Federal Railroad Administration

Washington State Segment of the Pacific Northwest Rail Corridor - from the Columbia River to the Canadian Border

FINDING OF NO SIGNIFICANT IMPACT

Submitted pursuant to 42 U.S.C. 4332 (2)(c)
By the
U.S. Department of Transportation
Federal Railroad Administration
and
Washington State Department of Transportation
State Rail and Marine Office

11/19/10
Date of Approval

for Federal Railroad Administration

The Washington State Department of Transportation (WSDOT) is proposing a program of infrastructure improvements along the existing 297-mile BNSF north-south main line between the Columbia River and the Canadian border that will initially allow for operation of four additional passenger daily round trips between Seattle and Portland (for a total of eight round trips), will help achieve greater schedule reliability, and will reduce the travel time between Seattle and Portland by up to 18 minutes. The proposed infrastructure improvements will also improve reliability for existing train service operating between Portland and Vancouver, B.C., and Seattle and Vancouver, B.C. The proposed improvements primarily follow the existing rail corridor to avoid and minimize impacts. Intercity passenger stops would be maintained at Bellingham, Mt. Vernon/Burlington, Stanwood, Everett, Edmonds, Seattle, Tukwila, Tacoma, Olympia/Lacey, Centralia, Kelso/Longview, and Vancouver, Washington. Maximum operating speed related to the corridor program would be 90 mph.[1] This finding of no significant impact is for the proposed service improvements and is being made at the Tier 1 level of review. It will be followed by additional studies that are required prior to implementation of the projects. Important issues identified by the public, review agencies, and the railroads include information needed in subsequent site-specific environmental documentation, location of future train stops, location of potential grade-separated crossings, and concern about animal-train collisions. This finding of no significant impact is conditioned on resolving these issues in subsequent site-specific environmental documentation so that no significant environmental impacts are associated with implementing the program. The analysis presented in the Tier-1 environmental assessment adequately discusses overall environmental issues and effects and supports a finding of no significant environmental impact for the proposed program of infrastructure improvements and the proposed service enhancement and meets the requirements of the National Environmental Policy Act.

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[1] *WSDOT has requested Federal funds from the Federal Railroad Administration's (FRA) High-Speed Intercity Passenger Rail Program to cover a substantial portion of the cost of the proposed program of passenger rail improvements.*

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I. Introduction

The Washington State Department of Transportation (WSDOT) proposes a program of railroad infrastructure improvements between the Columbia River and the Canadian border; a portion of the Pacific Northwest Rail Corridor (PNWRC) that is approximately 297 miles long and is located on the BNSF north-south main line in order to improve intercity passenger rail service by reducing travel times, achieving greater schedule reliability, and creating capacity for additional trip frequencies to accommodate growing intercity travel demand along the PNWRC in Washington State.

To achieve these goals WSDOT has applied for federal funding of the program through the High Speed Intercity Passenger Rail Program administered by the Federal Railroad Administration (FRA) and funded through the American Recovery and Reinvestment Act ("Recovery Act"). WSDOT's application under the Recovery Act was for a program of improvements, split into three Service Blocks, each adding incremental benefits to the PNWRC. At this time, the FRA is providing Recovery Act funding for a portion of the program of improvements, however, FRA has evaluated the environmental impact of the entire program of improvements, and the decision made in this FONSI covers all three Service Blocks. The specific projects that are being considered for funding at this time are identified in Appendix C. WSDOT prepared a Tier-1 Environmental Assessment (EA) in September 2009 to analyze the potential environmental effects of the improvements in Service Blocks 1, 2, and 3, that is consistent with FRA's guidance on Compliance with the National Environmental Policy Act (NEPA) in Implementing the High-Speed Intercity Passenger Rail Program, issued August 13, 2009 (which describes Service NEPA for corridor programs) and FRA's Procedures for Considering Environmental Impacts ("FRA Environmental Procedures") (64 FR 28545, May 26, 1999). Tiering is a concept encouraged by the Council on Environmental Quality (CEQ) in environmental impact assessment reviews so as to eliminate repetitive discussions of the same issues and focus on the actual issues ripe for decisions at each level of environmental review (see 49 CFR §1502.20 and §1508.28). Service NEPA addresses broader issues and likely environmental effects for the entire corridor relating to the type of service(s) being proposed, including cities and stations served, route alternatives, service levels, types of operations (speed, electric, or diesel powered), ridership projections, major infrastructure components, and identification of major terminal area or facility capacity constraints. For a major rail corridor improvement program, this type of environmental review is required before any substantial investments in the corridor are made. In this instance, WSDOT has prepared a Tier-1 service-level EA. Site-specific (or project) NEPA consists of Tier-2, site-specific environmental review that is appropriate to make a decision on implementing a specific project.

Prior to release of construction funding for individual projects, FRA and WSDOT will complete all appropriate site-specific (Tier-2) NEPA evaluation, documentation, and required determinations for component projects. The proposed infrastructure improvements of Service Blocks 1, 2, and 3 necessary to support the additional passenger service between the Columbia River and Canadian border have been thoroughly assessed in the Tier-1 EA; however, the extent and configuration of these infrastructure improvements will be refined during the final design process, and additional and site-specific information on impacts of the proposed action, where needed, will be provided in site-specific environmental documentation.

This finding of no significant impact (FONSI) based on the Tier-1 EA has been prepared to comply with the National Environmental Policy Act (NEPA), the FRA's Environmental Procedures and related laws. FRA has concluded that the award of Federal funds to implement the program of improvements to the Washington State segment of the PNWRC that are described as Service Blocks 1, 2, and 3 below, constitutes a major Federal action within the meaning of Section 102(c) of NEPA (42 U.S.C. 4321).

II. Purpose and Need

In 1993, the Washington State Legislature determined that major intercity transportation corridors in the State were becoming increasingly congested. Population and employment were projected to increase 40 percent, and almost 50 percent, respectively, by 2013. This resulted in a seventy-five percent increase of the intercity travel demand forecast. Air travel, with heightened airport security, has become more challenging on the corridor since September 11, 2001. Highway traffic congestion on Interstate 5, which roughly parallels the entire PNWRC, is no longer restricted to peak times around major cities but has spread to areas and times that traditionally have not experienced traffic congestion. Additionally, intercity passenger rail service is recognized by state and federal policy-makers as a means to address 21st century public policy goals, which include reducing the nation's dependency on foreign sources of energy, reducing greenhouse gas emissions that contribute to climate change, increasing public safety, and strengthening transportation system redundancies in the event of natural and man-made disasters.

In order to expand service, reduce running times and improve reliability, constraints on the corridor must be addressed. In 2007, the number of freight and passenger trains averaged 49 per day between Vancouver, WA and Tacoma, WA; 60 per day between Tacoma and Seattle, WA; 41 per day between Seattle and Everett, WA; and as many as 28 per day between Everett and Blaine, WA. The existing rail line has a number of bottlenecks where freight train traffic is heavy, especially near terminals such as Vancouver, Kalama, Longview, and Tacoma. The heavy rail traffic in these areas restricts the number of passenger trains that can be operated. Further, scheduled running times are extended to allow for anticipated delays in these areas, but unanticipated delays at these locations still result in poor reliability.

To address the need for expanded passenger rail service, the WSDOT proposes a program of railroad infrastructure improvements between the Columbia River and the Canadian border; a portion of the PNWRC that is approximately 297 miles long and is located on the BNSF north-south main line. The railroad infrastructure improvements that make up the Washington State Segment of the PNRC—from the Columbia River to the Canadian Border—will address network congestion and capacity constraints.

III. Description of Alternatives

Two alternatives were evaluated in the EA, the "No Build" and the "Corridor Service Expansion Alternative." The No Build Alternative analyzes what would happen if there are no further improvements on the corridor. The Corridor Service Expansion Alternative analyzes the effect of the service improvements described in Service Blocks 1, 2, and 3 below.

A. No Build Alternative

If no further improvements are made to the PNWRC, then the rail capacity will remain at four round trips per day between Seattle and Portland, with one of those four trips continuing on to Vancouver, B.C., and an individual round trip between Seattle and Vancouver, B.C. As a result, seating capacity will remain limited and the average on-time performance will remain at 62 percent to 69 percent. On-time performance may degrade over time by increasing freight traffic on the shared rail corridor. Travel times between cities will remain the same as they are today; reduced use of fuel consumed by automobiles and commercial aircraft transporting intercity travelers will not be realized through these rail improvements; the anticipated reductions in greenhouse gas emissions generated by intercity auto and air travel will not be realized through increased levels of daily intercity passenger rail service; and mobility in the PNWRC may be constrained, making the region a less attractive location for businesses, which may relocate to areas with improved intercity passenger rail systems.

Even if no further improvements are made to the PNWRC, improvement projects funded by the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and state and local sources, and programmed in the 2009-2012 Statewide Transportation Improvement Program (STIP) for Washington State in the vicinity of the corridor will still be constructed. These projects include the construction of new bridges or replacement of existing bridges above the track in the corridor. These are both pedestrian as well as roadway bridges. Several of the projects programmed in the 2009-2012 STIP would separate vehicle and pedestrian traffic from rail traffic. In addition, BNSF will continue to perform maintenance on their rail line, regardless of any improvement projects.

B. Corridor Service Expansion Alternative

The projects contained in the Corridor Service Expansion Alternative would result in increased service levels, improved on-time performance, and schedule reliability, and will allow for reduced travel times. The projects were grouped into three service blocks for funding applications that would provide incremental improvements to daily service levels, on-time performance, and schedule reliability between cities in the Pacific Northwest.

The projects listed below have been chosen to keep the freight operations on the rail system whole such that the increase in passenger service will not negatively impact freight service and operations. The resulting reduction in congestion of the rail network will allow an increase in passenger train frequency and reliability. In addition, the reduction in congestion will also improve the efficiency of the freight operations on the network. For example, at specific improvement locations, reduction in localized congestion for the benefit of the intercity passenger rail service may also improve the efficiency and safety of terminal freight switching operations.

The EA evaluated the following projects:

Service Block 1 projects would add one daily round trip between Seattle and Portland (for a total of five round trips) and would reduce the travel time between Seattle and Portland by six minutes. Projects would also improve reliability for existing train service operating between Portland and Vancouver, B.C., and Seattle and Vancouver, B.C.

- Tacoma – D to M Street Connection – Pierce County

1.2 miles of new railroad track from East D Street to South M Street in downtown Tacoma, including a new railroad bridge over Pacific Avenue, will be constructed for use by intercity passenger and commuter trains only.

- Tacoma – Point Defiance Bypass – Pierce County
  3.5 miles of second main track will be constructed from South 66th Street in Tacoma to south of Bridgeport Way in Lakewood; 10.5 miles of existing track will be reconstructed from Bridgeport Way in Lakewood to Nisqually Junction south of Mounts Road; and five at-grade crossings in Lakewood and DuPont will be improved.

- Vancouver – Yard Bypass Track – Clark County
  A new crew-change track and an additional connection between the east-west and north-south main lines will be provided along the east side of the existing rail yard, extending from Jefferson Street to Fruit Valley Road.

- Vancouver – New Middle Lead – Clark County
  A second connection between the east-west and north-south main lines will be provided along the yard lead track approximately from 11th Street to the Mill Plain Bridge over the rail yard.

- Vancouver – West Side Port Associated Trackage – Clark County
  Nearly 36,000 feet of new track and a new roadway bridge will be constructed on port property west of NW Gateway Avenue, north of the Columbia River, and south of NW Old Lower River Road.

- Cascades Corridor Reliability Upgrades – South – Clark, Cowlitz, Lewis, Thurston and Pierce counties
  Track quality improvements will be made at various locations on the main line between Nisqually Junction in Pierce County and the Columbia River at the southern border of Clark County.

- Cascades Corridor Reliability Upgrades – North – Snohomish, Skagit, and Whatcom counties
  Track quality will be improved at various locations on the main line between Everett in Snohomish County and Canada at the northern border of Whatcom County.

- King Street Station – Seismic Retrofit – King County
  The structural integrity of the King Street Station building at 303 S Jackson Street in Seattle will be strengthened to withstand earthquakes.

- Blaine – Swift Customs Facility Siding – Whatcom County
  A second siding track west of Portal Way from Loomis Trail Road to approximately Hall Road for freight trains awaiting U.S. Customs inspections near the Canadian border will be provided.

- Everett – Storage Track – Snohomish County

Two new receiving/departure tracks will be constructed northeast of Everett's Delta Yard between the bridges that carry Interstate 5 and State Route 529 over the rail yard.

- Amtrak Cascades – New Train Set – Corridor-Wide
  One new train set will be purchased.

Service Block 2 includes all the projects listed in Service Block 1 (with the exception of the purchase of one new Amtrak Cascades train set as described in Service Block 1) plus the projects listed below. Implementation of Service Block 2 projects would enable WSDOT and Amtrak to add a fifth and sixth daily round trip between Seattle and Portland and will reduce the travel time between these cities by 10 minutes. The projects also improve reliability for existing train service operating between Portland and Vancouver, B.C., and Seattle and Vancouver, B.C.

- Amtrak Cascades – New Train Sets – Corridor-wide
  Four new train sets will be purchased.

- Amtrak Cascades – High Speed Locomotives – Corridor-wide
  18 new, fuel-efficient, high-speed locomotives will be purchased.

- Advanced Signal System – Clark, Cowlitz, Lewis, Thurston, Pierce, King, Snohomish, Skagit, and Whatcom counties
  Prepare for a new train control system between locomotives, trackside signals, and road/rail crossings by converting relay interlockings to solid state interlockings at various locations on the main line between the Columbia River at the southern border of Clark County and Canada at the northern border of Whatcom County.

- Kelso to Martins Bluff – New Siding – Cowlitz County
  A new siding along the west side of the main line near the Port of Kalama from Toteff Road to just south of the Kalama River, along with other improvements, will be constructed.

- Kelso to Martins Bluff – Toteff Siding Extension – Cowlitz County
  A siding track will be extended about 0.9 miles south across Toteff Road and a new grade separation carrying Toteff Road over the siding, main line, and yard tracks will be constructed.

- Kelso to Martins Bluff – Kelso to Longview Junction – Cowlitz County
  A new 4.5-mile main line will be constructed along the east side of the existing main line, from the Kelso Amtrak Station to just north of Owl Creek, along with a new grade separation at Hazel Street in Kelso.

- King Street Station Track Upgrades – King County
  New tracks and interlockings will be added at King Street Station from South Royal Brougham Way to South Main Street to support additional daily trains, and two roadway structures near the station at South Jackson Street and 3rd Avenue Extension South will be rebuilt to accommodate the new tracks.

Service Block 3 includes all the projects in Service Blocks 1 and 2 (with the exception of the purchase of one new Amtrak Cascades train set which is replaced by the purchase of 18 new high-speed locomotives described in Service Block 2) plus the projects listed below. It will enable WSDOT and Amtrak to add a fifth, sixth, seventh and eighth daily round trip between Seattle and Portland, maintain a high level of schedule reliability, and reduce travel times between Seattle and Portland by up to 18 minutes. The Service Block 3 projects will also improve reliability for existing train service operating between Portland and Vancouver, B.C., and Seattle and Vancouver, B.C.

- Kelso to Martins Bluff – Kalama New Main Line – Cowlitz County
  This project adds 2.9 miles of new third main line track east of the existing main line near the Port of Kalama from Toteff Road to just south of the Kalama River.

- Bellingham Main Line Relocation – Whatcom County
  4,000 feet of track near Bellingham's waterfront from East Pine Street to West Chestnut Street will be relocated eastward, and a new Cornwall Avenue roadway bridge over the realigned tracks will be constructed.

- Everett Curve Realignment – Snohomish County
  From Pacific Avenue and Chestnut Street to just north of the Snohomish River in Everett, the main line will be realigned, the signal system improved, and the mechanical portions of the Snohomish River Bridge upgraded.

- Centralia – Station Modifications – Lewis County
  This project constructs a second platform east of the main lines between East Main Street and East Maple Street and a passenger overcrossing over the main tracks at Centralia Union Station.

- King Street Station Renovation – King County
  The passenger, baggage, and adjoining offices in Seattle's King Street Station building at 303 South Jackson Street will be restored to accommodate higher volumes of rail travelers.

- Tukwila Station – King County
  A passenger waiting shelter will be added at Sound Transit's commuter station at 2100 Longacres Drive Southwest in Tukwila and an Amtrak Cascades passenger information system will be installed at nearby Seattle-Tacoma International Airport just south of Seattle and west of Tukwila.

- Vancouver Port Access – Clark County
  New east-west tracks will be constructed from approximately West 7th Street and Jefferson Street in Vancouver, beneath the BNSF north-south main line as it crosses the Columbia River, to approximately West 26th Avenue in the Port of Vancouver.

- Tacoma Trestle Replacement – Pierce County
  A single track functionally-obsolete timber trestle will be replaced with a modern multiple track structure and retained earth fill from East L Street to west of East G Street in Tacoma.

IV. Public Involvement

A Tier-1 EA was prepared in September, 2009 for improvements to the PNWRC in Washington State that evaluates the program of improvements. WSDOT posted the EA on its website on October 2, 2009, and requested that all written comments be received via e-mail or post mail by October 19, 2009. Additionally, notice of the EA and the comment due date were posted on the Washington State Environmental Policy Act Register on October 5, 2009. Due to agency requests, the comment period remained open until 12:00 p.m. on October 23, 2009. The EA was also sent via mail to federal, state, and local agencies, military bases, ports, tribes, and city and county governments located along the rail line. Thirteen agencies submitted written comments on the EA. No individuals provided written comments on the EA. Agency concerns included future site-specific analysis, the deadline for the comment period, location of future train stops, location of potential grade-separated crossings, and wildlife/train collisions. The comment letters are shown in Appendix A along with WSDOT's response to issues raised. In addition to requesting public comment on this EA, WSDOT has engaged the public during the completion of planning studies and environmental projects for rail development along the PNWRC.

Beginning in 1992, WSDOT published its High Speed Ground Transportation Study and the Pacific Northwest Rail Corridor was designated as one of the five original high speed rail corridors by the FRA. WSDOT has worked with local governments and the public in the development of the rail corridor through both corridor-wide rail studies, as well as site-specific environmental documents. The proposed improvements that make up this program were presented in the 2006 "Washington State Long-Range Plan for Amtrak *Cascades"* and the 2008 "Amtrak *Cascades* Mid-Range Plan." Historically, when projects received funding WSDOT interacted with Federal agencies, freight railroad companies, state regulatory and resource agencies, local governments, tribes, and the public to allow for participation in the development of site-specific documentation.

WSDOT has prepared site-specific environmental documentation for projects within Service Blocks 1, 2, and 3. These include:

- Vancouver Rail Project – NEPA/State Environmental Policy Act (SEPA) Environmental Impact Statement (EIS). The project, located in southwest Washington, would eliminate conflicts between freight trains and passenger trains in the heavily-congested Vancouver Rail Yard. The Federal Highway Administration (FHWA) was the lead federal agency and FRA was a cooperating agency in the EIS process. The Final EIS was issued in May 2003, and FHWA's Record of Decision was issued in August 2003. The proposed project was reevaluated pursuant to NEPA in 2008, led by FHWA and included FRA as a cooperating agency. The first two phases of the project, funded with FHWA and state monies, are currently under construction. FRA will issue a NEPA decision before funding construction of additional phases of the Vancouver Rail Project.

- Kelso-Martin's Bluff Rail Project – NEPA/SEPA Preliminary Draft EIS. In 2001, WSDOT began the development of a NEPA/SEPA EIS for the Kelso-Martin's Bluff Rail Project with FRA and FHWA as co-lead Federal agencies. This project would have eliminated freight and passenger train conflicts near the Columbia River ports

of Kalama and Longview. The environmental documentation only proceeded as far as a preliminary draft EIS due to state budget limitations and legislative direction.

- D to M Street Connection – NEPA/SEPA EIS. In 2002, the FTA and Sound Transit prepared an EIS for the Lakewood to Tacoma Commuter Rail and SR-512 Park and Ride Expansion project, which included the improvements from D to M Street. FTA issued a Record of Decision (ROD) for Lakewood to Tacoma Commuter Rail and SR-512 Park and Ride Expansion project in December 2002. The improvements are described in the 2002 ROD consist of the "development of an approximately 1.2 mile segment of new track between East "D" Street and South "M" Street in the City of Tacoma. This new connection, which will be built primarily within City of Tacoma right -of-way, will be designed and built in accordance with Federal Rail Administration requirements." Subsequent changes in the design required Sound Transit and FTA to prepare a NEPA Reevaluation, which was issued in November 2007. The design changes consisted of a grade-separated crossing of Pacific Avenue to address limited rail capacity, safety concerns, and increased congestion. In 2009, Sound Transit competed for FRA funding to support the completion of the project and, as such, prepared an EA for the proposed D to M Street Connection. FRA issued a FONSI for the D to M Street project in December 2009. The project is currently being advertised for bids, but has not yet begun construction. While this project is within the limits of this environmental document, it has its own independent utility and logical termini. The construction of this project is not contingent upon the completion of any other part of the proposed undertaking.

- Point Defiance Bypass Rail Project – FHWA and WSDOT prepared a NEPA Documented Categorical Exclusion (DCE) for this project in 2008. The NEPA DCE was also adopted under SEPA as a Determination of Nonsignificance (DNS). This project would build, reconstruct, or rehabilitate approximately 18 miles of track that bypasses the BNSF main line around scenic Point Defiance. The first phase of construction is underway with funding from FHWA and other non-FRA sources. FRA will issue a NEPA decision before funding construction of the Point Defiance Bypass Rail Project.

- WSDOT has completed seven crossovers and three siding upgrades since 2000 along the PNWRC in Washington State. These projects had state funding only; thus, the environmental documents were SEPA DNSs. Two siding extensions, where required NEPA/SEPA environmental documents have been completed, will soon start construction. For one of the siding extension projects, the U.S. Army Corps of Engineers was the lead Federal agency due to wetland impacts. For the other siding extension project, FHWA was the lead Federal agency due to a grade crossing closure associated with the project.

For the Vancouver Rail Project, the Kelso-Martin's Bluff Rail Project, and the Point Defiance Bypass Rail Project, WSDOT reached out to the communities through scoping letters and meetings, public notices, community open houses, and agency and tribal meetings. At least 25 people attended each open house. Community and agency concerns expressed were for safety, noise, and access.

To facilitate public access, each project will have a communications plan to address three main audiences: media relations, government relations and community relations. The choice of tools and the extent they are used will vary with the size and potential impacts of each improvement and the amount of interest by each of the three types of audiences. WSDOT may use e-mails, press releases, newsletters and, in some cases, open houses, to keep media, government officials and the community informed of the improvements being planned and their progress. At a minimum for all projects, WSDOT develops individual project web pages that include the project description and location map, contact information, and all public outreach materials and environmental documents. Periodic updates on each web page are posted on a monthly basis. The address where all project web pages are listed is http://www.wsdot.wa.gov/projects/.

A. Outreach to Native American Tribes

In Washington State, Native American Tribes have determined their areas of interest for WSDOT projects. When a project is proposed, the affected Tribes are consulted on a government-to-government basis. This WSDOT consultation occurs either as a Section 106 consultation or as a Governor's Executive Order 05-05 consultation (which is similar to a Section 106 consultation and is required for all state-funded capital construction projects). FRA initiated formal government-to-government consultation in a letter sent to potentially interested tribes on or around August 18, 2010. FRA will continue to meet its government-to-government consultation responsibilities during the project-level environmental process and at the request of individual tribes. In general, tribes are concerned about any effects to their usual and accustomed fishing, hunting, or sacred places, as well as any known archaeological sites or the potential of encountering unknown cultural resources. To address their concerns, a cultural resources report/survey is completed for every project, and an inadvertent discovery plan is required for all project construction.

V. Summary of Impacts

The program of infrastructure improvements described in the EA occurs in selected areas along the 297-mile Pacific Northwest Rail Corridor on the BNSF north-south main line from the Columbia River to the Canadian border. The majority of the projects are located entirely within the existing BNSF right-of-way, which varies in width along the corridor from 100 feet to over 200 feet. The following section outlines the anticipated impacts, by resource area, of the proposed PNWRC service improvement program as analyzed in the Tier-1 EA.

The corridor assessment of potential environmental effects began in the late 1990s when discipline reports and GIS mapping were completed to support the Environmental Overview of the corridor and the long-range plan for the Amtrak Cascades. For this Tier-1 EA, the environmental information and the GIS mapping were both updated to reflect any changed conditions along the corridor.

The GIS mapping was completed using a custom GIS application built to access over 60 layers of environmental or natural resource management data. This application is an ArcView extension that provides tools for locating transportation projects and displaying the environmental data for that location. The resource areas that were mapped for the EA were hydrology, hazardous sites, flood zones, wetlands, threatened and endangered species, air quality, parks, national register listed historic properties, generalized slope stability, urban

growth areas, global warming / sea level rise model, and census data. The buffer area used to analyze each resource to help identify potential impacts ranged from 1,000 to 2,000 feet. The broad buffer areas allow for avoidance and minimization during subsequent NEPA studies. Actual impacts would be reduced based upon the footprint of the final design. Site-specific studies could include additional analysis of noise and vibration, air quality, traffic and transportation, wetlands, streams/rivers, floodplains, fish, wildlife, vegetation, endangered species, hazardous materials, cultural resources, social and economic, Environmental Justice populations, energy, land use/farmlands, utilities, and visual quality.

Table 1 (attached to this FONSI) provides a summary of the potential effects of the proposed program of improvements. The impacts of the proposed improvements will be mitigated below the level of "significant" as demonstrated in the environmental commitments section of this FONSI. The context and significance of the impacts are described by resource area below.

A. Waterways and Hydrological Systems

As a part of the service improvements program, new rail crossings would be constructed over the Coweeman River, Schoolhouse Creek, and some unnamed streams; rail improvements would be constructed directly adjacent to the Columbia River, Vancouver Lake, Burnt Bridge Creek, Cowlitz River, Kalama River, Owl Creek, China Creek, and the Snohomish River; between 15 and 20 acres of fill would be placed in floodplains (including wetlands and non-wetlands) in Clark, Cowlitz, and Snohomish counties; and there would be less than 5 acres of additional impervious areas outside the existing developed rail line in Clark, Cowlitz, Lewis, Pierce, King, Snohomish, and Whatcom counties. With appropriate mitigation as described in Section V.A. below, it is anticipated that the impact of the service improvements program on the waterways and hydrological systems will be less than significant.

B. Hazardous Materials

Any potential impact from hazardous materials can be avoided, minimized or mitigated. A survey completed during the EA found a total of 7 Superfund sites, 401 state cleanup sites, and 781 leaking underground storage tank sites within a 2,000 foot buffer along the rail corridor. The potential for permanent impacts exist if pre-existing contaminated soil or ground water is not properly managed and allowed to spread to clean soil or surface or ground water. However, with the proper mitigation and management protocols, this risk will be substantially diminished well below the level of significant impact. With appropriate mitigation as described in Section V.B. below, the potential impact from hazardous materials as a result of the service improvements will be less than significant. Site-specific environmental documentation will further evaluate the potential for hazardous material issues and will include appropriate mitigation measures as discussed in Environmental Commitments.

C. Biological Resources/Ecology

In the case of fill or cut areas, especially near streams or wetlands, moderate impacts to fisheries, vegetation, and wildlife could be expected. In these areas, critical, suitable or available habitat for species could be lost or modified in ways that limit usability by species. It is anticipated that the service improvement projects could create between 8 and 12 acres of wetland fill in Cowlitz County and between 1 and 2 acres of wetland fill in Snohomish County. It is anticipated that the improvement projects could affect between 18 and 25

acres of vegetation and wildlife sites in Clark, Cowlitz, Lewis, Pierce, King, Snohomish, and Whatcom counties. It is anticipated that the improvement projects could affect less than one river mile of fish designated critical habitat within Schoolhouse Creek and the Coweeman River in Cowlitz County. With appropriate mitigation as described in Section V.C. below, the service improvements impact on biological resources will less than significant.

D. Air Quality

Using Mobile 6 modeling, previous studies, and taking into account future regulations and trends, the General Conformity[2] air quality analysis that was performed for the service improvements and associated rail operations indicates that the level for each criteria pollutant would not exceed the National Ambient Air Quality Standards (NAAQS) *de minimis* level of emissions. As such, this analysis confirms that the rail program's increased operations conform to the purpose and intent of the State Implementation Plans and Maintenance Plans for achieving the NAAQS.

With the provision of faster and more reliable service, the increase in ridership will result in a decrease in auto fuel used and emissions from passenger vehicles, as diesel-powered passenger trains use less fuel and have lower emissions than the equivalent number of passenger highway vehicles. The improvements are expected to result in the following changes in emissions and number of auto trips/gallons of fuel used, annually:

	NAAQS *de minimis* Level[3] (tons/year)	**First Year (2018)**	**Fifth Year (2022)**	**Tenth Year (2027)**
Reduced Auto Trips		476,269	507,182	555,425
Reduced Gallons of Fuel		1,932,032	2,037,617	2,204,422
Change in NOx Emissions (tons)	100	38.1	27.7	13.7
Change in PM Emissions (tons)	100	0.9	0.2	-0.3
Change in VOC Emissions (tons)	100	-28.8	-26.4	-28.1
Change in CO2 Emissions (tons)	n/a	-26,910	-29,020	-32,246
Change in SO2 Emissions (tons)	100	-0.6	-0.7	-0.7

The major air quality impacts during construction are expected to be an increase in dust, odors, other particulate matter, and hydrocarbons. Construction impacts in the project area are expected to be temporary and intermittent only, and they will be diluted at increasing distances from the project. However, site-specific investigations will determine if the effects of construction of the proposed program of improvements on air quality and appropriate mitigation measures will be identified and implemented.

E. Soils and Geology

None of the proposed improvements are located near unstable slopes so the potential of impacts to unstable slopes is small. Liquefaction (ground failure due to earthquakes) is possible in portions of the corridor. Thus, the potential for sections of track to be dislocated is possible during an earthquake. Faster and more frequent trains will increase the

[2] *40 CFR 51 and 93*

[3] *These rates apply in maintenance areas.*

frequency of vibration and may increase the risk of liquefaction and track damage in any areas of liquefaction-prone soils. Erosion impacts during construction in Clark, Cowlitz, Lewis, Pierce, King, Snohomish, and Whatcom counties are primarily related to the increased potential for erosion resulting from exposure of excavated soils to water. If not controlled, such erosion could result in the deposition of silt and/or sediment in wetlands, streams, or any other adjacent surface water. It is also likely that soils could be tracked onto nearby paved roads by construction vehicles and wind action over exposed soils could generate dust. However, WSDOT will employ appropriate mitigation as described in Section V.E. below to reduce the potential for these occurrences, thus the potential impacts to soils and geology will be less than significant.

F. Land Use

Overall, the intercity passenger program is compatible with existing locally-approved comprehensive plans and policies. Some impacts may result from the addition of rail facilities in Clark, Cowlitz, and Whatcom counties. All efforts will be made to keep the project limits within the railroad's current right-of-way. However, it will not be possible to avoid work off the existing rail right-of–way in all situations. It is likely that between 10 and 15 acres of land will be converted from its present use to rail-related use in these three counties. In addition, if a wetland mitigation bank is not available, some land may be converted from its present use to wetland mitigation in Snohomish and Cowlitz counties (see Item G. Farmlands). State, regional, and county plans throughout the corridor have incorporated the Amtrak passenger rail service (and its associated facilities) into their comprehensive plans. Many other jurisdictions have also recognized the rail service in their plans, especially in the cities of Vancouver, Kelso, Lacey, Tacoma, Tukwila, Seattle, Edmonds, Everett, Mt. Vernon, and Bellingham, which all have train stations. With appropriate mitigation as described in Section V.F. below, the service improvements impact on land use will be less than significant.

G. Farmlands

Impacts to farmlands will be minor, because most of the new tracks will be constructed inside the existing railroad right-of-way. Between three and five acres of farmland used as pastures for small resident farms in suburban Kelso in Cowlitz County may be displaced by related roadway improvements. If a wetland mitigation bank is not available, some farmland may be converted to wetlands as mitigation for wetland impacts adjacent to the existing right-of-way in Cowlitz and Snohomish counties. The amount and location of the farmland converted to wetland mitigation will vary depending on consultation with the permitting agencies, but would likely not exceed a total of 15 acres in Cowlitz and Snohomish counties. The effects on farmlands will be minimized. Recent state law (RCW 47.01.305) directs WSDOT to use public lands before using land designated as agricultural land of long-term commercial significance. If public lands are unavailable, RCW 47.01.305 directs WSDOT to make every effort to avoid using lands designated as agricultural lands of long-term commercial significance.

H. Parks and Cultural Resources

The addition of rail improvements such as new sidings, bypasses, or additional main lines could potentially impact parks and cultural facilities. Such impacts could affect a cultural resource or change access to a park or recreation facility. None of the improvements proposed in the Corridor Service Expansion Alternative appear to be near enough to existing parks or known cultural resources to result in impacts. Based on this information,

the PNWRC improvements will not result in the use of any properties protected under Section 4(f) of the Department of Transportation Act of 1966 49 U.S.C. § 303. However, site-specific investigations will further evaluate if there is any potential to affect these resources by the proposed program of improvements consistent with FRA's obligations under Section 4(f). With appropriate mitigation as described in Section VI.H. below, it is anticipated that the service improvements impacts on parks and cultural resources will be less than significant.

I. Social and Economic

Potential effects of faster and more frequent passenger trains on community cohesion could result from increased train traffic along the line and from construction of associated facilities. Construction of bypass tracks and additional main lines could potentially disrupt neighborhoods and businesses by changing access. Increased rail service is not expected to require the relocation of any homes or businesses. It is not anticipated that these trains will result in levels of noise or vibration that will make homes or businesses adjacent to the railroad tracks unusable. With appropriate mitigation as described in Section V.I. below, the service improvements impact on the social and economic environment will be less than significant. Site-specific investigations will be conducted to determine more specific, or potential additional mitigation measures to minimize potential impacts to the social and economic environment.

J. Visual Quality

Most railroad improvements will occur within the existing right-of-way, where track and supporting structures already exist. Additional railroad facilities will comprise an incremental change that will be unnoticeable in most locations. Overall, there is not expected to be any change in visual quality as of a result of the PNWRC service improvement program.

K. Energy

A primary goal of the rail program is to reduce the existing bottlenecks in the rail system. This will result in an overall decrease in travel time. Additional fuel efficiency will be realized with the use of the new models of locomotives being built for this route in the future, which are assumed to be at least 10 percent more fuel efficient than the existing locomotives. Current total consumption of fuel for Amtrak Cascades rail passenger service is approximately 3,200 gallons per day or approximately 1.17 million gallons per year. With the planned rail improvements for Amtrak Cascades service expansion and using new locomotives, fuel use is projected to increase to 4,212 gallons per day, for a net increase of approximately 1,000 gallons per day or approximately 365,000 gallons per year. Local supplies of diesel fuel will not be impacted by these improvements.

With the increase in faster and more reliable service, the increase in ridership will result in a decrease in auto fuel used, as diesel-powered passenger trains use less fuel than the equivalent number of passenger highway vehicles. The improvements are expected to reduce the use of automobile fuel by the following amounts annually, based on Amtrak ridership data:

	First Year (2018)	Fifth Year (2022)	Tenth Year (2027)
Reduced auto trips	476,269	507,182	555,425
% Reduction in auto trips at I-5[4]	3.0%	3.1%	3.2%
Reduced gallons of auto fuel[5]	1,932,032	2,037,617	2,204,422
Reduction in diesel fuel used	365,000	365,000	365,000
Net reduction in equivalent energy in gallons of diesel fuel	1,337,230	1,430,257	1,577,222

L. Noise

A general noise and vibration analysis was conducted for the corridor using the guidance provided by the Federal Transit Administration (FTA) manual. Existing freight noise and vibration levels, and the noise and vibration that will be added from each improvement (and associated increases in the number of passenger trains), were predicted at the nearest sensitive receiver to the tracks. WSDOT determined that noise and vibration levels are already high throughout the program corridor due to existing freight operations and the proximity to the existing Interstate-5 highway corridor. The analysis found that the proposed rail improvements will not noticeably add to the existing levels of noise or vibration in these areas, or result in noise or vibration exceeding the FRA criteria for severe impacts for all the improvement areas studied. Further, site-specific noise and vibration analyses will be conducted where appropriate for projects within the program of improvements. With appropriate mitigation as described in Section V.L. below, the potential noise and vibration effects that could result from the service improvements will be less than significant.

M. Transportation

The projects proposed that will allow the additional four round trips between Seattle and Portland, OR will be designed to create rail system capacity such that there will be no increase in freight rail congestion and the existing level of passenger service on the corridor will not be negatively affected. The additional passenger trains will have a positive impact on vehicle traffic congestion on the parallel route of Interstate 5 when people choose to ride the trains rather than drive to destinations near I-5.

Eight highway-rail grade crossings in Clark, Cowlitz, Snohomish, and Whatcom counties will be closed, and six grade separations will be constructed in Clark, Cowlitz, Pierce, Snohomish and Whatcom counties. Other remaining at-grade crossings on the corridor will experience as many as eight more passenger trains per day, which will delay vehicle traffic at those crossings slightly more than today. Safety concerns at highway-rail grade crossings will be addressed at the project level and with appropriate mitigation as described in Section V.M. below; the potential impacts will be less than significant.

There will be temporary transportation delays associated with the construction of traffic circulation improvements. These traffic improvements could include construction of wider

[4] Based on 2009 traffic data collected on Interstate 5 at MP44.3 between Portland and Seattle, as a representative location, using growth rate of 1.5% annually.

[5] Note: 1 gallon of diesel fuel equals 1.1305 gallons of auto fuel (gasoline)

traffic lanes, additional bicycle lanes, and new or more accessible pedestrian facilities. Also, brief traffic delays will occur when the existing crossings are improved with the installation of safety improvement devices, including flashing lights and gates.

A project in Cowlitz County may be near enough to a local airport that it may exceed the Federal Aviation Administration (FAA) Part 77 Obstruction Standard. Design considerations for this project will take this potential obstruction into account in order to avoid or minimize the impacts to the local airport. If impacts cannot be avoided, FAA regulations for obstructions will be followed.

N. Environmental Justice

The corridor service expansion avoids and minimizes potential impacts to minority and low income populations by following the existing route. The wide range of variability in the demographics of census tracts along the corridor suggests that neither low-income nor minority populations would predominately bear the effects of the program.

Increased rail service would not result in substantial noise level increases or violations of ambient air quality standards, or other environmental health hazards. It is possible that if homes or businesses are displaced, one or more could be owned by a member of a protected population, but the overall numbers of displacements will be small, and relocation assistance would be provided in accordance with federal and state law. The rail program will provide mobility benefits to all users.

Corridor service expansion would not likely involve any disproportionately high and adverse impacts to populations protected by the Environmental Justice Executive Order 12898. Subsequent site-specific analysis will verify compliance.

O. Solid Waste Disposal

WSDOT or its contractor will properly dispose of any solid waste generated as a result of project construction, such as land clearing or construction debris, in accordance with state regulations (Washington Administrative Code (WAC) 173-304, Minimum Functional Standards for Solid Waste Handling). With appropriate mitigation as described in Section V.O. below, potential impacts of solid waste generation as a result of the service improvements will be less than significant.

P. Coastal Zone Management

Any project that is located within a Coastal Zone county and needs a Section 401 Water Quality Certification has to comply with the Coastal Zone Management Program and obtain a Determination of Federal Consistency from the Washington Department of Ecology (Ecology), the agency that manages the program in Washington State. Under Washington's Program, federal activities that affect any land use, water use, or natural resource of the coastal zone must comply with the enforceable policies within the six laws identified in the program document. These six laws are: the Shoreline Management Act (including local government shoreline master programs), the State Environmental Policy Act (SEPA), the Clean Water Act, the Clean Air Act, the Energy Facility Site Evaluation Council (EFSEC), and the Ocean Resource Management Act (ORMA).

The Pacific Northwest Rail Corridor runs through six coastal zone counties (out of 15 counties with marine shorelines), but only the Everett Curve Realignment project (on the

east side of the Delta Rail Yard) will need a federal consistency determination. The project is expected to receive concurrence from Ecology that it is consistent with the tenets of the Coastal Zone Management Program. With this mitigation as described in Section V.P. below, the service improvements impact on coastal zones will be less than significant.

Q. Use of Other Natural Resources, such as Water, Minerals, or Timber

There will be no extraction of water, minerals, or timber as a result of the rail projects described in the EA.

R. ADA Accessibility

The intercity passenger trains currently used on the PNWRC are accessible for elderly and disabled passengers, and the new Amtrak Cascades train sets will be equally accessible. The access for wheel chair-bound or others who are unable to climb stairs will be provided by mechanical lifts mounted to the train set, as today, or by portable loading lifts on each platform. Station facilities, which are generally owned by local public agencies, are also accessible for elderly and disabled users. With appropriate mitigation as described in Section V.R. below, the service improvements impact on ADA accessibility will be less than significant. In fact, the impact should be an improvement given that the increased frequency of train service will provide additional transportation options for elderly and disabled passengers.

S. Indirect and Cumulative Effects

Indirect effects are those that are "caused by an action and are later in time or farther removed in distance but are still reasonably foreseeable" (40 CFR 1508.8). Cumulative effects are impacts which result from the incremental consequences of an action when added to other past and reasonably foreseeable future-actions (40 CFR 1508.7). Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

The proposed program of improvements is consistent with locally-approved land use plans. New development around station areas could occur; however, it would not be wholly attributable to the proposed program of improvements. Improvements at King Street, Tukwila, and Centralia stations that are part of this program are not likely to induce development in the vicinity of the stations as they are primarily rehabilitation efforts or station capacity improvements. Local governments, through a public land use zoning process, could designate a transit-oriented development zone around a train station. If this re-zoning and development occurs, it would be focused in urban areas, and could be beneficial, providing additional housing and business opportunities that use less land and reduce auto trips as compared to typical development.

According to the Washington State Long-Range Plan for Amtrak *Cascades*, It is anticipated that by the year 2023, travel on Amtrak *Cascades* from Seattle to Portland will increase to 23 trains per day with over one million individuals utilizing the service per year (February 2006, 3-4). Sound Transit's commuter rail program (*Sounder*), was integrated into the *Cascades* planning process in the early 1990s, though development of the *Sounder* program is independent of the *Cascades* service. This integration ensures consistency between the two programs, individual improvements identified, and service plans. Additionally, capacity analyses incorporate Sound Transit, WSDOT, and BNSF's projected needs. As each project in the proposed program of improvements progresses in

development, WSDOT will ensure that supporting infrastructure is in place to address the potential increases in ridership.

Increased frequency of service and speed that would be achieved through implementation of the proposed program of improvements would not cause changes in population density or development patterns that were not already occurring. Rather, the program of improvements would give area residents more travel options resulting in increased ridership and fewer cars on the roads. Further, each modal shift will incrementally help meet Washington's policy goals for the reduction of greenhouse gas emissions and climate change. Those goals are: 1990 GHG levels by 2020; 25 percent reduction below 1990 levels by 2035; and 50 percent by 2050.

The proposed program of improvements will likely result in roughly 15 to 20 acres of fill placed in floodplains (including wetlands and non-wetlands), and one or two new rail bridges built over the Coweeman River. Permitting processes that will occur and site-specific environmental analyses that will be conducted will include specific design and mitigation requirements to ensure the actions conform to federal regulatory requirements. Similarly, the mitigation outlined in this FONSI include BMPs and other measures, such as bridge design that will not impede fish passage, to reduce the effects of the proposed improvement on the natural environment, including those that would occur only temporarily as a result of the construction process. Therefore, these impacts would not indirectly or cumulatively contribute to resource degradation.

Beneficial indirect effects that are anticipated as a result of the elimination of railroad bottlenecks and the addition of new rail capacity include improved air quality as delays and locomotive idling time decreases. The new locomotives that will be purchased to support the increased trip frequency will be at least 10 to 12 percent more energy-efficient than the current locomotives. This improved efficiency means that less fuel will be used, thus reducing GHG emissions.

WSDOT will work with BNSF and others to identify transportation infrastructure, including rail lines, highways, seawalls, and more, that could be vulnerable to sea level rise as a result of climate change. If vulnerable sections of the PNWRC rail corridor are identified, actions will be recommended to protect rail and other vital transportation infrastructure as well as protecting communities and public safety. Possible strategies to address vulnerabilities include raising rail berms or building bridges to span inundated areas.

According to the 2009-2012 Statewide Transportation Improvement Program (STIP) for Washington State, there are 8 planned projects in the vicinity of the corridor that have federal, state, and local funding sources. These include three new vehicle bridges planned in Edmonds (Edmonds Crossing Multimodal Terminal, a regional project), Renton (Southwest 27th Street / Strander Boulevard Connection (Phase 2)), and the Port of Ridgefield (Pioneer Street Rail Overpass), resulting in the closure of four existing at-grade crossings (two in Edmonds and two at the Port of Ridgefield); the new Lakewood Station Connection, which is a new pedestrian bridge at Lakewood over the proposed Point Defiance Bypass rail line; bridge replacements in Everett (Broadway Bridge Replacement Project) and Bellingham (Waterfront Bridges – Cornwall Bridge); the I-5: Portland Avenue to Port of Tacoma Road – Northbound High Occupancy Vehicle (HOV) and the I-5: Portland Avenue to Port of Tacoma Road – Southbound HOV, which is a project that includes two

new HOV bridges in Tacoma planned for Interstate 5; and the Downtown Vancouver Waterfront Access Project- a street underpass of the BNSF rail line in downtown Vancouver on the rail line that proceeds east from the PNWRC.

Elements of the project development process for the STIP projects are programmed to occur within the next 4 years and could include overlap of construction activities with the proposed improvements along the PNWRC in Washington State that will be implemented prior to September 30, 2017. However, BMPs and other mitigation measures included in this FONSI and included in WSDOT construction protocols will be implemented to ensure concurrent construction projects that could occur in proximity to one another along the rail line will not result in a cumulative adverse effect on area resources. The STIP projects will reduce the number of at-grade crossings along the PNWRC in Washington State, increase safety by reducing the likelihood of vehicle-train collisions, facilitate pedestrian access to either side of the rail line, and will mean less noise from train horns for the surrounding communities. The Downtown Vancouver Waterfront Access Project will improve access to the historic Amtrak station in Vancouver and is located in proximity to larger redevelopment opportunities proposed by the City of Vancouver, converting former heavy industrial use along the waterfront to mixed use. In conjunction with the proposed improvements along the PNWRC in Washington State, the STIP projects would lessen the effect of additional frequencies along the rail line to surrounding communities.

The two new HOV bridges in Tacoma planned for Interstate 5, located adjacent to existing bridges on the freeway over the PNWRC would facilitate the flow of vehicle traffic through this congested area and contribute along with the proposed improvements along the PNWRC in Washington State, to improved regional air quality.

VI. Environmental Commitments

The determination that implementation of the PNWRC program of improvements will not have a significant impact on the environment is predicated on a number of commitments made by WSDOT to protect the environment. These environmental commitments address the potential impacts of the program in Washington State. The Corridor Service Expansion Alternative was evaluated in the Tier-1 Environmental Assessment, dated September 2009. These environmental commitments summarize practicable means to avoid or minimize environmental harm from the improvements.

The environmental commitments are arranged by resource area. The following discussion indicates when the commitment should be implemented and who would have jurisdiction to assure fulfillment for each commitment.

A. Waterways and Hydrological Systems

1. WSDOT will design physical improvements to meet standard engineering practices to avoid and minimize impacts to floodplains and hydrological connection of waterways.

2. WSDOT will ensure that the engineering design and facility construction is consistent with applicable regulatory requirements for protection of water resources. WSDOT will ensure that temporary water quality impacts that could occur during construction over and adjacent to waterways would be avoided or minimized through compliance with the Washington Department of Ecology's Stormwater Management Manual for Western

Washington, and city and county grading/drainage ordinances and Best Management Practices (BMPs), as appropriate.

3. For construction sites disturbing more than one acre, WSDOT or its contractor will comply with the requirements of the National Pollution Discharge Elimination System (NPDES) stormwater construction permit and stormwater pollution prevention plan.

4. WSDOT will use BMPs during construction of the proposed program of improvements. These BMPs may include use of temporary barricades, fencing, and/or flagging to contain project-related impacts to the construction area and avoid impacts beyond the project footprint; returning areas disturbed (outside of the ROW) to their preconstruction contours to the extent practicable; and reseeding or replanting with native vegetation within one growing season following construction to provide permanent stabilization and minimize the potential for erosion; using contaminant-free embankment and surface materials; and using the appropriate BMPs in proximity to perennial waters.

5. WSDOT shall consider in project-level documentation the current water quality, including any impaired streams under CWA Section 303(d); any Total Maximum Daily Load (TMDL) analyses completed, underway or planned; and how anti-degradation requirements would be met for those streams that are meeting state water quality standards or are considered high quality waters.

6. WSDOT will obtain Federal permits required by Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act, from the U.S. Army Corps of Engineers prior to initiation of applicable project-related construction activities. WSDOT also agrees to obtain a 401 Water Quality Certification that is required for projects that include filling wetlands to verify that water quality standards will not be violated. (The 401 Water Quality Certification will be issued in conjunction with the U.S. Corps of Engineers Section 404 permit for wetland fill.)

7. As specific design refinements are made for individual projects, WSDOT will consider the use of elevated track (trestles, etc) or other methods to avoid or minimize floodplain fill in areas within the Snohomish River and Cowlitz River floodplains.

8. Prior to construction, WSDOT shall complete jurisdictional delineations of wetlands that are subject to Section 404 of the Clean Water Act for all proposed railroad facilities. WSDOT shall mitigate project-related unavoidable impacts to waters of the United States, including wetlands, in accordance with the requirements of permit (s) obtained from the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act.

9. WSDOT shall disturb the smallest area practicable around any streams and, as soon as practicable following construction activities, revegetate disturbed areas outside of the right-of-way using native vegetation. EPA approved BMP's will be utilized to minimize disturbances to these areas.

10. WSDOT shall design bridges and culverts to maintain existing water patterns and flow conditions as required by any appropriate permits.

B. Hazardous Materials

11. For construction projects that extend beyond the rail line and the rail berm, WSDOT will prepare a hazardous materials report. This report will identify and evaluate known or potentially contaminated sites in the project area that may affect the environment during construction, create significant construction impacts, and/or incur cleanup liability for WSDOT.

12. If hazardous materials are identified on a project site, WSDOT will develop the appropriate mitigation to properly manage pre-existing contaminated soil or ground water so that it does not spread, and so that clean water does not come into contact with contaminated stockpiled soil. WSDOT shall coordinate with the lead agency(ies) to ensure that project activities do not adversely affect any ongoing hazardous waste site cleanup activities.

13. For property acquisition, WSDOT will conduct a Phase I Environmental Site Assessment to evaluate the potential for the presence of contamination on or adjacent to a specific property. A Phase II Environmental Site Assessment, which characterizes soil and groundwater, may be performed if recognized conditions exist for a site.

14. WSDOT will include provisions for an environmental consultant in construction contract specifications for projects where hazardous materials are found on the project site. WSDOT will ensure that the contractor complies with the requirements for handling contaminated materials.

15. Prior to initiating any project-related construction activities, WSDOT or its contractor shall develop a Spill Prevention, Control and Countermeasures (SPCC) Plan for petroleum products or other hazardous materials, as required by applicable Federal and state regulations. During construction, any encountered materials presenting environmental risk would be handled according to construction specifications and the SPCC Plan that will be in place.

16. During construction, WSDOT or its contractor shall follow all applicable Federal regulations and standard protocols for transporting hazardous substances and other deleterious compounds to minimize the potential for a spill occurrence near or adjacent to water bodies.

17. WSDOT will require that contractor(s) dispose of waste generated during project-related construction activities in accordance with applicable and reasonable Federal, state, and local regulations.

18. If unanticipated sources of hazardous or regulated materials are encountered during project-related construction activities, WSDOT or its contractor will immediately notify the Washington Department of Ecology and stop all work in the area until a corrective action plan has been approved. Handling, treatment, and disposal of any hazardous materials would be conducted by WSDOT or its contractor in full compliance with Federal, state, and local requirements.

C. Biological Resources/Ecology

19. WSDOT will undertake design refinements during final design and as documented in subsequent environmental documents to avoid sensitive ecological areas and minimize impacts to aquatic resources and wetlands.

20. For unavoidable impacts to wetlands, mitigation will include one or more of the following: enhancing existing wetlands, restoring degraded wetlands, creating new wetlands in non-wetland areas, or purchasing wetland mitigation bank credits. Enhancement of existing wetlands within the immediate project area would likely involve eradicating invasive plant species and planting native vegetation.

21. In Snohomish County and other counties with a legacy of supporting land in agricultural production, where wetland mitigation could include converting farmland to wetland as compensation, WSDOT will coordinate with the agricultural community to ensure minimization of impacts to important farmlands while also mitigating for wetland impacts.

22. Prior to construction, WSDOT will collaborate with Federal and state resource agencies to identify means to minimize railway/wildlife impacts, which could include appropriate siting, design, and construction of effective wildlife crossings. Where bridges or large culverts are installed for water body crossings, these could be enlarged to facilitate movement of terrestrial species.

23. WSDOT will obtain Federal and state permits and authorizations for impacts to the habitat of Federally-protected species. Permit stipulations will be incorporated into the construction contract specifications.

24. WSDOT will coordinate with Federal and state resource agencies prior to the final design process to identify opportunities to avoid, minimize, mitigate, or compensate for unavoidable permanent impacts to critical, suitable, or available habitat. WSDOT will locate construction and staging areas outside of Federal or state-designated critical/sensitive habitats where possible, and consider developing a plan for targeted habitat improvements.

25. For all proposed crossings of fish-bearing waters incorporating culverts, WSDOT will design said structures in accordance with all reasonable requirements of Federal and state regulations (e.g., Endangered Species Act of 1973 and Washington State Hydraulic Code, Chapter 77.55 RCW (Revised Code of Washington)). In addition, WSDOT shall use the most recent fish utilization information from the Washington Department of Fish and Wildlife GIS database to determine the presence of fish in each water body.

26. In project locations where the rail corridor separates bluff areas from Puget Sound, WSDOT will, based upon consultation with resource agencies, investigate and consider the use of hydraulic structures, such as oversized culverts, to allow sediment to pass under the rail line and reach Puget Sound, as material transport is necessary to avoid major changes in supply and associated changes in beach and habitat suitability.

27. As determined during subsequent site-specific environmental evaluations, WSDOT will minimize adverse effects to salmon during critical life stages when practicable for any in-

water work in anadromous streams. WSDOT will incorporate timing windows into construction contract specifications for in-stream work. In addition, WSDOT will design and construct stream crossings so as not to impede fish passage or impair the hydrologic functioning of the water body.

28. WSDOT or its contractor will implement standard BMPs to minimize impacts to vegetation during project-related forest clearing, including minimizing construction vehicle traffic in areas where excessive soil compaction and rutting would cause erosion, and using low ground pressure construction vehicles to minimize disruption to soil.

D. Air Quality

29. WSDOT will include specifications to comply with Federal and state air quality regulations to cover temporary construction conditions such as dust and smoke emissions in the construction contract.

30. To minimize fugitive dust emissions created during project-related construction activities, WSDOT or its contractor will implement appropriate fugitive dust suppression controls, such as spraying water or other established measures, and operating water trucks on haul roads where possible to reduce dust.

31. To limit project-related construction emissions, WSDOT will work with its contractor(s) to ensure that construction equipment is properly maintained and that required pollution-control devices are in working condition.

32. While it has been demonstrated at the Tier 1 level that the proposed Corridor Service Alternative would not exceed the NAAQS *de minimis* levels for criteria pollutant emissions, site-specific investigations will be conducted to determine the air quality status of the project area and to determine if air quality could be adversely impacted during construction of the proposed improvements.

E. Soils and Geology

Note: Several of these mitigation strategies would be included in the NPDES Stormwater Construction Permit required to begin construction activities (see environmental commitments for waterways and hydrological systems).

33. Where steep slopes are unavoidable in cut and fill sections, WSDOT will minimize the disruption of soils and apply current soil stabilization techniques, such as retaining walls, where practicable. As a last resort, WSDOT will cut back steep slopes to a reasonable angle so that future landslide risk is minimized.

34. WSDOT or its contractor will properly prepare the subgrade and compact the embankment to reduce the risk of liquefaction and track damage in any areas of liquefaction-prone soils.

35. WSDOT or its contractor will mitigate potential erosion during project construction by the use of BMPs specified in the erosion and sedimentation control plans for the project, as required by state and local jurisdictions.

36. WSDOT or its contractor will re-establish vegetation in non-paved cleared areas as soon as possible and apply appropriate ground cover to minimize the potential for erosion hazards.

F. Land Use

The conversion of up to 15 acres of land that is not currently in use for rail-related activities would likely occur as a result of the construction of the proposed program of improvements within Clark, Cowlitz, and Whatcom counties. These conversions of land would occur along the existing transportation corridor and/or in areas that are recognized in local comprehensive plans for rail-related use. No long-term impacts to land use are anticipated to result from the proposed operational improvements that will allow for faster and more frequent intercity passenger trains. WSDOT will implement the following measures to minimize temporary disruptions during construction:

37. WSDOT will maintain a website providing information on each funded project, including the status of any site specific environmental documentation, construction schedule, funding, and contact information.

38. WSDOT will address concerns about fragmentation of neighborhoods and farm properties by maintaining the connectivity of major roadways where possible and working with local residents on specific right-of-way acquisition issues.

39. WSDOT will make reasonable efforts to minimize disruptions to utilities by scheduling project-related construction work and outages to low-use periods. WSDOT will notify residents and other utility customers in advance of project-related construction activities requiring temporary service interruptions.

G. Farmlands

Impacts to farmlands will be minor, because most of the new tracks will be constructed inside the existing railroad right-of-way. These potential impacts would likely occur in Cowlitz and Snohomish counties where farmland may be converted to wetlands for mitigation purposes, if a wetland mitigation bank is not available. The amount of farmland conversion would likely not exceed a total of 15 acres. No loss of access to properties is anticipated to result from faster and more frequent intercity trains and its associated project improvements. See suggested environmental commitments related to agricultural land under Biological Resources/Ecology.

H. Parks and Cultural Resources

WSDOT will conduct additional project investigations to determine if unidentified site-specific impacts may occur to parks and cultural resources as the proposed project designs are refined, as follows:

40. During subsequent site-specific environmental documentation, WSDOT will consult with affected Native American Tribes, the State Historic Preservation Officer (SHPO), the Advisory Council on Historic Preservation, and agencies with jurisdiction over the land that could be affected by the proposed improvements to comply with Section 106 of the National Historic Preservation Act and Section 4(f) of the US Department of Transportation Act. WSDOT will work with FRA and other interested federal agencies to

ensure compliance with Section 106 and Section 4(f). Project specific MOA's may be developed as the site specific processes develop.

41. If the potential to affect cultural resources as a result of the proposed improvements is determined during site-specific analysis, WSDOT will develop protocols to inform and prepare construction supervisors of the importance of protected archaeological resources, graves, and other cultural resources and how to recognize and treat the resources. An unanticipated discovery plan will be developed for each project.

I. Social and Economic

42. If additional right-of-way is needed, WSDOT will evaluate the effects of the additional land acquisition during site-specific environmental documentation. WSDOT will conduct project-related right-of-way acquisition in conformance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. 4601 et seq.).

43. To address safety concerns, WSDOT is working with local communities up and down the corridor to improve, close and consolidate grade crossings and educate the public about the dangers of railroad trespassing. In addition, the volunteer group, Operation Lifesaver, provides extensive community education and outreach about grade crossing safety and the dangers of trespassing on railroad property.

44. WSDOT will consider traffic-related improvements for the Tillicum neighborhood in Lakewood, which is separated from the roadway network by the existing rail line, such as improved coordination of traffic signals when a train is or is not present near the grade crossings. Similar traffic-related improvements will also be considered for other residential areas where community cohesion could be affected by the proposed improvements.

J. Visual Quality

45. Following construction, WSDOT will return lands outside of the rail right-of-way to near pre-existing conditions, where possible, for most improvement sites. Further, WSDOT or its contractor will dispose of excess construction material in a suitable fill location and will not cast it on downhill slopes.

46. Where new rail bridge structures will be added, specifically at the Coweeman River crossing in Kelso, WSDOT will design the new bridge alongside the existing structure, thus minimizing the visual impact.

47. At locations where there will be new roadway bridges over the tracks, the design of the new bridges will be coordinated by WSDOT with local government and the general public to minimize the visual impact of the new structures.

48. At locations where new retaining walls will be added, WSDOT will design the visible surface of the retaining walls to minimize the visual impact by modifying the surface color and texture to resemble natural rock surfaces or by adding a vegetation buffer to shield it from view.

49. WSDOT will replace removed vegetation with native vegetation and locate vegetative buffers beneficial to the visual quality along portions of the improvement sites where cuts or fills have occurred within sight of residential viewers and outside of the right of way, and where it does not attract wildlife species that could be involved in wildlife/train collisions.

K. Energy

No adverse impacts to energy are anticipated to result from project improvements to allow for faster and more frequent intercity passenger trains; thus, no mitigation is proposed.

L. Noise

The need for mitigation is based on the magnitude of impact and consideration of factors specifically related to the proposed improvement and affected land uses. Noise and vibration impacts will be further investigated during site-specific environmental reviews for those projects that have the potential to cause adverse effects. Every reasonable effort will be made to reduce predicted noise and vibration to levels deemed acceptable for impacted sensitive land uses.

50. If impacts exceed FRA severe criteria for vibration impacts, WSDOT will consider track improvement measures such as resilient tie pads and resilient fasteners to avoid or minimize vibration impacts.

51. If impacts exceed FRA severe criteria for noise impacts, WSDOT will consider specific noise abatement measures, such as train wheel maintenance, installing continuous welded rail, reducing train speed, installing supplementary safety measures, and working with affected communities for the designation of “Quiet Zones,” or other measures. WSDOT will be responsible for completing noise and vibration analyses and finalizing mitigation commitments with local communities during site-specific environmental reviews.

52. WSDOT will work with its construction contractor(s) to minimize, to the extent practicable, construction-related noise disturbances near residential areas by specifying acceptable working hours in construction contract documents. Construction and maintenance vehicles will be in good working order with properly functioning mufflers to control noise.

M. Transportation

WSDOT will complete additional analysis of traffic and transportation impacts for each project for which at least one public at-grade crossing is proposed to have one or more tracks added, trains speeds across it increased, or the crossing closed to vehicles with or without grade separation.

53. The at-grade crossings within the limits of the proposed projects will be improved with wider traffic lanes, the addition of bicycle lanes, and new or more accessible pedestrian facilities. These crossings will also be upgraded to modern active warning standards, including flashing lights, gates, and predictive circuitry. Crossings with predictive circuitry will adjust the activation of the flashing lights and gates such that the delay for vehicles stopped at a crossing is nearly the same for both slow-moving and fast-moving

trains. WSDOT will also consider traffic-related improvements, such as improved coordination of traffic signals when a train is or is not present near the grade crossings.

54. Where improvements to at-grade crossings are likely to result in temporary traffic delays and periodic lane and/or access revisions during construction, WSDOT will coordinate with local governments and communities to minimize construction impacts.

55. WSDOT will develop a traffic control plan for each project that includes, but is not limited to, the following measures: at least one lane will be kept open at crossings except for short periods of limited duration when new track and new crossing surface panels are being installed at the grade crossings; flaggers and/or signs will be in place when lanes are closed; detour signs will be placed when routes are closed; a uniformed officer will be required at locations where traffic signals will be countermanded; and traffic control plans will be developed in conjunction with the respective roadway authorities.

N. Environmental Justice

Corridor service expansion would not disproportionately affect populations protected by Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. Increased rail service would not result in high and adverse noise level increases or violations of ambient air quality standards, or other environmental health hazards.

It is possible that if homes or businesses are displaced, one or more could be owned by a member of a protected population. The overall numbers of displacements will be small, as the majority of the program would occur within existing rail right-of-way, and relocation assistance would be provided in accordance with federal and state law. The corridor service expansion would benefit protected populations by providing improved and more reliable intercity transportation.

O. Solid Waste Disposal

56. WSDOT will properly dispose of any solid waste generated as a result of project construction, such as land clearing or construction debris.

P. Coastal Zone Management

57. For those projects that are located in Whatcom, Skagit, Snohomish, King, Pierce, and Thurston counties (six of the 15 coastal zone counties in Washington State), WSDOT will comply with the Coastal Zone Management Program, managed by the Washington Department of Ecology.

Q. Use of Other Natural Resources, such as Water, Minerals, or Timber

There will be no extraction of water, minerals, or timber as a result of the rail projects described in the EA.

R. ADA Accessibility

The intercity passenger trains currently used on the PNWRC are accessible for elderly and disabled passengers, and the new Amtrak *Cascades* train sets will be equally accessible. Station facilities, which are generally owned by local public agencies, are also accessible for elderly and disabled users.

58. The access for wheel chair-bound or others who are unable to climb stairs will be provided by mechanical lifts mounted to the train set, as today, or by portable loading lifts on each platform.

59. Accessibility at stations will be maintained during construction and once the improvements are complete.

VII. Errata

A. Errata to the Environmental Assessment

The following corrections apply to the Tier-1 EA for the program level corridor improvements to the PNWRC, issued by WSDOT on October 2, 2009. These corrections serve to clarify, update, or enhance the readability of the EA. These corrections do not alter the conclusion of No Significant Impact. Changes to the EA are identified by page number and paragraph. New text is indicated by an underline. The comment letters on the Tier-1 EA are included as Appendix A.

Page 1-6, Service Block 3 Proposed Projects, after paragraph 1.
The project called "Centralia -- Station Modifications" was omitted from the list of projects in Service Block 3 in the Tier-1 EA. However, the impacts and the mitigation for this Station project were included in the analysis of impacts, Chapter 5, Impacts and Mitigation, of the Tier-1 EA. Potential effects of the proposed program of improvements are described by the county in which they occur. The Centralia station modifications project is located in Lewis County, which is included in the discussion of impacts by resource area in Chapter 5 of the Tier-1 EA. Other than signal system improvements and track quality improvements, there are no other projects included in this program that occur in Lewis County.

The following text is added:

- Centralia – Station Modifications – Lewis County
  This project constructs a second platform east of the main lines between East Main Street and East Maple Street and a passenger overcrossing over the main tracks at Centralia Union Station.

Page 1-4, after Paragraph 2.
The following text is added.

In response to comments received on the Environmental Assessment, WSDOT wants to clarify how different station stops will be considered in the future. This EA is in support of 25 specific projects, none of which address potential future station stops. WSDOT commits to exploring potential station stops, including one in particular at Auburn, as plans for expanded service are developed. (This will be done through collaboration with Puget Sound Regional Council, Amtrak and the host railroad, Sound Transit, and City of Auburn and in consideration of the State-studied Diesel Multiple Unit service). If necessary, a similar approach would be used when examining potential station stops elsewhere. Locations will be evaluated through various methods in the future including a business case analysis and any environmental analysis required under federal or state laws.

Page 7-2.
The following text is added.

HDR Engineering, Inc. Washington State Department of Transportation, Cascades Track 2 Projects, High-Speed Intercity Passenger Rail (HSIPR) Program, Cost Benefit Analysis & Economic Impact. September 30, 2009.

PSRC (Puget Sound Regional Council). 2006. 2007–2010 Regional Transportation Improvement Program. September 2006.

_____. 2007. Destination 2030 Update: Metropolitan Transportation Plan for the Central Puget Sound Region. April 2007.

_____. 2008. VISION 2040. April 2008. Accessed online July 25, 2009 at www.psrc.org.

_____. 2009a. Transportation 2040 Draft Environmental Impact Statement. Seattle, Washington May 2009. Available online at: http://psrc.org/transportation/t2040/t2040-pubs/trans2040-deis

_____. 2009b. Central Puget Sound Regional 2007-2010 Transportation Improvement Program. Available at: http://www.psrc.org/projects/tip/currenttip/index.htm.

Revised Code of Washington, Chapter 47.79, High Speed Ground Transportation. Section 47.49.01, Legislative Declaration. 1993.

Page 7-4.
The following text is added.

Current updated information was used including September 2009 GIS layers and data for all mapping and data analysis and personal review and correspondence with WSDOT environmental experts.

B. Errata to the Draft FONSI

The sections of this FONSI titled “solid waste disposal,” “coastal zone management,” “use of other natural resources, such as water, minerals, or timber,” “ADA accessibility,” and “transportation” are resource headings that did not appear in the Tier-1 EA prepared by WSDOT for the proposed program of improvements. These resource areas were analyzed in the Tier-1 EA but were not explicitly identified by resource heading and appear in this FONSI because FRA’s environmental procedures explicitly identify these topics as aspects of potential environmental impacts that should be considered. This FONSI states the potential impacts and mitigation measures for the above-mentioned topics that are conditions of this decision document.

Solid waste disposal and the use of other natural resources such as water, minerals, or timber are not addressed in the Tier-1 EA as the proposed program would not have major affect on solid waste disposal and there will be no extraction of water, minerals, or timber as a result of the proposed program of improvements. Waste is discussed in the EA in the

context of construction waste materials/construction debris, and the potential to affect existing hazardous waste sites during construction. Section O and Q of this FONSI include a discussion of solid waste and the use of other natural resources, respectively.

A discussion of coastal waters is included in the Tier-1 EA under "waterways and hydrological system" and compliance with the Coastal Zone Management Act will be required as a condition of a construction permit in coastal zones. Section P of this FONSI presents the coastal counties that could be affected by the proposed program of improvements and compliance with the Coastal Zone Management Act.

Access concerns and changes in vehicular and pedestrian access were addressed in the Tier-1 EA; however, access for elderly and disabled passengers as protected under the Americans with Disabilities Act (ADA) was not explicitly stated. Section R of this FONSI addresses station and train ADA accessibility.

Potential effects of the proposed program of improvements on transportation were addressed in the Tier-1 EA in the context of access and delay at rail-road crossings. A discussion of potential construction impacts in the Tier-1 EA that could result with implementation of the proposed program of improvements included the potential for delay of access at existing rail-road crossings. The community cohesion and safety discussion in the Tier-1 EA addresses the potential disruption of traffic in neighborhoods and businesses where there is the possibility of permanently changing access to residences and facilities. Section M of this FONSI addresses potential effects to transportation and mitigation measures.

Since the posting of the Draft FONSI for the proposed program of improvements for public and agency review, FRA has made minor edits and clarifications to the text of the FONSI that were not requested or included as comments from agencies or the public. Specifically, these errata include edits to the following environmental commitments: Nos. 8, 9, 10, 20, 26, and 40; as well as errata to Section IV. Public Involvement, and Sections V. A, V.C, V.H, and V.S of the Draft FONSI.

The following errata were made in response to comments received on the Draft FONSI that was issued by FRA on July 8, 2010. Changes to the Draft FONSI are identified by page number and paragraph. New text is indicated by an underline. See Section VIII for details on the comments received.

Page 18, Waterways and Hydrological Systems, after environmental commitment No. 4.
The following text is added.

5. <u>WSDOT shall consider in project-level documentation the current water quality, including any impaired streams under CWA Section 303(d); any Total Maximum Daily Load (TMDL) analyses completed, underway or planned; and how anti-degradation requirements would be met for those streams that are meeting state water quality standards or are considered high quality waters.</u>

Page 19, Hazardous Materials, edit to environmental commitment No. 11.
The following text is added.

12. If hazardous materials are identified on a project site, WSDOT will develop the appropriate mitigation to properly manage pre-existing contaminated soil or ground water so that it does not spread, and so that clean water does not come into contact with contaminated stockpiled soil. WSDOT shall coordinate with the lead agency(ies) to ensure that project activities do not adversely affect any ongoing hazardous waste site cleanup activities.

Page 13, Energy, after paragraph 2.
The following text is added.

With the increase in faster and more reliable service, the increase in ridership will result in a decrease in auto fuel used, as diesel-powered passenger trains use less fuel than the equivalent number of passenger highway vehicles. The improvements are expected to reduce the use of automobile fuel by the following amounts annually, based on Amtrak ridership data:

	First Year (2018)	Fifth Year (2022)	Tenth Year (2027)
Reduced auto trips	476,269	507,182	555,425
% Reduction in auto trips at I-5 [4]	3.0%	3.1%	3.2%
Reduced gallons of auto fuel[5]	1,932,032	2,037,617	2,204,422
Reduction in diesel fuel used	365,000	365,000	365,000
Net reduction in equivalent energy in gallons of diesel fuel	1,337,230	1,430,257	1,577,222

[4] Based on 2009 traffic data collected on Interstate 5 at MP44.3 between Portland and Seattle, as a representative location, using growth rate of 1.5% annually.
[5] Note: 1 gallon of diesel fuel equals 1.1305 gallons of auto fuel (gasoline)

VIII. Comments on the Draft FONSI

This FONSI was issued by FRA for public review on July 8, 2010 for a period of 30 calendar days (75 FR 39325, July 8, 2010). Six comments on the draft FONSI were received, including comments from one federal agency, two state agencies, and three local governments. A summary of and responses to the comments are provided below. The comment letters on the Draft FONSI are included as Appendix B.

Federal Agency comments:

Letter from EPA, Region 10 to Elizabeth Phinney, WSDOT dated August 11, 2010 (assigned EPA number: 09-063-FRA)

Comment topics: Wetlands/water quality, wildlife, planning and development, and air quality modeling

Water Resources Comments:

- EPA recommends that the final decision and project-level documentation should consider current water quality, including any impaired streams under CWA Section 303(d); any Total Maximum Daily Load (TMDL) analyses completed, underway or

planned; and how anti-degradation requirements would be met for those streams that are meeting state water quality standards or are considered high quality waters.

- EPA notes that WSDOT must comply with CWA Section 404(b)(1) Guidelines.

- EPA noted they are the authorizing agency for discharges to waters of the U.S. from stormwater under the NPDES permit and CWA Section 401 water quality certification on Tribal land.

Response:

- FRA has included an environmental commitment (No. 5) to address EPA's concerns regarding current water quality and anti-degradation requirements.

- Environmental commitment No. 8 reiterates the requirement to comply with CWA Section 404. This includes compliance with Section 404(b)(1) Guidelines.

- There are no impacts expected on Tribal lands as a result of the proposed program.

Biological Resources Comments:

- EPA recommended specific mitigation measures to address project-level requirements to reduce impacts to habitat and aquatic species.

- EPA recommended project-level coordination with the Washington Department of Fish and Wildlife, National Oceanic and Atmospheric Administration (NOAA), and the National Marine Fisheries Service (NMFS) and incorporate any terms and conditions that may result from consultation.

- EPA recommended their previous comments/concerns incorporated into the project-level NEPA process (see Appendix A for EPA comment letter on the Tier-1 EA).

Response:

- EPA's suggested minimization and avoidance measures to reduce impacts to habitat and aquatic species are addressed in the following environmental commitments. Other strategies to minimize and avoid impacts will be considered as necessary during project-level NEPA analysis.
    - Bridge crossings: see environmental commitments Nos. 1 and 10.
    - Limited construction period to avoid impacts to sensitive species: see environmental commitment Nos. 19, 23, 24, and 27.
    - Utilize BMPs: see environmental commitment Nos. 2, 4, and 27.
    - Maintain or improve water quality for streams in project area: see environmental commitment No. 5.

- Coordination and consultation will occur with both state and federal regulatory agencies as indicated in environmental commitments Nos. 22-24. This will include consultation with the Washington Department of Fish and Wildlife, NOAA, NMFS, and USFWS, when applicable.

- FRA has incorporated EPA's suggested environmental commitment as No. 22 of this FONSI and will be applied to the project-level NEPA process, where applicable.

Hazardous Materials Comments:

- EPA recommended that WSDOT and FRA coordinate with the appropriate lead agency where contamination is known to be present early in the planning process regarding contaminated sites and clean up actions to ensure the project would not adversely affect cleanup activities. Project-level documentation should include delineation of the extent of contamination, the agency managing the site, and the status of remedial action or site assessment where impacts may occur.

Response:

- FRA has added details to environmental commitment No. 12 to address agency coordination as part of the project-level NEPA documentation process to ensure the project would not adversely affect any ongoing hazardous waste site cleanup activities.

Sustainable Communities Comments:

- EPA requested the analysis consider how increased rail service may induce further growth and affect regional planning efforts, and consider and integrate multi-modal access to rail stations in order to potentially further reduce emissions. EPA also recommends WSDOT coordinate with local municipalities surrounding rail stations to collaborate on current and future transportation and development planning.

- EPA recommended that the projects that make up the program of improvements should be consistent with U.S. Department of Housing and Urban Development (HUD), DOT, and EPA's Interagency Partnership for Sustainable Communities and its 6 Livability Principles.

Response:

- FRA has addressed the program's potential to induce growth and affect regional and local planning efforts in Section S of this FONSI, Indirect and Cumulative Effects. New development around station locations could occur; however, it would not be wholly attributable to the proposed program of improvements. The proposed program of improvements is consistent with locally-approved land use plans. Regional planning entities, such as the Puget Sound Regional Council, consider how multi-modal travel options can affect regional plans. Moreover, WSDOT has considered the proposed improvements in their long-range and mid-range plans for the Amtrak *Cascades.*

- FRA's HSIPR program, which has provided funding for the proposed program of improvements, is consistent with the Livability Principles of the HUD, DOT, and EPA Interagency Partnership for Sustainable Communities. Improvements to the PNWRC will improve service to stations in established communities, therefore enhancing both connectivity and livability.

Air Quality Modeling Comments:

- EPA requested references to support the statements regarding population increases stated in the Tier-1 EA.

- EPA recommended including percent reduction in addition to number of reduced auto trips and gallons of fuel so that the predicted reduction could be better understood when comparing to a baseline. EPA recommended that project-level analyses include references to air quality modeling results and literature used for the effects determination.

Response:

- The requested references to support statements regarding population increases are included in Section VII. Errata, of this FONSI.

- FRA has included the percent reduction in auto trips in Section V.K Energy of this FONSI. A location along Interstate 5 that is representative of the PNWRC between Seattle and Portland was used to approximate intercity travel between the two metropolitan areas and estimate the percent reduction in auto trips along Interstate 5 as a result of the proposed program of improvements. WSDOT 2009 traffic volumes were obtained and an annual growth rate of 1.5% was included in the calculation.

- Air quality modeling that is conducted for projects that make up this program of improvements will include a description of the methods of analysis.

State Agency comments:

Letter from Southwest Clean Air Agency to Elizabeth Phinney, WSDOT dated July 22, 2010

Comment topics: Asbestos, construction dust, new source review of air pollution sources

Asbestos (SWCAA Regulation 476) Comments:

- The Southwest Clean Air Agency noted the asbestos abatement requirements if a structure is demolished or renovated.

Response:

- As explained in the environmental commitments for Hazardous Materials, WSDOT will determine if hazardous materials, such as asbestos, are present, and identify appropriate mitigation to properly manage the site (see environmental commitments Nos. 11, 13, and 16). If Asbestos or other hazardous/regulated materials are found during construction, WSDOT or its contractor shall follow federal (40 CFR Part 61 Subpart M National Emission Standards for Asbestos) and state (SWCAA 476 Standards for Asbestos Control) requirements regarding its handling, treatment, and/or disposal.

Construction Dust (SWCAA Regulations 400-040) Comments:

- The Southwest Clean Air Agency noted the requirements to minimize fugitive dust that potentially could be generated by construction activities.

Response:

- As stated in environmental commitment Nos. 29 and 30, WSDOT or its contractor shall take reasonable precautions to prevent fugitive dust from becoming airborne and shall maintain and operate the source to minimize emissions.

New Source Review of Air Pollution Sources (SWCAA Regulations 400-109,110)
Comments:

- The Southwest Clean Air Agency noted the SWCAA's General Regulations which regulate the installation and/or modification of any building, structure, or facility that emits or may emit an air contaminant.

Response:

- Environmental commitment No. 32 indicates that WSDOT will determine if construction of the proposed improvements could cause an adverse impact to air quality. If WSDOT installs or modifies any building, structure, or facility that creates a new or increased source of air contaminants, as per SWCAA Regulations 400-109, 110 WSDOT or its contractor shall obtain an Air Discharge Permit.

Letter from Washington Department of Ecology to Elizabeth Phinney, WSDOT dated August 9, 2010

Comment topics: Shorelands/wetlands, toxics cleanup, waste 2 resources

Shorelands/Wetlands Comments:

- Ecology suggested planning now for advanced mitigation for wetland impacts which will occur in different watersheds and jurisdictions. Mitigation site selection should be done at a watershed scale.

Response:

- Environmental commitment No. 8 charges WSDOT with mitigation of unavoidable impacts to waters of the United States in accordance with the requirements of Section 404 of the Clean Water Act, which requires that impacts are further identified and defined as the projects proceed through the design and environmental clearance processes. A decision as to the type of permitting and mitigation requirements will be made in consultation with the permitting agency

Toxics Cleanup Comments:

- Ecology requested township, range and section (T.R.S.) information be provided for each individual project when State Environmental Policy Act (SEPA) environmental documents are submitted for review.

Response:

- The requested information pertaining to township, range, and section will be provided to the Washington Department of Ecology when specific project environmental documentation is submitted for review.

Waste 2 Resources Comments:

- Ecology recognized that the Service NEPA EA is a planning document, and that individual projects that may have an environmental impact will be dealt with in individual SEPA documents.

Response:

- Comment noted.

Local Government comments:

Letter from the City of Auburn to Elizabeth Phinney, WSDOT dated August 6, 2010

Topic: Future alternative station stops along the Pacific Northwest Rail Corridor

Future Alternative Station Stops Comments:

- The City of Auburn reminded WSDOT of its commitment to include language in the Environmental Assessment (EA) addressing how alternative station stops will be considered in the future. The potential station stops are not connected to the proposed program but are related to the WSDOT's long-term planning efforts. In October 2009, WSDOT and the cities of Auburn, Covington, Maple Valley, and Black Diamond agreed to specific language to be included in the EA. That language was as follows: "In response to comments received on the Environmental Assessment, WSDOT wants to clarify how different station stops will be considered in the future. This EA is in support of 25 Track 2 specific projects, none of which address alternate station stops. WSDOT commits to exploring alternative station stops, including one in particular at Auburn, as plans for expanded service are developed. (This will be done through collaboration with Puget Sound Regional Council, Amtrak and the host railroad, Sound Transit, and City of Auburn and in consideration of the State-studied Diesel Multiple Unit service.) A similar approach would be used when examining station stops elsewhere. Locations will be evaluated in the future using a business case analysis." A modified version of this text was incorporated into the EA as Errata as described in Section IIV above.

Response:

- Section VII of this FONSI, under Errata to the Environmental Assessment (see Page 1-4, after Paragraph 2) addresses the concerns regarding future alternative station stops expressed by the City of Auburn.

Letter from the City of Renton to Elizabeth Phinney, WSDOT dated August 6, 2010

Topic: Tukwila Station

Tukwila Station Comments:

- The City of Renton stated that Sound Transit commuter rail studies have indicated that a significant percentage of passengers at the Station will originate from the east side of the City, and requested that proposed improvements at the Station be coordinated with Sound Transit to include public access from the east for both Amtrak and Sound Transit passengers.

Response:

- When funding is available to make improvements to Tukwila Station, WSDOT will work with Sound Transit to evaluate how improved access from the east could be accomplished for both intercity and commuter rail passengers.

E-mail from the City of DuPont to Elizabeth Phinney, WSDOT dated August 11, 2010

Topic: Noise Section in Environmental Commitments

Environmental Commitments, Noise Section Comments:

- The City of DuPont noted that more specificity is needed in Section L, Noise environmental commitments from the Draft FONSI. The City recommended revising this section to state that WSDOT will conduct a noise assessment if buildings are located within the screening distances indicated on Table 4-1 of Publication FTA-VA-90-1003-06 and propose appropriate and effective mitigation where warranted.

Response:

- As described in Section L of this document, noise and vibration impacts will be further investigated during site specific environmental reviews. The method of analysis for the investigations will follow the Federal Transit Administration's "Transit Noise and Vibration Impact Assessment Guidance Manual, 2nd Edition, May 2006" and if applicable, the Federal Railroad Administration's "Guidance Manual for High-Speed Ground Transportation Noise and Vibration Impact Assessment, October 2005."

IX. Ongoing Project-level Activities that are Part of the Washington State Segment of the PNWRC, Corridor Service Expansion Program

Two projects that are part of the Washington State segment of the PNWRC, Corridor Service Expansion Program have completed project-level environmental clearance with FRA in advance of the issuance of the final FONSI. They include:

- Advanced Signal System – Clark, Cowlitz, Lewis, Thurston, Pierce, King, Snohomish, Skagit, and Whatcom counties (Service Block 2)
  Prepare for a new train control system between locomotives, trackside signals, and road/rail crossings by converting relay interlockings to solid state interlockings at various locations on the main line between the Columbia River at the southern border of Clark County and Canada at the northern border of Whatcom County.

- Cascades Corridor Reliability Upgrades – South – Clark, Cowlitz, Lewis, Thurston and Pierce counties (Service Block 1)
  Track quality improvements will be made at various locations on the main line between Nisqually Junction in Pierce County and the Columbia River at the southern border of Clark County.

These two projects are categorically excluded from the requirements of FRA's Procedures for Considering Environmental Impacts (64 FR 28545, May 26, 1999) as they do not individually or cumulatively have a significant effect on the human or natural environment. The implementation of these projects on the Washington State Segment of the PNWRC both have independent utility and neither project limits the choice of reasonable program alternatives (see 49 CFR §1506.1). Both the track quality improvements and signal system improvements would be implemented independent of the proposed program, as they are

necessary for continuing maintenance and upgrades for existing service and do not change the nature or capacity of the existing infrastructure.

X. Conclusion

At the Tier-1 level of review, the FRA finds that the Corridor Service Expansion program, which includes Service Blocks 1, 2, and 3, as assessed in the 2009 Tier-1 EA, satisfies the requirements of FRA's "Procedures for Considering Environmental Impacts" and will not have a significant impact on the quality of the human or natural environment, following the implementation of the mitigation measures identified in this document and those which will be developed during the site-specific environmental documentation process for specific improvements.

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