at track miles 71.7-71.8, which is already disturbed and has good access. Use of this area instead would also avoid adverse effects to the scenic resource associated with the currently proposed staging area.*

*Compared with some other habitat types, when oaks are removed the mitigation requirements are much more complicated because it takes so long for the oak habitat to regenerate (up to four decades for an oak to begin producing acorns). A mitigation ratio of 8:1 has been required to offset impacts to Oregon white oak woodlands. Each acre of clearing and grading would require either long-term protection of eight acres of equivalent white oak habitat, mitigation planting of eight acres of oak habitat, or a combination of those. Planting would also entail monitoring for four or more years to ensure survival.*

*In the mitigation plan that accompanies the application, the primary mitigation proposed for sensitive plant sites in general appears to be revegetation of the disturbed sites, and does not include mitigation for entering the 200-foot buffers. A complete mitigation plan should identify additional enhancement sites to mitigate for disturbance to sensitive plant sites and their buffers.”*

The applicant states there is no practicable alternative, and has provided information to verify the proposed development is reliant upon the existing railroad corridor through the Columbia River Gorge, and the location within the Gorge, based on the safe spacing distances of double mainlines required throughout the larger railroad framework. Staff agrees the proposed development is the preferred alternative from the Alternatives Analysis prepared by the applicant, and that it will have the least impacts to natural resources.

Staff also agrees with the Forest Service recommendations that the 6.62-acre temporary landing zone and construction area near project MP 71.53 in SMA Open Space would have an adverse effect on natural resources and should be denied. The quality of habitat in this location is unique and would be very difficult to mitigate for natural resources and scenic resources.

Based on this information and the findings above for GMA impacts, staff recommends denying the 6.62 acre landing zone in SMA Open Space and requiring the proposed mitigation and rehabilitation for all other disturbances and impacts associated with the proposed development.

74. Section 14.610(C) protects soil productivity in the SMA, it states:

*Soil productivity shall be protected using the following criteria:*

- 1. A description or illustration showing the mitigation measures to control soil erosion and stream sedimentation.*
- 2. New developments and land uses shall control all soil movement within the area shown on the site plan.*

3. *The soil area disturbed by new development or land uses, except for new cultivation, shall not exceed 15 percent of the project area.*
4. *Within 1 year of project completion, 80 percent of the project area with surface disturbance shall be established with effective native ground cover species or other soil-stabilizing methods to prevent soil erosion until the area has 80 percent vegetative cover.*

**Finding:** The application has provided the following response on page 5-102 of the narrative: “The proposed project includes infrastructure improvements to an existing railroad track, and is not considered a new development or land use. As described in Section 4.2.5.5, UPRR will implement a variety of BMPs and mitigation measures as part of the project in order to maintain soil productivity, and control soil erosion and stormwater impacts. These measures will include but not be limited to revegetation of the temporarily disturbed project area following construction, erosion control measures from the Construction Stormwater Best Management Practices Manual published by the ODEQ, and BMPs implemented in accordance with state and federal permit requirements. Therefore, the project complies with these provisions.”

Staff finds the proposed development to be an expansion of an existing use, and not a “new” development; (2) and (3) are not applicable. Consistent with (1) the application includes a detailed grading plan, site plans showing disturbance areas, and a description of best management practices to minimize risk of erosion and sedimentation. The rehabilitation and mitigation plans provided the application address revegetation of disturbed soils; a condition of approval is included to ensure revegetation occurs as quickly as possible and will be monitored for five years following implementation. With conditions, staff finds the proposed development to be consistent with the soils productivity requirements.

75. Section 14.610(E) requires mitigation plans to be prepared when a proposed uses is within a buffer zone of a sensitive resource, or there in no practicable alternative according to (D) below, Practicable Alternative Test. It states:

1. *Mitigation Plan shall be prepared when:*
  - a. *The proposed development or use is within a buffer zone (wetland, pond, lakes, riparian areas, wildlife or plant areas and/or sites)*
  - b. *There is no practicable alternative according to D below, Practicable Alternative Test.*
2. *In all cases, Mitigation Plans are the responsibility of the applicant and shall be prepared by an appropriate professional (botanist/ecologist for plant sites, a wildlife/fish biologist for wildlife/fish sites, and a qualified professional for water resource sites).*
3. *The primary purpose of this information is to provide a basis for the project applicant to redesign the proposed use in a manner that protects sensitive water resources, and wildlife/plant areas and sites, that maximizes his/her development options, and that mitigates, through restoration, enhancement,*

*and replacement measures, impacts to the water resources and/or wildlife/plant area or site and/or buffer zones.*

4. *The applicant shall submit the mitigation plan to the County. The County shall submit a copy of the mitigation plan to the Forest Service, and appropriate state agencies. If the final decision contradicts the comments submitted by the state and federal wildlife agency/heritage program, the County shall justify how it reached an opposing conclusion.*
5. *A project applicant shall demonstrate sufficient fiscal, technical, and administrative competence to successfully execute a mitigation plan involving wetland creation.*
6. *Mitigation plans shall include maps, photographs, and text. The text shall:*
  - a. *Describe the biology and/or function of the sensitive resources (eg. Wildlife/plant species, or wetland) that will be affected by a proposed use. An ecological assessment of the sensitive resource to be altered or destroyed and the condition of the resource that will result after restoration will be required. Reference published protection and management guidelines.*
  - b. *Describe the physical characteristics of the subject parcel, past, present, and future uses, and the past, present, and future potential impacts to the sensitive resources. Include the size, scope, configuration, or density of new uses being proposed within the buffer zone.*
  - c. *Explain the techniques that will be used to protect the sensitive resources and their surrounding habitat that will not be altered or destroyed (for examples, delineation of core habitat of the sensitive wildlife/plant species and key components that are essential to maintain the long-term use and integrity of the wildlife/plant area or site).*
  - d. *Show how restoration, enhancement, and replacement (creation) measures will be applied to ensure that the proposed use results in minimum feasible impacts to sensitive resources, their buffer zones, and associated habitats.*
  - e. *Show how the proposed restoration, enhancement, or replacement (creation) mitigation measures are NOT alternatives to avoidance. A proposed development/use must first avoid a sensitive resource, and only if this is not possible should restoration, enhancement, or creation be considered as mitigation. In reviewing mitigation plans, the County, appropriate state agencies, and Forest Service shall critically examine all proposals to ensure that they are indeed last resort options.*
7. *At a minimum, a project applicant shall provide to the County a progress report every 3-years that documents milestones, successes, problems, and contingency actions. Photographic monitoring stations shall be established and photographs shall be used to monitor all mitigation progress.*

8. *A final monitoring report shall be submitted to the County for review upon completion of the restoration, enhancement, or replacement activity. This monitoring report shall document successes, problems encountered, resource recovery, status of any sensitive wildlife/plant species and shall demonstrate the success of restoration and/or enhancement actions. The County shall submit copies of the monitoring report to the Forest Service; who shall offer technical assistance to the County in helping to evaluate the completion of the mitigation plan. In instances where restoration and enhancement efforts have failed, the monitoring process shall be extended until the applicant satisfies the restoration and enhancement guidelines.*
9. *Mitigation measures to offset impacts to resources and/or buffers shall result in no net loss of water quality, natural drainage, fish/wildlife/plant habitat, and water resources by addressing the following:*
  - a. *Restoration and enhancement efforts shall be completed no later than one year after the sensitive resource or buffer zone has been altered or destroyed, or as soon thereafter as is practicable.*
  - b. *All natural vegetation within the buffer zone shall be retained to the greatest extent practicable. Appropriate protection and maintenance techniques shall be applied, such as fencing, conservation buffers, livestock management, and noxious weed control. Within five years, at least 75 percent of the replacement vegetation must survive. All plantings must be with native plant species that replicate the original vegetation community.*
  - c. *Habitat that will be affected by either temporary or permanent uses shall be rehabilitated to a natural condition. Habitat shall be replicated in composition, structure, and function, including tree, shrub and herbaceous species, snags, pool-riffle ratios, substrata, and structures, such as large woody debris and boulders.*
  - d. *If this standard is not feasible or practical because of technical constraints, a sensitive resource of equal or greater benefit may be substituted, provided that no net loss of sensitive resource functions occurs and provided the County, in consultation with the appropriate State and Federal agency, determine that such substitution is justified.*
  - e. *Sensitive plants that will be destroyed shall be transplanted or replaced, to the maximum extent practicable. Replacement is used here to mean the establishment of a particular plant species in areas of suitable habitat not affected by new uses. Replacement may be accomplished by seeds, cuttings, or other appropriate methods.*

*Replacement shall occur as close to the original plant site as practicable. The project applicant shall ensure that at least 75 percent of the replacement plants survive 3 years after the date they are planted*

- f. *Nonstructural controls and natural processes shall be used to the greatest extent practicable.*
- (1) Bridges, roads, pipeline and utility corridors, and other water crossings shall be minimized and should serve multiple purposes and properties.*
  - (2) Stream channels shall not be placed in culverts unless absolutely necessary for property access. Bridges are preferred for water crossings to reduce disruption to hydrologic and biologic functions. Culverts shall only be permitted if there are no practicable alternatives as demonstrated by the 'Practical Alternative Test'.*
  - (3) Fish passage shall be protected from obstruction.*
  - (4) Restoration of fish passage should occur wherever possible.*
  - (5) Show location and nature of temporary and permanent control measures that shall be applied to minimize erosion and sedimentation when riparian areas are disturbed, including slope netting, berms and ditches, tree protection, sediment barriers, infiltration systems, and culverts.*
  - (6) Groundwater and surface water quality will not be degraded by the proposed use. Natural hydrologic conditions shall be maintained, restored, or enhanced in such a manner that replicates natural conditions, including current patterns (circulation, velocity, volume, and normal water fluctuation), natural stream channel and shoreline dimensions and materials, including slope, depth, width, length, cross-sectional profile, and gradient.*
  - (7) Those portions of a proposed use that are not water-dependent or that have a practicable alternative will be located outside of stream, pond, and lake buffer zones.*
  - (8) Streambank and shoreline stability shall be maintained or restored with natural revegetation.*
  - (9) The size of restored, enhanced, and replacement (creation) wetlands shall equal or exceed the following ratios. The first number specifies the required acreage of replacement wetlands, and the second number specifies the acreage of wetlands altered or destroyed.*

*Restoration: 2: 1*

*Creation: 3: 1*

*Enhancement: 4: 1*

- g. Wetland creation mitigation shall be deemed complete when the wetland is self-functioning for 5 consecutive years. Self-functioning is defined by the expected function of the wetland as written in the mitigation plan. The monitoring report shall be submitted to the County to ensure compliance. The Forest Service, in consultation with appropriate state agencies, shall extend technical assistance to the County to help evaluate such reports and any subsequent activities associated with compliance.*
- h. Wetland restoration/enhancement can be mitigated successfully by donating appropriate funds to a non-profit wetland conservancy or land trust with explicit instructions that those funds are to be used specifically to purchase protection easements or fee title protection of appropriate wetlands acreage in or adjacent to the Columbia River Gorge meeting the ratios given above in (f)(9) above. These transactions shall be explained in detail in the Mitigation Plan and shall be fully monitored and documented in the monitoring report.*

**Finding:** As noted throughout this report, professionally prepared delineations, rehabilitation and mitigation plans were provided following extensive resource surveys for plants, wildlife and critical habitat areas. The reports were prepared in accordance with the methodology and inventories required above. Because the same plan addresses impacts in the GMA as well, and the GMA wetland mitigation requirements include a five year monitoring requirement, a condition of approval is included to ensure the entire project is monitored for mitigation success for five years. A condition of approval is also included to prohibit the development proposed for the 6.62 acre landing zone in SMA Open Space. This prohibition is necessary to prevent adverse effects to sensitive natural resources, consistent with this chapter.

#### **No Practicable Alternative Test – GMA and SMA**

76. Section 14.600(E) and Section 14.610(D) (same text in both) require all new development with potential impacts to sensitive resource sites and buffers to comply with the no practicable alternative test. It states:

*An alternative site for a proposed use shall be considered practicable if it is available and the proposed use can be undertaken on that site after taking into consideration cost, technology, logistics, and overall project purposes.*

*A practicable alternative does not exist if a project applicant satisfactorily demonstrates all of the following:*

- 1. The basic purpose of the use cannot be reasonably accomplished using one or more other sites in the vicinity that would avoid or result in less adverse effects on wetlands, streams, ponds, lakes, riparian areas, wildlife, or plant areas and sites; and*
- 2. The basic purpose of the use cannot be reasonably accomplished by reducing its size, scope, configuration, or density as proposed, or by changing the design of*

*the use in a way that would avoid or result in less adverse effects on wetlands, streams, ponds, lakes, riparian areas, wildlife or plant areas and sites.; and*

*Reasonable attempts were made to remove or accommodate constraints that caused a project applicant to reject alternatives to the use as proposed. Such constraints include inadequate infrastructure, parcel size, and land use designations. If a land use designation or recreation intensity class is a constraint, an applicant must request a management plan amendment to demonstrate that practicable alternatives do not exist.*

**Finding:** The application narrative provides sufficient information to confirm there is no practicable alternative to the location, length or width of the proposed track development. It states that the track expansion is reliant on the location of the existing railroad and Columbia River Gorge as it travels through the Cascade Mountains at the only available at-grade crossing. The applicant also provided information about the Mosier area location, citing that due to the distances between other existing sidings and double tracks, and the industry standard length of trains, there is no other location that would be able to meet their project goals. An Alternatives Analysis was prepared and identified the proposed development as the preferred alternative that minimizes impacts to sensitive resources. The Alternatives Analysis provides information about the specific design precautions that have been taken to further reduce the rail footprint and construction areas, including reducing the centerline offset from 20 to 15 feet, minimizing embankment design, and reducing access roads and associated drainage ditches. Based on the application materials, staff concludes there is no other practicable alternative due to geographic and topographic constraints that could not be accommodated without additional resource impacts. Staff finds the proposed development to be consistent with this requirement.

77. Section 14.600(F) includes the Public Interest Test. All uses in the GMA that may impact sensitive resources are required to comply, it states:

*F. Public Interest Test*

*The following factors shall be considered when determining if a proposed use is in the public interest:*

- 1. The extent of public need for the proposed use.*
- 2. The extent and permanence of beneficial or detrimental effects that the proposed use may have on the public and private uses for which the property is suited.*
- 3. The functions and size of the wetland, stream, pond, lake, or riparian area that may be affected.*
- 4. The economic value of the proposed use to the general area.*

*The ecological value of the wetland, stream, pond, lake, or riparian area and probable effect on public health and safety, fish, plants, and wildlife.*

**Finding:** On page 5-93 of the application narrative, the application provides the following response to this requirement:

*“The proposed project serves a major public interest and satisfies the Public Interest Test included in the NSA-LUDO. UPRR currently moves a wide array of commodities through Oregon that support the regional and local economies. Grain, automobiles, lumber, cement, apparel and consumer electronics are commonly moved through this corridor. UPRR has been handling this traffic mix for years and plans to continue moving a similar product mix in the future. UPRR has typically moved 20 to 25 trains a day through this area; with seasonal increases of shipments in commodities such as grains resulting in upwards of 30 trains using the corridor over the period of a month. Oregon is a critical part of UPRR’s service to customers. UPRR has invested more than \$1 billion in the state in the last 10 years to improve its rail yards and enhance railroad track, strengthening the reliability of Oregon’s transportation infrastructure. The project is required to support the needs of UPRR’s current customers throughout the state and region and will eliminate one of its most significant operational bottleneck in the Pacific Northwest.*

*In addition, the proposed second mainline track would reduce the need for trains idling near the City of Mosier. Converting the existing Mosier Siding to mainline track in this way would have the secondary effect of reducing noise and idling emissions near the City of Mosier. Trains idling on the existing siding also pose a potential safety hazard because the public often perceives an idling train as stationed at a siding for an extended period of time. This results in increased occurrences of high-risk pedestrian and vehicle crossings in front of active trains at siding locations relative to trains moving at standard operating speed along the adjacent mainline track. In addition, unauthorized pedestrian crossings between rail cars, train boarding, and vandalism are more common at siding locations in general. Operating fewer and longer trains reduces safety risks associated with collisions at pedestrian or vehicle crossing locations because longer trains present fewer occurrences of a train passing through a particular portion of a route. Accordingly, the economic and safety-related public benefits of the project outweigh the associated disturbance to aquatic and other resources. As discussed throughout this narrative and supported by the attached Mitigation Plan (Appendix D) and Sensitive Species and Wildlife Habitat Protection and Rehabilitation Plan (Appendix K), UPRR proposes to avoid, minimize and mitigate for unavoidable disturbance resulting from the proposed project.*

*Therefore, the project meets the public interest test required by NSA-LUDO Section 14.600(F).*

**Finding:** The UPRR line is one of two railroads that pass through the length of the Columbia River Gorge. As the only sea level passage through the Cascade Mountain Range, the Gorge is a hub of large-scale infrastructure that includes an interstate, five state highways, commercial barge traffic, two significant hydroelectric dams, three bi-

state bridges, and more. Staff recognizes the significance of these infrastructure elements and the maintenance and changes necessary overtime to ensure safe operations and ability to meet the public needs. Functional and well maintain infrastructure is an integral component of a resilient community – on any scale. The public does not have ability to use the UPRR trains for passenger rail services, but does currently benefit in some forms from commodities shipped by rail to Portland and then re-distributed locally by truck. The applicant states that the proposed development will not result in a change to number of trains, but that it could allow for fewer, longer trains operating more efficiently. The applicant also states that the project would benefit residents with a noise reduction by reducing the number of idling trains and the sound of trains stopping or starting in communities throughout the Gorge.

In this evaluation, it is important to note that more than one thousand public comments were received citing concerns about the impacts of increased coal and oil transport that could result from the proposed development in the Mosier community, the Columbia River Gorge National Scenic Area, and the Pacific Northwest. According to the application materials, UPRR currently carries mixed freight commodities driven by commerce demands and the requirements of the Federal Railroad Association. UPRR also states that the proposed development is not intended to increase the carrying of any one commodity. The application states that the development will not substantially result in an increase to the number of trains, the speed of trains or the length of trains and that they will continue to operate within their current volume, just more efficiently and more safely. ~~Staff recommends a condition of approval that ensures this outcome by requiring UPRR to stay within the existing range of 20 to 30 trains per day. Staff~~ recognizes that the NSALUDO cannot regulate what is being carried on a train, but recommends a condition of approval to address how dangerous materials are carried through our communities. To address this, staff recommends a condition of approval that requires UPRR to adhere to the FRA safety standards ~~(including any safety improvements that are optional).~~

A condition is included to eliminate the largest disturbance to SMA Open Space Priority Habitat - high functioning habitat - and to ensure all other impacts to lesser functioning and impacted wetlands are mitigated as described in the rehabilitation and mitigation plans.

The economic value to the region (general area) is difficult to quantify because the proposed development expands something that is already present. The applicant provided information to demonstrate that significant financial investments have been made in Gorge communities because of the maintenance and operation of existing infrastructure and the fact that they employ a large number of Gorge residents. Alternatively, if the railroad was not able to operate more efficiently, and mixed freight continues to increase in demand, there could be an unintended consequence of more trucks on the highway, which could lead to more individual events that risk safety or require costly emergency responses.

The ecological value of the impacted wetlands are discussed above and in the application materials. With conditions of approval to require UPRR to carry all freight in the safest vessels ~~possible, to stay within the current traffic volumes,~~ and to provide

training to emergency service providers in the Gorge, Staff finds the proposed development is unlikely to change the current probable effect on public health, and safety, fish, plants and wildlife.

In sum, staff recommends several conditions of approval to ensure the development is in the best interest of the public.

### Recreation Resources SMA

78. Section 14.710 provides recreation resource guidelines and protections for the SMA. Applicable provisions are listed below:

- A. *If a standard or condition of this subsection is more restrictive than other subsections of this section, this subsection is controlling;*
- B. *New developments and land uses shall not displace existing recreational use.*
- C. *Protect recreation resources from adverse effects by evaluating new developments and land uses as proposed in the site plan. An analysis of both on- and off-site cumulative effects shall be required.*

...

- E. *Mitigation measures shall be provided to preclude adverse effects on the recreation resource.*

...

- J. *Recreation resources shall be protected by limiting development and uses as per the Recreation Intensity Classes.*

**Finding:** As proposed, the development will occur on lands owned by Oregon State Parks and managed at the Memaloose State Park and Campground. According to State Parks website, park uses include day use area, overnight camping for tents and RVs, restrooms and showers, playground, scenic overlook, and an amphitheater. The park is approximately 441 acres and was made available to the public since 1925 and was expanded in 1953.

Staff provided notice to Oregon State Parks on February 24, 2015. Following a more recent public notice, Deputy Director MG Devereaux provided formal comments on April 25, 2016. In his letter, he states:

*"In 2015, the Oregon Parks and Recreation Department (OPRD) finalized the Columbia River Gorge Management Unit Plan covering the approximately 9,500 acres of OPRD managed property in the Columbia River Gorge. This planning effort included a robust public outreach effort to identify the current and future management issues on OPRD properties. Analysis included the existing challenges of an active rail corridor. The plan identified several areas where rail traffic has an impact on recreation. These areas are:*

- *Disconnection of existing recreation opportunity from the Columbia River*
- *Noise*
- *Natural and cultural resource disruption...*

### **Disconnection**

*The railroad has been in operation longer than many of the OPRD recreation sites, and in some cases the track creates a real property barrier between developed recreation sites and access to the Columbia River. The plan notes that federal crossing standards create a significant barrier to creating at-grade crossings, creating situations where the public trespasses across the rail line in order to access the Columbia River. The current trend toward increased visitation and recreation in the Columbia River Gorge means this demand will continue to place pressure on the need to find legal, safe crossings. Public input into the state park plan identifies several general areas where crossings would be desirable, and areas where existing recreation is limited because of the barrier to access created by the track. Developing new separated grade crossings would improve recreational access to the Columbia River, relieving pressure on other sites that are quickly becoming congested.*

*OPRD has also committed to developing and maintaining the partnership with Union Pacific Railroad (UPRR) to look for other ways develop recreation opportunities, such as trail connections, to expand recreation capacity of the Gorge.*

### **Noise**

*The planning process illustrated a reality everyone who lives, works, and plays in the Gorge already understands: traffic noise—especially rail noise—is a significant challenge for visitors and park staff. It constrains recreation, especially camping, and the impact is documented in the plan as well as other media sources... See article: *When Camping Columbia Gorge It Pays to be a Little Deaf*. It is difficult to quantify a precise impact of increased noise based on the information provided by UPRR.*

*If the project results in a significant increase in train volume or increased speeds this may have additional impacts on recreational uses, especially in the overnight areas near the tracks.*

### **Resource Impacts**

*State Parks in the Columbia River Gorge often serve as recreational gateways to larger tracts of public lands and also serve as habitat corridors for wildlife. Rail and road transportation often fragments these habitat corridors. The interface between parks and rail or road corridors are often highly degraded with noxious weeds, and lower diversity of flora. Any new disturbance of these areas should take great care to remove non-native invasive weeds, and create opportunities for greater native bio-diversity.*

*The Columbia River Gorge also contains significant cultural resources. Great care should be taken to ensure that rail projects and operations do not impact cultural*

*resources. Tribal coordination regarding these potential resource impacts is an important element of resource protection.*

*The Columbia River Gorge Management Unit Plan can be found at:*

*[http://www.oregon.gov/oprd/PLANS/Pages/planning\\_gorge.aspx](http://www.oregon.gov/oprd/PLANS/Pages/planning_gorge.aspx). Specific*

*References can be found:*

- Pg 6 - Overview of railroads effects on state parks in Gorge*
- Pg 20 - RR Impact on Recreation on Gorge*
- Pg 26-27 - Historic Cultural References*
- Pg 44 - RR Impacts on Habitat connectivity*
- Pg 103 – Historic Illegal Use Addressed at Memaloose, among other places*
- Pg 104-5 - Map of potential railroad crossings to be studied in feasibility study*
- Pg 106 – Public Comment about increase in railroad traffic and potential risk, OPRD response*
- Pg 108 – Reference to UPRR partnership*
- Pg 114 – Railroad as challenge to river access*
- Pg 116 – Railroad impacts to overnight facilities (noise)*
- Pg 118 – Wyeth’s existing access over railroad as opportunity*
- Pg 119 – Memaloose river access unsafe, unfeasible as constraint*
- Pg 120 - Squally Point potential access needs to be explored*
- Pg 155 – River access strategy to explore access point feasibility in multi-agency study*
- Pg 138-139 – Railroad as barrier to increasing river access points in Gorge, and Plan for River access study*
- Pg 150, 156 – Value of potential for Railroad crossing at Rooster Rock described*
- Pg 158 – Reference to UPRR owning land near Bridal Veil*
- Pg 161 – RR Impacts on recreation at Benson*
- Pg 166 – Wyeth’s existing access over railroad as opportunity described*
- Pg 169 – Viento existing condition of at grade crossing\*
- Pg 175 – Description of Memaloose as limited for river recreation with no access*
- Pg 177 - West Mayer as having potential for increased facilities based on proximity from railroad (decreased noise), existing access to river*
- Pg 180 – East Mayer/ Squally Point, mostly limiting factors for consideration in potential development”*

**Finding:** The proposed development will not physically displace any camping or day use areas, but will have temporary impacts (noise, dust, traffic, disruption) from construction and long term impacts that may result from any increases in rail traffic. Based on this letter, and the references to additional information in the OPRD Gorge Unit Parks Plan, which includes a goal to prepare a study to improve coordination with the railroad, provide safe access where informal access continues to occur in an unsafe manner, and to enhance existing connections to park properties along the Columbia River. A condition of approval is included to ensure these concerns are addressed through a Columbia River access feasibility study. A condition of approval is also included to require UPRR to coordinate with OPRD to help mitigate noise,

safety, gate security, and impacts to overnight visitors resulting from construction activities. That may look like signage, limited hours of operation.

### **Tribal Treaty Rights GMA and SMA**

79. Section 14.800 protects Indian Tribal Treaty Rights and specifies consultation procedures for the GMA. The purpose of this chapter is to ensure the implementing plans and ordinances do not affect or modify any treaty or other rights of any Indian tribe. Section 14.810 provides Indian Tribal Treaty Rights and Consultation for the SMA.

In the GMA Section 14.800(B) describes the Tribal government notice and comment period. This provision requires notices to include enough information for the Tribal governments to evaluate possible impacts and provide comments back to staff within 20 days. Section 14.800(C) provides a 10 day consultation period to interested Tribal governments that provide substantive written comments within a timely manner. In the SMA, the Forest Service is responsible for consulting with Indian Tribal Governments at the government-to-government level.

**FINDING:** A cultural resource notice and project description was provided September 22, 2015. The project has since been re-noticed for the public hearing multiple times; notices have been sent to tribal governments March 10, 2016, April 26, 2016, June 1, 2016, June 23, 2016, and August 11, 2016.

Following the initial notice, there was a request for onsite consultation regarding cultural resources from Holly Shea of the Warm Springs Tribe, Catherine Dickson of the Confederated Tribes of the Umatilla Indian Reservation, and Nancy Nelson, Oregon State Parks and Recreation Archaeologist. Consistent with the GMA provisions, the applicant offered to meet onsite, and consistent with the SMA provisions, the Forest Service offered to participate in the onsite consultation. Through email exchanges, the request for consultation evolved into a request for more information. The additional information was provided for the cultural resource protection process and ultimately, the consultation was no longer desired. Please see Cultural above for more information.

On April 6, 2016, Staff spoke with Audie Huber, Government Affairs for the Confederated Tribes of the Umatilla Indian Reservation. Mr. Huber expressed concerns regarding treaty rights related to accessing traditional fishing ground and the safety of fishermen who will now face a possible increase in train speed and frequency. In his most recent email, he states:

*“...How much will traffic increase is based on an approximation of the railroad, and in reality will be based on the number of customers, which fluctuates. There is no upper limit to the number of trains, the only limit is the physical carrying capacity of the tracks and the logistics of getting east and westbound trains around each other. Tribal fishers need to get to the river, and for the bulk of the real estate, the railroad tracks are in the way.”*

Jeremy Wolf, Chair of the Fish and Wildlife Commission for the Confederated Tribes of the Umatilla Indian Reservation, provided comment to the U.S. Army Corps of Engineers and the Wasco County Planning Department in a letter dated May 11, 2016. Mr. Wolf's comments cite several impacts to treaty rights, including:

*“...The increased railroad traffic all along the Columbia River, particularly in Zone 6 between Bonneville and McNary Dams, will impair the Tribe's interests in the following ways: damage to Treafy [sic] resources and the ecosystems they depend on, eradication of tribal fishing areas, impeded access to tribal fishing areas and increased risks to tribal member safety, and damage and access to cultural resources...”*

80. Section 14.810 states:

*“... Section 17 (Savings Provisions of the Scenic Area Act) contains several provisions regarding the need to avoid potential effects to treaty rights. Treaty rights are defined by the Treaties of 1855 between the Congress and Indian Tribal governments. These rights are not subject to negotiation. Potential effects to treaty rights must be avoided...”*

81. Section 14.800(D) explains how the treaty rights protection process may conclude, it states:

- (1) The County will decide whether the proposed uses would affect or modify any treaty or other rights of any Indian tribe.
  - a. The final decision shall integrate findings of fact that address any substantive comments, recommendations, or concerns expressed by Indian tribal governments.*
  - b. If the final decision contradicts the comments, recommendations or concerns of Indian tribal governments, the County must justify how it reached an opposing conclusion.**
- 2. The treaty rights protection process may conclude if the County determines that the proposed uses would not affect or modify treaty or other rights of any Indian tribe. Uses that would affect or modify such rights shall be prohibited.*
- 3. A finding by the County that the proposed uses would not affect or modify treaty or other rights, or a failure of an Indian tribe to comment or consult on the proposed uses as provided in these guidelines, in no way shall be interpreted as a waiver by the Indian tribe of a claim that such uses adversely affect or modify treaty or other tribal rights.*

**Finding:** As explained above, several treaty rights concerns were raised by the Confederated Tribes of the Umatilla Indian Reservation. The concerns focused on ecosystem health in the event of a disaster, elimination of fishing access, and damage to cultural resources. Impacts to the natural environment are discussed throughout this report.

Ecosystem Health: Staff has coordinated extensively with the U.S. Army Corps of Engineers, U.S. National Marine Fisheries Service, U.S. Fish and Wildlife, U.S. Forest Service National Scenic Area Office, Oregon Fish and Wildlife, the Oregon State Water Master to evaluate the impacts to wetlands, priority habitats and sensitive wildlife and plants. Staff concludes that with conditions of approval to require the mitigation plans prepared by the applicant, and to eliminate the 6.62

acre landing zone for construction in SMA Open Space, the proposed development will not adversely affect natural resources. To address emergency response needs, Staff also recommends UPRR be required to prepare a Spill Response Plan for derailments and railroad accidents prior to commencement of construction and to provide railroad emergency response training to emergency service providers in the Gorge.

Elimination of Fishing Access: Staff visited Memaloose State Park and UPRR properties and did not see any evidence of recent fishing access or activities. Additionally, there is no public vehicle access to the waterfront. Following the site visit, Staff spoke with Audie Huber and learned that historic scaffolding not visible from the shore may be present in the vicinity of the development site. Mr. Huber also explained that the Memaloose beach is one of many traditional fishing access areas east and west of the development site that will be impacted by the proposed development. Mr. Huber is concerned that with reduced slowing and parking, the tracks will no longer afford even somewhat safe access.

As stated in (2) above, “uses that would affect or modify such rights shall be prohibited”. To address the treaty rights impacts raised by the Umatilla, staff recommends the following conditions of approval. If these conditions are not included, the use must be denied:

- ~~○ The proposed development shall not directly result in significantly increased net volume of rail traffic, including number of individual trains, length of trains, or speed of trains.~~

On September 26, 2016, the Planning Commission voted to remove this condition due to the difficulty in monitoring and enforcing rail traffic for compliance with existing staff and programs.

- UPRR shall provide two (2) safe crossings for National Scenic Area treaty tribe members: ~~one east of the project area, and one west of the project area~~ within Wasco County. The safe crossings will each include a minimum of new crossing lights and crossing arms for safety. The safe crossings must occur in locations deemed appropriate by the four treaty tribes ~~Umatilla Fish and Wildlife Commission~~. Following the appeal period, but within 45 days of the final decision, UPRR shall establish contact to begin this work. The safe crossings shall be completed within two years of the commencement of second mainline development; extensions of this timeline may be requested by the ~~CTUR~~ the tribes. Please note a subsequent review may be required depending on the scope and location of proposed safe crossings.

Cultural Resources: Cultural resource impacts are addressed by Sections 14.500 and 14.510 above.

Staff solicited feedback on the proposed conditions of approval from Mr. Huber, but did not receive formal guidance. Staff concludes that although a lack of response does not indicate approval, the proposed conditions of approval would address the treaty rights concerns expressed by the Umatilla, consistent with this Section. Given this information, the treaty rights protection process may conclude.