4.4 Airport Levee Improvements

Improvements to the existing airport levee would be made by increasing the height by between 4 and 7 feet. If the existing levee is raised by 7 feet, a change to the extent and location of the northwest corner of the levee could be necessary to avoid interference with the glide path to the active runway; otherwise, no change to the extent or location of the levee would be proposed. In addition to raising the existing levee, 1,700 feet of Airport Road would be raised to meet the raised airport levee height along the southern extent of the airport, and all utility infrastructure would be replaced, terminating at the West Street overcrossing approach.

Short-term impacts from construction of the Airport Levee Improvements would include limited excavation, clearing, and filling required for elevating and extending the levee. No construction would occur immediately adjacent to the active channel of the Chehalis River. For a majority of the elements of the environment, the Airport Levee Improvements would result in no long-term adverse impacts. Adverse impacts would primarily be minor in nature, except for moderate impacts due to increases in the flood extent upstream and downstream of the levee, moderate impact on groundwater from disruption of the groundwater flow regime within the footprint of the levee, and the potential loss of fewer than 5 acres of wetlands and moderate to significant impacts on cultural resources. The Airport Levee Improvements would reduce flood extents in portions of the Chehalis River floodplain, resulting in beneficial effects to water resources, land use, transportation, public services and utilities, and environmental health and safety.

4.4.1 Water Resources

4.4.1.1 Short-term Impacts

The potential short-term impacts on water resources that would occur during construction are described in Table 4.1-1. No in-water work is anticipated and there would be limited subsurface excavation, which would result in limited impacts on water resources.

4.4.1.2 Long-term Impacts

4.4.1.2.1 Surface Water Quality

No adverse impacts on surface water quality are anticipated as a result of implementing the Airport Levee Improvements. Installation of the Airport Levee Improvements would reduce flood depths and extents in areas protected by the levee, which could reduce pollutant loading to nearby surface waters from sources no longer inundated. Surface water quality may not be as negatively affected during and after floods as during previous floods, if developed areas that are no longer flooded were home to pollutant-generating uses such as vehicular traffic, or on-site storage of hazardous or toxic materials. Flood levels adjacent to the Chehalis Regional Water Reclamation Facility located on Louisiana Avenue are predicted to increase by 0.5 foot during a 100-year flood. However, the Chehalis Regional Water

Reclamation Facility is elevated above the current 100-year flood levels and would not flood—with or without the Airport Levee Improvements.

Surface Water Quantity
Anticipated adverse impacts on surface water quantity include the following:

- Reduction in floodwater depths in specific locations during peak floods (e.g., 100-year flood)
- Potential for changes in flood extents and increases in floodwater elevations upstream and downstream of the Airport Levee Improvements

The Airport Levee Improvements were designed to provide flood protection in the airport vicinity in a 100-year flood. Flood depths are predicted to be reduced by as much as 15 feet at the airport within the levee (WSE 2014c), resulting in no inundation at the airport behind the levee during a 100-year flood.

The potential exists for increases in Chehalis River flood extents and flood elevations upstream and downstream of the airport levee due to changes in river hydraulics, resulting in a moderate adverse impact. Flooding could increase up to 0.9 foot in areas immediately upstream of the airport levee (north of SR 6 and west of the Chehalis River) due to backwater effects, or the displacement of floodwater that would have otherwise flooded the airport (WSE 2014c). In addition, there could be up to a 0.2-foot increase in water depth immediately downstream of the levee (WSE 2014c).

Potential beneficial effects on surface water quantity would occur in the area protected by the levee due to a reduction in the extent and depth of flooding. The acres of different land uses and number of structures that would no longer be inundated are discussed in combination with the Flood Retention Facility (Alternative 1) and I-5 Projects (Alternative 2) in Chapter 5.

No adverse impacts on water use and water rights are anticipated with the Airport Levee Improvements, because these improvements would not affect the ability of area water users to divert their water rights.

4.4.1.2.2 Groundwater

Potential adverse impacts on groundwater could result from subsurface construction (i.e., levee toe placement) that has the potential to modify the shallow groundwater flow regime. These adverse impacts are considered moderate due to their localized area of impact within the levee footprint. A potential beneficial effect on groundwater quality could result from the improved surface water quality resulting from reduced flooding of pollutant-generating surfaces or uses that store hazardous or toxic materials.

4.4.1.3 Mitigation

Potential mitigation measures for short-term impacts on water resources are described in Table 4.1-1.

Potential avoidance and minimization measures for long-term adverse impacts on surface water quality would include compliance with applicable stormwater manual requirements (i.e., the most recent version of Ecology's *Stormwater Management Manual for Western Washington*).

Potential compensatory mitigation measures for long-term adverse impacts on surface water quantity could include compensatory water storage in areas upstream of the Airport Levee Improvements where flood levels are anticipated to increase. No compensatory mitigation is proposed for shallow groundwater flow regime impacts.

4.4.2 Geology and Geomorphology

4.4.2.1 Short-term Impacts

The potential short-term impacts on geology that would occur during construction are described in Table 4.1-1. These impacts, related to excavation and filling, would increase the potential for soil erosion. There are no short-term impacts on geomorphology because all construction work would occur outside of the Chehalis River.

4.4.2.2 Long-term Impacts

Potential adverse impacts on geology would occur as a result of increased settlement of buildings and land from the Airport Levee Improvements, and are considered minor because they would be isolated to the area of the levee. No impacts on channel formation, or sediment and wood transport, in the Chehalis River are predicted to occur; therefore, no adverse impacts on geomorphology are anticipated.

4.4.2.3 Mitigation

Potential mitigation measures for short-term impacts on geology would be the same as those described in Table 4.1-1 related to excavation and filling.

Potential avoidance and minimization measures for long-term adverse impacts on geology from potential levee settlement could include engineering studies to evaluate any potential settlement by the addition of the weight (from added height) of the fill and/or levee, with such measures as staged construction and subdrainage. No long-term adverse impacts on geomorphology are anticipated, so no mitigation is proposed.

4.4.3 Wetlands and Vegetation

4.4.3.1 Short-term Impacts

The potential short-term impacts on wetlands and vegetation include temporary removal or disturbance of vegetation for activities such as excavating, clearing, filling, and construction staging. These types of impacts would occur where the levee and Airport Road are immediately adjacent to wetlands and vegetated areas, including both the north and south ends of the airport site (see Figure 4.4-1).

Disturbed wetlands and vegetated areas would be restored to pre-construction status and/or function following completion of construction.

4.4.3.2 Long-term Impacts

The potential adverse impacts on wetlands and vegetation would occur with the raising of Airport Road along the southern extent of the Airport Levee Improvements, and along the northwest corner of the levee. Both of these areas have been substantially modified by previous development and construction activities. Work here could affect existing wetlands and vegetation from activities such as land clearing, excavating, and fill placement. These activities could result in the permanent loss of wetlands and upland and wetland vegetation, and the conversion, disturbance, and/or reduction of existing wetland, riparian, and vegetation communities.

These potential adverse impacts are considered moderate for wetlands because the potential impact is less than 5 acres, and minor for vegetation because the potential loss of vegetation is less than 2 acres.

4.4.3.3 Mitigation

Some potential long-term impacts on wetlands and vegetation would be addressed through avoidance and minimization measures, including avoiding wetlands during construction access and staging efforts, and restoring vegetation in temporarily disturbed areas.

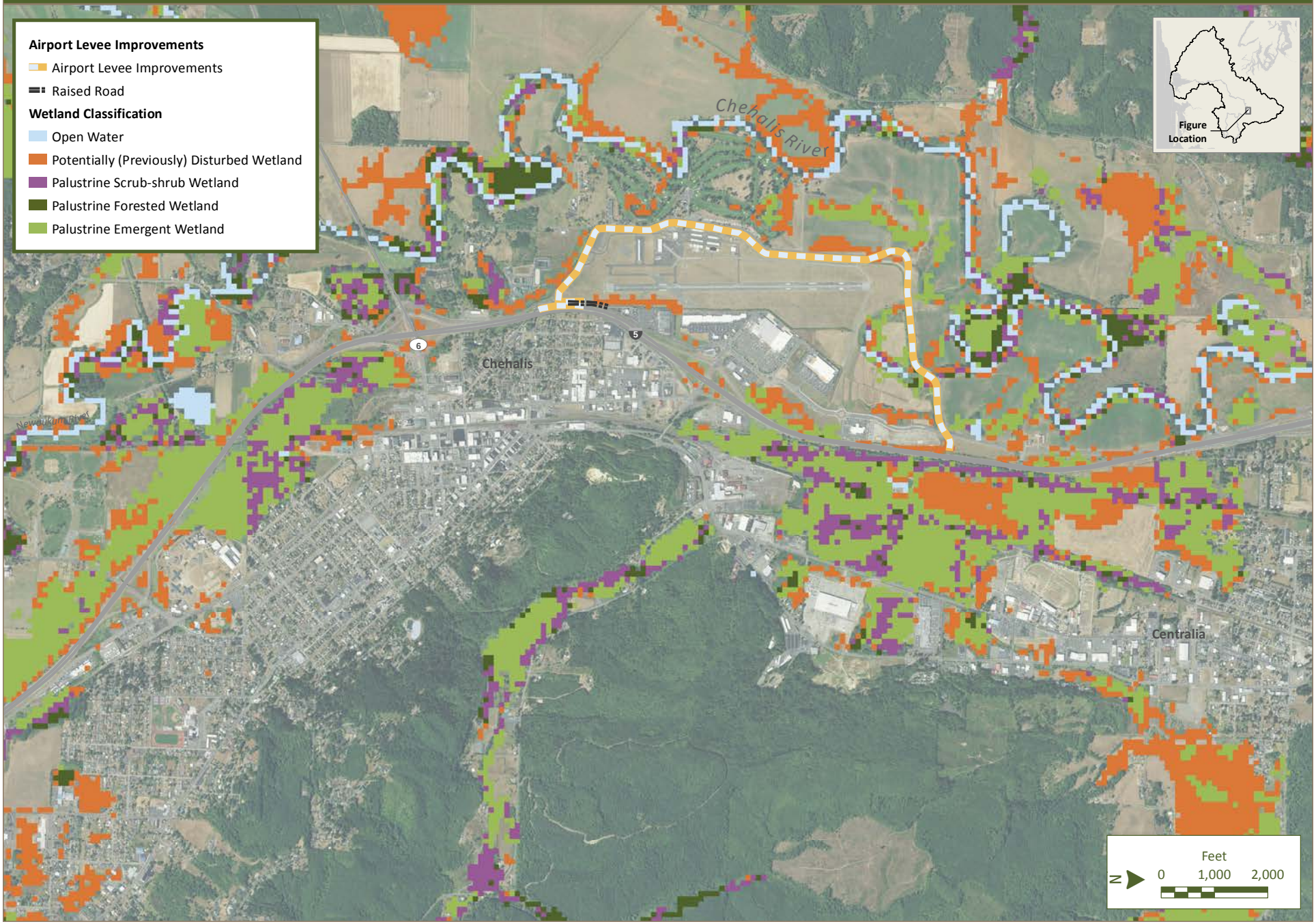
Potential compensatory mitigation measures for unavoidable adverse impacts on wetlands from the Airport Levee Improvements that could be implemented to address long-term loss of wetlands from filling and excavation could include the following:

- Creating, enhancing, or restoring wetlands in locations that would be consistent with Federal Aviation Administration (FAA) guidance, and would not create potential hazards to aircraft operations (e.g., wetlands with no standing water)
- Restoring previously disturbed wetlands in the floodplain downstream of the airport
- Completing monitoring programs for new, restored, or enhanced wetlands to ensure performance standards have been achieved
- Purchasing credits from an approved wetland mitigation bank in the same watershed

The potential compensatory mitigation measures to address unavoidable adverse impacts on vegetation from the Airport Levee Improvements would be implemented to address the loss of vegetation and habitat from land clearing. Potential compensatory mitigation for long-term impacts on vegetation could include replanting the affected area with native species, where applicable, to replace the functions and values lost from the removal and/or modification of vegetation. Revegetation efforts would be conducted in accordance with USACE levee design requirements.

Figure 4.4-1

Wetland Areas Mapped near the Airport Levee Improvements



4.4.4 Fish and Wildlife

4.4.4.1 Short-term Impacts

4.4.4.1.1 Fish

The potential short-term impacts on fish would occur during construction and would be localized to the construction footprint, with conditions returning to pre-construction status and/or function following completion of the Airport Levee Improvements. The potential short-term impacts described in Table 4.1-1 are related to construction activities, including excavation, construction of staging areas, and noise and vibration generated by equipment. There is a small potential for fish in the reach closest to the levee to be exposed to pollutant-laden runoff from the construction site.

4.4.4.1.2 Wildlife

The potential responses of wildlife to short-term impacts on habitat are similar to those described in Table 4.1-1; however, impacts would be limited in magnitude through implementation of avoidance and minimization measures during construction. The existing condition in the Airport Levee Improvements area is heavily disturbed and developed with road infrastructure. Construction activity could disturb habitat used by native wildlife species to breed, forage, rest, and overwinter.

4.4.4.2 Long-term Impacts

4.4.4.2.1 Fish

The potential adverse impacts on fish are primarily related to a change in flood extents and elevations upstream and downstream of the levee during 100-year floods. These potential adverse impacts are considered minor because of the limited extent and occurrence. Salmon and steelhead are not known to spawn or rear in the nearby reach of the Chehalis River, but adults could be affected as they migrate upstream—particularly fall-run Chinook salmon, steelhead, and coho salmon, which migrate during the fall and winter when floods are most likely to occur. Other species likely to be present in this reach and that could be affected during a flood include lamprey, largescale sucker, dace, shiner, Northern pikeminnow, and invasive non-native species.

4.4.4.2.2 Wildlife

The potential adverse impacts on wildlife species would be minor due to limited wetland and vegetation disturbance. These potential adverse impacts on composition of wildlife species currently occurring within these habitats are considered minor due to the relatively small area the action element affects, and small change in the extent of flood inundation compared to current conditions.

4.4.4.3 Mitigation

4.4.4.3.1 Fish

Mitigation measures to reduce short-term impacts on fish would not be required because construction would not occur in water.

Compensatory mitigation measures to address unavoidable adverse impacts on fish from the Airport Levee Improvements related to the redistribution of fish during a flood could potentially include acquiring and restoring affected floodplain areas of equivalent size or habitat function for fish.

4.4.4.3.2 Wildlife

Some potential short-term impacts on wildlife would be addressed through the implementation of avoidance and minimization measures, including applicable mitigation measures included in Table 4.1-1 related to excavating, clearing, filling, and construction staging.

Compensatory mitigation measures to address potential unavoidable adverse impacts on wildlife could include restoring function to sensitive habitats for wildlife after construction. Potential compensatory mitigation for long-term impacts on elements could include the following:

- Replanting native vegetation and monitoring of planted areas to ensure the success of mitigation plantings
- Implementing wetland mitigation measures described in Section 4.4.3.3 and restoring vegetation and habitat conditions that support a variety of native wildlife species

4.4.5 Tribal Resources

4.4.5.1 Short- and Long-term Impacts

Construction of the Airport Levee Improvements would not occur in water and, therefore, is not anticipated to affect access to tribal fishing areas. However, there is a small potential for release of sediments or pollutant-laden runoff from the construction site (see Table 4.1-1) to waterbodies used by tribal fish resources adjacent and downstream of the levee. This could have a negative effect on fish habitat, leading to an indirect impact on fish abundance.

Potential long-term impacts on tribal fish resources could result from changing flood extents and elevations upstream (increase in limited area) and downstream of the airport levee during floods. Although the impact of these changes on fish and fish habitat are expected to be small relative to the overall impact of a major flood or greater, there could be an indirect impact on tribal treaty rights due to reduced or impaired habitat that could affect fish populations. Elevating the airport levee would prevent the Chehalis River from breeching it during a 100-year flood, which would reduce the risk of fish stranding behind the levee. The extent of potential impacts on tribal resources from changing flood extents is pending additional consultation with tribes.

4.4.5.2 Mitigation

The potential mitigation associated with impacts on tribal resources would be addressed directly with Quinault Indian Nation and Chehalis Tribe tribal leadership during project-level environmental review and continued government-to-government consultations.

Some potential long-term impacts on tribal fish resources could be addressed through avoidance and minimization measures developed in consultation with tribes. These could include avoiding intact riparian vegetation and working in streams or other sensitive areas. Other measures outlined in Table 4.1-1 related to erosion controls would also be implemented.

Compensatory mitigation measures to address unavoidable adverse impacts on tribal resources from the Airport Levee Improvements, including impacts on tribal fish harvests, would be addressed directly with Quinault Indian Nation and Chehalis Tribe tribal leadership. In some cases, mitigation measures could be proposed to address the impacts on habitat that are important to tribal resources, including fish, wildlife, and plants. Mitigation of impacts on treaty rights is subject to consideration and agreement by the Quinault Indian Nation.

4.4.6 Air Quality

4.4.6.1 Short-term Impacts

The potential short-term impacts on air quality would occur during construction, including increased vehicle emissions from truck trips and mechanized construction equipment, and dust created by clearing and grading land and the transport and placement of excavation material, soils, and other materials. These impacts would be localized during the construction period and would not cause an overall decrease in regional air quality.

4.4.6.2 Long-term Impacts

No adverse impacts on air quality are anticipated because the Airport Levee Improvements would not generate emissions or dust.

4.4.6.3 Mitigation

Potential mitigation measures to reduce short-term impacts on air quality would be the same as those described in Table 4.1-1 related to excavating, clearing, filling, and construction staging. No long-term adverse impacts on air quality are anticipated, so no mitigation is proposed.

4.4.7 Climate Change

4.4.7.1 Short-term Impacts

4.4.7.1.1 Effects of the Airport Levee Improvements Contributing to Climate Change

The potential short-term effects of the Airport Levee Improvements that could contribute to the effects of climate change would occur during construction and include increased GHG emissions from

construction equipment and truck shipments of materials to and from the Airport Levee Improvements site. GHG emissions resulting from construction activities are expected to be below the 10,000 MT CO_2e annual threshold for qualitatively disclosing emissions over the construction period. This threshold equates to 6.2 million vehicle miles for a Class 7-8 truck.

4.4.7.1.2 Effects of Climate Change on the Airport Levee Improvements

There are no anticipated short-term effects of climate change on the Airport Levee Improvements.

4.4.7.2 Long-term Impacts

4.4.7.2.1 Effects of the Airport Levee Improvements Contributing to Climate Change

No adverse impacts that would contribute to the effects of climate change are anticipated from implementation of the Airport Levee Improvements, because the potential loss of vegetation or additional GHG emissions from vehicle trips associated with airport levee operation and maintenance is below the annual threshold for qualitatively disclosing emissions. The threshold equates to 22 million vehicle miles for a large truck or sport utility vehicle.

4.4.7.2.2 Effects of Climate Change on the Airport Levee Improvements

Climate change is not anticipated to result in any adverse impacts on the Airport Levee Improvements. Even though the potential effects of climate change on the Airport Levee Improvements include an increased frequency and intensity of flooding events, the airport levee elevation would provide freeboard (i.e., distance between water surface and the height of the levee) beyond the 100-year flood level to account for potential future increases in the intensity of floods as a result of climate change. Pumps used to pump out water trapped behind the levee into the Chehalis River may be used more often as major flooding from the effects of climate change occurs more frequently. These measures would provide additional resiliency to changing climate conditions.

4.4.7.3 Mitigation

4.4.7.3.1 Mitigation to Address Effects of the Airport Levee Improvements Contributing to Climate Change

No adverse impacts contributing to climate change from the Airport Levee Improvements are anticipated, so no mitigation is proposed.

4.4.7.3.2 Mitigation to Address Effects of Climate Change on the Airport Levee Improvements

No adverse impacts from climate change are anticipated, so no mitigation is proposed.

4.4.8 Visual Quality

4.4.8.1 Short-term Impacts

Potential short-term impacts on visual quality would occur during construction of the Airport Levee Improvements, due to views of construction activities such as fugitive dust, exposed construction debris, heavy equipment, and erosion control measures. This would temporarily create an unattractive visual setting during the construction period for airport users, Riverside Golf Course and RV Park patrons, residents of surrounding properties, passing traffic, and trail users. The existing trail would be closed during construction and surrounding views would be closed off to recreational trail users for the duration of construction, which would also negatively affect existing views.

4.4.8.2 Long-term Impacts

The Airport Levee Improvements would elevate the recreational trail that runs along the airport levee by up to 7 feet. The increased elevation would generally have a positive impact on the views from the trail, except in areas where Airport Road is raised to the same grade. Because the trail along the airport levee already provides mostly open views, the increased elevation is likely to be a beneficial effect from vantage points along the trail.

The higher levee would slightly obstruct views on either side of it. Overall, however, views from properties surrounding the levee would be largely unchanged; therefore, adverse impacts would be minor. Views of the surrounding area would be improved for motorists along portions of Airport Road that are elevated to meet trail height because their vantage point would be higher, generally allowing them to see more of the landscape.

4.4.8.3 Mitigation

For short-term impacts, vegetated areas that would be temporarily affected due to clearing, grading, and other construction activities could be re-established with appropriate native vegetation following construction.

Mitigation measures to reduce long-term impacts include using earthen materials atop the existing levee to blend in with natural surroundings, and vegetating new exposed areas on the levee to the extent possible. These mitigation measures would mitigate negative visual impacts for trail users, motorists, and those observing the Airport Levee Improvements site from surrounding properties.

4.4.9 Noise

4.4.9.1 Short-term Impacts

The potential short-term impacts of noise occurring during construction would be related to heavy equipment and construction activities. Construction equipment would primarily consist of earth-moving and hauling equipment with noise levels ranging from 77 to 89 dBA (see Table 4.2-10). Some of these

noise levels would be high enough to cause hearing damages at a short distance, but noise levels would decrease with distance to levels that would not cause hearing damage at adjacent properties.

Townhouses are located on the southeast corner of the Riverside Golf Club and RV Park, immediately adjacent to the airport levee. The west side of the airport levee is located adjacent to the golf course. Construction noise is likely to disturb residents as well as golfers and campers. Construction noise would be limited to allowable, daytime hours and noise levels would be reduced with distance from the construction site to levels that would not cause hearing damage.

4.4.9.2 Long-term Impacts

No adverse impacts are anticipated because the completed Airport Levee Improvements would not generate noise.

4.4.9.3 Mitigation

In addition to short-term mitigation measures described in Table 4.1-1 for noise impacts, additional measures to minimize impacts on local residents and users of the Riverside Golf Course and RV Park could include the following:

- Using equipment with mufflers or noise control
- Situating noise-generating equipment away from the townhouses and the Riverside Golf Course and RV Park
- Minimizing the need for back-up alarms
- Maintaining equipment to reduce noise
- Notifying affected property owners

No long-term adverse impacts on noise are anticipated, so no mitigation is proposed.

4.4.10 Land Use

4.4.10.1 Short-term Impacts

No short-term impacts on land use are anticipated.

4.4.10.2 Long-term Impacts

The potential adverse impacts on land use from the Airport Levee Improvements include properties and structures that would experience reduced flooding, as well those that would experience new or increased flooding in limited areas upstream and downstream of the levee. While reduced flooding would improve airport operations, a minor adverse impact on land use could occur if the existing structures or land uses in areas with new or increased flooding cannot be maintained. This effect would be minor at a Basin-wide scale because it would generally occur on the edge of the existing floodplain immediately upstream and downstream of the levee.

The decrease in acres flooded and land uses and structures that would no longer be inundated are discussed in combination with the Flood Retention Facility (Alternative 1) and I-5 Projects (Alternative 2) in Chapter 5. Areas protected by the levee that would see a reduction in flooding and are currently undeveloped could experience a corresponding increase in development. This potential is evaluated in more detail in the impacts analysis for Alternatives 1 and 2 (see Chapter 5).

4.4.10.3 Mitigation

Compensatory mitigation measures to address potential unavoidable adverse impacts on land use by increased flooding resulting from the Airport Levee Improvements could include elevating or floodproofing measures.

4.4.11 Recreation

4.4.11.1 Short-term Impacts

The potential short-term impacts on recreation that could occur during construction of the Airport Levee Improvements include the closure of the recreational trail on the top of the airport levee. Construction would be visible to users of the Riverside Golf Course and RV Park, and construction noise and dust would be disruptive to golfers. If Airport Way is used for access to the construction site, access to the golf course would likely be temporarily delayed. If the Airport Levee Improvements require bumping out the levee and locating Airport Way outside of the levee, additional construction impacts and delays could occur to users of the Riverside Golf Course and RV Park.

4.4.11.2 Long-term Impacts

The recreational trail on top of the airport levee would be rebuilt following construction, and current recreational uses would resume. The higher levee could increase flood levels at the Riverside Golf Course and RV Park, which are located between the Chehalis River and the levee. These potential adverse impacts are considered minor. Flood levels during 100-year floods would increase by up to 0.9 foot, possibly extending the time the Riverside Golf Club and RV Park are not available for use.

4.4.11.3 Mitigation

Mitigation measures related to noise, air quality, and transportation would also mitigate short-term impacts on recreation.

Long-term mitigation measures to address increased flooding at the Riverside Golf Course and RV Park could include installing compensatory flood storage upstream of the levee where flood levels are anticipated to increase.

4.4.12 Historic and Cultural Preservation

4.4.12.1 Short- and Long-term Impacts

Potential short- and long-term impacts on historic and cultural resources include the following:

- Destruction, damage to, or alteration of a cultural resource
- Necessary removal of a cultural resource from its original location
- Changes to the use or physical features of a cultural resource
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the significant features of a cultural resource

The extent of impacts would depend on the nature of cultural resources that could be disturbed, which would be determined through coordination with DAHP and affected tribes during project-level environmental review, including continued government-to-government consultations. Potential impacts on tribal cultural resources or graves, Indian human remains, or traditional cultural properties could also occur and would be determined in coordination with tribes, and government-to-government consultations.

The potential impacts on cultural resources during construction are related to ground disturbance associated with excavating, filling, and construction access/hauling. Several archaeological resources have been identified in the area during studies for other projects.

Potential impacts on cultural resources following construction could occur if the improved levee exposes, damages, destroys, and/or alters cultural resources upstream or downstream of the levee through additional, increased, or changed foot traffic patterns, as well as different flood patterns that could cause flooding and sedimentation of submerged resources in affected areas.

Based on WSAPM, this area is considered to have a very high potential for archaeological deposits; therefore, potential adverse impacts are considered moderate to significant.

4.4.12.2 Mitigation

Mitigation measures for potential impacts on cultural resources would be determined during project-specific evaluations of the Airport Levee Improvements, and would include consultation with DAHP, interested and affected tribes, as well as other consulting parties (see information on addressing potential impacts on cultural resources in Section 4.2.12). The potential compensatory mitigation measures would be the same as those described for the Flood Retention Facility (see Section 4.2.12.2).

4.4.13 Transportation

4.4.13.1 Short-term Impacts

The potential short-term impacts during construction of the Airport Levee Improvements on transportation include temporary disruptions on Airport Road and adjacent roadways from construction traffic and temporary road closures. Expanding the levee to meet FAA design standards for approach and departure space would require relocating Airport Road outside of the levee, requiring additional road closures.

4.4.13.2 Long-term Impacts

The Airport Levee Improvements would provide some flood protection to I-5 during a 100-year flood, but flooding would continue to cause I-5 closures. The Airport Levee Improvements would protect the airport during 100-year floods, allowing flights to continue. The Airport Levee Improvements would provide beneficial effects on the transportation system. Some access roads to the airport would continue to flood during major floods, and the raised levee could increase flooding of SR 6 and nearby residential streets, resulting in minor adverse impacts.

4.4.13.3 Mitigation

Potential mitigation measures to reduce short-term impacts on transportation would be the same as those described in Table 4.1-1. Additional mitigation measures would include providing detours or other means to maintain access to properties along Airport Road to the extent possible.

Long-term mitigation for increased flooding of local roadways could include compensatory water storage in areas upstream of the levee where flood levels are anticipated to increase. The height and design of the Airport Levee Improvements would be coordinated with FAA to ensure compliance with FAA design standards, possibly requiring expanding the airport levee and relocating Airport Road outside the levee.

4.4.14 Public Services and Utilities

4.4.14.1 Short-term Impacts

No schools or health care facilities are located in the immediate vicinity of the airport. The potential short-term impacts on public services would occur during construction due to temporary road closures that could affect public services, such as garbage collection, because access to properties from Airport Road would be temporarily restricted. Construction could cause a temporary disturbance of on-site and nearby utilities, including overhead utility lines, underground utilities on both sides of Airport Road, and lighting in the parking lot south of the airport on Airport Road.

4.4.14.2 Long-term Impacts

The Airport Levee improvements would increase flood levels upstream (in a limited area) and downstream of the levee, potentially increasing flooding of public services and utilities. The Chehalis

Regional Water Reclamation Facility is located just upstream of the airport and could experience increased flood levels. Utilities located in the footprint of the levee would be replaced during construction. These potential adverse impacts are considered minor because increased flood levels would be limited and utility relocations would be localized to the footprint of the Airport Levee Improvements.

The Airport Levee Improvements would protect the radio tower located on the airport property (across the street from the entrance to the Riverside Golf Course and RV Park) during a 100-year flood.

4.4.14.3 Mitigation

Potential measures to reduce short-term construction disruptions on public services and utilities include the following:

- Providing public notification of proposed construction activities, including the timing of construction, to all local service providers within the immediate vicinity of the construction area
- Coordinating with local utility service providers to assist in utility locations, if applicable, and to identify specific mitigation measures to minimize impacts on utility purveyors
- Coordinating with local utility purveyors to identify other specific mitigation measures to minimize impacts

Mitigation planning for utilities would also include close coordination with involved service providers, as well as with potentially affected residents and landowners. Where local utility system connections or installations would be affected by construction activities, alternative or relocated connections and facilities could be planned and implemented prior to construction to avoid service disruptions.

Mitigation for potential long-term impacts due to limited increased flooding could be provided where flood levels are anticipated to increase. Mitigation for utility relocations would include coordination with service providers and property owners.

4.4.15 Environmental Health and Safety

4.4.15.1 Short-term Impacts

The potential short-term impacts on environmental health and safety include road closures that temporarily restrict emergency service access to businesses, single-family residences, multi-family complexes, and the Riverside Golf Course and RV Park during construction. This could result in increased emergency response time. These impacts would be limited to the construction period and access would be maintained to the extent possible.

4.4.15.2 Long-term Impacts

The potential adverse impacts on environmental health and safety are considered minor because the improved levee would cause minor increases in flood levels at the Chehalis Regional Water Reclamation

Facility, which could result in increased risk of contamination. This increased risk would be small because of the limited increase in flood levels and the existing level of flood protection at the facility. The improved levee would protect the airport and local businesses, allowing the airport to remain functional and able to provide emergency response during floods. The Airport Levee Improvements would also provide some protection to a portion of I-5 during a 100-year flood, possibly maintaining I-5 as an emergency response route for longer periods during flooding. Protection of the airport during a 100-year flood would prevent the release of hazardous or toxic materials at the airport, and reduce the risk of contamination of nearby surface waters. The Airport Levee Improvements would provide minor reductions in threats to human health and safety by allowing the airport to remain functional for emergency response.

4.4.15.3 Mitigation

Potential measures to reduce short-term impacts on environmental health and safety include those described in Table 4.1-1 related to transport of material, as well as coordinating construction with emergency services to reduce impacts on emergency response.