

Table 1

Summary of Potential Impacts

Project	Table 1. Summary of Potential Impacts											
	Waterways and Hydrological Systems	Hazardous Materials	Biological Resources/ Ecology	Air Quality	Soils and Geology	Land Use	Farmlands	Parks and Cultural Resources	Social and Economic	Visual Quality	Energy	Noise
<u>Service Block 1</u>												
Tacoma – D to M Street Connection	No impacts to any waterways or hydrologic systems are anticipated and the project is not located within a 100-year floodplain or floodway.	4 sites known or have the potential for contamination; 5 sites with LUST ¹ s; 1 site with UST ² within the project area. Additional 5 sites of concern ³ . Existing contaminated soil or ground water could potentially be encountered during construction. If encountered, removal or treatment would be conducted as appropriate in accordance with applicable laws and regulations.	No significant impacts on biological resources are expected. Four low quality wetlands would be permanently filled, and will be replaced at a one-to-one ratio.	The project occurs in an USEPA-designated maintenance area ⁴ for carbon monoxide and ozone. Adverse air quality impacts are not expected based on expected levels of delay at area intersections. Fugitive dust emissions will be controlled during construction.	The project area contains steep slopes. During construction, standard erosion and sedimentation control BMPs will be required.	Ten businesses and four residential units will be displaced and two additional properties will be affected. These changes will not result in significant impacts to the general character or land uses of the project area. Property acquisition will be conducted in conformance with federal requirements.	No farmland conversion will occur.	No impacts to the Pacific Brewing and Malting Company Historic District or to other historic or potentially eligible properties. The State Historic Preservation Officer has concurred with these findings in a letter dated November 20, 2001.	Short-term economic benefit will be provided to the area during project construction. Construction may cause short-term temporary changes in access and traffic circulation. Any displaced residents or businesses would receive relocation assistance per federal requirements. The project will not cause any disproportionately high and adverse impacts to populations protected by Executive Order 12898 on Environmental Justice. In fact, the project will increase transportation alternatives for the community.	No significant adverse impacts on visual quality are anticipated. The new rail bridge over Pacific Avenue will be consistent with the immediate surroundings and will not negatively affect the overall visual character of the area.	Energy use will be lower as a result of providing rail transit for the public because many riders will choose to leave their passenger vehicles at home and ride the train. Temporary increase in energy consumption during construction is possible.	Major noise sources near the project site include Interstate 5, Interstate 705, major arterials, commercial and industrial activity, activity on existing rail routes, and occasional military aircraft. The highest level of noise resulting from this project would be generated by warning horns at grade crossings which will be used to minimize the noise impact to the community.
Tacoma – Point Defiance Bypass	No impacts to waterways or hydrologic	3 Substantially Contaminated Sites ⁵ and 21	No impacts.	The project area is currently	At the southern end of the project, there is an area	Less than 1 acre of property will	No farmland conversion will occur.	37 historic buildings or structures including 1 NRHP property and	Traffic delays are expected to increase at some of the at-grade	There will be negligible changes in visual quality for nearby residents and	Energy use would be lower because less	Primary existing noise sources are traffic from I-5,

¹ Leaking Underground Storage Tank (LUST) is an underground storage tank that is leaking its contents into the surrounding environment, including soil and ground water, and has been documented to have leaked.

² Underground Storage Tank (UST) is a tank and any underground piping connected to the tank that has at least 10 percent of its combined volume underground.

³ Sites of concern include those with operating underground storage tanks, generators of Resource Conservation Recovery Act (RCRA) hazardous waste, historic sites, and sites identified during reconnaissance activities.

⁴ Maintenance Area is a geographical area of the state that was designated as a nonattainment area, and then redesignated as an attainment area by EPA after taking specified actions within a certain time frame to reduce emissions and attain the national Ambient Air Quality Standards (NAAQS).

⁵ Substantially Contaminated Sites are sites that have potential for substantial contamination of soil, groundwater, surface water, and/or sediment; contain contaminants that are persistent or expensive to manage; and lack information on predicted remedial costs.

Project	Table 1. Summary of Potential Impacts											
	Waterways and Hydrological Systems	Hazardous Materials	Biological Resources/ Ecology	Air Quality	Soils and Geology	Land Use	Farmlands	Parks and Cultural Resources	Social and Economic	Visual Quality	Energy	Noise
	systems are anticipated and the project is not located within a 100-year floodplain or floodway.	Reasonably Predictable Sites ⁶ within 500 feet of project site. However, none of these sites will be impacted by the project. Existing contaminated soil or ground water could potentially be encountered during construction. If encountered, removal or treatment would be conducted as appropriate in accordance with applicable laws and regulations.		designated as meeting all <i>National Air Quality Standards</i> (NAAQS). Fugitive dust emissions will be controlled during construction.	with steep slopes, which will not be impacted by the project. During construction, standard erosion and sedimentation control BMPs will be required.	be acquired, changing its land use from residential to railroad right-of-way.		3 NRHP-eligible properties, and 3 historic-period archaeological sites were identified within 150 feet of the rail line. The project will have no impacts on these structures or sites. The State Historic Preservation Officer has concurred with these findings in a letter dated March 28, 2008.	crossings and increases in noise due to additional passenger rail traffic are also expected. Community cohesion will remain intact because the proposed physical changes will not change mobility or access to neighborhoods or public services. Improvements to at-grade crossings will provide a benefit to the community by improving public safety and traffic flow. There are no disproportionately high or adverse impacts to populations protected by Executive Order 12898 on Environmental Justice.	for motorists because the project will be within the railroad right of way and will be similar in appearance to the existing tracks and supporting structures.	fuel would be used by intercity passenger trains on the bypass route, which is 6 miles shorter than the current route on the BNSF main line. Temporary increase in energy consumption during construction.	surface arterials and local streets. Because of the proximity of much of the corridor to I-5, noise levels in the corridor are fairly uniform. The highest level of noise resulting from this project would be generated by warning horns at grade crossings which will be used to minimize the noise impact to the community.
Vancouver – Yard Bypass Track	No impacts to waterways or wetlands are anticipated as a result of this project. No adverse impacts to the Troutdale Sole Source Aquifer, which underlies the project area will result from this project; Best Management Practices will be	Existing contaminated soil or ground water could potentially be encountered during construction. If encountered, removal or treatment would be conducted as appropriate in accordance with applicable laws and regulations.	No impacts.	The project occurs in an USEPA-designated maintenance area for carbon monoxide and ozone. The project ambient criteria pollutants will not exceed the NAAQS. Fugitive dust	Construction of the bypass track will require grading activities that will impact the existing topography. During construction, standard erosion and sedimentation control BMPs ⁷ will be required.	No impacts.	No farmland conversion will occur.	No impacts.	No impacts.	No impacts.	By facilitating train movement through the rail yard, less energy will be consumed by idling trains.	There will likely be a decrease in train noise as the proposed project will facilitate train movement through the rail yard and decrease idling time for locomotives.

⁶ Reasonably Predictable Sites are sites with recognized environmental conditions based on existing data, or they can be predicted to have those conditions based on site observations, previous experience, or by using best professional judgment. These sites are typically small, contaminants are localized and are relatively nontoxic; and abatement or remediation activities are routine. Common examples might include a dry cleaning business or a former gas station.

⁷ BMPs are Best Management Practices, which are techniques used to control stormwater runoff, sediment, and stabilize soil. These techniques could include silt fencing, hydroseeding, mulching, bank/slope stabilization, filter fabric, siltation pond, etc. Source: WSDOT Highway Runoff Manual, Chapter 6 “Temporary Erosion and Sediment Control Design Guidelines and Process, Appendix 6A “Best Management Practices”.

Project	Table 1. Summary of Potential Impacts											
	Waterways and Hydrological Systems	Hazardous Materials	Biological Resources/ Ecology	Air Quality	Soils and Geology	Land Use	Farmlands	Parks and Cultural Resources	Social and Economic	Visual Quality	Energy	Noise
	implemented during construction.			emissions will be controlled during construction.								
Vancouver – New Middle Lead	No impacts to waterways or wetlands are anticipated as a result of this project. No adverse impacts to the Troutdale Sole Source Aquifer, which underlies the project area, will result from this project; Best Management Practices will be implemented during construction.	Existing contaminated soil or ground water could potentially be encountered during construction. If encountered, removal or treatment would be conducted as appropriate in accordance with applicable laws and regulations.	No impacts.	The project occurs in an USEPA-designated maintenance area for carbon monoxide and ozone. The project ambient criteria pollutants will not exceed the NAAQS. Fugitive dust emissions will be controlled during construction.	No impacts.	No impacts.	No farmland conversion will occur.	No impacts.	No impacts.	No impacts.	By facilitating train movement through the rail yard, less energy will be consumed by idling trains.	There will likely be a decrease in train noise as the proposed project will facilitate train movement through the rail yard and decrease idling time for locomotives.
Vancouver – West Side Port Associated Trackage	It is anticipated that 0.17 acre of wetland will be filled and mitigation will include 0.38 acre of wetland creation. A small portion of the project area is within the 100-year floodplain of the Columbia River; however flood modeling showed a negligible impact. No adverse impacts	Parcels with hazardous material releases from existing and historic industrial facilities were identified. The proposed rail alignment would be constructed on facilities that are required to maintain caps in accordance with WA Dept of Ecology agreed orders and decrees, and would require approval from	No impacts.	The project occurs in an USEPA-designated maintenance area for carbon monoxide and ozone. The project ambient criteria pollutants will not exceed the NAAQS. Fugitive dust emissions will be controlled during construction.	No impacts.	Project site is characterized by intensive industrial uses. A small amount of industrial land will be converted into rail right-of-way. No additional property will be acquired.	No farmland conversion will occur.	No impacts.	No impacts.	The new loop track will not impact the visual quality of the area as it is located on Port property. The highway-rail grade separation will be visible from the surrounding neighborhoods and businesses; however the visual effect of the grade separation would be consistent with the existing highly industrialized landscape.	Overall, less energy will be used because there will be less congestion on the BNSF north-south main line as freight trains move more smoothly onto the Port property.	There will likely be a decrease in train noise as the proposed project will facilitate train movement onto Port property and decrease idling time for locomotives.

Project	Table 1. Summary of Potential Impacts											
	Waterways and Hydrological Systems	Hazardous Materials	Biological Resources/ Ecology	Air Quality	Soils and Geology	Land Use	Farmlands	Parks and Cultural Resources	Social and Economic	Visual Quality	Energy	Noise
	to the Troutdale Sole Source Aquifer, which underlies the project area; Best Management Practices will be implemented during construction.	Ecology prior to starting work. Existing contaminated soil or ground water could potentially be encountered during construction. If encountered, removal or treatment would be conducted as appropriate in accordance with applicable laws and regulations.										
Cascades Corridor Reliability Upgrades -- South	Temporary water quality impacts during construction over and adjacent to waterways will be avoided through compliance with the Washington Department of Ecology's Stormwater Management Manual for Western Washington, and using BMPs, as appropriate. No other impacts are likely.	There are no known hazardous materials sites that would be affected by the corridor reliability upgrades.	No impacts.	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. Fugitive dust emissions will be controlled during construction.	No impacts.	No impacts.	No farmland conversion will occur.	No impacts.	Minor impacts to rail operations and vehicle traffic will occur during construction of the reliability upgrades. Amtrak and BNSF railway are aware of the impacts. BNSF will coordinate with local roadway jurisdictions as needed.	No impacts.	A temporary increase in energy consumption would occur during construction. Long-term energy use will be lower as a result of increasing the reliability of the rail corridor. There will be less locomotive idling when congested areas are eliminated. Also, ridership should increase when passengers are better able to depend on the timeliness of train schedules;	Noise levels are already high due to existing freight operations. During construction, people working and living near improvements may be exposed to additional noise and vibration originating from construction equipment.

Project	Table 1. Summary of Potential Impacts											
	Waterways and Hydrological Systems	Hazardous Materials	Biological Resources/ Ecology	Air Quality	Soils and Geology	Land Use	Farmlands	Parks and Cultural Resources	Social and Economic	Visual Quality	Energy	Noise
											thus, cars will be removed from the road.	
Cascades Corridor Reliability Upgrades -- North	Temporary water quality impacts during construction over and adjacent to waterways will be avoided through compliance with the Washington Department of Ecology's Stormwater Management Manual for Western Washington and using BMPs, as appropriate. No other impacts are likely.	There are no known hazardous materials sites that would be affected by the corridor reliability upgrades.	No impacts.	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. Fugitive dust emissions will be controlled during construction.	No Impacts.	No impacts.	No farmland conversion will occur.	No impacts.	Minor impacts to rail operations and vehicle traffic will occur during construction of the reliability upgrades. Amtrak and BNSF railway are aware of the impacts. BNSF will coordinate with local roadway jurisdictions as needed.	No impacts.	A temporary increase in energy consumption would occur during construction. Long-term energy use will be lower as a result of increasing the reliability of the rail corridor. There will be less locomotive idling when congested areas are eliminated. Also, ridership should increase when passengers are better able to depend on the timeliness of train schedules; thus, cars will be removed from the road.	Noise levels are already high due to existing freight operations. During construction, people working and living near improvements may be exposed to additional noise and vibration originating from construction equipment.
King Street Station – Seismic Retrofit	N/A	Lead and asbestos abatement was previously completed. There are no other hazardous materials expected to be encountered during the seismic retrofit.	N/A	N/A	N/A	No impacts.	N/A	King Street Station is on the National Register of Historic Places. A seismic retrofit will be conducted to ensure the historic integrity of the structure.	Long-term viability of King Street Station will ensure the continued availability of intercity passenger rail service.	King Street Station will continue to be a visual “fixture” in the downtown community with the proposed structural improvements.	N/A	N/A

Project	Table 1. Summary of Potential Impacts											
	Waterways and Hydrological Systems	Hazardous Materials	Biological Resources/ Ecology	Air Quality	Soils and Geology	Land Use	Farmlands	Parks and Cultural Resources	Social and Economic	Visual Quality	Energy	Noise
Blaine – Swift Customs Facility Siding	Temporary water quality impacts during construction will be avoided or minimized through compliance with the Washington Department of Ecology’s Stormwater Management Manual for Western Washington, and using BMPs, as appropriate. If wetland fill is required, appropriate mitigation will be completed as part of the pre-construction permitting process.	Existing contaminated soil or ground water could potentially be encountered during construction. If encountered, removal or treatment would be conducted as appropriate in accordance with applicable laws and regulations	No impacts.	Temporary impacts during construction are expected to be an increase in dust, odors, other particulate matter, and hydrocarbons. These impacts are expected to be intermittent, and they will be diluted at increasing distances from the project. Fugitive dust emissions will be controlled during construction.	There is the potential for erosion resulting from exposure of excavated soils to water during construction. Standard erosion and sedimentation control BMPs will be required.	No impacts.	No farmland conversion will occur.	No impacts.	There will be increased reliability for intercity passenger train movement through this area, which will benefit the traveling public.	No impacts.	By allowing passenger trains to move more smoothly through the area, less energy will be used. During construction, a temporary increase in energy consumption would occur.	There will be less locomotive idling because passenger trains will not be blocked by freight trains undergoing customs inspection. During construction, people working and living near the improvements may be exposed to noise originating from construction equipment.
Everett – Storage Track	No waterways or hydrological systems on the project site. Construction will comply with the WA Dept of Ecology’s Stormwater Management Manual for Western Washington and city grading/drainage ordinances and BMPs, as	Recent civil construction removed all contaminated soil from project site. There are no other hazardous materials expected to be encountered during construction of the proposed project.	No impacts.	Temporary impacts during construction are expected to be an increase in dust, odors, other particulate matter, and hydrocarbons. These impacts are expected to be intermittent, and they will be diluted at	Tracks will be laid on existing subgrade material. No excavation is necessary.	No impacts.	No farmland conversion will occur.	No impacts.	No impacts.	No impacts.	By allowing passenger trains to move more smoothly through the area, less energy will be used. During construction, a temporary increase in energy consumption would occur.	Noise level already high due to existing freight operations. During construction, people working and living near the improvements may be exposed to additional noise originating from construction equipment.

Project	Table 1. Summary of Potential Impacts											
	Waterways and Hydrological Systems	Hazardous Materials	Biological Resources/ Ecology	Air Quality	Soils and Geology	Land Use	Farmlands	Parks and Cultural Resources	Social and Economic	Visual Quality	Energy	Noise
	appropriate.			increasing distances from the project. Fugitive dust emissions will be controlled during construction.								
Amtrak Cascades – New Train Set	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<u>Service Block 2</u>												
Amtrak Cascades – New Train Sets	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Amtrak Cascades – High Speed Locomotives	N/A	N/A	N/A	The new locomotives will benefit air quality by having fewer emissions.	N/A	N/A	N/A	N/A	N/A	N/A	The new locomotives will be more efficient and will use less energy.	New high-speed locomotives could potentially produce less noise than current locomotives.
Advanced Signal System	No impacts.	There are no known hazardous materials sites that would be affected by the advanced signal system implementation.	No impacts.	Temporary impacts during construction are expected to be an increase in dust, odors, other particulate matter, and hydrocarbons. Construction impacts are expected to be intermittent, and they will be diluted at increasing	No impacts.	No impacts.	No impacts.	No impacts.	No impacts.	No impacts.	During construction, a temporary increase in energy consumption would occur.	A temporary increase in noise could occur from construction equipment used to install the advanced signal system.

Project	Table 1. Summary of Potential Impacts											
	Waterways and Hydrological Systems	Hazardous Materials	Biological Resources/ Ecology	Air Quality	Soils and Geology	Land Use	Farmlands	Parks and Cultural Resources	Social and Economic	Visual Quality	Energy	Noise
				distances from the project. Fugitive dust emissions will be controlled during construction.								
Kelso to Martins Bluff – New Siding	No impacts to waterways or hydrological systems. Construction will comply with the Washington Department of Ecology’s Stormwater Management Manual for Western Washington and BMPs, as appropriate.	There is a risk of encountering contaminated soil and ground water in this area as there is a history of industrial and commercial land use in the vicinity. If encountered, removal or treatment would be conducted as appropriate in accordance with applicable laws and regulations	No impacts.	Temporary impacts during construction are expected to be an increase in dust, odors, other particulate matter, and hydrocarbons. Construction impacts are expected to be intermittent, and they will be diluted at increasing distances from the project. Fugitive dust emissions will be controlled during construction.	There is the potential for erosion resulting from exposure of excavated soils to water during construction. BMPs will be employed during construction to prevent deposition of silt and/or sediment in wetlands, streams, or any other adjacent surface water, to limit dust, and avoid tracking soil onto nearby paved roads by construction vehicles.	No impacts.	No farmland conversion will occur.	No impacts.	The project is located in an industrial area, and there are no grade crossings affected by the project. Project construction will not impact traffic on the adjacent road. No homes or businesses will be relocated; community cohesion will not be affected. Corridor service expansion would not result in any disproportionately high or adverse impacts to populations protected by Executive Order 12898 on Environmental Justice.	No impacts.	By allowing passenger trains to move more smoothly through the area, less energy will be used. During construction, a temporary increase in energy consumption would occur.	Noise level already high due to existing freight operations. During construction, people working and living near the improvements may be exposed to additional noise originating from construction equipment.
Kelso to Martins Bluff – Toteff Siding Extension	The culvert on Schoolhouse Creek will be extended to accommodate the siding extension. Temporary water quality impacts during construction will be avoided or	There is a risk of encountering contaminated soil and ground water in this area as there is a history of industrial and commercial land use in the vicinity. If encountered, removal or treatment would	Some 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. A small	Temporary impacts during construction are expected to be an increase in dust, odors, other particulate matter, and hydrocarbons. Construction	There is the potential for erosion resulting from exposure of excavated soils to water during construction. BMPs will be employed during construction to prevent deposition of silt and/or sediment in	If some farmland is converted for wetland mitigation, then there will be a change in land use. However, no other land use impacts are	Some farmland could be converted to a mitigation site for wetland impacts. The amount and location of the farmland converted to wetland mitigation will	Based on review of GIS data, the proposed project is unlikely to have impacts to parks and cultural resources. A cultural resources survey will be completed, and Section 106 consultation will occur during the	The project is located in an industrial area. The roadway bridge will enable vehicles, including cargo trucks, to move directly from Interstate 5 to surface roads and the Port of Kalama. The existing at-grade crossing will be closed. However, any properties whose access is affected by the	One roadway bridge will be added and will be constructed on concrete columns or steel pilings. New concrete retaining walls above or below the railroad or associated highway improvements would be added. The roadway bridge may be visible from properties located in close	By allowing passenger trains to move more smoothly through the area, less energy will be used. During construction, a temporary increase in energy	Noise level already high due to existing freight operations. During construction, people working and living near the improvements may be exposed to additional

Project	Table 1. Summary of Potential Impacts											
	Waterways and Hydrological Systems	Hazardous Materials	Biological Resources/ Ecology	Air Quality	Soils and Geology	Land Use	Farmlands	Parks and Cultural Resources	Social and Economic	Visual Quality	Energy	Noise
	minimized through compliance with the Washington Department of Ecology's Stormwater Management Manual for Western Washington and BMPs, as appropriate. Improvements will require placing fill in floodplains (including wetlands and non-wetlands). Improvements will be designed to meet standard engineering practices to avoid and minimize impacts to floodplains and hydrological connection of waterways.	be conducted as appropriate in accordance with applicable laws and regulations	amount of fill will be placed in the floodplain (including wetlands and non-wetlands). The project could also affect less than one river mile of fish-designated critical habitat within Schoolhouse Creek. Mitigation measures would follow a hierarchy of avoidance, minimization, and compensation for impacts. Sensitive areas will be avoided as much as possible. Engineering designs will be developed to minimize impacts to aquatic resources. Restoring degraded wetlands, enhancing existing wetlands, creating new wetland habitat, or purchasing wetland mitigation bank credits can be used to replace impacted wetlands. Enhancing existing wetlands within the immediate project area may involve eradicating invasive plant species and planting native vegetation.	impacts are expected to be intermittent, and they will be diluted at increasing distances from the project. Fugitive dust emissions will be controlled during construction.	wetlands, streams, or any other adjacent surface water, to limit dust, and avoid tracking soil onto nearby paved roads by construction vehicles.	expected.	vary depending on consultation with the permitting agencies.	development of the site-specific environmental documentation.	crossing closure would have their access restored or maintained. No homes or businesses will be relocated; community cohesion will not be affected. Corridor service expansion would not result in any disproportionately high or adverse impacts to populations protected by Executive Order 12898 on Environmental Justice.	proximity; however the visual effect of the grade separation would be consistent with the existing highly industrialized landscape.	consumption would occur.	noise originating from construction equipment.

Project	Table 1. Summary of Potential Impacts											
	Waterways and Hydrological Systems	Hazardous Materials	Biological Resources/ Ecology	Air Quality	Soils and Geology	Land Use	Farmlands	Parks and Cultural Resources	Social and Economic	Visual Quality	Energy	Noise
Kelso to Martins Bluff – Kelso to Longview Junction	1 or 2 new rail bridges will be constructed over the Coweeman River. Temporary water quality impacts during construction will be avoided or minimized through compliance with the Washington Department of Ecology’s Stormwater Management Manual for Western Washington and BMPs, as appropriate. Improvements will require placing fill in floodplains (including wetlands and non-wetlands). Physical improvements will be designed to meet standard engineering practices to avoid and minimize impacts to floodplains and hydrological connection of waterways.	There is a risk of encountering contaminated soil and ground water in this area as there is a history of industrial and commercial land use in the vicinity. If encountered, removal or treatment would be conducted as appropriate in accordance with applicable laws and regulations.	Some 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. A small amount of fill will be placed in the floodplain (including wetlands and non-wetlands). Mitigation measures would follow a hierarchy of avoidance, minimization, and compensation for impacts. Sensitive areas will be avoided as much as possible. Engineering designs will be developed to minimize impacts to aquatic resources. Restoring degraded wetlands, enhancing existing wetlands, creating new wetland habitat, or purchasing wetland mitigation bank credits can be used to replace impacted wetlands. Enhancing existing wetlands within the	Temporary impacts during construction are expected to be an increase in dust, odors, other particulate matter, and hydrocarbons. Construction impacts are expected to be intermittent, and they will be diluted at increasing distances from the project. Fugitive dust emissions will be controlled during construction.	There is the potential for erosion resulting from exposure of excavated soils to water during construction. BMPs will be employed during construction to prevent deposition of silt and/or sediment in wetlands, streams, or any other adjacent surface water, to limit dust, and avoid tracking soil onto nearby paved roads by construction vehicles.	Based on preliminary analysis, there will be a change in land use for less than 8 acres of land needed for related roadway improvements. It is possible this land would be farmland converted into a wetland mitigation site. No other land use impacts are expected.	If a wetland mitigation bank is not available, some farmland may be converted to a mitigation site for wetland impacts. The amount and location of the farmland converted to wetland mitigation will vary depending on consultation with the permitting agencies.	Based on review of GIS data, the proposed project is unlikely to have impacts to parks and cultural resources. A cultural resources survey will be completed, and Section 106 consultation will occur during the development of the site-specific environmental documentation.	Rail and road vehicle traffic separation with the construction of the new Hazel Street roadway overpass over the corridor main line, and the elimination of the two at-grade crossings at Mill and Yew streets will eliminate the possibility for train/vehicle collision. Community cohesion could be affected due to the potential relocation of 4 to 5 homes and 1 business for construction of the overpass. However, corridor service expansion would not result in any disproportionately high and adverse impacts to populations protected by Executive Order 12898 on Environmental Justice, and displaced residents or businesses would receive relocation assistance per federal requirements.	The new roadway overpass over the corridor main line at Hazel Street, which was selected by the community, includes concrete retaining walls and associated street improvements, and would be visible from properties in proximity to the new structure. The visual effect of the new overpass would be consistent with the existing industrialized/airport landscape. In addition, the project includes 1 or 2 new rail bridges constructed on concrete columns or steel pilings alongside the existing bridges over the Coweeman River. These bridges will present a minor visual impact.	By allowing passenger trains to move more smoothly through the area, less energy will be used. During construction, a temporary increase in energy consumption would occur.	Noise level already high due to existing freight operations. During construction, people working and living near improvements may be exposed to additional noise originating from construction equipment.

Project	Table 1. Summary of Potential Impacts											
	Waterways and Hydrological Systems	Hazardous Materials	Biological Resources/ Ecology	Air Quality	Soils and Geology	Land Use	Farmlands	Parks and Cultural Resources	Social and Economic	Visual Quality	Energy	Noise
			immediate project area may involve eradicating invasive plant species and planting native vegetation.									
<u>Service Block 3</u>												
King Street Station Track Upgrades	No impacts.	There is a risk of encountering contaminated soil and ground water in this area as there is a history of industrial and commercial land use in the vicinity. If encountered, removal or treatment would be conducted as appropriate in accordance with applicable laws and regulations.	No impacts.	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. Fugitive dust emissions will be controlled during construction.	There is the potential for erosion resulting from exposure of excavated soils to water during construction. BMPs will be employed during construction to prevent deposition of silt and/or sediment in wetlands, streams, or any other adjacent surface water, to limit dust, and avoid tracking soil onto nearby paved roads by construction vehicles.	No impacts.	No farmland conversion will occur.	No impacts.	No impacts.	No impacts.	By facilitating passenger train movement through the area, less energy will be used. During construction, a temporary increase in energy consumption would occur.	Temporary noise impacts would occur during construction of this project.
Kelso to Martins Bluff – Kalama New Main Line	Temporary water quality impacts during construction adjacent to wetlands and waterways will	There is a risk of encountering contaminated soil and ground water in this area as there is a history of industrial and	Some impacts to fisheries, vegetation, and wildlife could be expected. In these areas, critical, suitable or available	Temporary impacts during construction are expected to be an increase in dust, odors,	There is the potential for erosion resulting from exposure of excavated soils to water during construction. BMPs	If a wetland mitigation bank is not available, and some farmland is converted for wetland	If a wetland mitigation bank is not available, some farmland may be converted to a mitigation site	Based on review of GIS data, the proposed project is unlikely to have impacts to parks and cultural resources. A cultural resources	Community cohesion will benefit from the construction of an ADA-accessible pedestrian overpass over the corridor main line, which will enable increased	The new pedestrian overpass replaces an existing non-ADA-compliant overpass in a waterfront industrial area.	The Kalama new main line will be used primarily by passenger trains. By facilitating passenger train	Noise level is already high due to the existing freight operations. During construction,

Project	Table 1. Summary of Potential Impacts											
	Waterways and Hydrological Systems	Hazardous Materials	Biological Resources/ Ecology	Air Quality	Soils and Geology	Land Use	Farmlands	Parks and Cultural Resources	Social and Economic	Visual Quality	Energy	Noise
	be avoided or minimized through compliance with the Washington Department of Ecology's Stormwater Management Manual for Western Washington and BMPs, as appropriate. Improvements will require placing a small amount of fill in floodplains (including wetlands and non-wetlands). Physical improvements will be designed to meet standard engineering practices to avoid and minimize impacts to floodplains and hydrological connection of waterways.	commercial land use in the vicinity. If encountered, removal or treatment would be conducted as appropriate in accordance with applicable laws and regulations.	habitat for species could be lost or modified in ways that limit usability by species. A small amount of fill will be placed in floodplains (including wetlands and non-wetlands). Mitigation measures would follow a hierarchy of avoidance, minimization, and compensation for impacts. Sensitive areas will be avoided as much as possible. Engineering designs are developed to minimize impacts to aquatic resources. Restoring degraded wetlands, enhancing existing wetlands, creating new wetland habitat, or purchasing wetland mitigation bank credits can be used to replace impacted wetlands. Enhancing existing wetlands within the immediate project area may involve eradicating invasive plant species and planting native vegetation.	other particulate matter, and hydrocarbons. Construction impacts are expected to be intermittent, and they will be diluted at increasing distances from the project. Fugitive dust emissions will be controlled during construction.	will be employed during construction to prevent deposition of silt and/or sediment in wetlands, streams, or any other adjacent surface water, to limit dust, and avoid tracking soil onto nearby paved roads by construction vehicles.	mitigation, then there will be a change in land use. However, no other land use impacts are expected.	for wetland impacts. The amount and location of the farmland converted to wetland mitigation will vary depending on consultation with the permitting agencies.	survey will be completed, and Section 106 consultation will occur during the development of the site-specific environmental documentation.	access to a park and marina. No homes or businesses will be relocated. There are no at-grade crossings on the project site. Corridor service expansion would not likely involve any disproportionately high and adverse impacts to populations protected by the Environmental Justice Executive Order.		movement through the area, less energy will be used. During construction, a temporary increase in energy consumption would occur.	people working and living near the improvements may be exposed to additional noise originating from construction equipment.

Project	Table 1. Summary of Potential Impacts											
	Waterways and Hydrological Systems	Hazardous Materials	Biological Resources/ Ecology	Air Quality	Soils and Geology	Land Use	Farmlands	Parks and Cultural Resources	Social and Economic	Visual Quality	Energy	Noise
Bellingham Main Line Relocation	Temporary water quality impacts during construction over and adjacent to waterways will be avoided or minimized through compliance with the Washington Department of Ecology's Stormwater Management Manual for Western Washington and BMPs, as appropriate.	There is a risk of encountering contaminated soil and ground water in this area as there is a history of industrial and commercial land use in the vicinity. If encountered, removal or treatment would be conducted as appropriate in accordance with applicable laws and regulations	Some impacts to vegetation 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. Mitigation measures would follow a hierarchy of avoidance, minimization, and compensation for impacts. Sensitive areas will be avoided as much as possible.	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. Fugitive dust emissions will be controlled during construction.	There is the potential for erosion resulting from exposure of excavated soils to water during construction. BMPs will be employed during construction to prevent deposition of silt and/or sediment in wetlands, streams, or any other adjacent surface water, to limit dust, and avoid tracking soil onto nearby paved roads by construction vehicles.	No impacts.	No farmland conversion will occur.	No impacts to parks or known cultural resources are anticipated as a result of this project. A cultural resources survey will be completed, and Section 106 consultation will occur during the development of the site-specific environmental documentation.	Unlikely to require the relocation of any homes or businesses. Unlikely to cause any disproportionately high and adverse impacts on populations protected by the Environmental Justice Executive Order.	The existing roadway bridge will be replaced with a new bridge that will be constructed on concrete columns or steel pilings. New concrete retaining walls above or below the railroad or associated highway improvements would be added. The bridge replacement would be consistent with the visual quality of the area.	By facilitating passenger train movement through the area, less energy will be used. During construction, a temporary increase in energy consumption would occur.	Noise level already high due to existing freight operations. During construction, people working and living near improvements may be exposed to additional noise and vibration originating from construction equipment.
Everett Curve Realignment	Temporary water quality impacts during construction adjacent to waterways will be avoided or minimized through compliance with the Washington Department of Ecology's Stormwater Management Manual for Western	There is a risk of encountering contaminated soil and ground water in this area as there is a history of industrial and commercial land use in the vicinity. If encountered, removal or treatment would be conducted as appropriate in accordance with applicable laws	Some 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. The project could place a small amount of fill in the floodplain (including wetlands and non-wetlands).	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	There is the potential for erosion resulting from exposure of excavated soils to water during construction. BMPs will be employed during construction to prevent deposition of silt and/or sediment in wetlands, streams, or any other adjacent surface water, to limit dust, and avoid tracking	No impacts.	No farmland conversion will occur.	The proposed project is unlikely to impact parks or cultural resources. A cultural resources survey will be completed, and Section 106 consultation will occur during the development of the site-specific environmental documentation.	No relocation of any homes or businesses. Unlikely to cause any disproportionately high and adverse impacts on populations protected by the Environmental Justice Executive Order.	No impacts.	By facilitating passenger train movement through the area, less energy will be used. During construction, a temporary increase in energy consumption would occur.	Noise level already high due to existing freight operations. During construction, people working and living near improvements may be exposed to additional noise and vibration originating from construction equipment.

Project	Table 1. Summary of Potential Impacts											
	Waterways and Hydrological Systems	Hazardous Materials	Biological Resources/ Ecology	Air Quality	Soils and Geology	Land Use	Farmlands	Parks and Cultural Resources	Social and Economic	Visual Quality	Energy	Noise
	Washington and BMPs, as appropriate. Improvements will be constructed directly adjacent to the Snohomish River. Improvements will require placing a small amount of fill in floodplains (including wetlands and non-wetlands). Physical improvements will be designed to meet standard engineering practices to avoid and minimize impacts to floodplains and hydrological connection of waterways.	and regulations	Mitigation measures would follow a hierarchy of avoidance, minimization, and compensation for impacts. Sensitive areas will be avoided as much as possible. Engineering designs are developed to minimize impacts to aquatic resources. Restoring degraded wetlands, enhancing existing wetlands, creating new wetland habitat, or purchasing wetland mitigation bank credits can be used to replace impacted wetlands. Enhancing existing wetlands within the immediate project area may involve eradicating invasive plant species and planting native vegetation.	only, and they will be diluted at increasing distances from the project. Fugitive dust emissions will be controlled during construction.	soil onto nearby paved roads by construction vehicles.							
Centralia – Station Modifications	No impacts to waterways and hydrological systems. Temporary water quality impacts during construction will be avoided or minimized through	Existing contaminated soil or ground water could potentially be encountered during construction. If encountered, removal or treatment would be conducted as	No impacts.	Impacts during construction are expected to be an increase in dust, odors, other particulate matter, and hydrocarbons. Construction	No impacts.	No impacts.	No farmland conversion will occur.	The Centralia Station is eligible for the National Register of Historic Places. The proposed pedestrian overcrossing will be conducted to avoid affecting the historic eligibility of the Station.	This project will not involve any disproportionately high and adverse impacts on populations protected by the Environmental Justice Executive Order. The project will benefit the entire community by improving the pedestrian accessibility to the	A new pedestrian overcrossing will be added adjacent to the Station, and will be consistent with the historic nature of the Station and the surrounding community.	During construction, a temporary increase in energy consumption would occur.	Temporary noise impacts during construction.

Project	Table 1. Summary of Potential Impacts											
	Waterways and Hydrological Systems	Hazardous Materials	Biological Resources/ Ecology	Air Quality	Soils and Geology	Land Use	Farmlands	Parks and Cultural Resources	Social and Economic	Visual Quality	Energy	Noise
	compliance with the Washington Department of Ecology’s Stormwater Management Manual for Western Washington, and city grading/drainage ordinances and BMPs, as appropriate.	appropriate in accordance with applicable laws and regulations.		impacts in the project area are expected to be temporary and intermittent only, and they will be diluted at increasing distances from the project. Fugitive dust emissions will be controlled during construction.					Station.			
King Street Station Renovation	N/A	Lead and asbestos abatement was previously completed. There are no other hazardous materials expected to be encountered during the station renovation.	N/A	No impacts to air quality anticipated as the Station renovation will occur in the interior of the Station.	N/A	No impacts.	N/A	King Street Station is on the National Register of Historic Places. Renovations to the station would be conducted in accordance with the Department of Interior’s Standards for Rehabilitation ⁸ to maintain the historic integrity of the Station.	Long-term viability of King Street Station will ensure the continued availability of intercity passenger rail service.	King Street Station will continue to be a visual “fixture” in the downtown community with the proposed renovations.	Energy consumption would decrease when the Station’s heating and cooling systems are updated.	N/A
Tukwila Station	Temporary water quality impacts during construction will be avoided or minimized through compliance with the Washington Department of Ecology’s Stormwater	There is a risk of encountering contaminated soil and ground water in this area as there is a history of industrial and commercial land use in the vicinity. If encountered, removal or treatment would	No impacts.	Impacts during construction are expected to be an increase in dust, odors, other particulate matter, and hydrocarbons. Construction impacts in the	There is the potential for erosion resulting from exposure of excavated soils to water during construction. BMPs will be employed during construction to prevent deposition of silt and/or sediment in	No impacts.	No farmland conversion will occur.	No impacts.	This project will not involve any disproportionately high and adverse impacts on populations protected by the Environmental Justice Executive Order. The project will benefit the traveling public by providing shelter from the weather while waiting for trains, and by providing	No impact.	During construction, a temporary increase in energy consumption would occur.	Temporary noise impacts would occur during construction of this project.

⁸ 36 CFR 67

Project	Table 1. Summary of Potential Impacts											
	Waterways and Hydrological Systems	Hazardous Materials	Biological Resources/ Ecology	Air Quality	Soils and Geology	Land Use	Farmlands	Parks and Cultural Resources	Social and Economic	Visual Quality	Energy	Noise
	Management Manual for Western Washington, and city grading/drainage ordinances and BMPs, as appropriate.	be conducted as appropriate in accordance with applicable laws and regulations.		project area are expected to be temporary and intermittent only, and they will be diluted at increasing distances from the project. Fugitive dust emissions will be controlled during construction.	wetlands, streams, or any other adjacent surface water, to limit dust, and avoid tracking soil onto nearby paved roads by construction vehicles.				updated passenger information.			
Vancouver Port Access	Temporary water quality impacts during construction over and adjacent to waterways will be avoided or minimized through compliance with the Washington Department of Ecology's Stormwater Management Manual for Western Washington, and city grading/drainage ordinances and BMPs, as appropriate.	There is a risk of encountering contaminated soil and ground water in this area as there is a history of industrial and commercial land use in the vicinity. If encountered, removal or treatment would be conducted as appropriate in accordance with applicable laws and regulations.	No impacts.	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. Fugitive dust emissions will be controlled during construction.	There is the potential for erosion resulting from exposure of excavated soils to water during construction. BMPs will be employed during construction to prevent deposition of silt and/or sediment in wetlands, streams, or any other adjacent surface water, to limit dust, and avoid tracking soil onto nearby paved roads by construction vehicles.	No impacts.	No farmland conversion will occur.	No impacts to parks or known cultural resources are anticipated as a result of this project. A cultural resources survey will be completed, and Section 106 consultation will occur during the development of the site-specific environmental documentation.	No impact to homes; unlikely to impact businesses. Project would not likely involve any disproportionately high and adverse impacts on populations protected by the Environmental Justice Executive Order.	No impacts.	By facilitating passenger train movement through the area, less energy will be used. During construction, a temporary increase in energy consumption would occur.	Noise level already high due to existing freight operations. During construction, people working and living near improvements may be exposed to additional noise and vibration originating from construction equipment.
Tacoma Trestle Replacement	Temporary water quality	There is a risk of encountering	No impacts.	Impacts during construction	There is the potential for	No impacts.	No farmland conversion will	No impacts to parks or known cultural	No relocation of homes or businesses. The project	No impacts to visual quality for the trestle	During construction, a	During construction,

Project	Table 1. Summary of Potential Impacts											
	Waterways and Hydrological Systems	Hazardous Materials	Biological Resources/ Ecology	Air Quality	Soils and Geology	Land Use	Farmlands	Parks and Cultural Resources	Social and Economic	Visual Quality	Energy	Noise
	impacts during construction will 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 BMPs, as appropriate.	contaminated soil and ground water in this area as there is a history of industrial and commercial land use in the vicinity. If encountered, removal or treatment would be conducted as appropriate in accordance with applicable laws and regulations.		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. Fugitive dust emissions will be controlled during construction.	erosion resulting from exposure of excavated soils to water during construction. BMPs will be employed during construction to prevent deposition of silt and/or sediment in wetlands, streams, or any other adjacent surface water, to limit dust, and avoid tracking soil onto nearby paved roads by construction vehicles.		occur.	resources are anticipated as a result of the proposed project. A cultural resources survey will be completed, and Section 106 consultation will occur during the development of the site-specific environmental documentation.	will not involve any disproportionately high and adverse impacts on populations protected by the Environmental Justice Executive Order.	replacement because it will be similar in appearance and structure to the existing trestle. New concrete retaining walls above and below the railroad and associated highway improvements would be new visual elements, although they are consistent with the surrounding industrial landscape.	temporary increase in energy consumption would occur.	people working near the improvements may be exposed to noise and vibration originating from construction equipment.