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**File Code:** 1900

**Date:** April 13, 2012

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The consistency review of the proposed highway realignment for the Washington State Department of Transportation (WSDOT) SR 14 Marble Road Vicinity to Belle Center Road Safety Improvement project (Marble Road project) has been completed. This is a highway safety project and as identified in the application there has been 64 accidents (2 fatalities, 45 injuries) on this ~ 0.25 miles section of roadway (MP22.6 to MP 22.9) over a 10 year period. The majority of the accidents appear to be related to the geometric layout of the highway. WSDOT completed a comprehensive No Practicable Alternative Test to minimize impacts to scenic and natural resources affected by the project and a number of significant mitigations have been incorporated into the project.

The Forest Service has submitted to the Federal Highway Administration the following stipulations as part of our Letter of Consent for approval of this project.

1. Convey a parcel of land owned by the State of Washington described as Tax Parcel # 03083600080000 to Federal ownership as compensatory mitigation for the loss of Oregon White Oak Woodland habitat on a Federal Conservation Easement (Tax Parcel # 01051900030000). This conveyance is identified in the project proposal as the Wind Mountain Preservation Site.
2. Convey to Federal ownership the portion of the Reversion Area/Abandoned Highway 14 alignment which is currently State of Washington property to Federal ownership as compensatory mitigation for the loss of Oregon White Oak Woodland habitat on a Federal Conservation Easement (Tax Parcel # 01051900030000).
3. Convey to Federal ownership any portion of Tax Parcel # 01051900030000 as acquired by WSDOT that lies between the current highway and the realigned highway that is not utilized for highway purposes. This area is to be combined with the area indicated in No. 2 above and is to be conveyed as compensatory mitigation for the loss of Oregon White Oak Woodland habitat.



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4. Repair or replace the water line crossing through a culvert under Highway 14 that serves Tax Parcels #01052000010000 and #01051700160000.
5. Plant Oregon White oaks and other native vegetation on a 12 acre site near Cape Horn as compensatory mitigation for the loss of Oregon White Oak Woodland habitat on the Federal Conservation Easement. Work will be done in accordance with specifications in the Consistency Determination.

If for any reason the above listed parcel conveyances cannot occur, replacement parcels with suitable Oregon White Oak Woodland habitat will be conveyed to the Forest Service as compensatory mitigation for the loss of Oregon White Oak Woodland habitat on a Federal Conservation Easement (Tax Parcel # 01051900030000). Selection of any replacement parcels will be by mutual agreement between the Grantee and the Forest Service.

I find that this project is consistent with the Columbia River Gorge National Scenic Area (CRGNSA) Management Plan as determined by the Forest Service pursuant to Section 14(d) of the Act, provided that it is implemented as described in the CRGNSA Consistency Determination Findings of Fact, referenced as CD-11-07-S, and the following conditions are applied:

### Scenic Resource Conditions

1. The Forest Service is requiring the incorporation of all design features, mitigations, and specifications identified in the Visual Quality Assessment Technical Memorandum of October 2011; 2012 Mitigation Plan; and NSA Application of September 2011 into all contract specifications.
2. The Forest Service is requiring that a WSDOT landscape architect be present during the final periods of excavation of the cut slopes within the realignment area to ensure an irregular, natural appearance of the final slopes. Preservation of oaks on the south side of the cut slope crest is highly encouraged.
3. Trees and shrubs shall be planted on all cleared areas as described in the Visual Quality Assessment Technical Memorandum. Trees and shrubs should be planted in groupings to reflect the natural pattern on the landscape and should be of variable sizes. Any changes to the native plants species list identified for site restoration will require the approval of the Forest Service.
4. Within five years of planting the cleared areas shall meet the performance standards identified in the Mitigation Plan performance criteria.
5. Any materials such as concrete, shotcrete or grout that are visible from SR 14 shall be of a dark earth tone color.
6. The Forest Service has requested that a small number of Douglas-fir be planted at the west end of the Reversion Area for additional screening from the Crown Point and Portland Women's Forums State Park KVAs.

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7. Signs used in this project will have the following: (A) The support structure shall be unobtrusive and have low visual impact; (B) Lettering colors with sufficient contrast to provide clear message communication and signs shall be colored to blend with their setting to the maximum extent practicable; and (C) backs of all signs shall be unobtrusive, non-reflective, and blend in with the setting.
8. Replace high visibility fencing at Cleveland Oak Mitigation Site with carsonite or wood post's, earth-tone in color, spaced every 50 feet apart.

### Cultural Conditions

9. Should any historic or prehistoric cultural resources be uncovered during project activities, the applicant shall cease work and immediately notify the CRGNSA office and the Washington Office of Archeology and Historical Preservation. The applicant will also notify the Indian Tribal governments within 24 hours if the resources are prehistoric or otherwise associated with Native American Indians.

### Natural Resource Conditions

10. The Forest Service will require that WSDOT submit for approval a list of all native plants species used in site restoration.
11. 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.
12. WSDOT will submit an annual progress report for the mitigation program. Four photographic monitoring stations will be established: Crown Point; Portland Women's Forum; and two locations showing west and east bound views on SR 14 (locations to be chosen after completion of the project).
13. A mitigation monitoring report will be used to evaluate the progress for completion of the mitigation plan. An interim monitoring report will be prepared 5 years after completion of the project. A final monitoring report will be prepared upon the 10 year anniversary of project completion.

### Other Requirements

1. Use of the Forest Service access road for vehicular access to the Cleveland Oak Mitigation Site shall be completed by December 30, 2014. After this period authorized access will be on foot.
2. The project shall be consistent with the 2005 Memorandum of Understanding between the Washington State Department of Fish and Wildlife and the USDA Forest Service, Pacific Northwest Region regarding hydraulic projects.

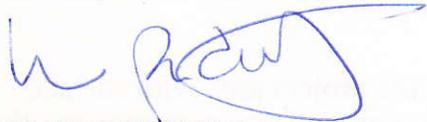
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**Implementation Date:** This project may begin immediately as long as it complies with the conditions as described in items (1-13) above. This decision expires two years after this approval on April 13, 2012. If implementation has not commenced before that date, a new consistency review or extension shall be required.

**Administrative Review Opportunities:** A written request for review of the Consistency Determination, with reasons to support the request, must be received within 20 days of the date shown with the Area Manager signature below. Requests for review should be addressed to: Request for National Scenic Area Review, Regional Forester, P.O. Box 3623, Portland, OR 97208.

**Contact Person:** The Columbia River Gorge National Scenic Area staff prepared an analysis file in conjunction with this project. For further information, contact Lynn Oliver at the Columbia River Gorge National Scenic Area, phone: (541) 308-1716, e-mail: loliver@fs.fed.us.

Sincerely,



LYNN BURDITT  
Area Manager

Enclosure: Findings of Fact

cc: Darren J. Nichols, Executive Director, Columbia River Gorge Commission  
Rick Till, Friends of the Columbia Gorge

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## FINDINGS OF FACT

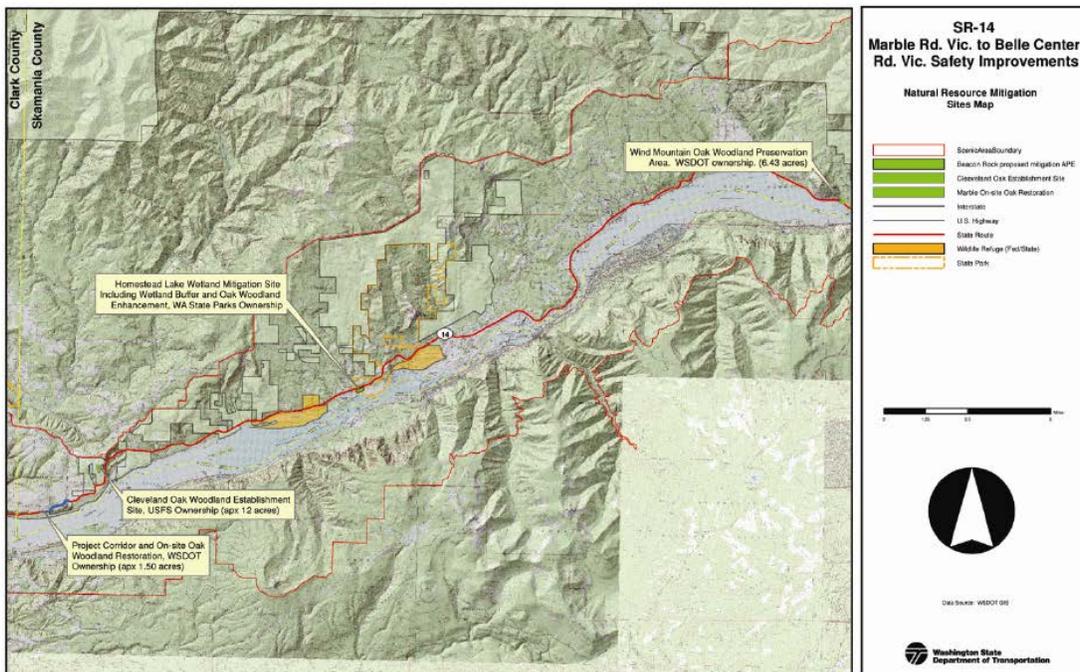
<b>LANDOWNER:</b>	Private, State, Federal, Private with Federal Conservation Easement
<b>PROPOSED ACTION:</b>	SR 14 Marble Road Vicinity to Belle Center Road Safety Improvement project
<b>LOCATION:</b>	T1N R5E Sec 17, 19, 20 Tax lot ID - #01051900030000; #01051700140000; #010517009999900; #0105090006140; #01050900081000; #010519009999900
<b>NATIONAL SCENIC AREA DESIGNATION:</b>	SMA and GMA
<b>LAND USE DESIGNATION:</b>	Agriculture, Large-Scale Agriculture, Public Recreation, Forest, Open Space
<b>LANDSCAPE SETTING</b>	Pastoral and Coniferous Woodland

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Appendix A – Natural Resource Mitigation Plan 2012 - WSDOT

Appendix B – Visual Quality Assessment Technical Memorandum (October 2011)



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### FINDINGS OF FACT

The following findings of fact contain the applicable standards and guidelines from the Management Plan for the CRGNSA. The Management Plan, as adopted in 2004 and updated in 2011, is in effect. The CRGNSA Management Plan standards and guidelines are displayed in regular type. The findings are displayed in **bold type**.

Because of the complexity of this project, mixed ownership, and because both the US Forest Service and Skamania County are completing consistency reviews, the entire project is described in total. Findings are limited to where the Forest Service has a responsibility for a consistency determination (see Section C. Land Use Designations).

#### A. PUBLIC COMMENT

A notice describing the project was sent to a mailing list of known interested parties and adjacent landowners, a period of 30 days was allowed for public comment, and the scoping period ended on November 28, 2011. Two comments were received during the public comment period. The Mt. Pleasant School District inquired on the timing of the proposed activities. The Friends of the Columbia Gorge submitted comments regarding meeting NEPA and application standards for scenic and natural resource protection.

WSDOT reviewed the proposal under the Washington State Environmental Policy Act (SEPA). The Federal Highway Administration under the National Environmental Policy Act (NEPA) completed a Documented Categorical Exclusion on April 10, 2009 for WSDOT Project XL 3172. It was updated on February 13, 2012 for the development of the compensatory mitigation sites for unavoidable adverse impacts to natural resources including Oregon White Oak and Wetlands.

The appropriate guidelines for scenic and natural resource are addressed in these findings of fact. The application materials are determined adequate for review.

## B. PROJECT PROPOSAL

The following information is taken directly from WSDOT August 9, 2011 National Scenic Area application and portions of the Natural Resource Mitigation Plan (March 2012).

### Project Location

The SR 14 Marble Road Vicinity to Belle Center Road Safety Improvement project is located along SR 14 between mileposts MP 22.60 to MP 23.70 in rural western Skamania County within the Columbia River Gorge National Scenic Area (CRGNSA). The project is located in Township 1 North, Range 5 East, Sections 17, 19, and 20. Nearby cities include Washougal and Stevenson, which are located to the west and to the east.

### General Project Details

The project is an I-2 safety project that will improve safety by reducing vehicular accidents along a section of SR 14. This section of highway is experiencing an elevated rate of vehicular accidents and is listed on the WSDOT Southwest Region's High Accident Corridor (HAC) and High Accident Location (HAL) lists from MP 22.00 to MP 23.50. In addition, an updated 2006 to 2009 Collision Analysis has been completed, confirming the need to continue with construction of the proposed design including other safety improvements. Vehicular accidents will be reduced in the project area by realigning horizontal and vertical alignments to straighten and widen the roadway as necessary addressing current accident trends.

### Project Size

This linear transportation improvement project's disturbance area is approximately 9 acres.

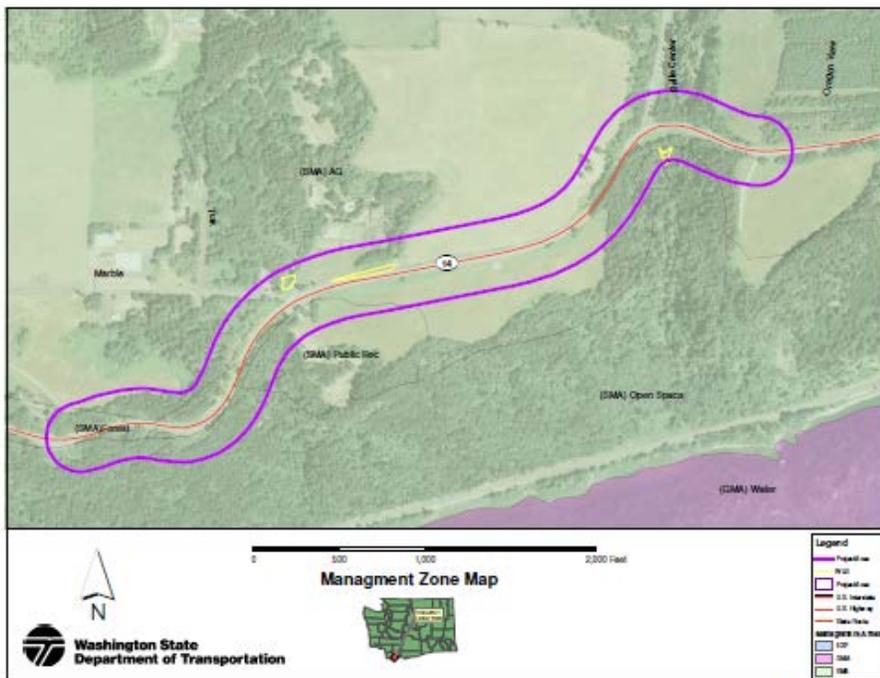


Figure showing the project management area boundaries for the Marble Road Project (WSDOT, 2012).

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### **Roadway Design and Environmental Impacts**

WSDOT follows the federal mitigation sequencing procedure by first avoiding environmental impacts wherever possible. When avoidance is not possible, impacts to the natural resource (Oregon White Oak woodland) are minimized to the greatest extent practicable using analysis, alternative designs, and various design/construction techniques. Remaining impacts are fully mitigation for no net loss of resource or function following a comprehensive mitigation strategy developed specifically for the individual project by qualified professionals.

In this case, after clearly establishing project purpose and need, WSDOT developed seven alternatives to better evaluate and analyze the effect on natural, scenic, and cultural resources that not only looked at resource impacts, but the projects ability to improve safety at a documented high accident location (includes fatalities) by changing substandard geometries in a variety of configurations.

The selected alternative (current proposal) meets design and safety criteria, and limits environmental impacts to the greatest extent possible. Some alternatives with reduced natural resource impacts had higher cultural and historic impacts (ie- Mt Pleasant Pioneer Cemetery, Mt. Pleasant Grange), extreme scenic impacts (construction of multi-story retaining structures in full view of Crown Point and other Key Viewing Areas in Oregon), or were simply not geotechnically feasible. The current proposal has gone through numerous design refinements to further reduce impacts to the Oregon White Oak community.

This process has reduced projected impacts to the priority habitat by:

1. Selecting a slower design speed (i.e., 40 mph curve versus 55 mph design standard) providing slightly steeper curves that fit better into local topography.
2. Steepening slopes from 2:1 to a 1.5:1, reducing the horizontal extent to the cut area.
3. Design refinements to the clearing limits resulting in the preservation of a significant section of large oak and associated understory at the western end of the proposed cut.
4. Utilization and approval of an innovative storm water treatment system that eliminated a flat bottom swale along the southern edge of SR-14 through the cut, reducing the horizontal extent to the cut area and retaining a dense section of younger oak.
5. Re-design of the Marble Road intersection to reduce footprint, thus reducing impacts to private property and wetlands.
6. Analysis of several retaining wall options to evaluate their effectiveness in retaining additional trees. This exercise looked at single and multi-level walls. It was determined that the walls would have very limited effectiveness in preserving additional trees (the northern alternatives would have preserved two <18-inch DBH oaks at the expense of a >30-inch DBH oak and millions of dollars. The wall alternatives would have also introduced six to 12 foot tall vertical structures for several hundred linear feet through the cut with minimal opportunity for scenic mitigation.

This project will realign the highway to the north from approximately MP 22.60 to MP 22.95. The SR14/Marble Road intersection will be improved with realignment of Marble Road's centerline to the west. The realigned roadway will provide two (2) twelve foot lanes with four foot shoulders

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throughout most of the project limits, and wider lanes of fifteen feet are required in the realigned curve section (the cut area) with increasing shoulder width to allow truck-off-tracking.

The roadway prism consists of compacted subgrade, 0.3 ft of crushed surface base course, and 0.7 ft of Hot Mix Asphalt (HMA). The project shall be delineated according to WSDOT standards. Delineation consists of pavement markings and guideposts.

### **Guardrail**

Beam Guardrail Type 31 with Corten/weathering steel rail will be installed within the project limits (for locations please see the included Roadway Sections). Guardrail and anchor construction, modification, removal and installation will be in accordance with the contract plans. Please see the attached detail sheets, RS1-RS3.

### **Grading**

New excavation and embankments will be required in areas where roadway geometries do not match the natural grade. These cut and fill areas are shown on the proposed NSA Permit Display plan sheets. The realignment will require large excavated areas, up to approximately 170 feet in width and 90 feet in height and embankment fill up to approximately 85 feet in width and 60 feet in height with a 1.5H:1V slopes. The estimated cumulative quantity of cut material for the project is 87,110 cubic yards. The estimated cumulative quantity of fill material for the project is 13,850 cubic yards, with 10,500 cubic yards fill within the proposed reversion area. There will be an approximate net excess of 73,260 cubic yards of material. It is anticipated that this material will be disposed of by the contractor. The contractor will be responsible for obtaining the necessary permits and following the appropriate regulations.

### **Utilities**

Known utilities that travel through the project are Frontier/Verizon Telephone and Skamania County PUD Power. These utilities are located both below and above ground, with the majority of the utilities above ground on utility poles. The project will require utility pole relocation. Relocation will be in accordance to WSDOT 2010 Standard Specification for Road, Bridge and Municipal Construction 1-07.17(2): Utility Construction, Removal, or Relocation by Others.

### **Stormwater Pond and Culverts**

Currently, the project area has no water quality treatment or flow control facilities. Most of the SR 14 runoff in the existing condition is collected in roadside ditches and inlets and conveyed to culverts crossing under SR 14, which enter into unnamed tributaries or sheet flow down the south embankment, eventually reaching the Columbia River. Since land use immediately adjacent to SR 14 is mostly undeveloped or forest, runoff not captured in ditches is dispersed off the shoulder as sheet flow, infiltrating and dispersing naturally over densely forested areas to the south.

Stormwater management guidelines have been established for highway projects and must be strictly adhered to as condition of WSDOT's National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit issued by the Washington State Department of Ecology (DOE).

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Stormwater management is proposed at the intersection of SR 14 and Marble Road, along the south side of SR 14, and along the north side of the realignment section of SR 14 to provide flow control and runoff treatment. A catch basin will be placed at Marble Road to connect the two existing culverts.

A bio-infiltration swale will collect sheet flow from the roadway and connect to an existing culvert at MP 22.67 and a new culvert at approximately MP 22.85. A Compost Amended Vegetated Filter Strip (CAVFS) system is proposed on the south side of SR 14 at approximately MP 23.06 to MP 23.22 for flow control and treatment. SR 14 crosses two unnamed tributaries within the project limits that drain to the Columbia River. All tributaries within the project limits are impassible to listed fish from the Columbia River due to natural barriers downstream of the project site. There is an unnamed tributary at SR 14 MP 22.96 it passes through a 24" culvert heading south under Marble Road and continues through a 4x4 box culvert under SR 14. The second tributary crosses SR 14 at MP 23.50 it passes through a 6x4 box culvert heading south, no work will occur at this location. WSDOT will apply for permits from the U.S. Army Corps of Engineers, Washington State Department of Ecology, and Washington State Department of Fish and Wildlife for approval to construction these culverts.

This project will reclaim approximately 1.5 acres of former highway as a natural reversion area. The natural reversion area will include pavement and subgrade removal, significant contouring to re-establish the natural slope profile, native topsoil placement, compost and bark mulch blanket placement, and intensive revegetation with native trees and shrubs consistent with Oregon White Oak woodlands.

There are no listed FEMA floodplains within the project limits. No impacts to floodplains are anticipated.

### **Current use of the property and adjoining lands**

The current use of the property proposed for improvement includes: state property which is used for transportation, federal forest land, private timberland, and private residential land. Adjoining land uses consists of agricultural, forest, residential and timberland.

### **Erosion Control Measures**

Several Best Management Processes (BMPs) in accordance with the WSDOT Temporary Erosion and Sediment Control (TESC) Plan will be used to prevent erosion during construction.

#### *TESC Element Mark Clearing-1: Limits*

Clearing limits will be marked on the plans and in the field with high-visibility fences prior to land-clearing activities, to protect sensitive areas and their buffers, as well as adjacent properties.

#### *TESC Element 2: Establish Construction Access*

Stabilized construction access points will be installed prior to major grading operations. Access points will be limited to the fewest number possible-only one, whenever feasible.

#### *TESC Element 3: Control Flow Rates*

Permanent sediment control facilities will be installed as early in the construction process (prior to grading) as feasible to provide flow control. Stream by-pass systems will be re-routed and discharged at appropriate rates.

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### *TESC Element 4: Install Sediment Controls*

Sediment control BMPs will be installed prior to soil-disturbing activities. These BMP's may include silt fence, straw wattles, coir fabric, topsoil, and compost blankets. Coir logs will be used on the steeper cut slopes as they are being construction.

### *TESC Element 5: Stabilize Soils*

Exposed and un-worked soils will be stabilized with appropriate measures by applying effective BMPs that protect the soil from wind, raindrops, and flowing water.

All exposed soils will be permanently stabilized through the use of native woody and herbaceous species as contained on the Roadside Restoration plan sheets and consistent with the Draft Natural Resource Mitigation Plan.

### *TESC Element 6: Protect Slopes*

Cut-and-fill slopes are designed and will be constructed in a manner that will minimize erosion by (1) reducing continuous length and steepness of slopes with coir wattles and diversions, (2) reducing slope steepness, and (3) roughening slope surfaces.

### *TESC Element 7: Protect Drain Inlets*

All operable storm drain inlets will be protected from sediment with approved inlet BMPs.

### *TESC Element 8: Stabilize Channels and Outlets*

All temporary conveyance channels will be designed, constructed, and stabilized to prevent erosion. Stabilization will be provided at the outlets of all conveyance systems.

### *TESC Element 9: Control Pollutants*

All pollutants, including construction materials, waste materials, and demolition debris, will be handled and disposed of in a manner that does not cause contamination of storm water.

### *TESC Element 10: Control Dewatering*

When groundwater is encountered during excavation or in other areas it shall be detained and treated until the turbidity of the groundwater is similar to or better than the turbidity of the site runoff, then discharged at a rate that will not cause erosion. When water is generated on site from construction and washing activities, it shall be detained and treated separately until the turbidity is similar to or better than the site runoff, then can be discharged at a rate that will not cause erosion. Offsite storm water is not to be combined with onsite storm water and will be piped through or around the project area and discharged at its pre-construction outfall without causing an increase in erosion.

### *TESC Element 11: Maintain BMPs*

A Certified Erosion and Sediment Control Lead (CESCL) shall implement project BMPs until final stabilization is achieved. The BMPs will be maintained so they properly perform their function, are inspected regularly, and will be repaired or replaced immediately if damaged.

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### *TESC Element 12: Manage the Project*

The project will be managed so that vegetation is preserved, disruption, exposure and compaction of native soil is minimized, TESC and Spill Prevention Countermeasures and Control (SPCC) requirements are met, project BMPs are inspected, monitored, and maintained, and the ESL is on-site or on-call and the TESC/SPCC plans are on site or within reasonable access to the project site.

### **Equipment**

Equipment used for the project will consist of mainly large earthmoving equipment, including graders, rock crusher, generators, compactors, rollers, bulldozers, excavators, and dump trucks. Other equipment likely to be used onsite will be loaders, backhoes, pavers, and miscellaneous small equipment.

### **No Practicable Alternative Test (Natural Resource Mitigation Plan – Appendix A)**

The purpose of this analysis is to document and demonstrate that there is "no practicable alternative" to the proposed realignment of a portion of SR 14 for the SR 14 Marble Rd Vic to Belle Center Vic - Safety Project (see Appendix A). Management Plan requirements state 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 wetlands, ponds, lakes, riparian areas, wildlife or plant areas and/or sites;
- B. The basic purpose of the use cannot be reasonably accomplished by reducing its proposed size, scope, configuration, or density, or by changing the design of the use in a way that would avoid or result in less adverse effects on wetlands, ponds, lakes, riparian areas, wildlife or plant areas and/or sites; and
- C. Reasonable attempts were made to remove or accommodate constraints that caused a project applicant to reject alternatives to the proposed use. 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.

### Project purpose

The purpose of this project is to improve safety on SR 14 in the vicinity of Marble Road where there is a high incidence of vehicular accidents.

### History

Over the last 10 years, there have been 64 accidents in this area (MP22.6 to MP 22.9), including 2 fatalities, and 45 injuries. The majority of the accidents, including the fatalities and most injury accidents, appear to be related to the geometric layout of the highway. One geometric concern in this curve is that the existing horizontal compound curves are too short and that alters the drivers' ability to see hazards in the roadway and make a decision so as to avoid a collision. Another concern is that the length between sections of super elevation or road "banking" are too short, not allowing a smooth transition for drivers. The radii of the curves are also quite small compared to others on the corridor,

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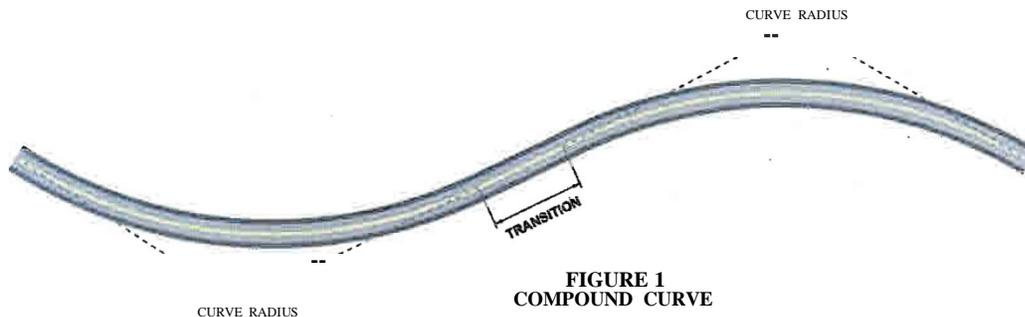
creating a "sharp" curve that drivers must navigate. Together, these geometric concerns affect a driver's ability to anticipate the appropriate speed at which to drive the curves.

WSDOT attempted low-cost mitigation to prevent accidents with additional signing in 1999, and again in 2001. The establishment of a Traffic Safety Corridor in 2005, which included improved pavement markings and increased police enforcement, was a temporary solution ending in 2008 that did temporarily decrease accidents in the project area. These types of measures are very good short-term solutions; however, since they do not "solve" the underlying problem, they have limited long-term effectiveness.

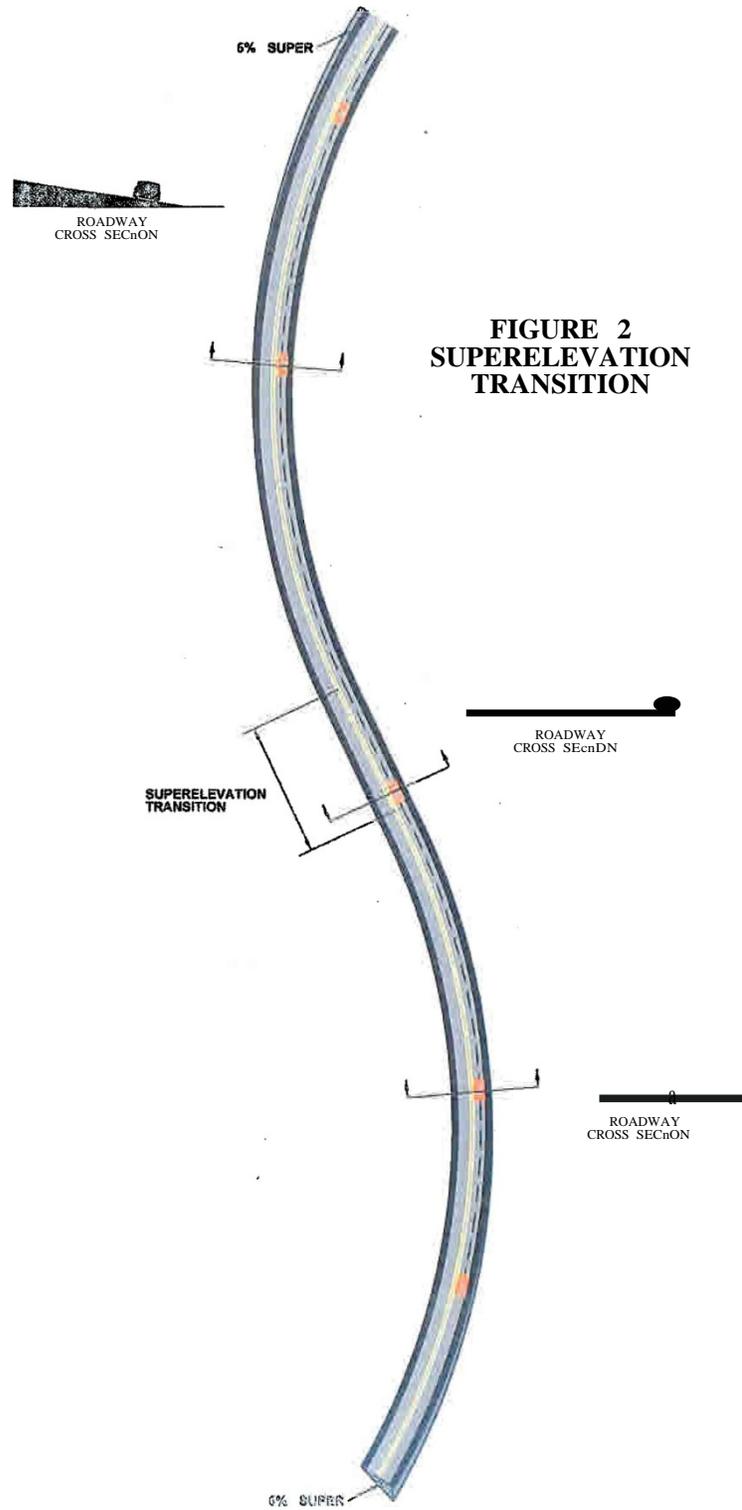
### Constraints

In other locations throughout the state with similar accident history and vehicle counts, WSDOT would design and construct the curves according to full design standards with a design speed of 55 to 60 mph. The existing curves on SR 14 can be traveled anywhere from 30 to 45 mph and many have warning signs alerting motorists of the recommended speed. As a compromise between optimum design standards and minimizing scenic and natural resource impacts, WSDOT and the USFS have moved forward with this design assuming a 40 mph design speed. This will provide a consistent driving speed for motorists, which will in turn reduce the most severe of accidents.

This meets WSDOT modified design level standards, with smaller curve radii (487 ft for a 6% super), shorter transition sections (125 ft for a 6% super), and lower super elevation (6%) rates than WSDOT full design standards. Please see Figures 1 and 2 below. As outlined in the SR 14 Corridor Management Plan, any safety improvements will use the current WSDOT Design Manual Modified Design Level. At locations where there are documented safety deficiencies identified by WSDOT; consideration will be given for geometric changes. Any improvements will also maintain the rural and scenic character by minimizing or preserving vegetation, following the natural terrain where practical, retaining cultural and historic resources, and minimizing visual impacts.



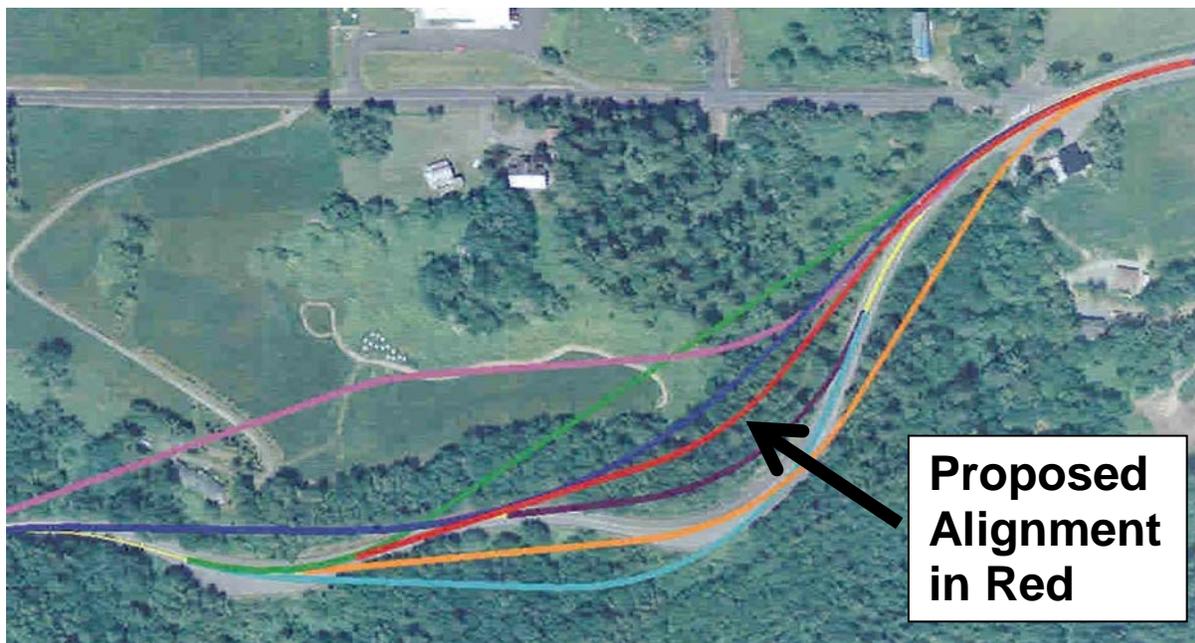
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### Alternatives Considered

Keeping in mind the cultural, historic, scenic, habitat, safety, and geometric concerns, WSDOT developed eight alternatives for realigning SR 14 from MP 23.6 to 23.9, and evaluated their impacts. Each of the alternatives and associated impacts are described in full in WSDOT No Practicable Alternative Test. The proposed alternative is the only option that would provide for the safety improvements while minimizing the impacts to scenic, natural, historic, and private land resources. The proposed alignment will also preserve the consistency of driving through SR 14 in the Gorge, as outlined in the SR 14 Corridor Management Plan and the Route Development Plan. As part of the realignment of SR 14, the previous roadbed and roadway structure will be removed and that previous section of SR 14 will be filled with soil and topsoil to create an area that blends into the adjoining slope and vegetation. This area is labeled as the "reversion area" on attached appendices. The slope, soil type, and vegetation plan may all be found in the mitigation plan for SR 14. This ownership of this "reversion area" is planned to be turned over to the US Forest Service once the project is complete and permit conditions are satisfied.



### **Mitigation Strategy and Site Descriptions**

WSDOT has taken appropriate and practicable steps to avoid and minimize adverse impacts to natural resources including priority habitats (oak woodlands), wetland resources, riparian areas, and associated buffers. Total avoidance was not possible due to constraints associated with safety and design-guidelines, steep terrain, the close proximity of resources to the existing highway facility and embankments, legal requirements for water quality treatment, and the linear nature of transportation projects. Several alignments and storm water designs with varying levels of wetland, buffer, and oak woodland impacts were evaluated during the development of the project. The final proposed alignment and storm water design affects the least amount of natural resources while addressing the geometric and safety deficiencies along this section of SR-14. Impacts were minimized primarily through site-specific design techniques including limiting the extent of cuts and fills by steepening slopes, adjustments to the proposed storm water treatment methods, , and by reducing extensive excavation (cut) areas by modifying the proposed contours to match the existing terrain.

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To address for direct and temporal impacts to natural resources, WSDOT will implement a comprehensive Natural Resource Mitigation Plan designed to provide compensatory mitigation for direct and temporal loss to Oregon white oak woodland, wetlands, and wetland/riparian buffers. This strategy utilizes a combination of on and off-site mitigation strategies to replace direct and temporal loss to important natural resources and associated functions. Off-site mitigation areas include the U.S. Forest Service-owned Cleveland Oak Woodland Mitigation Site and the Homestead Lake Mitigation Site at Beacon Rock State Park. Both off-site mitigation areas are publically owned, and were identified during interagency conversations and in WA State Parks studies as sites that would benefit from environmental restoration activities. These sites satisfy WSDOT's requirements under RCW 47.01 and WSDOT Directional Memo ESO 2010-2 for considering public properties first when developing mitigation strategies.

On-site minimization and mitigation strategies include design adjustments that reduced corridor wetland impacts by 30 percent. Re-design of the Marble Rd. intersection completely eliminated impacts to a depressional wetland east of the historic Mt. Pleasant Grange Hall. Other design adjustments reduced Oak woodland impacts by approximately 10 percent. On-site restoration and rehabilitation of Oregon White Oak woodland are described below.

### Homestead Lake Mitigation Site

The proposed Homestead Lake natural resource mitigation site is located in Beacon Rock State Park adjacent to the Homestead Lake Turtle Pond area near Skamania Landing Road, SR14 MP 33.52 to 33.86. This 6.5 acre site natural resource mitigation site is located directly south of SR 14 and the BNSF rail line in the NW 1A of Section 35, Township 2N, Range 6E, W.M., Skamania County, WA. This site will provide approximately 1 acre of wetland creation and 7.34 acres of wetland and riparian buffer mitigation by expanding a shallow aquatic bench currently supporting a dense stand of *Sagittaria latifolia* (Wapato). This site-specific plant community provides cover for the reintroduced Northwestern Pond Turtle. Wetland creation would involve shallow excavation along the southern margins of the existing wetland to the depth of existing hydrology (depth to be based on a stage gauge installed in the spring of 2010); roughly maintain the perimeter shape of the existing wetland. The created wetland area is proposed to be seasonally inundated and dominated by Wapato.

According to WDFW, Western pond turtles prefer a more open habitat, so woody shrubs would likely be concentrated on the edges (clumps elsewhere) to provide physical visual screening from the access path that parallels the site boundary to the south. Herbaceous areas would be planted to include wet prairie species. Large woody debris salvaged from the project limits would be added at specific locations and elevations to provide suitable turtle perches/cover at various locations throughout the site. The existing grassy upland buffer along the southern, western, and eastern edges of the site would be enhanced with native riparian trees and woody shrubs to minimize exotic nuisance and noxious vegetation, improve screening, and increase vertical structure. This area would be designed to maintain upland turtle habitat adjacent to the wetland. Wildlife function within an existing stand of mature Oregon White Oak trees adjacent to the northern edge of the wetland would be enhanced through the removal of dense Himalayan blackberry stands and planting of native woody understory vegetation.

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### Cleveland Oak Woodland Mitigation Site

The proposed Cleveland Oak Woodland mitigation site is located on a 12 acre parcel located north of SR 14 Milepost 24.73 on a USFS owned parcel on top of Cape Horn in Section 9, Township 1N, Range 5E, W.M., Skamania County, WA. This site will provide approximately 12 acres of Oregon White Oak woodland establishment and will include dense planting of larger caliper Oregon White Oak (1-inch dia) as well as native woody understory species including *Viburnum ellipticum* (Oval-leaf Viburnum), *Symphoricarpos albus* (Common Snowberry), *Holodiscus discolor* (Oceanspray), *Amelanchier alnifolia* (Serviceberry), *Mahonia nervosa* (Cascade Oregon Grape), and *Polystichum munitum* (Western swordfern). The site currently supports pasture grass and blackberry species, and is bordered on the south, east, and west by mixed deciduous forest. The aspect and topography of the Cleveland site closely matches that of the impacted Oak Woodland in the vicinity of Marble Road. The USFS identified Oak restoration and establishment at the Cleveland site as a beneficial use. To facilitate Oak woodland restoration, the existing dense sod will be removed using vegetation management techniques that will include mechanical tilling. Compost and bark mulch blankets will be utilized to improve plant survival and growth, inhibit weed and grass development and associated root competition, water retention, and erosion control.

### Wind Mountain Oak Preservation Site

The Wind Mountain oak preservation site is a 3.1 acre parcel owned by WSDOT that will be preserved and transferred to the USFS for permanent preservation and management. At this time, WSDOT estimates that there are well over 300 Oregon White Oaks of various sizes, including several greater than 24-inches DBH located in an upper saddle in the middle portion of the site and a deep ravine along the eastern edge of the site.

### Reversion Area and on-site oak restoration

WSDOT will restore disturbed roadside areas within the project limits including a 1.5 acre natural reversion area. The 1.5 acre natural reversion area will occur where the current SR-14 alignment will be abandoned. This area will have the asphalt and subgrade removed, then be filled with soil and graded to restore the historic slope profile. This area will provide full visual exposure to Crown Point and the Portland Women's State Parks in Oregon, will be intensely revegetated as an Oregon White Oak community. Other cut slopes and unused areas of right of way will be restored as both Oregon White Oak woodland where feasible and native shrub communities. The natural reversion and suitable slopes and other areas of the right of way will utilize a similar soil preparation sequence as the Cleveland mitigation site, but will also include compost blanket as part of the overall soils restoration strategy. The steepest cut slopes will receive a seed-injected compost blanket with a mix of native herbaceous and woody species. Overall Oregon White Oak Woodland restoration within the project limits will be a minimum of 1.5 acres.

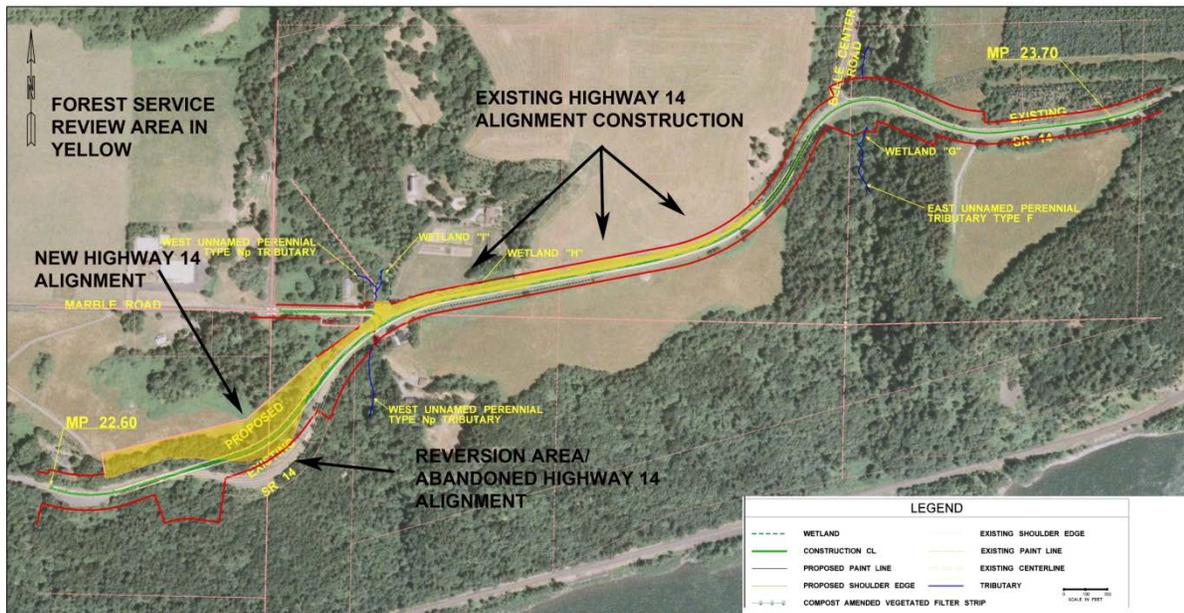
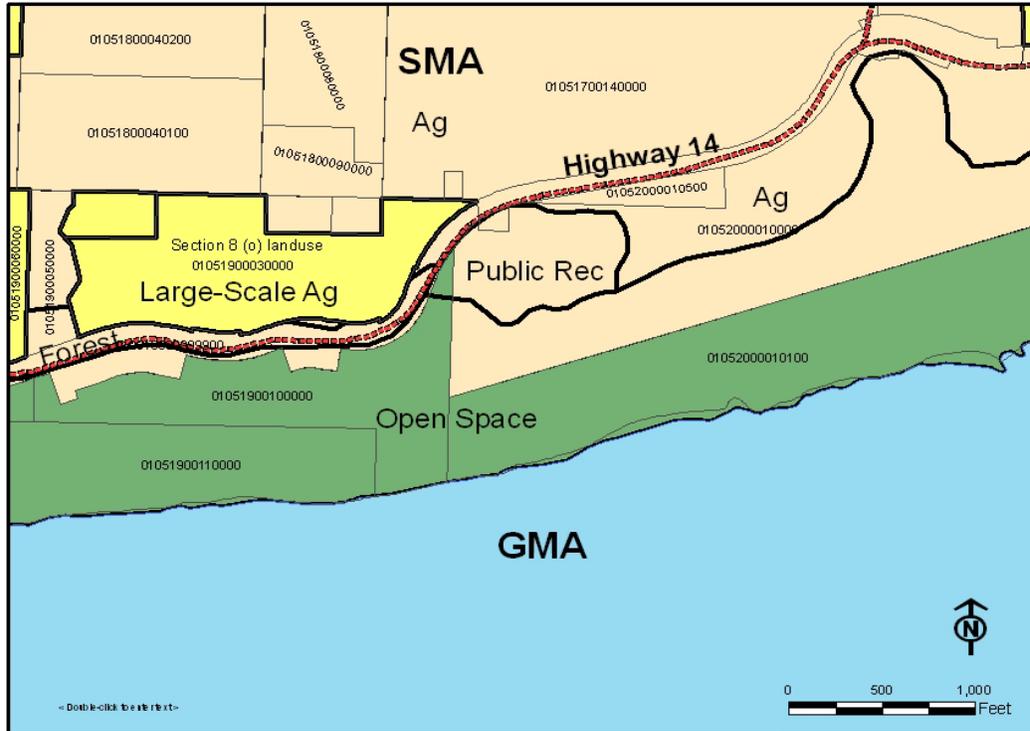
## **C. LAND USE DESIGNATIONS**

This project occurs on a mix of private, state, federal, and private land with Federal Conservation Easements in the Columbia River Gorge National Scenic Area, Skamania County, Washington. The portions of the project occurring on private land with Federal Conservation Easements are being reviewed for consistency with the purposes of the NSA Act and Management Plan pursuant to Section 14(d) of the Act and review use policy (2011, MP, Policy 4 pg. II-7-57). These private parcels with Federal Conservation Easements are also being reviewed by Skamania County since there are joint responsibilities for these parcels.

Listed below are the six different project areas defined by land use, ownership, and proposed activity. The Forest Service will review the New Highway 14 Alignment; Existing Highway 14 Alignment; and the Cleveland Oak Mitigation Site for consistency with the Management Plan.

<b>Area</b>	<b>Land Use</b>	<b>Ownership and Parcel ID</b>	<b>Proposed Activity</b>	<b>Natural Resources Reviewed through Management Plan</b>
<b>New Highway 14 Alignment</b> (Excavation Area)	GMA – Large Scale Agriculture (80) Parcel	Private with Federal Conservation Easement #01051900030000	Excavation of ~ 87,000 cubic yards of material creating embankments ~ 85 feet in width and 60 feet in height.	West Stream Drainage Buffer.
<b>Existing Highway 14 Alignment</b>	SMA – Agriculture	Private with Federal Conservation Easement and State Washington #01051700140000 #010517009999900	Realignment of Marble Road intersection and fill on north and south side of road to allow realignment of the road.	Wetlands G, H, I; Wetland G, H, I Buffer Zone, West and East Stream Drainage Buffer. Riparian and Wetland Priority Habitat
<b>Cleveland Oak Mitigation Site</b>	SMA – Small Scale Agriculture	Federal Ownership #0105090006140; #01050900081000	Conversion of pasture to oak woodland setting.	None Present
<b>Reversion Area/ Abandoned Highway 14 Alignment</b>	SMA - Forest	State Washington #010519009999900	Placement of ~ 10,500 cubic yards fill and restoration as oak woodland setting.	West Drainage Buffer. Oregon White Oak Woodland Priority Habitat
<b>Homestead Lake Mitigation Site</b>	GMA – Open Space/Water	State Washington #02063500020100	Natural resource mitigation site for impacts to wetlands.	Wetland. Riparian and Wetland Priority Habitat; Pond Turtles
<b>Wind Mountain Preservation Site</b>	SMA – Open Space	State Washington #03083600080000	Oak preservation area that will be transferred to the Forest Service.	Oregon White Oak Woodland Priority Habitat

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The area identified as the **New Highway 14 Alignment** is where majority of the proposed project activities will occur. This area is within the boundaries of Parcel #01051900030000, which is an 8”o” parcel with a land use designation of GMA – Large Scale Agriculture. This parcel was evaluated with the GMA standards for scenic, cultural, natural, and recreation resources as required by the Management Plan. This parcel has a Federal Conservation Easement and the Forest Service will issue findings in conjunction with Skamania County for this parcel.

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The area identified as the **Existing Highway 14 Alignment** is in the SMA and where the highway will be moved slightly to the north side and Marble Road is realigned. Parcel #01051700140000 is private land with a Federal Conservation Easement. The Forest Service will issue findings in conjunction with Skamania County for this area.

The **Cleveland Oak Mitigation Site** located is on Forest System Lands and is reviewed by the Forest Service for consistency with the SMA standards for scenic, cultural, natural, and recreation resources.

The **Reversion Area/Abandoned Highway 14 Road Alignment** is currently Washington State owned land within the SMA that will be transferred to federal ownership as part of accepted project mitigations. Until the Forest Service assumes ownership of these parcels Skamania County is the reviewing agency.

The **Homestead Lake Mitigation Site** is located on Washington State lands is being used as a mitigation site for disturbance on private land with a Federal Conservation Easement. This site is within the GMA and reviewed by Skamania County.

The **Wind Mountain Preservation Site** is located on Washington State lands and is being transferred to the Forest Service as mitigation for impacts to Oregon White Oak Woodland habitat (see Section D. Conservation Easement for further discussion). The transfer of land between two parties is not reviewed under the Management Plan.

Review uses allowed within the SMA Agriculture land use designation include construction, reconstruction, or modifications of roads not in conjunction with agriculture (review use U, MP, II-1-26) and resource enhancement projects for the purpose of enhancing scenic, cultural, recreation and/or natural resources .....(review use R, MP, II-1-25).

Review uses allowed within the GMA Agriculture land use designation include construction, reconstruction, or modifications of roads not in conjunction with agriculture (review use L, MP, II-1-9). Existing agricultural activities in the nearby vicinity consist of livestock grazing (pasture) and ornamental flower gardens. The permanent impacts to agriculture land include 2.12 acres of disturbance for the realignment of the highway. Temporary impacts from the proposed project will occur in the transition between the WSDOT right-of-way and agriculture land but should result in no net loss of agriculture land.

The proposed development should not force a change in, or significantly increase, the cost of accepted agricultural practices on nearby lands devoted to agricultural use. The project has been sited to minimize the loss of land suitable for the production of crops or livestock as much as possible (See Appendix A – No Practicable Alternative Test). Given this information, the proposed development is consistent with the Approval Criteria for Specified Review Uses listed on page II-1-9 and MP, II-1-26 of the Management Plan and is therefore eligible for review.

The use of Forest Service land with an agriculture land use as one component of a mitigation requirement for loss of Oregon White Oak Woodland priority habit is also consistent with the

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Approval Criteria for Specified Review Uses listed on page II-1-25 of the Management Plan and is therefore eligible for review.

The removal of timber in the GMA Agriculture land use is not a review use. The timber is owned by the private landowner as stated in the conservation easement. Savings Policy #9 (MP, II-7-3) states: *In the GMA, the rights and responsibilities of non-federal landowners under the Forest Practice Acts of Washington and Oregon, or under county regulations that supersede those acts, shall be exempt from regulation under the Management Plan or land use ordinances adopted by counties or the Gorge Commission pursuant to the Scenic Area Act.*

## **D. CONSERVATION EASEMENTS**

The United States Government purchased conservation easements to provide further protection to the scenic and natural resource values for GMA Parcel #01051900030000 and SMA Parcel #01051700140000. The scenic and natural resources values for SMA Parcel #01051700140000 are within the scope of a consistency review and are reviewed within this document. The Federal Conservation Easement for GMA Parcel #01051900030000 contains terms and conditions for the protection of natural resources that are outside the scope of a consistency review under the Management Plan.

A review of all natural resources for GMA Parcel #01051900030000 indicates the primary resource values impacted by the proposed project are the 2.25 acres of Oregon White Oak Woodland habitat. This is a resource that is managed under the SMA Standards and Guidelines but not applicable to the GMA. There are no wetlands; streams, ponds, lakes, and riparian areas within this parcel. A very small portion of the southeast corner of this parcel is within the buffer zone of Wetland I and the west drainage. There are no wildlife habitats or rare plant sites within 1000 feet of the parcel.

WSDOT's 2012 Natural Resource Mitigation Plan - Chapter 5 – Oak Woodland Impact Assessment describes the existing conditions of the impacted oak woodland and proposed mitigations accepted by the Forest Service. At the request of the Forest Service, WSDOT completed a no practicable alternative test specifically to minimize the impacts to the Oregon White Oak Woodland resource.

The existing impacts to Oregon White Oak Woodland habitat total 2.25 acres. Mitigations include the Cleveland Restoration Site – 12 acres; onsite restoration 1.5 acres; and the Wind Mountain Oak Preservation site of 3.1 acres.

Washington State Department of Fish and Wildlife staff commented on the proposed oak mitigation in correspondence of August 10, 2011 and requested at least a 5:1 mitigation ratio if all oaks were less than 12 inch dbh. If larger oaks were identified than their staff requested a higher mitigation ratio. A total of 9 oaks greater than 32 inch dbh will be removed in this proposal.

The Forest Service requested a preservation component for mitigation to oak habitat. WSDOT spent well over a year looking for land parcels with suitable oak habitat for permanent preservation and transfer to the Forest Service. WSDOT looked at private parcels near the project area but none were available for purchase. WSDOT looked at a number of WSDOT parcels available for transfer to the Forest Service to meet this requirement. The Wind Mountain Oak Preservation site was identified as a suitable candidate with high quality oak habitat to meet the preservation component requested by the Forest Service.

The mitigation ratio is 6:1 with the Cleveland site (12 acres) and onsite restoration (1.5 acres). This mitigation exceeds the Washington State Department of Fish and Wildlife staff mitigation requirements of 5:1. With the addition of the Wind Mountain Oak Preservation site the final mitigation ratio is 7.3:1. This mitigation ratio does not include the Homestead Lake mitigation site which includes an oak woodland enhancement component that totals 2.4 acres of blackberry removal to enhance the oak woodland.

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There are no requirements to mitigate impacts to Oregon White Oak Woodland habitat in the GMA. While not reviewed as part of the findings, the submitted mitigations for the Oregon White Oak Woodland habitat meet SMA resource standards for habitat that will be affected by either temporary or permanent uses shall be rehabilitated to a natural condition or may be substituted by a sensitive resource of equal or greater benefit (MP, I-3-43, Requirement 9C and 9D). The 2.25 acres of Oregon White Oak Woodland habitat represents 0.14 percent of the total of nearly 1600 acres of Oregon White Oak Forest Association in Southeast Clark County and Southwest Skamania County (WSDOT, 2012). This is a negligible impact, and with the submitted mitigations as described above, will have no adverse consequences to the 1600 acres of identified Oregon White Oak Woodland habitat. No other present and future projects have been identified that would require the removal of Oregon White Oak Woodland habitat. This project, combined with all known present and future projects, should have no cumulative impacts to the Oregon White Oak Woodland habitat.

The Forest Service has reviewed the Conservation Easements and determined that the proposed project with the submitted mitigations meets the terms and conditions for Conservation Easement on GMA Parcel #01051900030000. These are stipulations that have been submitted to the Federal Highway Administration as part of our Letter of Consent for impacts to the federal conservation easements.

1. Convey a parcel of land owned by the State of Washington described as Tax Parcel # 03083600080000 to Federal ownership as compensatory mitigation for the loss of Oregon White Oak Woodland habitat on a Federal Conservation Easement (Tax Parcel # 01051900030000). This conveyance is identified in the project proposal as the Wind Mountain Preservation Site.
2. Convey to Federal ownership the portion of the Reversion Area/Abandoned Highway 14 alignment which is currently State of Washington property to Federal ownership as compensatory mitigation for the loss of Oregon White Oak Woodland habitat on a Federal Conservation Easement (Tax Parcel # 01051900030000).
3. Convey to Federal ownership any portion of Tax Parcel # 01051900030000 as acquired by WSDOT that lies between the current highway and the realigned highway that is not utilized for highway purposes. This area is to be combined with the area indicated in No. 2 above and is to be conveyed as compensatory mitigation for the loss of Oregon White Oak Woodland habitat.
4. Repair or replace the water line crossing through a culvert under Highway 14 that serves Tax Parcels #01052000010000 and #01051700160000.
5. Plant Oregon White oaks and other native vegetation on a 12 acre site near Cape Horn as compensatory mitigation for the loss of Oregon White Oak Woodland habitat on the Federal Conservation Easement. Work will be done in accordance with specifications in the Consistency Determination.

If for any reason the above listed parcel conveyances cannot occur, replacement parcels with suitable Oregon White Oak Woodland habitat will be conveyed to the Forest Service as compensatory mitigation for the loss of Oregon White Oak Woodland habitat on a Federal Conservation Easement (Tax Parcel # 01051900030000). Selection of any replacement parcels will be by mutual agreement between the Grantee and the Forest Service.

## **E. SCENIC RESOURCES**

This section contains findings for the GMA and SMA.

GMA findings are for Parcel #01051900030000 which is private land and an 8”o” parcel and a land use designation of GMA – Large Scale Agriculture. The majority of the proposed project activities will occur within the boundaries of this parcel. General project activities consist of excavating ~87,000 cubic yards of material creating open areas up to approximately 170 feet in width and 90 feet in height with embankments approximately 85 feet in width and 60 feet in height with 1.5H:1V slopes. Storm water treatment facilities will be constructed. This portion of the project area is identified as the **New Highway 14 Alignment**.

SMA findings are issued for the portions of Parcel #01051700140000 which are private land with a federal conservation easement and a land use designation of SMA –Agriculture. A portion of Wetland I and possibly very small portions of Wetland H and grass slopes are located within this parcel. Proposed activities include realignment of Marble Road and realignment of the existing curve by placing fill on the north and south sides of the road and establishment of storm water treatment facilities. This portion of the project area is identified as the **Existing Highway 14 Alignment**.

SMA findings are issued for the oak restoration site which is federal land with a land use designation of SMA - Small Scale Agriculture. This portion of the project area is identified as the **Cleveland Oak Mitigation Site**.

A WSDOT landscape architect completed a Visual Quality Assessment Technical Memorandum (October 2011) for this project. It was reviewed by a Forest Service landscape architect, describes existing visual conditions and the potential change from a number of Key Viewing Areas, and the Forest Service has used this analysis to support the findings and conclusions issued in this section.

### **GMA Overall Scenic Provision Policies**

*(Policies #2, 4, 6 are not applicable and are not included)*

1. Except for production and/or development of mineral resources and disposal sites for spoil materials from public road maintenance activities, nothing in the key viewing areas or landscape settings guidelines in this chapter shall be used as grounds to deny proposed uses otherwise authorized by the land use designation. However, the guidelines may affect the siting, location, size, and other design features of proposed developments, and compliance with them is mandatory.
3. New development shall be compatible with its designated landscape setting (as described in the "Landscape Settings" section of this chapter). Expansion of existing development shall be compatible with its landscape setting to the maximum extent practicable.
5. New development shall retain existing landforms and strive to fit into the existing topography to the maximum extent feasible.

## GMA Overall Scenic Provision Guidelines

*(Guidelines #2, 4, 6, 7 are not applicable and are not included in review)*

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

**Findings:** A no practicable alternative test was completed (see Appendix A).

**This is a highway safety project and as identified in the application there has been 64 accidents (2 fatalities, 45 injuries) on this ~ 0.25 miles section of roadway (MP22.6 to MP 22.9) over a 10 year period. The majority of the accidents appear to be related to the geometric layout of the highway.**

- **The existing highway alignment has a “sharp” curve because the radii of the curves are quite small compared to others along the corridor.**
- **Since the existing horizontal compound curves are too short they alter the drivers' ability to see hazards in the roadway.**
- **The sections of this curve with “banking”, or super elevation, are too short and do not allow the driver to make a smooth transition through the curve.**
- **The combination of all these factors creates the conditions that affect a driver's ability to anticipate the appropriate speed at which to drive this section of highway.**

**WSDOT did implement low-cost mitigations to prevent accidents with additional signing and the establishment of a Traffic Safety Corridor between 2005 to 2008, but these are short-term solutions. Other factors such as weather (rain, snow, ice), wildlife (deer crossing road), bicycles (using vehicle lane because there is not adequate shoulder width), and pedestrians on the roadway are variables that cannot be addressed without resolving the underling safety problem as described above.**

**The existing highway alignment cannot be modified in any form to meet the minimum WSDOT modified design level standards without considering an alternative that involves grading to straighten the curve of the highway alignment.**

**WSDOT evaluated eight primary alternatives using a number of different alignments as described in the No Practicable Alternative Test (Appendix A) before selecting the proposed highway alignment that will provide a consistent driving speed for motorists using a 40 mph design speed that will reduce the most severe of accidents. This alternative meets the guideline to minimize grading activities to the maximum extent practicable.**

3. Project applicants shall be responsible for the proper maintenance and survival of any planted vegetation required by the guidelines in this chapter.

**Findings:** As described in the Mitigation Plan (Appendix A) WSDOT has agreed to assume responsibility for maintenance and survival of all mitigations for a period of ten years or until restoration performance standards are achieved.

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5. For all proposed development, the determination of compatibility with the landscape setting shall be based on information submitted in the site plan.

**Findings: The landscape setting for GMA Parcel #01051900030000 is pastoral. The proposed highway alignment is compatible with the pastoral landscape because it does not change the essential agrarian character of the surrounding parcels.**

### GMA Key Viewing Areas Guidelines

*(Guidelines #8, 9, 11, 13-15, 17-21, 23-25, 27-30 are not applicable and are not reviewed)*

1. The guidelines in this section shall apply to proposed developments on sites topographically visible from key viewing areas.

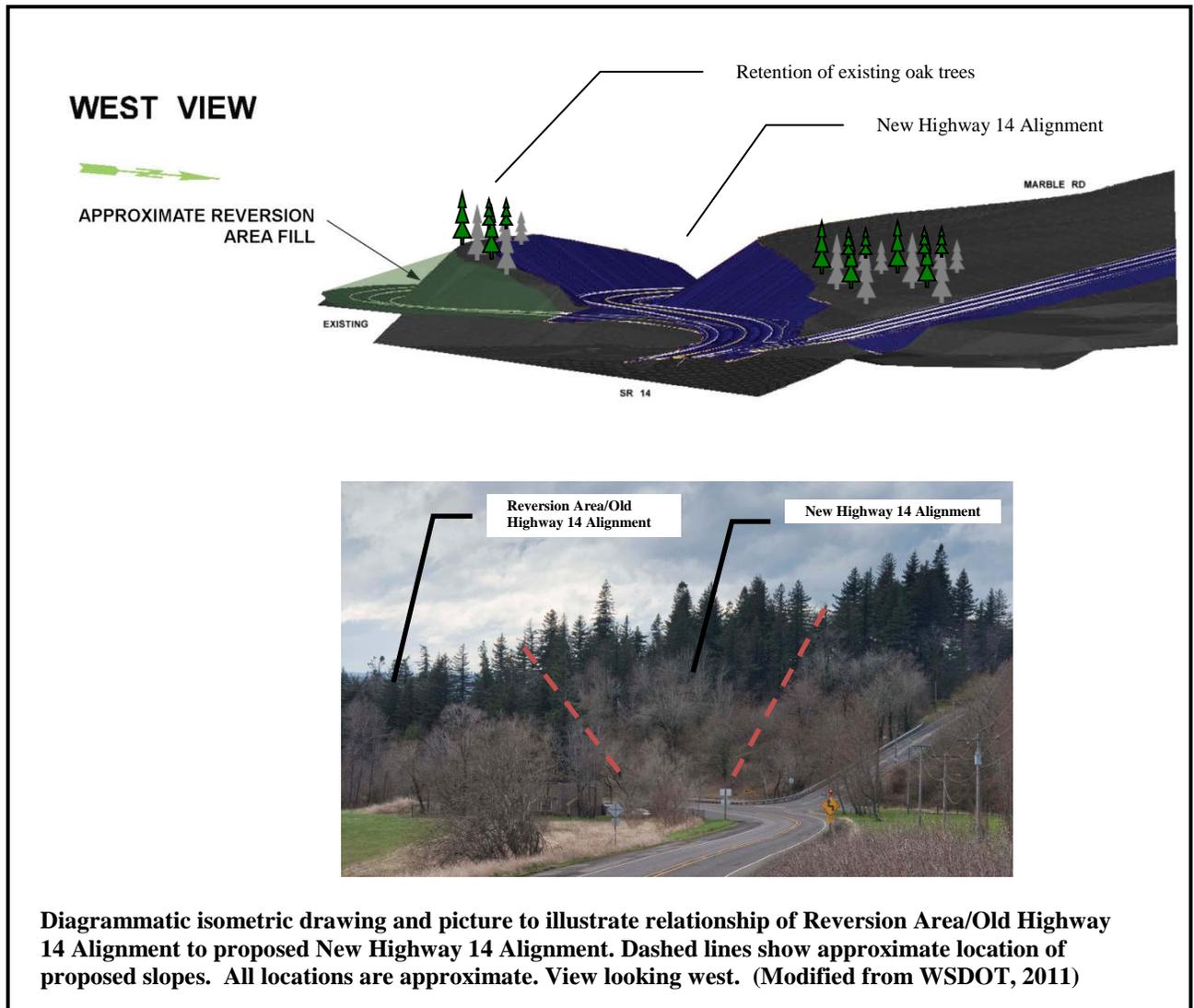
**Findings: The proposed project is visible from the following key viewing areas: Washington State Route 14; Crown Point; Portland Women Forums State Park; Rooster Rock State Park; Historic Columbia River Highway; Highway I-84; Columbia River; and Larch Mountain Road/Sherrad Pt.**

2. Each development shall be visually subordinate to its setting as seen from key viewing areas. Visually subordinate is defined as:

*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 (generally a key viewing area, for the Management Plan). As opposed to structures that are fully screened, structures that are visually subordinate may be partially visible. They are not visually dominant in relation to their surroundings..... (MP, Glossary-20).*

**Findings: This project was designed to minimize scenic resource impacts from the Key Viewing areas of Crown Point; Portland Women Forums State Park; Rooster Rock State Park; Historic Columbia River Highway; Highway I-84; Columbia River, and Larch Mountain Road/Sherrad Pt. This is accomplished by retaining the existing cut slope which has a mix of fir, oak, shrubs, and forbs. Fill from the excavation area will be placed within the reversion area to restore this slope to an approximation of the original topography. The existing oak trees at the crest of the berm will remain undisturbed. The Reversion Area/Old Highway 14 Alignment created from the abandonment of Highway 14 functions as an existing topographic berm with existing oak trees at the crest to partially to fully screen the excavation area from view of all KVAs as shown below in the isometric drawing.**

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The Larch Mountain Road/Sherrad Pt is six miles away and the project area is almost too small to be discernable from this distance. After implementation of planned mitigations the impacts are negligible because the majority of users would not notice any effects or changes to the landscape.

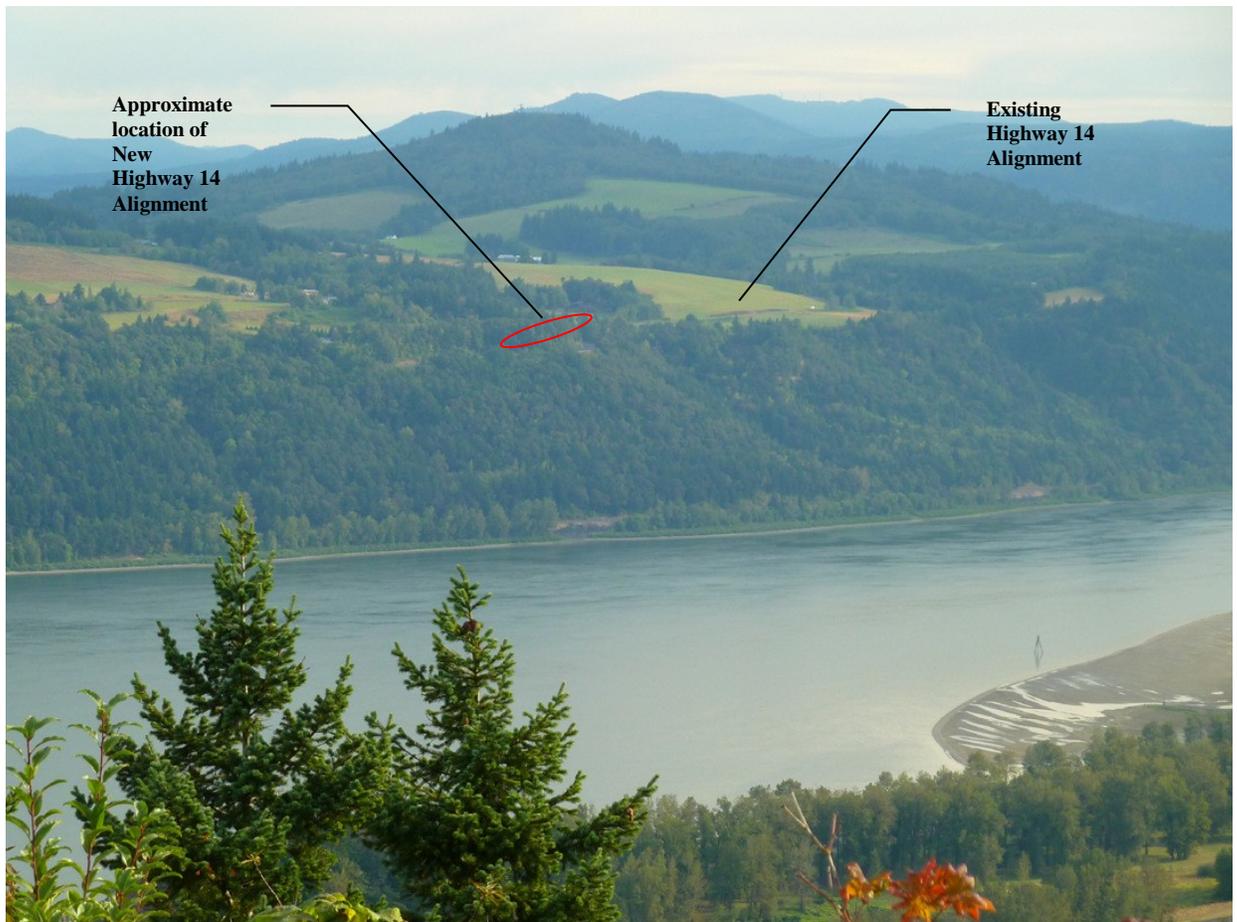
The views from Highway 84 and the Historic Columbia River Highway are “glimpse views”, very short in duration, passengers are the primary viewers, and the passenger has to be looking directly at the project site, and viewing conditions must be ideal. These are negligible impacts because most of the passengers traveling on these highways will never be able to identify the project area even during the construction period unless they are specifically trying to locate the project site.

The views from the Rooster Rock State Park KVA are similar to the Columbia River KVA and reviewed together. The primary project elements that are visible are the upper portion of the north slope of the soil cut and associated vegetation removal. The type of views includes glimpse and vista and the impacts are dependent on user activity (running/playing versus sitting). The project area is

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well screened by vegetation and somewhat difficult to see because of the viewing angle (looking up hill). The casual observer may notice the vegetation removal but impacts are generally negligible because the majority of users would not notice any effects or changes to the landscape because of the existing vegetation screening and planned mitigations.

The Crown Point and Portland Women's Forums State Park KVAs are approximately two miles in distance from the Marble Road project. The west and upper portions of the north cut slope are partially visible to fully visible as seen from these KVAs. The views from these KVA's are "vista" and the duration of the views could be quite long depending on the individual visitor. The soil cut and associated vegetation removal will create an opening that is light in color and would contrast with the surrounding forest landscape.



View as seen from Portland Women's Forum State Park KVA. This is the closest viewpoint to the project area. Photo taken as seen by a casual observer (Modified from WSDOT, 2011).

From this viewing distance the project does not meet scenic resource standards and there is the potential for more than moderate adverse consequences (*as defined at 16 U.S.C. § 544 (a)*) without mitigations. WSDOT has used established mitigation measures (*as defined at 16 U.S.C. § 544 (a) (4)*) to reduce the potentially adverse consequence to scenic resources. These mitigation measures include the

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use of the no practicable alternative test to select an alternative that balances the amount of grading while protecting scenic and natural resources; steepening the slopes to 1V:1.5H to limit disturbance; and replanting slopes within the New Highway 14 Alignment as well as the Reversion Area as a native Oregon White Oak woodland.

With the implementation of the Natural Resource Mitigation Plan these slopes will not noticeably contrast with the surrounding landscape and will fully meet visual subordination requirements' within 1-2 years of project implementation. The initial establishment of vegetation will change the color and contrast to match the surrounding landscape. While the irregular form of the project area may still be identified, to the casual observer the project area will appear like the other grass slopes and will begin to blend in with the surrounding Pastoral and Forest landscape. Within 1 – 2 years the impacts are still moderate because there is still a slight alteration of landscape character from the irregular form of the opening as compared with the surrounding landscape.

After 5 years the vegetation is well established, trees are much larger, and the impacts from the irregular form of the project area will continue to decrease. The revegetation of the Reversion Area with an Oregon White Oak community will provide additional screening at the west end of the road alignment once the vegetation becomes established and provide further mitigation this portion of the project area. After 5 years the impacts are minor because there is still a slight change in landscape character, but will generally not be readily visible to the casual observer. This meets the visual standard of visual subordination. After 10 years the project area as seen from the Crown Point and Portland Women's Forums State Park KVAs will begin to meet the visual standard of Not Visually Evident.

The greatest effects are to the Highway 14 KVA within the immediate foreground of the new alignment. As described in the WSDOT Visual Quality Assessment Technical Memorandum the north and south slopes of the new alignment will be designed to blend with adjacent topography and retain a more natural appearance after revegetation. Slope areas that are too steep for standard revegetation will be seeded with a native seed mix while the remaining slopes will be revegetated as an Oregon White Oak community. The effects to scenic resources are moderate, temporary adverse consequences. The change will not be evident to the casual observer after 5 years because the area will only be slightly altered because of the re-establishment of the vegetation the intensity of the impacts are considered minor. These slopes should not noticeably contrast and appear similar to the other cut slopes within the foreground of the Highway 14 KVA.

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

**Findings:** Cumulative effect findings are addressed at the end of the Scenic Resources section.

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4. 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.

A. Decisions shall include written findings addressing the factors influencing potential visual impact, including but not limited to:

- (1) The amount of area of the building site exposed to key viewing areas.
- (2) The degree of existing vegetation providing screening.
- (3) The distance from the building site to the key viewing areas from which it is visible.
- (4) The number of key viewing areas from which it is visible.
- (5) The linear distance along the key viewing areas from which the building site is visible (for linear key viewing areas, such as roads)

New Highway 14 Alignment GMA Parcel #01051900030000	% Area Exposed to KVA <sup>1</sup>	Existing Vegetative Screening (Full, Partial, Absent)	Viewing Distance (FG, MG, BG) <sup>2</sup>	Type exposure along KVA (Vista or linear)	Visually Sub- ordinate <sup>3</sup> (Yes/No)
Key Viewing Area					
Highway 14	100%	Absent	Immediate FG	Linear ~ 0.3 miles in length	Yes, with submitted mitigation measures.
Crown Point, Portland Women's Forums State Park	~ 25-50%, West end of realignment area and upper slopes	Partial Screening by Reversion Area	MG ~ 2 miles away	Vista	Yes, with submitted mitigation measures.
Rooster Rock State Park	~ 25%, Upper slopes realignment area	Partial Screening by Reversion Area	MG ~ 2 miles away	Vista	Yes
Historic Columbia River Highway	<10%, Upper slopes realignment area	Partial Screening by Reversion Area; trees on north side Historic Highway	MG ~ 2 – 4 miles away	Linear	Yes
Highway 84, Columbia River	<10%, Upper slopes realignment area	Partial Screening by Reversion Area; trees on north side I-84	MG ~ 2 – 4 miles away	Liner	Yes
Larch Mountain Road/ Sherrad Pt	100%	Partial Screening by Reversion Area	BG ~ 6 miles away	Vista	Yes
<sup>1</sup> Percent exposure is an approximation based on a professional interpretation <sup>2</sup> FG = Foreground (within 1/4 mile for Scenic Travel Corridors) MG = Middle Ground (between 1/4 mile and 3 miles); and BG = Back Ground (more than 3 miles away) <sup>3</sup> See findings for GMA Key Viewing Area Guideline #2 for complete discussion of visual subordination					

B. Conditions may be applied to various elements of proposed developments to ensure they are visually subordinate to their setting as seen from key viewing areas, including but not limited to:

- (1) Siting (location of development on the subject property, building orientation, and other elements).
- (2) Retention of existing vegetation.
- (3) Design (color, reflectivity, size, shape, height, architectural and design details and other elements).
- (4) New landscaping.

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**Condition:** The Forest Service is requiring the incorporation of all design features, mitigations, and specifications identified in the Visual Quality Assessment Technical Memorandum of October 2011; 2012 Mitigation Plan; and NSA Application of September 2011 into all contract specifications.

**Condition:** The Forest Service is requiring that a WSDOT landscape architect be present during the final periods of excavation of the cut slopes within the realignment area to ensure an irregular, natural appearance of the final slopes. Preservation of oaks on the south side of the cut slope crest is highly encouraged.

5. 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, sensitive plants, or sensitive wildlife sites or would conflict with guidelines to protect cultural resources. In such situations, development shall comply with this guideline to the maximum extent practicable.

**Findings:** The proposed new alignment is not within any identified buffer zones for protection of wetlands, riparian corridors, sensitive plants, or sensitive wildlife sites or would conflict with guidelines to protect cultural resources.

6. New development shall be sited using existing topography and/or existing vegetation as needed to achieve visual subordination from key viewing areas.

**Findings:** The use of the Reversion Area with retention of existing and planting new vegetation meets the requirement of using existing topography to achieve visual subordination.

7. Existing tree cover screening proposed development from key viewing areas shall be retained as specified in the Landscape Settings Design Guidelines section of this chapter.

**Findings:** The retention of the existing vegetation within the Reversion Area (native oak trees, shrubs, and forbs) meets this requirement.

10. The following guidelines shall apply to new landscaping used to screen development from key viewing areas:
  - A. New landscaping (including new earth berms) shall be required only when application of all other available guidelines in this chapter is not sufficient to make the development visually subordinate from key viewing areas. Alternate sites shall be considered prior to using new landscaping to achieve visual subordination. Development shall be sited to avoid the need for new landscaping wherever possible.
  - B. If new landscaping is required to make a proposed development visually subordinate from key viewing areas, existing on-site vegetative screening and other visibility factors shall be analyzed to determine the extent of new landscaping, and the size of new trees needed to achieve the standard. Any vegetation planted pursuant to this guideline shall be sized to provide sufficient screening to make the development visually subordinate within five years or less from the commencement of construction.

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- C. Unless as specified otherwise by provisions in this chapter, landscaping shall be installed as soon as practicable, and prior to project completion. Applicants and successors in interest for the subject parcel are responsible for the proper maintenance and survival of planted vegetation, and replacement of such vegetation that does not survive.
- D. The *Scenic Resources Implementation Handbook* shall include recommended species for each landscape setting consistent with the Landscape Settings Design Guidelines in this chapter, and minimum recommended sizes of new trees planted (based on average growth rates expected for recommended species).

**Findings:** As described in the WSDOT Mitigation Plan and Visual Quality Assessment Technical Memorandum, the revegetation of all disturbed areas is incorporated into project design using native species that have been reviewed and approved by the Forest Service.

**Condition:** Trees and shrubs shall be planted on all cleared areas as described in the Visual Quality Assessment Technical Memorandum. Trees and shrubs should be planted in groupings to reflect the natural pattern on the landscape and should be of variable sizes. Any changes to the native plants species list identified for site restoration will require the approval of the Forest Service.

**Condition:** Within five years of planting the cleared areas shall meet the performance standards identified in the Mitigation Plan performance criteria.

- 12. Unless expressly exempted by other provisions in this chapter, colors of structures on sites 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.

**Findings:** If rock is encountered in the cut surfaces it will be surfaced with a natural weathering agent (Permeon or similar material) to reduce visibility. All guard rails are constructed from weathered steel to reduce glare and reflectivity. The guard rails and natural weathering agent meet the requirements of the Scenic Resources Implementation Handbook for colors and reflectivity.

**Condition:** Any materials such as concrete, shotcrete or grout that are visible from SR 14 shall be of a dark earth tone color.

- 16. Exterior lighting shall be directed downward and sited, hooded, and shielded such that it is not highly visible from key viewing areas. Shielding and hooding materials shall be composed of non-reflective, opaque materials.

**Findings:** No highway safety lighting is proposed for this project.

- 22. Overpasses, safety and directional signs, and other road and highway facilities may protrude above a skyline visible from a key viewing area only upon a demonstration that:
  - A. The facility is necessary for public service, and

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B. The break in the skyline is the minimum necessary to provide the service.

**Findings: No safety and directional signs, or other materials will protrude above the skyline of the new cut slope.**

26. All proposed structural development involving more than 200 cubic yards of grading on sites visible from key viewing areas shall include submittal of a grading plan. This plan shall be reviewed by the local government for compliance with key viewing area policies. The grading plan shall include the following: (see 26 A (1 – 3); B (1-6); MP, page I-1-12).

**Findings: The grading plans have been reviewed by a Forest Service landscape architect and they meet the requirements identified in 26A and 26B (MP, I-1-12). See WSDOT Application and submitted Mitigation Plan (Appendix A).**

### ***GMA Landscape Settings Design Guidelines for Pastoral Landscape Setting*** (Only applicable setting)

2. In portions of this setting visible from key viewing areas, the following guidelines shall be employed to achieve visual subordination for new development and expansion of existing development:
- A. Except as is necessary for site development or safety purposes, the existing tree cover screening the development from key viewing areas shall be retained.
  - B. Vegetative landscaping shall, where feasible, retain the open character of existing pastures and fields.
  - C. 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, big leaf maple, and black locust (primarily in the eastern Gorge).
  - D. At least one-quarter of any trees planted for screening shall be coniferous for winter screening.

**Findings: Existing vegetation was retained as much as possible (See Key Viewing Area Findings #2). The proposed restoration plan meets the requirements of the Pastoral Landscape Setting. Disturbed areas will be planted with a native woody understory with species at a density of 4,000 stems per acre. Oregon White Oak will be planted at a density of 200 trees per acre. Slope areas too steep for this treatment will be replanted with a native herbaceous and woody seed mix. Douglas-fir is not required within the New Highway 14 Alignment because the intent is to create an Oregon White Oak landscape and because it would not provide screening to any of the other KVAs.**

**The WSDOT proposal, with submitted mitigation measures, also meets GMA Overall Scenic Resource Policy #3 that expansion of existing development shall be compatible with its landscape setting to the maximum extent practicable**

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**Conditions:** The Forest Service has requested that a small number of Douglas-fir be planted at the west end of the Reversion Area for additional screening from the Crown Point and Portland Women's Forums State Park KVAs.

## GMA Scenic Travel Corridor Guidelines

*(Standards # 2 -7 are not applicable and are not reviewed)*

1. For the purposes of implementing this section, the foreground of a scenic travel corridor shall include those lands within 1/4 mile of the edge of pavement of the scenic travel corridor roadway.

**Findings:** The foreground of Highway 14 was evaluated using the distance of 1/4 mile for the foreground.

## GMA Signs Guidelines

*(Guideline # 2 is not applicable and is not reviewed)*

1. Except for signs allowed without review pursuant to "Uses Allowed Outright" (Part II, Chapter 7: General Policies and Guidelines), all new signs must meet the following guidelines unless these guidelines conflict with the Manual for Uniform Traffic Control Devices for public safety, traffic control or highway construction signs. In such cases, the standards in the Manual for Uniform Traffic Control Devices shall supersede these guidelines.

**Findings:** The existing highway signs will be replaced in new locations and cannot be considered a Use Allowed Outright. Signs along public highways necessary for public safety, traffic control, or road construction and consistent with the Manual for Uniform Traffic Control Devices are an allowed use.

**Condition:** Signs used in this project will have the following: (A) The support structure shall be unobtrusive and have low visual impact; (B) Lettering colors with sufficient contrast to provide clear message communication and signs shall be colored to blend with their setting to the maximum extent practicable; and (C) backs of all signs shall be unobtrusive, non-reflective, and blend in with the setting.

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## **SMA Scenic Resource Policies** *(Policies # 3 -8 are not applicable and are not included)*

1. The appearance and character of the Landscape Settings within the SMA shall be protected. (Character is defined as the land use, landform and vegetation as described in the GMA Scenic Resources section of this chapter).
2. In developing conditions of approval, agencies shall emphasize those elements that, in combination, provide effective, long-term scenic resource protection.

## **SMA Design Guidelines Based on Landscape Settings**

1. The following guidelines apply to all lands within SMA landscape settings regardless of visibility from KVAs (includes areas seen from KVAs as well as areas not seen from KVAs):
  - A. Pastoral: Pastoral areas shall retain the overall appearance of an agricultural landscape.
    - (1) The use of plant species common to the landscape setting shall be encouraged. The use of plant species in rows, as commonly found in the landscape setting, is encouraged.

**Findings: The areas identified in these findings within the Existing Highway 14 Alignment and the Cleveland Oak Mitigation Site are in the pastoral landscape. As described in the WSDOT Mitigation Plan and Visual Quality Assessment Technical Memorandum the revegetation of all disturbed areas is incorporated into the design of the project using native species that have been reviewed and approved by the Forest Service.**

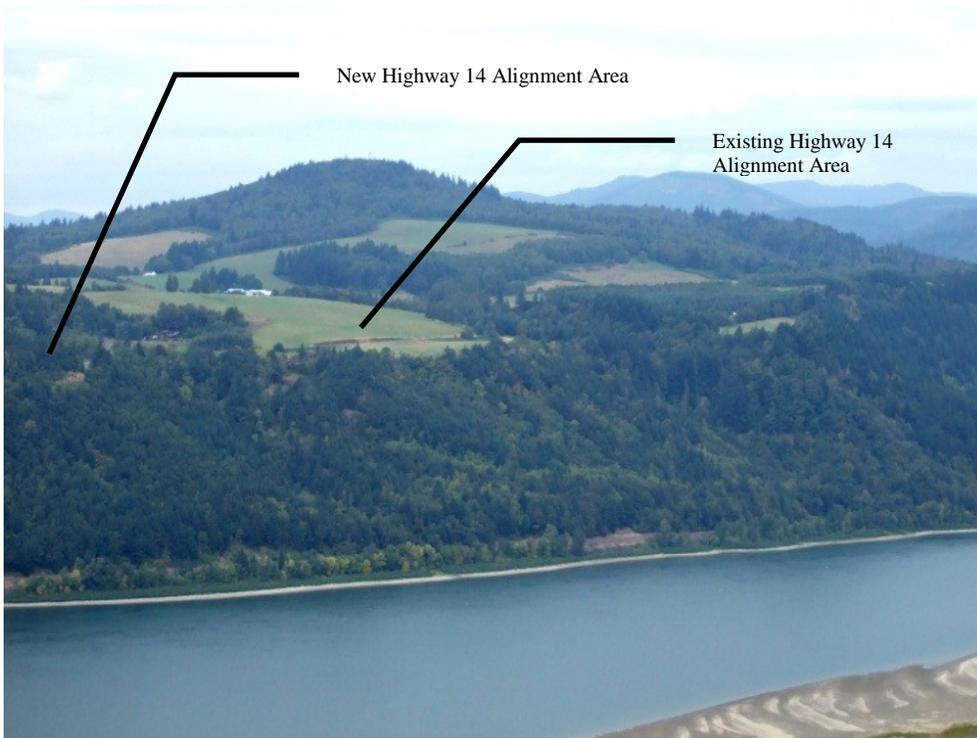
## **SMA Guidelines for Development and Uses Visible from KVAs**

*(Guidelines # 8, 9, 10, 14 are not applicable and are not reviewed)*

1. The guidelines in this section shall apply to proposed developments on sites topographically visible from key viewing areas.

**Findings: The Existing Highway 14 Alignment is visible from Washington State Route 14, Crown Point and Portland Women Forums State Park. This area is topographically visible, but partially screened by vegetation from Rooster Rock State Park; Historic Columbia River Highway; Highway I-84; Columbia River; and Larch Mountain Road. The Cleveland Oak Mitigation Site is topographically visible, but completely screened by vegetation, from Crown Point; Portland Women Forums State Park; Historic Columbia River Highway; Highway I-84; Columbia River; and Larch Mountain Road/Sherrad Pt KVAs.**

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View looking from Crown Point KVA. (WSDOT, 2011)

2. New developments and land uses shall be evaluated to ensure that the required scenic standard is met and that scenic resources are not adversely affected, including cumulative effects, based on the degree of visibility from key viewing areas.

**Findings:** “Adverse affect” or “adversely affecting” as defined in the National Scenic Area Act at 16 U.S.C. § 544 (a) (1-4) as “*a reasonable likelihood of more than moderate adverse consequences for the scenic, cultural, recreation, or natural resources, the determination of which is based on (1) the context of the proposed action; (2) the intensity of the proposed action, including magnitude and duration of an impact and likelihood of its concurrence; (3) the relationship between a proposed action and other similar actions which are individually insignificant but which may have cumulatively significant impacts; and (4) proven mitigation measures which the proponent of an action will implement as part of the proposal to reduce otherwise significant affects to an insignificant level*”.

The primary activities consists of removing the existing pavement, placing fill on the north and south sides of the road, construction of storm water treatment facilities, changing the road alignment, repaving the road, placement of guard rails, and the realignment of the Marble Road intersection. These activities will permanently impact Wetland H and a small portion of Wetland I.

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View looking west along SR14 (WSDOT, 2011)

**Impacts to scenic resources during construction occur through the creation of contrasting color and texture because of the removal of the existing pavement and the remaining construction activities. At the east end of this project area, there is also a 400 foot section of cut slope, generally less than 3 feet in height, on the north side of State Route 14. This small area of cut slope will be revegetated. The primary change in visual character will be the removal of the vegetation in Wetland H for a distance of 300 linear feet on the north side of State Route 14.**

**These impacts are short term in duration and limited to State Route 14; Crown Point; and Portland Women Forums State Park KVA's. None of these impacts are visible from any of the other KVA's because of their small size, existing vegetative screening, middle and foreground viewing distances, and the limited duration of view. There are no other affects to the visual character of the surrounding agrarian landscape. The view from the Crown Point KVA will remain unchanged after completion of the project. After implementation of planned mitigations the scenic resource impacts are negligible because the majority of users would not notice any effects or changes to the landscape.**

**There are no adverse consequences to scenic resources within the Existing Highway 14 Alignment. The impacts are temporary and limited because of the short duration of construction period and the small scope of the grading activities. The proposed project within the Existing Highway 14 Alignment area meets the scenic standard of visual subordination. The positive impacts to the State Route 14 scenic highway corridor include creation of a wider road, well defined shoulders,**

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guard rails constructed from naturally weathered steel, and in general a more pleasing driving experience for users of the scenic route.

Cumulative effect findings are included at the end of the scenic resource section.

The Cleveland Oak Mitigation site will be converted from a pastoral landscape to an Oregon Oak woodland. Users of the Cape Horn trail will see temporary impacts to scenic resources during surface preparation, bark mulch placement, and planting. There are no adverse consequences to scenic resources because of the short term and limited duration, and negligible impact of these activities and the proposed mitigation project meets the scenic standard of visual subordination.



View looking south from Cape Horn Trail of Cleveland Oak Mitigation site.  
(WSDOT, 2011)

3. The required SMA scenic standards for all development and uses are summarized in the following table: (MP, I-1-38)

REQUIRED SMA SCENIC STANDARDS		
LANDSCAPE SETTING	LAND USE DESIGNATION	SCENIC STANDARD
Pastoral	Forest, Agriculture, Public Recreation, Open Space	Visually Subordinate

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**Findings: The required scenic standard is visually subordinate for Agriculture land uses in the Pastoral landscape setting. Visually Subordinate is defined as:**

*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 (generally a key viewing area, for the Management Plan). As opposed to structures that are fully screened, structures that 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. (MP, Glossary-21)*

4. In all landscape settings, scenic standards shall be met by blending new development with the adjacent natural landscape elements rather than with existing development.

**Findings: The new construction within the Existing Highway 14 Alignment is a modification of the existing highway and will have no net increase in effects to the adjacent agrarian landscape. The Mitigation Plan submitted for the Cleveland Oak Mitigation Site will restore a portion of the historical Oregon White Oak landscape and will blend in with the surrounding deciduous forest.**

5. 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.

**Findings: The new construction within the Existing Highway 14 Alignment has been sited to limit the impact to landforms, vegetative cover, and the natural characteristics and the proposed grading activities will have minimal affect on scenic resources (See Findings for SMA Guideline #2 for Development and Uses Visible from KVAs). The Mitigation Plan submitted for the Cleveland Oak Mitigation Site has no proposed grading activities or other modifications.**

6. The extent and type of conditions applied to a proposed development or use to achieve the scenic standard shall be proportionate to its degree of visibility from key viewing areas.
  - A. Decisions shall include written findings addressing the factors influencing the degree of visibility, including but not limited to:
    - (1) The amount of area of the building site exposed to key viewing areas,
    - (2) The degree of existing vegetation providing screening,
    - (3) The distance from the building site to the key viewing areas from which it is visible,
    - (4) The number of key viewing areas from which it is visible, and
    - (5) The linear distance along the key viewing areas from which the building site is visible (for linear key viewing areas, such as roads).

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New Construction Existing Highway 14 Alignment	% Area Exposed to KVA <sup>1</sup>	Existing Vegetative Screening (Full, Partial, Absent)	Viewing Distance (FG, MG, BG) <sup>2</sup>	Type exposure along KVA (Vista or linear)	Visually Sub-ordinate (Yes/No)
Key Viewing Area					
<b>Highway 14</b>	100%	Absent	Immediate FG	Linear ~ 0.3 miles	Yes. Short term temporary impacts but no visible change as seen from these KVAs.
<b>Crown Point, Portland Women's Forums State Park</b>	~ 75-100%, West end of realignment area and upper slopes	Partial Screening by trees at west end of work area.	MG	Vista	Yes. Short term temporary impacts but no visible change as seen from these KVAs.
<b>Rooster Rock State Park, Historic Columbia River Highway, Highway 84, Columbia River, Larch Mountain Road/Sherrad Pt</b>	~0 - 25%, north side of SR 14.	Partial to Full depending on viewpoint.	MG, BG	Vista, and linear	Yes. None of the impacts are visible because of their small size, existing vegetative screening, MG/BG viewing distances, and the limited duration of views.
<sup>1</sup> Percent exposure is an approximation based on a professional interpretation <sup>2</sup> FG = Foreground (within 1/4 mile for Scenic Travel Corridors) MG = Middle Ground (between 1/4 mile and 3 miles); and BG = Back Ground (more than 3 miles away)					

Cleveland Oak Mitigation Site	% Area Exposed to KVA <sup>1</sup>	Existing Vegetative Screening (Full, Partial, Absent)	Viewing Distance (FG, MG, BG) <sup>2</sup>	Type exposure along KVA (Vista or linear)	Visually Sub-ordinate (Yes/No)
Key Viewing Area					
<b>Larch Mountain Road/Sherrad Pt</b>	100%	Full vegetative screening.	BG	Vista, and linear	Yes. Because of the long viewing distance the small size of this 12 acre opening is difficult to discern to the casual observer.
<sup>1</sup> Percent exposure is an approximation based on a professional interpretation <sup>2</sup> FG = Foreground (within 1/4 mile for Scenic Travel Corridors) MG = Middle Ground (between 1/4 mile and 3 miles); and BG = Back Ground (more than 3 miles away)					

- B. Conditions may be applied to various elements of proposed developments to ensure they meet the scenic standard for their setting as seen from key viewing areas, including but not limited to:

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- (1) Siting (location of development on the subject property, building orientation, and other elements),
- (2) Retention of existing vegetation,
- (3) Design (color, reflectivity, size, shape, height, architectural and design details and other elements), and
- (4) New landscaping.

### **Findings: Conditions are the same as GMA Key Viewing Area Guideline 4.**

7. Sites approved for new development to achieve scenic standards shall be consistent with guidelines to protect wetlands, riparian corridors, sensitive plant or wildlife sites and the buffer zones of each of these natural resources, and guidelines to protect cultural resources.

### **Findings: The proposed work with the Existing Highway 14 Road Alignment and Cleveland Oak Mitigation site are consistent with all guidelines for natural and cultural resources.**

11. Unless expressly exempted by other provisions in this chapter, colors of structures on sites visible from key viewing areas shall be dark earth-tones found at the specific site or the surrounding landscape. The specific colors or list of acceptable colors shall be included as a condition of approval. The *Scenic Resources Implementation Handbook* shall include a recommended palette of colors as dark or darker than the colors in the shadows of the natural features surrounding each landscape setting.

### **Findings: The guardrails are a Corten/weathering steel rail which are dark brown in color and meet the requirements of a dark earth-tone color.**

### **Conditions: Replace high visibility fencing at Cleveland Oak Mitigation Site with carsonite or wood posts, earth-tone in color, spaced every 50 feet apart.**

12. The exterior of structures on lands seen from key viewing areas shall be composed of non-reflective materials or materials with low reflectivity. The *Scenic Resources Implementation Handbook* shall include a recommended list of exterior materials. These recommended materials and other materials may be deemed consistent with this guideline, including those where the specific application meets approval thresholds in the “Visibility and Reflectivity Matrices” in the Implementation Handbook. Continuous surfaces of glass unscreened from key viewing areas shall be limited to ensure meeting the scenic standard. Recommended square footage limitations for such surfaces will be provided for guidance in the Implementation Handbook.

### **Findings: A road is considered a structure as defined in the Management Plan (MP, Glossary-19). The use of asphalt for the road construction is considered a non-reflective material. The guardrails used for the project are Corten/weathering steel and meet reflectivity requirements.**

13. Any exterior lighting shall be sited, limited in intensity, shielded, or hooded in a manner that prevents lights from being highly visible from key viewing areas and from noticeably contrasting with the surrounding landscape setting, except for road lighting necessary for safety purposes.

### **Findings: Not applicable. No highway street lights are proposed for this project.**

## SMA Guidelines for KVA Foregrounds and Scenic Routes

*(Guidelines # 1, 3, and 6 are not applicable and are not reviewed)*

2. Scenic highway corridor strategies shall be developed and implemented for Interstate 84 (I-84), Washington State Route 14 (SR 14) and the Historic Columbia River Highway (HCRH). For I-84, SR 14 and the HCRH, this involves ongoing implementation (and possible updating) of the associated existing documents.

**The SR 14 Corridor Management Plan was completed in July 1997 and the proposed project is identified as Project Number 5CL – MP 22.7 to MP 24.20 Marble Road Vicinity to Half Bridge. The proposed project incorporated guidelines from the SR 14 Corridor Management Plan and include:**

### *Guard Rails*

**For most traffic control situations standard Steel “W” beam guard rail should be used. Weatherized steel guardrail will be installed rather than galvanized steel because it is less reflective and meets the intent of Scenic Area Management Plan.**

### *Culvert Treatment*

**Newly constructed culverts or existing culverts within roadway projects that are visible from the roadway should be constructed in an unobtrusive manner. Visible culvert faces should be constructed with the same materials and design theme as other Gorge structures, if feasible. Fill will be blended to the slope of the culvert.**

### *Laying Back Slopes*

**Reducing the slope grades back to the angle of repose or flatter is preferred. Flattening the slope would not be appropriate where old-growth trees or a larger area of sensitive vegetation must be removed, or if the slope in question is extremely high.**

### *Tree Preservation*

**To preserve the scenic value of the road corridor, large trees will be saved where possible unless no reasonable option exists. Specimen trees (36-inches or larger), outstanding evergreen or deciduous trees, and vegetation within environmentally sensitive areas, such as streamside riparian habitat, should carry special importance and will be evaluated on a case-by-case basis. Ordinarily, tree wells will not be considered a cost-effective alternative within the SR 14 right-of-way.**

### *Highway Geometrics*

**Design standard deviations are expected to occur on a project-specific basis because of the significant design constraints along SR14. Design deviations should take into consideration the SR 14 Highway Design Guidelines and the SR 14 Corridor Strategy and Action Plans.**

### *Planting Guidelines*

**Planting guidelines developed for Slope Preparation, Plant Material, Survivability, Planting Design, Planting in the Clear Zone, and a plant list.**

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**Findings: The guardrails used for the project are Corten/weathered steel. The culvert at the Marble Road intersection is located beneath highway fill and will not be visible. WSDOT has chosen not to flatten the slopes in order to reduce the impacts to Oregon White Oaks. A no practicable alternative test was completed for the removal of trees in the New Highway 12 Alignment (See Findings for GMA Guidelines 1). As described in the no practicable alternative test WSDOT consider all aspects of the SR 14 Highway Design Guidelines and the SR 14 Corridor Strategy in development of the selected alternative. WSDOT Mitigation Plan for restoration of all disturbed areas meets the Planting Guidelines identified in the SR 14 Corridor Management Plan.**

4. The following guidelines shall apply only 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 of KVAs such as Crown Pt. and Multnomah Falls. They shall apply in addition to applicable guidelines in the previous section (SMA Guidelines for Development Visible from KVAs).
  - A. The proposed development shall be designed and sited to meet the applicable scenic standard from the foreground of the subject KVA. If the development cannot meet the standard, findings must be made documenting why the project cannot meet the requirements in the previous section and why it cannot be redesigned or wholly or partly relocated to meet the scenic standard (section 4B and 4C not applicable, MP, page I-1-42).

**Findings: The work within the Existing Highway 14 Alignment area has been designed to limit grading activities and vegetative disturbance and meets the scenic standard of visual subordination.**

5. Right-of-way vegetation shall be managed to minimize visual impacts of clearing and other vegetation removal as seen from key viewing areas. Roadside vegetation management (vista clearing, planting, etc.) should enhance views from the highway.

**Findings: Wetland H will be permanently impacted from the placement of fill. There are no other impacts to surrounding vegetation from the placement of fill and widening the road.**

## **GMA/SMA Scenic Resources Cumulative Effect Findings**

GMA Key Viewing Area Guideline #3 - Determination of potential visual effects and compliance with visual subordination policies shall include consideration of the cumulative effects of proposed developments.

SMA Guidelines for development and uses visible from KVA Guideline #2 - New developments and land uses shall be evaluated to ensure that the required scenic standard is met and that scenic resources are not adversely affected, including cumulative effects, based on the degree of visibility from key viewing areas.

**The Existing Highway 14 Alignment reviewed in this consistency determination has no adverse consequences to scenic resources; therefore, there will be no cumulatively significant impacts to scenic resources within the Columbia River Gorge National Scenic Area.**

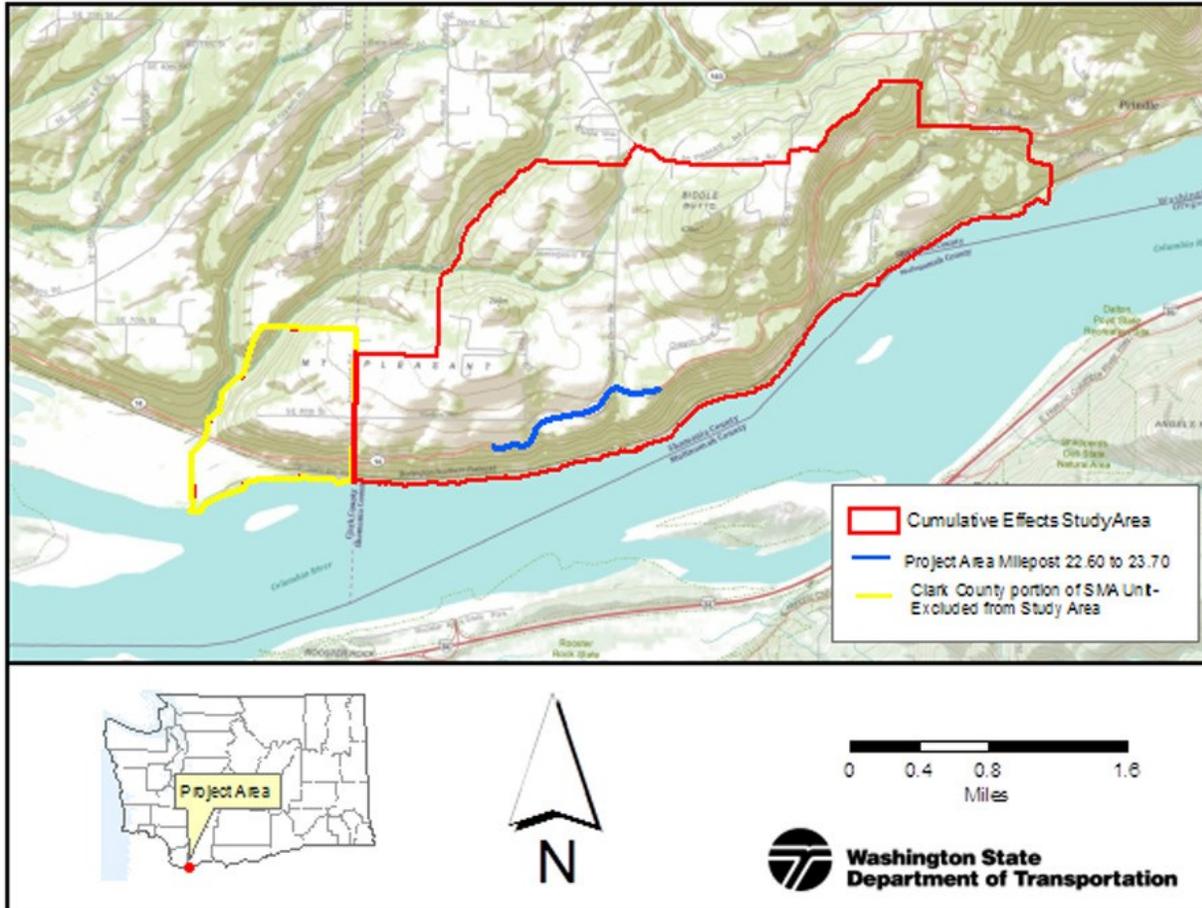
**The New Highway 14 Alignment has the potential to have more than moderate adverse consequences for scenic resources. The impact to three of the KVA's are potentially adverse consequences, long-term in duration, and of moderate intensity. WSDOT has used established mitigation measures (16 U.S.C. § 544 (a) (4)) to reduce potentially cumulatively significant impacts to scenic resources to a negligible level (See GMA Key Viewing Area Guideline #2 Findings).**

**Cumulative effects are defined in the Management Plan 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*” (MP, Glossary-6).**

### ***Spatial and Temporal Boundary***

**Unless otherwise specified, the temporal boundary of ten years was selected because it's maximum length of time for any government agency or private organization to reasonably project and plan future projects. The study area is entirely in SMA management unit within Skamania County. The study area is approximately 3000 acres in size and includes the project area and adjacent private, state, and federal lands as shown below. The study area also encompasses the individual viewsheds for each KVA and is large enough to cover recent and future WSDOT construction activities.**

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### *Past Actions*

The cumulative effects analysis includes an analysis of past actions by including them in the assessment of current conditions. Current conditions within the Columbia River gorge have been impacted by innumerable actions over the last century (and beyond), and trying to isolate the individual actions that continue to have residual impacts would be nearly impossible. Providing the details of past actions on an individual basis would not be useful to predict the cumulative effects of the proposed action or alternatives. Focusing on individual actions would be less accurate than looking at existing conditions, because there is limited information on the environmental impacts of individual past actions, and one cannot reasonably identify each and every action over the last century that has contributed to current conditions. Additionally, focusing on the impacts of past human actions risks ignoring the important residual effects of past natural events, which may contribute to cumulative effects just as much as human actions. The current conditions serve as an aggregate of all past actions, so by looking at current conditions, we are sure to capture all the residual effects of past human actions and natural events, regardless of which particular action or event contributed those effects. The WSDOT Cape Horn Road Project is a recent project that is included as present conditions.

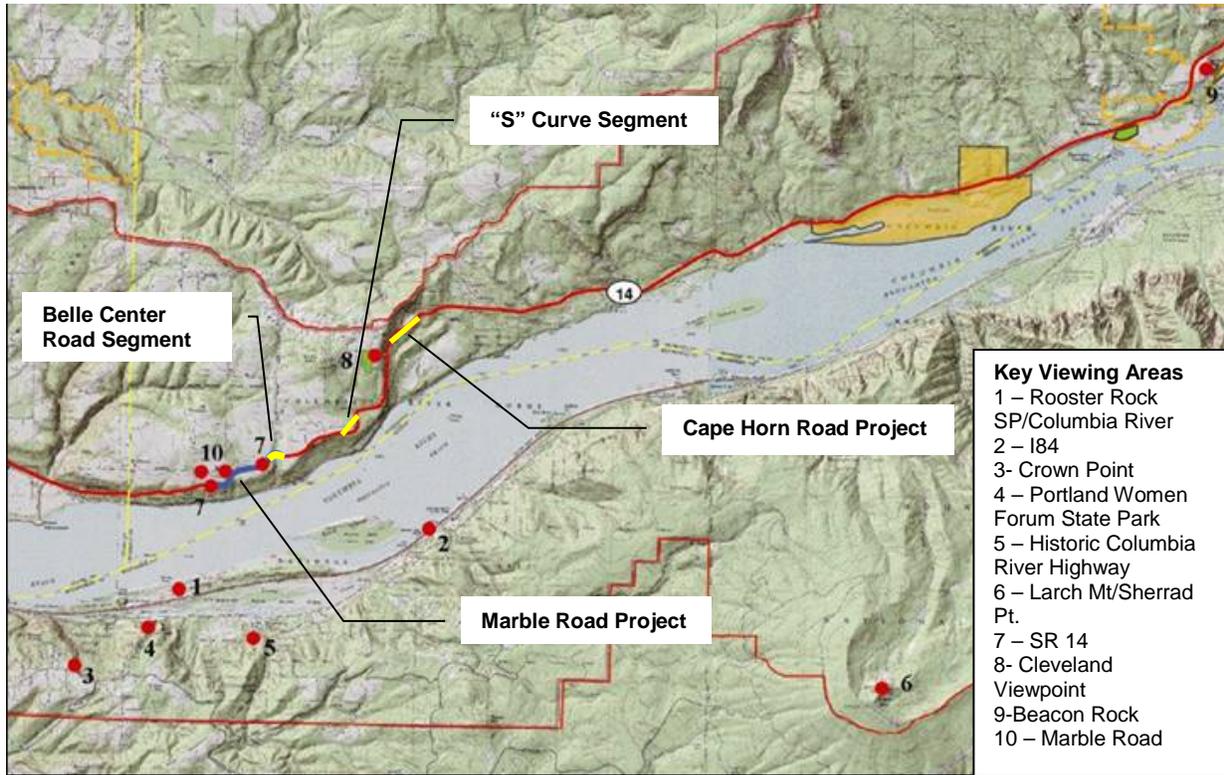
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## *Reasonably Foreseeable Present and Future Actions*

Present and Reasonable Foreseeable Future Actions	Potential effects	Overlap		Cumulative Impacts
		Time	Space	
Conversion of agricultural land to oak woodland	A large portion of the original oak woodland forest within the Scenic Resources CESA has been removed. Agricultural land that is not in production remains fallow and are potential sites for invasive plant populations. Ongoing agricultural use limits the opportunity for invasive plant populations to spread.	Yes	Yes	The conversion of 12 acres of agricultural land to a native oak forest is a neutral impact to scenic resources. Both landscape types have equal value as a scenic resource. The Cleveland Oak Mitigation Site, combined with all other existing and future agricultural land uses, should have no cumulatively significant impacts to scenic resources.
Existing and ongoing farming activities	Farming activities that affect scenic resources should meet MP requirements. One landowner adjacent and south of the existing Highway 14 Alignment has a number of different proposals that could involve new farming activities but they all must meet MP requirements.	Yes	Yes	Farming activities are an identified component of this pastoral landscape and are considered a scenic resource. WSDOT's project will impact 2.5 acres of GMA parcel #01051900030000. The loss of 2.5 acres of farmland in a 3000 acre CESA is a negligible incremental impact to scenic pastoral resources that directly impacts only 2 of the 7 KVAs. Cumulative significant impacts to scenic resource are neutral.
Transmission facilities and operation	Existing transmission facilities are large linear features that can affect scenic resources in the foreground and middleground depending on their location and visibility. Most of this infrastructure was present before the establishment of the NSA and are an allowed deviation to scenic resources requirements. Replacement of any transmission facility (tower, road, other) should not have any new effect to scenic resources because the transmission right-of-ways have already been cleared. Operation and maintenance of access roads should not create new effects to scenic resources. No new transmission projects are identified in the CESA.	Maybe	Yes	There are no adverse consequences from the operation and maintenance of transmission facilities in the CESA. The WSDOT proposal has been mitigated to a negligible level and when combined with all present and reasonably foreseeable future transmission projects for operation and maintenance, cumulative significant impacts to scenic resource are neutral.
Railway construction, operation, and maintenance	Existing railways are large linear features that can affect scenic resources in the foreground and middleground depending on their location and visibility. Most of this infrastructure was present before the establishment of the NSA and is an allowed deviation to scenic resources. Replacement of any facility or structure should not create any new effects to scenic resources. No new railway projects are identified.	Maybe	Yes	There are no adverse consequences from the operation and maintenance of railroad projects in the CESA. The WSDOT proposal has been mitigated to a negligible level and when combined with all present and reasonably foreseeable future railway projects for operation and maintenance, cumulative significant impacts to scenic resource are neutral.
Residential Development (and Agricultural Buildings and structures)	Building permits for single family homes and agricultural buildings and structures can occur at anytime on designated land uses within the CESA. Construction of single family homes would have to meet all NSA requirements and should be visually subordinate and not have any major impacts to scenic resources.	Maybe	Yes	The construction of new single family homes will have no adverse consequences to scenic resources. The WSDOT proposal has been mitigated to a negligible level and when combined with all present and reasonably foreseeable future residential development cumulative significant impacts to scenic resource are neutral.
Road construction, operation, and maintenance	Highway 14 is a large linear feature that can affect scenic resources in the foreground and middleground depending on it location and visibility from KVAs. Most of this infrastructure was present before the establishment of the NSA and is an allowed deviation to scenic resources. The WSDOT SR14/Cape Horn Bridge Vicinity to Cape Horn Road is a recent project that is included as present conditions. Future projects within the CESA include the Belle Center Road Project and the Big "S" Curve Segment (See Mitigation Plan – Appendix A for description).	Yes	Yes	See discussion below.

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The Cape Horn Road project was completed in 2011. After the Marble Road project, the next two WSDOT construction projects that have a likelihood of being completed in the next ten years are the Belle Center Road Project and the “S” Curve Segment.



The Cape Horn project realigned the highway from MP 25.97 to MP 26.03. The Salmon Falls and Cape Horn roads and other intersections with SR 14 were improved with left turn channelization into both county roads. A right turn pocket was also added to SR 14 for traffic turning into Salmon Falls road. The estimated total of excavation material for the project was approximately 68,000 cubic yards and the estimated quantity of fill material for the project was approximately 10,000 cubic yards.

The Belle Center Road segment from MP 23.22 to 23.59 includes rebuilding the auxiliary lane, realignment of the highway to the south, and shifting the intersection of SR 14 and Belle Center Road also to the south. The abandoned roadway will be reverted to pervious surface. In this segment SR 14 near MP 23.44 crosses a tributary to the Columbia River. This MP 23.44 tributary is non-fish bearing. The culvert at this crossing will be extended. A storm water pond (52'x180') is proposed near MP 23.36. The preliminary estimate by WSDOT is a total of approximately 32,000 cubic yards of fill and minor quantities of cut material that will be placed in this project (This estimate is for conceptual planning and does not represent a detailed WSDOT engineering analysis or design that will be completed at a later date for submittal of a NSA Application).

The 'S' Curves segment (MP 24.04 to 24.74) includes realignment to the north and an additional westbound truck passing lane. This segment consists of WSDOT right of way,

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private lands, and US Forest Service lands. The realignment will shift SR 14 from MP 24.50 to MP 24.57. The abandoned roadway will be reverted to pervious surface. In this segment the existing SR 14 alignment near MP 24.55 (needs to be fish passable) and 24.71 (non-fish bearing) crosses two unnamed tributary to the Columbia River. The existing culvert at MP 24.55 will be replaced with two new fish passable culverts where the proposed roadway alignment will be shifted to the north. The culvert at MP 24.71 will be extended. The preliminary estimate by WSDOT is a total of approximately 193,000 cubic yards of cut material that will be excavated and approximately 52,000 cubic yards fill will be placed in this project (This estimate is for conceptual planning and does not represent a detailed WSDOT engineering analysis or design that will be completed at a later date for submittal of a NSA Application).

Key Viewing Area	Cape Horn Road Project	Marble Road Project	Belle Center Road Segment	“S” Curve Segment
	Visually Sub-ordinate (Yes/No)	Visually Sub-ordinate (Yes/No)	Visually Sub-ordinate (Yes/No)	Visually Sub-ordinate (Yes/No)
Highway 14	Yes, with completed mitigation measures	Yes, with submitted mitigation measures.	Yes	Yes, with mitigation measures.
Crown Point, Portland Women’s Forums State Park	Yes, with submitted mitigation measures.	Yes, with submitted mitigation measures.	Yes	Yes, with mitigation measures.
Rooster Rock State Park	Not Seen	Yes	Yes	Not Seen
Historic Columbia River Highway	Yes	Yes	Yes	Yes
Highway 84, Columbia River	Yes	Yes	Yes	Not Seen
Larch Mountain Road/ Sherrad Pt	Yes	Yes	Yes	Yes
Cape Horn	Yes, with submitted mitigation measures.	Not Seen	Not Seen	Not Seen
Bridal Veil State Park, Multnomah Falls	Yes	Not Seen	Not Seen	Not Seen

The Cape Horn Road Project was analyzed in the Cape Horn Consistency Determination (CD-09-04-S) and with the implemented mitigations was determined to have no adverse consequences to scenic resources.

The Belle Center Road Project will not be visible from any KVA except SR 14. It should have similar effects as the Existing Highway 14 Alignment reviewed in this consistency determination and have no adverse consequences to scenic resources.

The “S” Curve Project has some similarities to the Marble Road project because the project will be at least partially visible from the Crown Point and Portland Women Forums State Park KVAs but at somewhat longer viewing distances. The project area will be effectively screened from all other KVAs by topography and vegetation and will not be visible so the number of affected KVAs is somewhat less. With the completion of a no practicable alternative test to identify the best alignment for protecting scenic and natural

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**resources, and the implementation of similar mitigations, this project should have similar impacts to scenic resources and meet visual resource standards within 5 years.**

**The Cape Horn project is one year old and it is anticipated to meet scenic resources standards within the SR-14 KVA by the end of 2016 and the Marble Road project one year later at the end of 2017. Both projects each have temporary, minor to moderate, adverse consequences to scenic resources within the foreground of the SR 14 KVA for the first five years. The cumulative impact to scenic resources from the two projects would still be moderate, temporary, adverse consequences. The combination of the two projects are not major because the impacts are not long-term; portions of both projects have no adverse consequences (Existing Highway 14 Alignment and West Tunnel Cape Horn project areas); scenic impacts continue to decrease in intensity over time with the continued growth of vegetation; and Cape Horn is already into restoration and will meet scenic standards.**

**There is no implementation date for the “S” Curve Segment but the project would have similar affects to scenic resources in the foreground of the SR-14 KVA for the first five years as the Marble Road project. If the planning and design time frame is similar to Marble Road the earliest the project could be implemented is at least five years out in 2017. If the project is implemented after 2017 there should be no cumulative significant impacts to scenic resources because the other WSDOT projects would meet scenic resource standards.**

**The Belle Center Road Project will have no adverse consequences to scenic resources; therefore, this project combined with the other three will have no unresolved cumulative significant impact to scenic resources.**

**The Cleveland Oak Mitigation site will have no adverse consequences to scenic resources; therefore, this project combined with the other three projects will have no unresolved cumulative significant impact to scenic resources.**

## F. CULTURAL RESOURCES

GMA and SMA Cultural Resource Policies required that new developments or land uses shall not have adverse consequences to cultural resources. A four-step process shall be used to protect cultural resources that includes reconnaissance or historic surveys; an assessment of the effects of proposed uses on significant cultural resources; and the preparation of mitigation plans to avoid or minimize impacts to significant cultural resources (MP, Guideline 4, I-2-23).

**Findings: Cultural resource surveys were conducted by the WSDOT Cultural Resources program and reviewed by a Forest Service archeologist.**

**Conditions: If any historic or prehistoric cultural resources uncovered during project activities, the applicant shall cease work and immediately notify the CRGNSA office and the Washington Office of Archeology and Historical Preservation. The applicant should also notify the Indian Tribal governments within 24 hours if the resources are prehistoric or otherwise associated with Native American Indians.**

GMA Guidelines (MP, I-2-8) and SMA Cultural Resource Guideline #5 (MP, I-2-26) requires a determination of potential effects to significant cultural resources should include consideration of cumulative effects of proposed developments that are subject to any of the following: 1) reconnaissance or historic survey; 2) a determination of significance; 3) an assessment of effect; or 4) a mitigation plan (MP, I-2-26).

**Findings: A Forest Service archeologist has concurred with WSDOT's assessment that there are no adverse effects, therefore, there will be no unresolved adverse cumulative effects on significant cultural resources within the Columbia River Gorge National Scenic Area.**

## G. NATURAL RESOURCES

The goals of the management plan are to protect water quality, natural drainages and fish and wildlife habitat of streams, ponds, lakes, and riparian areas. A second goal is enhance aquatic and riparian areas.

GMA Polices and Goals for water resources are very similar to the direction for the SMA and require that undisturbed buffers should be preserved around wetland, streams, ponds, and lakes (SMA Policies #4, MP, 1-3-30) but uses may occur that impact these areas and buffer zones may be allowed subject to the compliance with guidelines for the protection of scenic, cultural, natural, and recreation resources and approval criteria (SMA Policies #5, MP, 1-3-30).

GMA Polices and Goals for wildlife habitat are also very similar to the direction for the SMA to ensure that new uses do not adversely affect sensitive wildlife areas and sites as defined in Table 2 (MP, 1-3-46). The goals within the GMA and SMA for Rare Plants are to ensure that new uses do not adversely affect plant species that are (1) endemic to the Columbia River Gorge; lists as endangered or threatened pursuant to federal or state endangered species acts, or listed as endangered, threatened, or sensitive by the Oregon or Washington Natural Heritage Program.

There are no GMA requirements for the protection of significant ecosystems and this is only a requirement for the SMA. In the SMA significant ecosystems such as natural areas, wetlands, ponds, lakes, riparian areas, old growth forests, islands, and areas of special importance such as botanical areas, sensitive wildlife and fishery habitats, or oak woodlands shall be protected from adverse effects. (SMA Policies #2, MP, 1-3-31).

Adequate buffer zones shall be maintained to protect sensitive wildlife and plant areas or sites from new uses (SMA Policies #9, MP, 1-3-32). When unavoidable impacts may result from new uses than rehabilitation and/or enhancement shall be required to offset unavoidable impacts to wildlife and plant habitat. (SMA Policies #12, MP, 1-3-32).

### GMA Natural Resource Provisions

Determination of potential natural resources effects shall include consideration of cumulative effects of proposed developments within the following areas: 1) wetlands and their buffer zones; 2) streams, ponds, lakes, riparian areas and their buffer zones; 3) sites within 1,000 feet of sensitive wildlife areas and sites; and 4) sites within 1,000 feet of rare plants. (*Added: CRGC adoption 7/13/10; U.S. Sec. Ag. concurrence 11/1/10*)

**Findings: Cumulative effect findings are included at the end of the natural resource section.**

### GMA Wetland Guidelines

**Findings: Small portions of the Wetland I Buffer Zone are within the boundaries of the GMA Parcel #01051900030000. Findings are included in the section reviewing SMA Water Resource Guidelines.**

## **GMA Streams, Ponds, Lakes, and Riparian Areas Guidelines**

**Findings:** Small portions of the West Stream Drainage Buffer are within the boundaries of the GMA Parcel #01051900030000. Findings are included in the section reviewing SMA Water Resource Guidelines.

## **GMA Wildlife Guidelines**

**Findings:** There are no sensitive wildlife areas as identified in Table 2 (MP, I-3-46) within 1000 feet of the project. No further review of GMA Wildlife Guidelines is required. See findings included in the section reviewing SMA Wildlife and Plants Guidelines for a further information.

## **GMA Rare Plant Guidelines**

**Findings:** There are no sensitive plant areas as identified in Table 2 (MP, I-3-46) within 1000 feet of the project. No further review of GMA Rare Plant Guidelines is required. See findings included in the section reviewing SMA Wildlife and Plants Guidelines for a further information.

## **SMA Natural Resources Guidelines**

1. 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. (Site plans are described under “Review Uses” in Part II, Chapter 7: General Policies and Guidelines.)

**Findings:** This project was reviewed using the guidelines listed below, information submitted in WSDOT’s application, and professional review by Forest Service resource specialists.

## **SMA Water Resources Guidelines (Wetlands, Streams, Ponds, Lakes, and Riparian Areas)**

2A. All Water Resources shall, in part, be protected by establishing undisturbed buffer zones as specified in 2A(2a) and (2b). These buffer zones are measured horizontally from a wetland, stream, lake, or pond boundary as defined below. *(Requirements 2A (3) – (6) are not applicable and are not reviewed)*

**Findings:** A 200 foot buffer zone for each wetland and perennial stream was used in the Forest Service evaluation. Listed below are the impacts in each wetland and wetland/riparian buffer zone.

- Wetland G - No temporary or permanent impacts. Very small portion located within the right-of-way and with the larger portion located outside the right-of-way.

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- **Wetland H - Permanent wetland impacts are 0.15 acres in size for the placement of fill in the new road alignment. Located completely within the right-of-way and is not part of a larger wetland outside of the right-of-way.**
- **Wetland I - Temporary wetland impacts are 0.06 acres in size. Very small portion located within the right-of-way with the larger portion located outside the right-of-way.**
- **Wetland G Buffer Zone – Approximately 500 linear feet of repaving of SR 14 in buffer zone.**
- **Wetland H and I Buffer Zone - Approximately 1250 linear feet of cut, fill, and/or repaving of SR 14 and the Marble Road intersection realignment occur in the buffer zone.**
- **West Stream Drainage Buffer – Approximately 0.2 acres of impact.**
- **East Stream Drainage Buffer – No temporary or permanent impacts.**

2A (1) All buffers zones shall be retained undisturbed and in their natural condition, except as permitted with a mitigation plan.

**Findings: A mitigation plan has been prepared and included as Appendix A to the Findings of Fact.**

2A(2c) 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 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.

**Findings: Not applicable. The identified wetlands are larger than a drainage ditch.**

- B. When a buffer zone is disturbed by a new use, it shall be replanted with only native plant species of the Columbia River Gorge.

**Findings: WSDOT has agreed to use native plant species for all restoration efforts as described on page 19 of their application.**

**Conditions: The Forest Service will require that WSDOT submit for approval a list of all native plants species used in site restoration.**

- C. The applicant shall be responsible for identifying all water resources and their appropriate buffers (see above).

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**Findings: As described in the project application and submitted mitigation plan WSDOT wetland specialists prepared a Wetland Assessment Report dated June 2009. They delineated three Category III wetlands using the Washington State Wetland Rating System for Western Washington within the proposed project area, all of which would be considered jurisdictional by the U.S. Army Corps of Engineers (USACE), Washington State Department of Ecology (Ecology), and Skamania County.**

- 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.

**Findings: The applicant used the US Fish and Wildlife wetland classification system for wetland delineations. All wetland buffer zones meet management plan guidelines for herbaceous communities. The Forest Service reviewed their methodology and findings and determined they meet the requirements of the Management Plan and the application is considered complete.**

- 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.

**Findings: All boundaries have been delineated and meet Forest Service requirements.**

- F. The local government 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 local government shall obtain professional services, at the project applicant's expense, or the local government will ask for technical assistance from the Forest Service to render a final delineation.

**Findings: Not Applicable.**

- G. Buffer zones shall not be undisturbed unless the following criteria have been satisfied:

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- (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.
- (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.
- (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.

**Findings: The applicant submitted a no practicable alternative test and a copy of the completed report is included as Appendix A. The Forest Service has reviewed the report and determined that they have documented a public safety hazard. As described in the No Practicable Alternative Test, the proposed design had the least impact to wetland and wetland/riparian buffer zones. A comprehensive mitigation plan was prepared that uses onsite and offsite mitigation strategies to replace direct and temporal loss to wetlands and wetland/riparian buffers. On-site mitigation included the re-design of the Marble Road intersection to eliminate impacts to Wetland I east of the Mt. Pleasant Grange hall and other design adjustments to reduce corridor wetland impacts by 30% (Page 21, NSA Application).**

**The off-site mitigation site for wetlands and wetland/riparian buffers is the 6.5 acre Homestead Lake Mitigation Site at Beacon Rock State Park. The site provides 1 acre of wetland creation and 7.34 acres of wetland and riparian buffer mitigation. The wetland mitigation meets GMA Approval Criteria for other Review Uses in Wetlands 1 H (1-7) (MP, I-3-7).**

**Potentially adverse consequences to water resources have been reduced to a negligible level through the application of the No Practicable Alternative Test and the use of established mitigation measures which also include off-site wetland mitigation.**

- H. Determination of potential natural resources effects shall include consideration of cumulative effects of proposed developments within the following areas: wetlands, streams, ponds, lakes, riparian areas and their buffer zones. (*Added: U.S. Sec. Ag. concurrence 7/1/11*)

**Findings: Cumulative effect findings are included at the end of the natural resource section.**

### 3. SMA Wildlife and Plants Guidelines

- A. 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 are those areas depicted in the wildlife inventory and listed in Table 2, 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.

**Findings: There are no sensitive wildlife/plant areas as identified in Table 2 (MP, I-3-46) within 1000 feet of the project. Priority habitats affected by this project include Oregon White Oak Woodlands, Riparian, and Wetlands.**

- B. The local government 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 the appropriate state agencies (Oregon Department of Fish and Wildlife or the Washington Department of Wildlife for wildlife issues and by the Oregon or Washington Natural Heritage Program for plant issues).

**Findings: The Washington Department of Fish and Wildlife reviewed this project and submitted written comments on August 10, 2011 and a copy of this letter is filed in the project record.**

- 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,
  - (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 effects (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 and 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.

**Findings: A Forest Service botanist has reviewed this proposal, concurred with Washington Department of Fish and Wildlife that Oregon White Oak Woodland priority habitat will be impacted by this project.**

- D. The local government, 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 (Criteria 1 – 9 listed in MP, page I-3-38/39):

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**Findings:** There are no wildlife and plant sites within 1000 feet of the project area and there are no adverse consequences to these resources. The proposed project has adverse affects 0.15 acres of wetland (Wetland H). There are no adverse affects to riparian habitat.

PRIORITY HABITATS TABLE	
<b>Riparian</b>	<b>High fish and wildlife density, species diversity, breeding habitat, movement corridor, high vulnerability, dependent species.</b>
<b>Wetlands</b>	<b>High species density, high species diversity, important breeding habitat and seasonal ranges, limited availability, high vulnerability.</b>

- E. The wildlife/plant protection process may terminate if the local government, 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.

**Findings: Not applicable.**

- 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 and prepare a mitigation plan to offset the adverse effects by deliberate restoration and enhancement.

**Findings: WSDOT has completed a No Practicable Alternative Test and is included as Appendix A. A mitigation plan has been prepared and was submitted to the Forest Service for review and comment (Appendix A). The mitigation plan offsets adverse affects to 0.15 acres of wetlands through the restoration and enhancement at the Homestead Lake mitigation site at Beacon Rock State Park (5.2 acres).**

- G. The local government shall submit a copy of all field surveys (if completed) and mitigation plans to the Forest Service and appropriate state agencies. The local government 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 local government 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

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comments submitted by the state and federal wildlife agency/heritage program, the local government shall justify how it reached an opposing conclusion.

**Findings: With the identified mitigations in the Natural Resource Mitigation Plan; information provided by WSDOT in the Biological Evaluation; input provided by Washington Department of Fish and Wildlife Service (August 10, 2011); and a review of Forest Service resource specialists - the Marble Road Project is consistent with wildlife/plant policies and guidelines and will have no adverse affects to wildlife and plant areas or sites.**

- H. The local government 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.

**Findings: The mitigation plan has been reviewed and with the proposed mitigations there are no adverse consequences to a sensitive wildlife/plant area or site.**

- I. Determination of potential natural resources effects shall include consideration of cumulative effects of proposed developments within the following areas: 1) sites within 1,000 feet of sensitive wildlife areas and sites; and 2) sites within 1,000 feet of rare plants. *(Added: U.S. Sec. Ag. concurrence 7/1/11)*

**Findings: Cumulative effect findings are included at the end of the natural resource section.**

### 4. SMA Soil Productivity

- A. Soil productivity shall be protected using the following guidelines:
- (1) A description or illustration showing the mitigation measures to control soil erosion and stream sedimentation.

**Findings: WSDOT has included twelve Temporary Erosion and Sediment Control (TESC) in the project description to control soil erosion and stream sedimentation. The Forest Service has no further conditions of approval for further mitigations.**

- (2) New developments and land uses shall control all soil movement within the area shown on the site plan.

**Findings: WSDOT's proposed grading plans and TESC's will meet this requirement.**

- (3) The soil area disturbed by new development or land uses, except for new cultivation, shall not exceed 15 percent of the project area.

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**Findings:** This requirement was evaluated using the total project area, which includes both SMA and GMA parcels. The total disturbed soil area from new development is 11.63 %.

**Area of project limits:** Highway = 25 acres; Beacon Rock Mitigation = 6 acres; and Cleveland Mitigation = 12 acres.

**Area of disturbance:** Highway = 4 acres; Beacon Rock Mitigation = 1 acre; and Cleveland Mitigation = 0 acres.

- (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.

**Condition:** 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.

### SMA Practicable Alternative Test

1. 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 wetlands, ponds, lakes, riparian areas, wildlife or plant areas and/or sites.

**Findings:** As described in the project application the purpose of this project is to improve the public safety on Highway 14 because of the high incidence of vehicular accidents. Highway 14 cannot be relocated outside of the existing highway corridor to avoid adverse consequences. WSDOT evaluated the continuation of the Traffic Safety Corridor program and not completing modifications to Highway 14. They determined that continuation of the Traffic Safety Corridor program by itself would not meet public safety requirements. A full description is described in the No Practicable Alternative Test (Appendix A).

- B. The basic purpose of the use cannot be reasonably accomplished by reducing its proposed size, scope, configuration, or density, or by changing the design of the use in a way that would avoid or result in less adverse effects on wetlands, ponds, lakes, riparian areas, wildlife or plant areas and/or sites.

**Findings:** WSDOT evaluated a total of seven alternatives and determined that the proposed alternative meets the minimum acceptable safety standards. The proposed alternative changes the design speed from 35 mph to 40 mph, meets public safety

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**requirements, and minimizes the impacts to scenic, cultural, and natural resources to the maximum extent practicable. A full description is described in the No Practicable Alternative Test (Appendix A).**

- C. Reasonable attempts were made to remove or accommodate constraints that caused a project applicant to reject alternatives to the proposed use. 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.

**Findings: There are no constraints such as a land use designation or recreation intensity class that would cause the proposed project to be rejected. WSDOT incorporated additional design features such as steepening the final slopes to 1.5:1 to further minimize impacts to Oregon White Oak habitat.**

### SMA Mitigation Plan

1. Mitigation Plans shall be prepared when:
  - A. The proposed development or use is within a buffer zone (wetlands, ponds, lakes, riparian areas, wildlife or plant areas and/or sites).
  - B. There is no practicable alternative (see the “practicable alternative” test).

**Findings: A mitigation plan has been prepared because the proposed project is located within an identified buffer zone for wetlands; riparian areas; and Oregon White Oak Woodland priority habitat. A no practicable alternative test has been completed and accepted by the Forest Service.**

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).

**Findings: The mitigation plan has been prepared by professional staff members employed by the Washington State Department of Transportation – SW Region Environmental Services Office.**

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.

**Findings: The mitigation plan meets this purpose.**

4. The applicant shall submit the mitigation plan to the local government. The local government 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

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agency/heritage program, the local government shall justify how it reached an opposing conclusion.

**Findings: The mitigation plan was developed in consultation with the Forest Service and the appropriate state agencies.**

5. A project applicant shall demonstrate sufficient fiscal, technical, and administrative competence to successfully execute a mitigation plan involving wetland creation.

**Findings: Washington State Department of Transportation meets this requirement.**

6. Mitigation plans shall include maps, photographs, and text. The text shall:

**Findings: The mitigation plan meets requirements A – E identified in MP, I-3-42.**

7. At a minimum, a project applicant shall provide to the local government 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.

**Condition: WSDOT will submit an annual progress report for the mitigation program. Four photographic monitoring stations will be established: Crown Point; Portland Women’s Forum; and two locations showing west and east bound views on SR 14 (locations to be chosen after completion of the project).**

8. A final monitoring report shall be submitted to the local government for review upon completion of the restoration, enhancement, or replacement activity. This monitoring report shall document successes, problems encountered, resource recovery, and status of any sensitive wildlife/plant species and shall demonstrate the success of restoration and/or enhancement actions. The local government shall submit copies of the monitoring report to the Forest Service; who shall offer technical assistance to the local government 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.

**Condition: A mitigation monitoring report will be used to evaluate the progress for completion of the mitigation plan. An interim monitoring report will be prepared 5 years after completion of the project. A final monitoring report will be prepared upon the 10 year anniversary of project completion.**

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:

**Findings: The mitigation measures identified for the Cleveland Oak Establishment Mitigation Site; Homestead Lake mitigation site at Beacon Rock State Park; Wind Mountain Oak Preservation Site; and the on-site restoration area will result in no net loss of water quality, natural drainage, fish/wildlife/ plant habitat, and water resources and meet requirements A – H identified in MP, I-3-43 to I-3-45.**

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**Restoration is schedule to begin concurrently with project implementation. Completion of each restoration site is dependent on the proposed restoration strategies specific for that resource. The proposed wetland restoration meets the requirement of the 3:1 replacement ratio with 1 acre of wetland creation for 0.15 acres of permanent wetland loss (Requirement F9; G). See Section D – Conservation Easement for a discussion on Oregon White Oak Woodland mitigation.**

### **GMA/SMA Natural Resources Cumulative Effect Findings**

GMA Provisions for determination of potential natural resources effects shall include consideration of cumulative effects of proposed developments within the following areas: 1) wetlands and their buffer zones; 2) streams, ponds, lakes, riparian areas and their buffer zones; 3) sites within 1,000 feet of sensitive wildlife areas and sites; and 4) sites within 1,000 feet of rare plants. (Added: CRGC adoption 7/13/10; U.S. Sec. Ag. concurrence 11/1/10)

SMA Guidelines 2H requires that a determination of potential natural resources effects shall include consideration of cumulative effects of proposed developments within the following areas: wetlands, streams, ponds, lakes, riparian areas and their buffer zones. (Added: U.S. Sec. Ag. concurrence 7/1/11)

SMA Guidelines 3I requires that a determination of potential natural resources effects shall include consideration of cumulative effects of proposed developments within the following areas: 1) sites within 1,000 feet of sensitive wildlife areas and sites; and 2) sites within 1,000 feet of rare plants. (Added: U.S. Sec. Ag. concurrence 7/1/11)

Cumulative effects are defined in the Management Plan 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*” (MP, Glossary-6).

#### ***Spatial and Temporal Boundary***

**Unless otherwise specified, the temporal boundary of ten years was selected because it’s maximum length of time for any government agency or private organization to reasonable project and plan future projects. The study area is entirely in SMA management unit within Skamania County. The cumulative effects study area (CESA) for all riparian resources is ~ 2400 acres in size and is a smaller CESA within the larger Scenic Resources CESA. This smaller CESA encompasses all of the small drainages that are affected by the WSDOT project with the exception of Lawton Creek which is not affected by any present and future projects. The CESA for all wildlife and rare plants sites was based on the project area identified in the WSDOT Biological Evaluation (2010) and is also a smaller CESA within the larger Scenic Resources CESA boundary. CESA boundaries are in the project record.**

#### ***Past Actions and Reasonably Foreseeable Future Actions***

**The cumulative effects analysis includes an analysis of past actions by including them in the assessment of current conditions. Please see Scenic Resource Cumulative Section for**

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**further information. The WSDOT Cape Horn Road Project is a recent project that is included as a present condition. The two largest projects that could occur within the next ten years are WSDOT Belle Center Road Segment and “S” Curve Segments along SR-14. A summary of the natural resources impacted by these major projects are listed below.**

Natural Resource Summary for SR-14 Projects <sup>1</sup>	Cape Horn Road	Marble Road	Belle Center Segment	“S” Curve Segment
# Wetlands	4	2	1	2
# Streams, Ponds, Lakes, Riparian Areas	4	2	1	2
Wildlife Areas within 1000 feet	Yes	No	No	Yes
Rare Plant Area within 1000 feet	Yes	No	No	Yes

<sup>1</sup> All data from WSDOT Natural Resource Mitigation Plan and Biological Evaluation

Affected Resource	Present and Reasonable Foreseeable Future Actions and Potential Effects	Overlap		Cumulative Impacts
		Time	Space	
<p>Wetlands and their buffer zones. Streams, ponds, lakes, riparian areas and their buffer zones.</p> <p>There are a number of different riparian sites within the CESA.</p>	<ul style="list-style-type: none"> <li>Existing and ongoing farming activities generally have some impact because of associated runoff that includes pesticides as well as sedimentation.</li> <li>Storm water runoff from existing roads and railways would continue to have some impacts but are mitigated through the use of BMP's, SWPP's, and MP guidelines.</li> <li>Residential and Ag building development is mitigated through the use of BMP's, SWPP's, and MP guidelines.</li> <li>Present and future SR 14 Road projects impacts will be mitigated through either avoidance or off-site mitigation.</li> </ul>	Yes	Yes	<p>The impacts to wetlands and riparian zones are negligible because of the no practicable alternative test to limit disturbance in buffer zones and off-site mitigation. The Marble Road project, combined with the incremental impacts of all other reasonably and foreseeable future actions should continue to have only negligible cumulatively significant impacts to wetlands and riparian zones.</p>
<p>Wildlife areas and sites within 1000 feet of projects.</p> <p>The Biological Evaluation completed by WSDOT on June 25, 2010 identified a total of 13 different species within the CESA project area.</p>	<ul style="list-style-type: none"> <li>Existing and ongoing farming activities generally have negligible impacts because of distance from known sites.</li> <li>Noise from existing roads and railways would continue to have some impacts to peregrine falcons.</li> <li>Residential and Ag building development is mitigated through the avoidance of known sites or MP mitigations.</li> <li>Present and future SR 14 Road projects impacts may have temporary impacts during construction from noise and presence. Habitat disturbance to salamander habitat should be neutral.</li> </ul>	Yes	Yes	<p>Since there are no adverse consequences to wildlife sites within 1000 feet of the Marble Road project, the proposed project, combined with the incremental impacts of all other reasonably and foreseeable future actions, should have no cumulatively significant impacts to wildlife sites.</p>

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<p>Rare Plant sites within 1000 feet of projects.</p> <p>The Biological Evaluation completed by WSDOT on June 25, 2010 identified one rare plant species within the CESA project area. This site could be directly impacted from future SR-14 road construction unless mitigations are implemented.</p>	<ul style="list-style-type: none"> <li>• The greatest impacts to rare plants are past actions resulting from the loss of habitat. Present and future activities will have negligible impacts.</li> <li>• Existing and ongoing farming activities; roads, transmission facilities, and railways operations should have negligible impacts to rare plants.</li> <li>• New residential and ag building development should not have impacts through the implementation of MP guidelines.</li> <li>• Present and future SR 14 Road projects impacts should have no major impacts to rare plants because of the implementation of the no practicable alternative test and mitigation.</li> </ul>	Yes	Yes	<p>Since no Rare Plants were identified within 1000 feet of the Marble Road project, the proposed project, combined with existing and future activities, should have no cumulatively significant impacts to Rare Plants.</p>
	<ul style="list-style-type: none"> <li>• A large portion of the original oak woodland forest within the Scenic Resources CESA has been removed. Agricultural land that is not in production remains fallow and are potential sites for invasive plant populations. Ongoing agricultural use limits the opportunity for invasive plant populations to spread.</li> </ul>	Yes	Yes	<p>The conversion of 12 acres of agricultural land to an oak forest, combined with all other existing and future agricultural land uses should have no cumulatively significant impacts to riparian (wetland, streams, ponds, lakes, riparian areas and their buffer zones), wildlife/plants areas or sites.</p>

**Findings: The Marble Road Project, combined with existing and future projects, will have no cumulative impact to riparian areas (wetlands, streams, ponds, lakes) and their buffer zones; known wildlife areas and sites; and known rare plant areas and sites.**

## H. RECREATION RESOURCES

### GMA Recreation Resources

The GMA recreation resource guidelines provide review criteria for recreation uses identified as allowed use for the different Recreation Intensity Classes. They are not applicable to this project. Scenic Appreciation and Scenic Travel Corridors Objective #8, establish low-elevation bicycle paths or lands along or near Interstate 84 and Washington State Route 14, is reviewed in the findings for SMA Recreation Resource Guideline #6.

### SMA RECREATION RESOURCES GUIDELINES *(Guidelines #3-5 and 7-9 are not applicable and not reviewed)*

1. New developments and land uses shall not displace existing recreational use.

**Findings: The proposed project will not displace any identified recreation use.**

2. Recreation resources shall be protected from adverse effects by evaluating new developments and land uses as proposed in the site plan. An analysis of both onsite and offsite cumulative effects shall be required.

**Findings: Adjacent to the proposed project are parcels 01051700160000 and 01052000010009 which are zoned Commercial Recreation. The proposed project will not directly impact these parcels. The proposed project will have positive cumulatively significant impacts by creating a safer driving environment for access to these parcels.**

6. New development and reconstruction of scenic routes (see Part III, Chapter 1: Recreation Development Plan) shall include provisions for bicycle lanes.

**Findings: The Recreation Development Plan SMA Goal 2 requires the creation of a diversity of trail opportunities of which SMA Policy 7 states that safe bikeways should be provided for recreation uses on appropriate public roads (MP, III-1-5).**

**While Highway 14 is a scenic route there are no dedicated bicycle lanes currently in place along this route. The addition of bicycle lanes for this relatively small section of the Scenic Route was rejected in the development of the project, as well as any of the other completed and proposed Highway 14 projects within the Columbia River Gorge National Scenic Area. Highway 14 is not an appropriate public road for the addition of bicycle lanes because of the high impact to natural resources and cost of construction. The proposed project will create shoulders for use by bicycles. An additional benefit of improving public safety includes the secondary effects of increasing bicycle safety along Highway 14.**

## **I. CONCLUSION**

**The Marble Road project is consistent with the National Scenic Area Management Plan Policy and Guidelines provided they meet the criteria and conditions listed in the Findings of Fact and Consistency Determination. These findings do not cover the Reversion Area/Abandoned Highway 14 Alignment and Homestead Lake Mitigation Site which are the responsibility of Skamania County. The transfer of the Wind Mountain Preservation Site to USFS does not require a Consistency Determination.**