

## 3.7 Parks and Recreation

Existing and planned parks and recreation facilities are important community resources that are highly valued by individuals, private organizations, and local governments. This section identifies, describes, and evaluates the long-term, temporary, and indirect effects of the No-Build Alternative and Modified LPA on park and recreation resources, including school facilities, interpretive or community centers, trails, open spaces, and sports fields. Additionally, this analysis examines potential impacts on recreational events and activities. An evaluation of the use of park and recreation resources in accordance with Section 4(f) of the U.S. Department of Transportation Act (49 United States Code [USC] 303) (referred to as “Section 4(f)”) can be found in Chapter 4 of this Draft SEIS. An evaluation of impacts to park and recreation resources protected under Section 6(f) of the federal Land and Water Conservation Fund Act (referred to as “Section 6(f)”) is included in Section 3.21 of the SEIS.

The information presented in this section is based on the Parks and Recreation Technical Report, which contains greater detail and additional analysis.

### 3.7.1 Changes or New Information Since 2013

The Columbia River Crossing (CRC) Selected Alternative identified in the 2011 Record of Decision (ROD), as revised by the 2012 and 2013 re-evaluations, is referred to as the CRC Locally Preferred Alternative (CRC LPA). Over the past 10+ years since the CRC LPA was identified, the physical environment in the study area, community priorities, and regulations have changed, which necessitated design revisions and resulted in the IBR Modified LPA (see Section 2.5.2). Evaluation of potential impacts associated with parks and recreation has been updated in this Draft SEIS to include:

- Updates to information on existing and planned park and recreation resources within the study area.
- Updates to information on federally and state-protected park and recreation resources.
- Changes in land uses such as development at the Vancouver Waterfront, planned uses on Hayden Island, and recently constructed, altered, or removed buildings.
- Updates to long-term and temporary effects of the Modified LPA.
- Updates to mitigation, in consultation with the agencies with jurisdiction, for the long-term and temporary effects of the Modified LPA.

Table 3.7-1 compares the impacts and benefits of the CRC LPA to those of the Modified LPA as a result of the changes listed above. Based on the analysis described in this section, the effects of the Modified LPA would be similar to those of the CRC LPA, but overall, the Modified LPA would have fewer impacts to parks and recreation resources than the CRC LPA.

Table 3.7-1. Comparison of CRC LPA Effects and IBR Modified LPA Effects

Technical Considerations	CRC LPA Effects as Identified in the 2011 Final EIS	Modified LPA Effects as Identified in this Section	Explanation of Differences
Total acres of park and recreation resources acquired	4 acres	0.8 acres	The reduction in total acres acquired is primarily the result of reduced impacts to Fort Vancouver National Historic Site, Waterfront Park, Discover Historic Loop Trail, and Clark College

Technical Considerations	CRC LPA Effects as Identified in the 2011 Final EIS	Modified LPA Effects as Identified in this Section	Explanation of Differences
			Recreation Fields. These reductions are the result of design modifications, including straightening the bridge alignment and moving the LRT terminus from Clark College to Evergreen Boulevard.
Acres of acquired parkland within the Fort Vancouver National Historic Site	1.7 acres	0.4 acres	The reduction in impact is due to a slight westward shift in the I-5 mainline alignment, which also shifts the reconstructed loop ramp from I-5 northbound to C Street to the west.

CRC = Columbia River Crossing; EIS = Environmental impact statement; I-5 = Interstate 5; LPA = Locally Preferred Alternative; LRT = light-rail transit

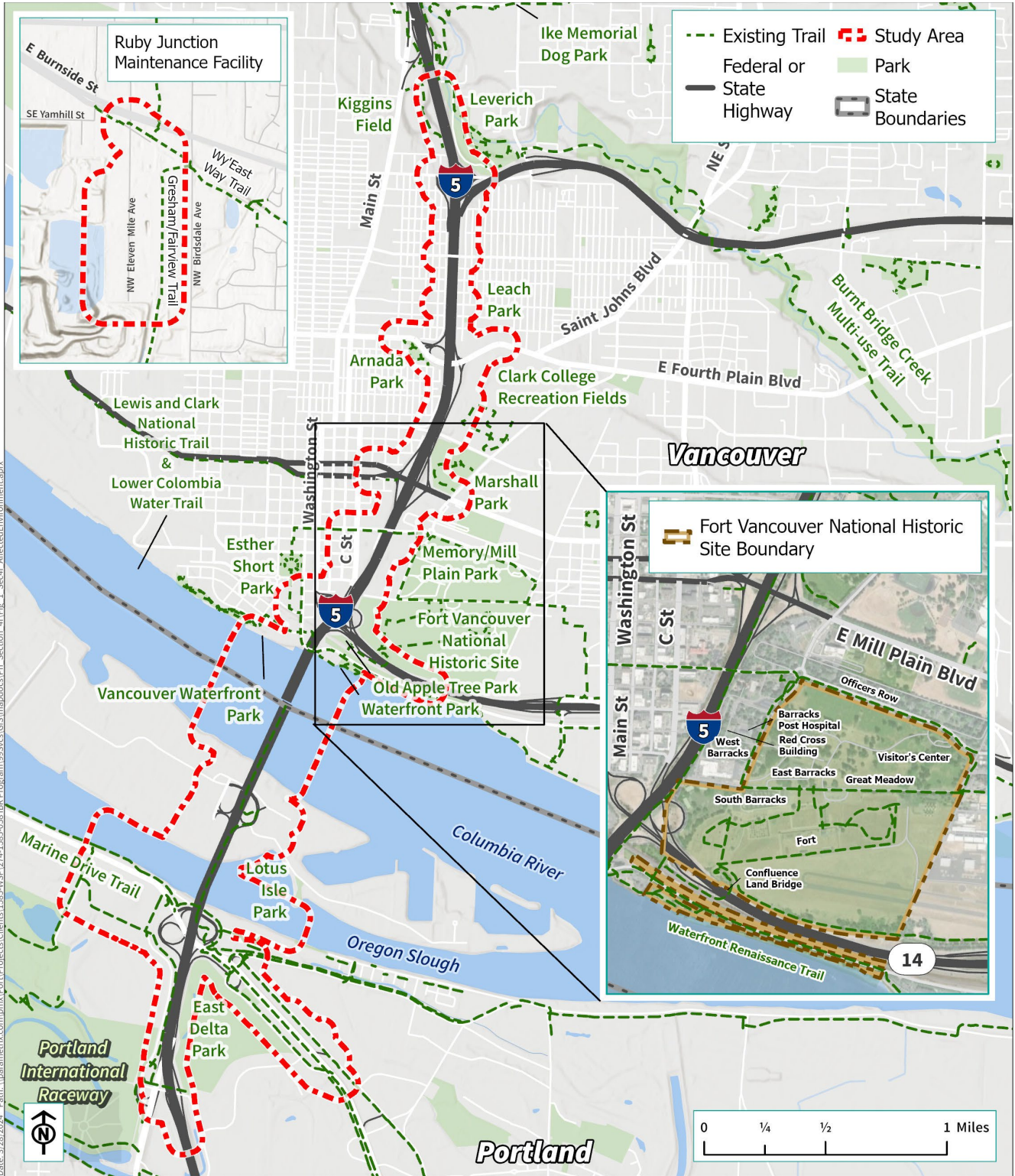
### 3.7.2 Existing Conditions

Parks and recreation facilities were identified within the study area, which extends from approximately the SR 500 interchange in Washington and the I-5/Columbia Boulevard interchange in Oregon. North of the Columbia River, the study area generally terminates on the west side of I-5, expanding west into downtown Vancouver to include potential park and ride locations. The study area also includes the potential construction staging sites, identified in Chapter 2, and the Ruby Junction Maintenance Facility in Gresham, Oregon. Figure 3.7-1 shows the study area boundaries and the locations of parks and recreation facilities within or near the study area. Table 3.7-2 provides a description of these facilities, including their amenities.

The following parks are located nearby, but outside of the study area, and would not be affected by the Modified LPA:

- Lotus Isle Park (N Tomahawk Drive, east of I-5, Portland).
- Esther Short Park (W Columbia and 8th Streets, Vancouver).
- Leach Park (E 28th Street and K Street, Vancouver).
- Ike Memorial Dog Park (NE Ross Street and NE 15th Avenue, Vancouver).

Figure 3.7-1. Parks and Recreation Facilities in the Study Area



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Source: City of Portland, Clark County, ODOT, WSDOT, Mapbox, OpenStreetMap

Table 3.7-2. Parks and Recreation Facilities – Location, Jurisdiction, and Amenities

Resource	Type	Location	Agency with Jurisdiction	Description and Amenities
East Delta Park	Regional park	N Denver and Martin Luther King Jr. Boulevard, Portland	PP&R	87.5 acres; softball and soccer fields, volleyball courts, nature trails, playground, control-line model aircraft flying field; off-leash area on ODOT property
Bridgeton Trail (Proposed)	Proposed multiuse trail	NE Bridgeton Road, Portland	PP&R and Prosper Portland	Proposed paved multiuse path paralleling NE Bridgeton Road and connecting to the Marine Drive Trail
Marine Drive Trail	Multiuse trail	I-5 to Kelley Point Park	PP&R	5.0-mile paved multiuse path connecting Marine Drive interchange and Kelley Point Park
Gresham/Fairview Trail	Multiuse trail	NE Halsey Street to Springwater Corridor Trail	City of Gresham	3.29-mile-long trail starting at the intersection of Northeast Halsey Street at 201st Avenue and traveling south to the Springwater Trail at SW 10th Avenue
Wy'East Way Trail	Multiuse trail	Ruby Junction Station, Rockwood to Cleveland Station, Gresham	City of Gresham	2-mile-long, 12-foot-wide walking and bike path that runs along the MAX light-rail line from the Ruby Junction Station in Rockwood to the Cleveland Station in historic downtown Gresham
Lower Columbia River Water Trail	Recreational waterway	Columbia River	Not Applicable	Informally designated trail managed by Lower Columbia River Estuary Partnership. 146.0-mile recreational waterway from Bonneville Dam to Pacific Ocean
Lewis and Clark National Historic Trail	Recreational waterway	Columbia River	NPS	Recreational waterway
Columbia River Renaissance Trail (part of Discovery Historic Loop Trail)	Multiuse trail	115 Columbia Way, Vancouver	VPR&C	5.0-mile, 14-foot-wide multiuse paved trail starting at the intersection of Columbia Way and Columbia Street and traveling east to Marine Park and Wintler Park
Vancouver Landing at Terminal One	City amphitheater and public dock	River mile 106 on north shore of the Columbia River	VPR&C and Port of Vancouver	Public transient moorage facility/dock, amphitheater
Vancouver Waterfront Park	Public open space	115 SE Columbia Way, Vancouver	VPR&C	7.3 acres; completed in 2018, part of a 35-acre, high-density, mixed-use urban development – the Waterfront. Incorporates public open spaces with the Columbia River edge.



Resource	Type	Location	Agency with Jurisdiction	Description and Amenities
Old Apple Tree Park	City of Vancouver park	112 Columbia Way, Vancouver	VPR&C	1.3 acres; entrance to Confluence Land Bridge. The tree died in 2020, but interpretive signs, fencing, and the stump of the original tree remain.
Fort Vancouver National Historic Site	Includes a National Historic Site, Historic District	Between Columbia River and Mill Plain Boulevard east of I-5	NPS	209 acres (largely overlapping with the VNHR); historic interpretive sites and replica structures, multiuse trails, picnic tables, event and recreation fields, and reservable picnic shelter. Newly constructed main visitor parking lot and improvements to E 5th Street, including repaving, new sidewalks, reoriented parking spaces, and bicycle and pedestrian routes, completed in fall 2022. NPS is currently constructing a replica village dwelling in the western portion of the property. Waterfront Park, which NPS manages as a part of the Fort Vancouver NHS, includes passive recreation and viewing opportunities for the Columbia River and is crossed by the Columbia River Renaissance Trail.
Discovery Historic Loop Trail (includes portion of Waterfront Trail)	Multiuse trail and city sidewalks	Columbia River Waterfront, Fort Vancouver National Historic Site, downtown Vancouver	VPR&C/NPS	2.3-mile trail on paved multiuse paths and local streets
Marshall Community Center, Luepke Senior Center, and Marshall Park	Community center, senior center, and park	1009 E McLoughlin Boulevard, Vancouver	VPR&C	19.0 acres; community garden, play equipment, fields, gym, senior center
Clark College Recreation Fields	School recreation facility	1500 E Mill Plain Boulevard, Vancouver	Clark College	13.0 acres; operated by Clark College with soccer fields, softball fields, and tennis courts open to public
Arnada Park	Neighborhood park	610 E 25th Street, Vancouver	VPR&C	3 acres; gazebo, picnic shelter, play equipment, sports court, benches, and paved walkway
Leverich Community Park	Community park	39th and M Streets, Vancouver	VPR&C	16 acres; disc golf course, picnic areas

Resource	Type	Location	Agency with Jurisdiction	Description and Amenities
Burnt Bridge Creek Trail	Multiuse trail	North of SR 500 interchange, Vancouver	VPR&C	8.0-mile paved multiuse trail; portion extends through Leverich Park
Kiggins Bowl Sports Fields and Stadium	Sports venue	North of 39th Street, west of I-5, Vancouver	Vancouver Public Schools	3.0 acres; sports venue for Vancouver Public Schools and public

I-5 = Interstate 5; NHS = National Historic Site; NPS = National Park Service; ODOT = Oregon Department of Transportation; PP&R = Portland Parks and Recreation; SR = State Route; VNHR = Vancouver National Historic Reserve; VPR&C = Vancouver Parks, Recreation and Cultural Services

### Planned Facilities

In Oregon, Portland Parks and Recreation (PP&R), in coordination with Prosper Portland, plans to construct a 0.5-mile trail section linking the Bridgeton neighborhood on North Portland Harbor with I-5. The proposed Bridgeton Trail would travel along the levee and underneath I-5, connecting to the Marine Drive Trail on the west side of I-5. In winter 2009, PP&R and Prosper Portland (known at the time as the Portland Development Commission) began acquiring trail easements from property owners. After these acquisitions are complete, work will begin to refine the trail design for construction.

#### Where are the regional multiuse trails?

Section 3.1, Transportation, contains a map showing the routes and connections of the region’s nonmotorized multiuse trails.

The Portland Citywide Systems Plan maps a large portion of Hayden Island west of I-5 as a parks-deficient area and states that future park acquisitions are needed to serve residents in the area. The 2009 Hayden Island Plan recommends the development of future park spaces and increased recreational opportunities and conceptually identifies an area west of I-5.

In Washington, Vancouver Parks, Recreation and Cultural Services (VPR&C) has identified the area surrounding the Modified LPA as having a deficit in acquired and developed park acres. The City of Vancouver is therefore seeking to acquire new parks and expand current parks within the study area; currently, no specific sites have been identified.

Previously, Clark College had planned to develop athletic facilities on a parcel located immediately east of I-5 and north of McLoughlin Boulevard. This parcel, now owned by the State of Washington and maintained by Clark College, is currently used for college purposes such as parking for the athletic fields and is not open to the public.

The National Park Service (NPS) is coordinating with the City of Vancouver to increase connectivity between the Fort Vancouver National Historic Site (NHS) and downtown Vancouver. These plans include a pedestrian overpass between E Evergreen Boulevard and 7th Street. Within the study area, planned Fort Vancouver NHS park and recreation facilities include a replica Hudson Bay Company (HBC) historic village (HBC Village) and associated extensions to the existing trail system. The planned facilities would be tied to the historic village and the Confluence Land Bridge in the southwestern portion of the Fort Vancouver NHS near the I-5/SR 14 interchange, as well as a proposed new pedestrian crossing over I-5 connecting E 7th Street and Hathaway Road. This planned development would occur on land that was previously owned by the U.S. Army Reserve but transferred to NPS in 2012.

## Recreational Events

Prior to the COVID-19 pandemic in 2020, recreational events taking place within the study area included several large ongoing events and festivals in the Fort Vancouver NHS. Although several previously ongoing events have not resumed, events that took place in 2022 included the Vancouver Summer Fest, a day-long festival that included live music, games, food and marketplace vendors, and a beer garden. The Fort Vancouver NHS also hosts ongoing interpretive events such as military history talks, cultural demonstrations, and a Junior Ranger program for children (Fort Vancouver NHS 2023). Esther Short Park, while located outside the study area, is a venue for numerous downtown festivals and events throughout the year, including the Vancouver Farmers Market, the Vancouver Brewfest, and the Vancouver Wine and Jazz Festival. In addition to the organized events taking place in parks within the study area, recreational fishing and boating occur in the Columbia River portion of the study area throughout the year.

### 3.7.3 Long-Term Benefits and Effects

#### No-Build Alternative

No long-term direct effects of recreational resources would occur under the No-Build Alternative. However, the No-Build Alternative would result in substantial traffic congestion along the I-5 corridor and would not improve transit, bicycle, and pedestrian access to parks and recreational facilities in the study area. The increased traffic congestion and limited transit, bicycle and pedestrian access would reduce the ability of community members to access and/or enjoy park and recreation resources. Large events in downtown Vancouver, such as festivals and events at the Fort Vancouver NHS, Vancouver Farmers Market, Vancouver Brewfest, and Vancouver Wine and Jazz Festival, would continue to have limited transit and active transportation access, particularly from Portland. Connections between the Marine Drive and Columbia River Renaissance Trails would not be improved, and the shared-use path on the Interstate Bridge would remain narrow and considerably less accessible.

#### Modified LPA

Each design option under the Modified LPA would have the same effects on the following park and recreation facilities, as described in Table 3.7-3. Table 3.7-4 compares the long-term effects on parks and recreation facilities from Modified LPA options where the effects differ. Table 3.7-5 summarizes the long-term effects from the No-Build Alternative and the Modified LPA and its design options.

Table 3.7-3. Long-Term Effects on Parks and Recreation Facilities from the Modified LPA (No Difference between the Design Options)

Resource	Description of Long-Term Effects from the Modified LPA
East Delta Park	<ul style="list-style-type: none"> <li>Total of approximately 0.2 acres permanently acquired.</li> <li>Traffic noise levels could slightly increase.</li> <li>Approximately 2.1 acres of ODOT right of way currently in park use reverting to highway use.</li> </ul>
Bridgeton Trail (planned)	<ul style="list-style-type: none"> <li>No effects on this planned trail.</li> </ul>
Marine Drive Trail	<ul style="list-style-type: none"> <li>Marine Drive interchange improvements would enable greater ease of future connection to the existing Marine Drive Trail.</li> <li>Improved connections within and to Marine Drive interchange.</li> <li>Portions of reconstructed trail would consist of replacement of existing sidewalks along north side of Marine Drive with 16-foot-wide multiuse trail.</li> </ul>

Resource	Description of Long-Term Effects from the Modified LPA
Gresham/Fairview Trail	<ul style="list-style-type: none"> <li>No effects on this trail.</li> </ul>
Wy'East Way Trail	<ul style="list-style-type: none"> <li>Approximately 140 linear feet of the trail, where it currently crosses the existing LRT tracks, would need to be reconstructed once construction of the new tracks and pavement for the Ruby Junction Maintenance Facility completes. The existing alignment of the trail would not change.</li> </ul>
Columbia River Renaissance Trail (coextensive with Discovery Historic Loop Trail along affected portion)	<ul style="list-style-type: none"> <li>Realignment of up to 1,000 linear feet of trail underneath new Columbia River bridges landing (see Discovery Historic Loop Trail below).</li> <li>Traffic noise levels are expected to slightly decrease with double-deck fixed-span configuration. Traffic noise levels may increase with the wider single-level configurations (all bridge type options).</li> <li>Reduced number of connections between the Columbia River bridges and the water (from two to one). The connection would be wider and safer.</li> </ul>
Vancouver Landing at Terminal One	<ul style="list-style-type: none"> <li>Changes in eastern and southern views due to new Columbia River bridges.</li> <li>Improved active transportation connections to the park.</li> </ul>
Vancouver Waterfront Park	<ul style="list-style-type: none"> <li>Changes in eastern and southern views due to new Columbia River bridges.</li> <li>Traffic noise levels are expected to decrease.</li> </ul>
Old Apple Tree Park	<ul style="list-style-type: none"> <li>Approximately 0.08 acres permanently acquired.</li> <li>Less than 0.1 acres of airspace permanently acquired by easement.</li> </ul>
Marshall Community Center and Park	<ul style="list-style-type: none"> <li>Approximately 0.6 acres permanently acquired.</li> <li>Traffic noise levels from I-5 are predicted to increase slightly.</li> <li>Long-term character, use, and enjoyment of the existing facilities would not be affected.</li> </ul>
Clark College Recreation Fields	<ul style="list-style-type: none"> <li>Changes in westerly views.</li> <li>Incremental increase in highway noise due to shift of I-5 closer to recreation fields.</li> </ul>
Arnada Park	<ul style="list-style-type: none"> <li>Traffic noise levels could slightly decrease.</li> <li>Long-term character, use, and enjoyment of the existing facilities would not be affected.</li> </ul>
Leverich Community Park	<ul style="list-style-type: none"> <li>Changes in westerly views.</li> <li>Traffic noise levels could slightly increase.</li> </ul>
Burnt Bridge Creek Trail	<ul style="list-style-type: none"> <li>Traffic noise levels could slightly increase.</li> </ul>
Kiggins Bowl Sports Fields/Stadium	<ul style="list-style-type: none"> <li>Less than 0.01 acres of property permanently acquired.</li> <li>Approximately 0.3 acres of a permanent subsurface easement for retaining wall ties.</li> </ul>



Table 3.7-4. Comparison of Long-Term Effects on Parks and Recreation Facilities from the Modified LPA Options

1	2	3	4	5	6
Facility	Modified LPA with Double-Deck Fixed-Span Configuration, One Auxiliary Lane, C Street Ramps, Centered I-5	Modified LPA Double-Deck Fixed-Span Configuration, Two Auxiliary Lanes, C Street Ramps, and Centered I-5	Modified LPA with Single-Level Fixed-Span <sup>a</sup> or Single-Level Movable-Span Configuration, One Auxiliary Lane, C Street Ramps, Centered I-5	Modified LPA Double-Deck Fixed-Span Configuration, One Auxiliary Lane, Centered I-5, without C Street Ramps	Modified LPA with Double-Deck Fixed-Span Configuration, One Auxiliary Lane, C Street Ramps, I-5 Westward Shift
Lower Columbia River Water Trail	<ul style="list-style-type: none"> <li>• Reduced navigational hazard with reduced number of in-water piers.</li> <li>• Traffic noise levels expected to slightly decrease due to increased bridge height over the Columbia River.</li> <li>• The Modified LPA with the double-deck fixed-span configuration and one auxiliary lane would have 173 linear feet of shading and coverage effects; a net increase of approximately 37 linear feet after the removal of the existing Interstate Bridge.</li> </ul>	<p>Similar to effects listed in Column 2, but:</p> <ul style="list-style-type: none"> <li>• Two auxiliary lanes would result in an additional 16 linear feet of shading and coverage effects (total of approximately 189 linear feet).</li> </ul>	<p>Similar to effects listed in Column 2, but:</p> <ul style="list-style-type: none"> <li>• The single-level fixed-span configuration would result in an additional approximately 80 linear feet of shading and coverage effects (total of approximately 253 linear feet) and a net increase of approximately 117 linear feet once the existing Interstate Bridge is removed.</li> <li>• The single-level movable-span configuration would result in an additional approximately 80 to 100 linear feet of shading and coverage effects (depending on the location); a net increase of 117 to 137 linear feet once the existing Interstate Bridge is removed.</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced navigational hazard with reduced number of in-water piers.</li> <li>• Traffic noise levels expected to slightly decrease due to increased bridge height over the Columbia River.</li> <li>• Would have 173 linear feet of shading and coverage effects; a net increase of approximately 37 linear feet after the removal of the existing Interstate Bridge.</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced navigational hazard with reduced number of in-water piers.</li> <li>• Traffic noise levels expected to slightly decrease due to increased bridge height over the Columbia River.</li> <li>• Would have 173 linear feet of shading and coverage effects; a net increase of approximately 37 linear feet after the removal of the existing Interstate Bridge.</li> </ul>

Interstate Bridge Replacement Program

1	2	3	4	5	6
<p>Lewis and Clark National Historic Trail</p>	<ul style="list-style-type: none"> <li>• Reduced navigational hazard with reduced number of in-water piers.</li> <li>• Traffic noise levels expected to slightly decrease due to increased bridge height over the Columbia River.</li> <li>• The Modified LPA with the double-deck fixed-span configuration and one auxiliary lane would have 173 linear feet of shading and coverage effects; a net increase of approximately 37 linear feet after the removal of the existing Interstate Bridge.</li> </ul>	<p>Similar to effects listed in Column 2, but:</p> <ul style="list-style-type: none"> <li>• Two auxiliary lanes would result in an additional 16 linear feet of shading and coverage effects.</li> </ul>	<p>Similar to effects listed in Column 2, but:</p> <ul style="list-style-type: none"> <li>• The single-level fixed-span configuration would result in an additional approximately 80 linear feet of shading and coverage effects (total of approximately 273 linear feet) and a net increase of approximately 117 linear feet once the existing Interstate Bridge is removed.</li> <li>• Depending on bridge type, the single-level movable-span configuration would result in an additional approximately 80 to 100 linear feet of shading a coverage effects; a net increase of 117 to 137 linear feet once the existing Interstate Bridge is removed.</li> </ul>	<ul style="list-style-type: none"> <li>• Same as effects listed in Column 2.</li> </ul>	<ul style="list-style-type: none"> <li>• Same as effects listed in Column 2.</li> </ul>
<p>Discovery Historic Loop Trail (includes portion of Columbia River Renaissance Trail)</p>	<ul style="list-style-type: none"> <li>• Realignment of up to 2,750 linear feet of trail (1,000-foot portion of overlaps with affected length of the Columbia River Renaissance Trail).</li> <li>• Improved visitor experience from new and improved intersections, sidewalks, and</li> </ul>	<ul style="list-style-type: none"> <li>• Same as effects listed in Column 2.</li> </ul>	<ul style="list-style-type: none"> <li>• Same as effects listed in Column 2.</li> </ul>	<ul style="list-style-type: none"> <li>• The SR 14 interchange without C Street ramps design option would require approximately 174 fewer linear feet of permanent trail realignment along the Discovery Historic Loop Trail than the SR</li> </ul>	<ul style="list-style-type: none"> <li>• Same as effects listed in Column 2.</li> </ul>

1	2	3	4	5	6
	<p>bicycle lanes in downtown Vancouver portion.</p> <ul style="list-style-type: none"> <li>Traffic noise levels are expected to slightly decrease on the Columbia River Renaissance Trail with the double-deck fixed-span configuration because the bridges would be shifted slightly to the west further from the trail. Traffic noise levels may increase with the wider single-level configurations which would be closer to the trail (all bridge type options).</li> <li>Community Connector, which would span over I-5 and block traffic noise, would slightly reduce traffic noise levels on a portion of trail near and on Evergreen Boulevard.</li> </ul>			<p>14 with C Street ramps design option would.</p>	
<p>Fort Vancouver NHS</p>	<ul style="list-style-type: none"> <li>Approximately 0.4 acres permanently acquired.</li> <li>Traffic noise levels could increase due to shift in SR 14 interchange.</li> <li>At Waterfront Park, changes in western and southern views due to new Columbia River bridges.</li> </ul>	<p>Similar to effects listed in Column 2, but:</p> <ul style="list-style-type: none"> <li>The Modified LPA with two auxiliary lanes would require permanent acquisition of an additional 0.03 acres.</li> </ul>	<p>Similar to effects listed in Column 2, but:</p> <ul style="list-style-type: none"> <li>The single-level fixed-span configuration would require permanent acquisition of an additional 0.02 acres.</li> </ul>	<ul style="list-style-type: none"> <li>Same as effects listed in Column 2.</li> </ul>	<ul style="list-style-type: none"> <li>The Modified LPA with the westward shift of I-5 would require an approximately 0.4-acre permanent easement from the Fort Vancouver NHS, a reduction of approximately 200 square feet from the Modified LPA design option that</li> </ul>

Interstate Bridge Replacement Program

1	2	3	4	5	6
					does not shift the I-5 mainline.

Note: Table does not include park and ride options because the potential park and ride areas are not near any of the parks and recreational facilities/resources. No long-term adverse direct effects are anticipated.

a The long-term effects associated with the single-level fixed-span configuration would be the same for all bridge type options, unless otherwise specified.

I-5 = Interstate 5; LPA = Locally Preferred Alternative; NHS = National Historic Site; ODOT = Oregon Department of Transportation; SR = State Route

Table 3.7-5. Summary of Long-Term Effects from the No-Build Alternative, Modified LPA, and Design Options on Parks and Recreation Facilities and Trails

1	2	3	4	5	6	7
<b>Feature</b>	<b>No-Build Alternative</b>	<b>Modified LPA with Double-Deck Fixed-Span Configuration, One Auxiliary Lane, C Street Ramps, Centered I-5</b>	<b>Modified LPA Double-Deck Fixed-Span Configuration, Two Auxiliary Lanes, C Street Ramps, Centered I-5</b>	<b>Modified LPA with Single-Level Fixed-Span<sup>a</sup> or Single-Level Movable-Span Configuration, One Auxiliary Lane, C Street Ramps, Centered I-5</b>	<b>Modified LPA Double-Deck Fixed-Span Configuration, One Auxiliary Lane, without C Street Ramps, Centered I-5</b>	<b>Modified LPA Double-Deck Fixed-Span Configuration One Auxiliary Lane, C Street Ramp, I-5 Westward Shift</b>
Total acres <sup>b</sup> of park and recreation resources to be acquired (approximate) <sup>c</sup>	0 acres	1.3 acres	1.3 acres (+1,500 square feet compared to area of acquisitions stated in Column 3)	1.3 acres (+760 square feet compared to area of acquisitions stated in Column 3)	1.3 acres	1.3 acres (-200 square feet compared to area of acquisitions stated in Column 3)
Linear feet of trails to be reconstructed and/or permanently realigned (approximate)	0 acres	5,800 feet	6,000 feet	6,000 feet	5,700 feet	5,800 feet
Anticipated transit access to park and recreation resources in study area	No change.	Would improve access to some large regional parks.	Would improve access to some large regional parks.	Would improve access to some large regional parks.	Would improve access to some large regional parks.	Would improve access to some large regional parks.

a The long-term effects associated with the single-level fixed-span configuration would be the same for all bridge type options, unless otherwise specified.  
 b Does not include 2.1 acres of property permanently acquired from an off-leash area associated with East Delta Park but located in ODOT-owned right of way.  
 c Differences would be less than 0.1 acres between the design options.  
 I-5 = Interstate 5; LPA = Locally Preferred Alternative; N/A = not applicable; NHS = National Historic Site; ODOT = Oregon Department of Transportation; SR = State Route



### ***East Delta Park***

The Modified LPA would require permanent acquisition of approximately 0.2 acres of park land. Approximately 0.1 acres would be acquired from the western edge of East Delta Park to construct a wall supporting the I-5 northbound to Marine Drive interchange ramp.

A 2.1-acre area of ODOT-owned highway right of way north of N Union Court, which has previously been used as an off-leash dog area associated with East Delta Park, would be developed with a roadway connection between Oregon Route 99 E and N Union Court and a stormwater facility would be developed in place of the dog park. The off-leash dog area is currently closed. Because this area is highway right of way it is not included in calculations of parkland areas that would be acquired and converted.

Approximately 0.1 acres of PP&R-owned park land would be required to enable construction of the roadway connection between Oregon Route 99 E and N Union Court. This area is part of a small parcel located northeast of the main portion of East Delta Park that is not used by PP&R.

Portions of East Delta Park currently experience noise levels approaching FHWA noise abatement criteria, as discussed in Section 3.11, Noise and Vibration. Compared to the No-Build Alternative, the Modified LPA is predicted to slightly increase traffic noise levels in East Delta Park, due to the revisions to the I-5 northbound mainline and the N Marine Drive/NE Martin Luther King Jr. Boulevard interchange and roadways that would shift traffic noise slightly closer to East Delta Park. Portions of East Delta Park nearest to transportation noise sources are primarily ballfields, model aircraft flying areas, and other active recreation areas not dependent on a quiet environment.

The Modified LPA would result in improved access to East Delta Park via transit as a result of improvements at the Expo Center and the new light-rail connection to Hayden Island. Additionally, new active transportation facilities and improvements to the existing active transportation network throughout the Oregon portion of the study area would improve access to East Delta Park via active transportation modes. See Section 3.1, Transportation, and the Transportation Technical Report, for additional detail on these improvements.

### ***Marine Drive Trail***

The Modified LPA would realign and reconstruct Marine Drive, requiring approximately 3,000 linear feet of the 5-mile Marine Drive Trail to be demolished and rebuilt in a similar location. The rebuilt portion of the trail would be slightly widened to connect with a 16-foot-wide multiuse path along the north side of Marine Drive, which would replace the existing sidewalk. Following construction of the Modified LPA, the rebuilt portion of the Marine Drive Trail would extend through the Marine Drive interchange, connecting both sides of I-5 to the Expo Center light-rail station, East Delta Park, the existing portion of the Marine Drive Trail, and the crossing over North Portland Harbor to Hayden Island.

The existing network of paths within the Marine Drive interchange area is difficult for users to navigate; the greater connectivity and ease of travel provided by the trail improvements would be a benefit. The reconstructed portion of the Marine Drive Trail would be designed for forward compatibility with the proposed Bridgeton Trail, and a connection to the Bridgeton Trail is included in the Modified LPA design with an extension through the I-5 right of way.

### ***Gresham/Fairview Trail***

The expansion of the Ruby Junction Maintenance Facility in Gresham is not expected to affect the Gresham/Fairview Trail. The Gresham/Fairview Trail runs through the study area along the east side of the existing Ruby Junction Maintenance Facility, which would not be affected by the expansion to the west of the existing maintenance facility.

Traffic noise levels under the Modified LPA for the Gresham/Fairview Trail are expected to be the same or similar to the noise levels under the No-Build Alternative because the trail would still run along the east side of the existing facility.

### ***Wy'East Way Trail***

The expansion of the Ruby Junction Maintenance Facility in Gresham is expected to affect approximately 140 linear feet of the Wy'East Way Trail. The effects would be from new tracks and pavement that would be constructed for the Ruby Junction Maintenance Facility. Traffic noise levels under the Modified LPA for the Wy'East Way Trail are expected to be the same or similar to the noise levels under the No-Build Alternative because the trail would still run along the north side of the existing facility.

### ***Lower Columbia River Water Trail***

Users of the Lower Columbia River Water Trail (LCRWT) would benefit from the Modified LPA's replacement of the Interstate Bridge, as the number of pier sets in the Columbia River would be reduced from nine to six. The bridge piers can pose a navigational hazard to those using the trail for recreation and commercial purposes; therefore, fewer bridge piers would reduce navigation hazards. Compared to the No-Build Alternative, traffic noise levels along the LCRWT are expected to decrease with the Modified LPA because the bridge and highway traffic would be higher above the trail (over the Columbia River).

The Modified LPA with the double-deck fixed-span configuration and one auxiliary lane would result in approximately 173 linear feet of shading and coverage effects to the LCRWT. The demolition of the existing Interstate Bridge would remove approximately 136 linear feet of existing shading. Therefore, the Modified LPA with the double-deck fixed-span configuration and one auxiliary lane would result in a net increase of approximately 37 linear feet of shading to the LCRWT. Compared to the Modified LPA with the double-deck fixed-span configuration, the Modified LPA with the single-level fixed-span would result in an additional approximately 80 linear feet of shading and coverage effects on the LCRWT. The Modified LPA with the single-level movable-span would result in an additional approximately 100 linear feet of shading and coverage effects at the movable-span location and 80 linear feet elsewhere. Compared to the Modified LPA with one auxiliary lane, the Modified LPA with two auxiliary lanes would result in an additional approximately 16 linear feet of shading and coverage of the LCRWT.

The new Columbia River bridges would be visible from the LCRWT. See Section 3.9, Visual Quality, for more detail on visual effects.

### ***Lewis and Clark National Historic Trail***

As with the LCRWT, users of the Lewis and Clark National Historic Trail along the Columbia River would benefit from the reduced navigational hazard as a result of the Modified LPA. Compared to the No-Build Alternative, traffic noise levels along the LCRWT are expected to decrease with the Modified LPA because the bridge and highway traffic would be higher above the trail (over the Columbia River).

The Modified LPA with the double-deck fixed-span configuration and one auxiliary lane would result in approximately 173 linear feet of shading and coverage effects to the Lewis and Clark National Historic Trail. The demolition of the existing Interstate Bridge would remove approximately 136 linear feet of existing shading. Therefore, the Modified LPA with the double-deck fixed-span configuration and one auxiliary lane would result in a net increase of 37 linear feet of shading to the Lewis and Clark National Historic Trail. Compared to the Modified LPA with the double-deck fixed-span configuration, the Modified LPA with the single-level fixed-span would result in an additional approximately 80 linear feet of shading and coverage effects on the Lewis and Clark National Historic Trail. The Modified LPA with the single-level movable-span would result in an additional approximately 100 linear feet of shading and coverage effects at the movable-

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span location and 80 linear feet elsewhere. Compared to the Modified LPA with one auxiliary lane, the Modified LPA with two auxiliary lanes would result in an additional approximately 16 linear feet of shading and coverage of the Lewis and Clark National Historic Trail.

The new bridges would be visible from the Lewis and Clark National Historic Trail. See Section 3.9, Visual Quality, for more detail on visual effects.

### ***Columbia River Renaissance Trail***

The Modified LPA would permanently realign approximately 1,000 linear feet of the Columbia River Renaissance Trail. Currently, the only access to the Columbia River Renaissance Trail from I-5 is via steep or circuitous paths extending from the north end of the Interstate Bridge to Columbia Way and then across Columbia Way. The Modified LPA would include a new multiuse path that would extend underneath the northbound Columbia River bridge and connect directly to the trail along the realigned Columbia Way.

The Modified LPA would reduce the number of connections between the Columbia River bridges and the waterfront from two to one, and the connection would be wider and safer than what currently exists, benefiting the Columbia River Renaissance Trail users. The Modified LPA with the double-deck fixed-span configuration is anticipated to result in lower traffic noise levels along the Columbia River Renaissance Trail than the No-Build Alternative because of the increased bridge height. The Modified LPA with the single-level fixed-span and the single-level movable-span configurations may slightly increase traffic noise levels due to the wider bridge span.

### ***Discovery Historic Loop Trail***

The Modified LPA, with the C Street ramps, would permanently realign approximately 2,750 linear feet of the Discovery Historic Loop Trail with construction of the new Columbia River bridges and demolition of the existing bridges. The elimination of the C Street ramps at the SR 14 interchange would reduce the permanent realignment of the Discovery Historic Loop Trail to approximately 2,579 linear feet—a reduction of approximately 174 linear feet. The affected portions of the Discovery Historic Loop Trail include approximately 1,000 linear feet where it shares an alignment with the Columbia River Renaissance Trail, with the impacts discussed above.

Users of the section of the Discovery Historic Loop Trail traversing downtown Vancouver streets would benefit from new and improved intersections, sidewalks, and bicycle lanes under the Modified LPA, which would result in an overall improvement in safety and enjoyment for users. Trail users would benefit from the Community Connector that would be constructed south of Evergreen Boulevard. This Community Connector would include off-street pathways for active transportation modes including pedestrians, bicyclists, and other micro-mobility modes, and public space and amenities to support the active transportation facilities – improving connections between downtown Vancouver and the VNHR and adding to the network of public spaces in the area. The Community Connector, which would span over I-5, would provide some reduction in highway noise when compared to existing sidewalks and bike lanes, which would further enhance the user experience when traveling this section of the Discovery Historic Loop Trail.

Project modifications would be visible from the Discovery Historic Loop Trail. See Section 3.9, Visual Quality, for more detail on visual effects.

### ***Fort Vancouver National Historic Site***

The Modified LPA, with the double-deck fixed-span configuration and one auxiliary lane, would require an approximately 0.4-acre permanent acquisition from the Fort Vancouver NHS. These permanent impacts would result from the modifications to the I-5/SR 14 interchange and the widening of I-5. The Modified LPA with the single-level fixed-span (all bridge type options) and single-level movable-span configuration would result in the permanent acquisition of an additional approximate 0.02 acres (approximately 762 square feet)

of park land at the Fort Vancouver NHS. The Modified LPA with two auxiliary lanes would result in the permanent acquisition of an additional approximately 0.03 acres of undeveloped park land at the Fort Vancouver NHS. Figure 3.7-2 shows the permanent and temporary impacts for each of the Modified LPA design options.

Traffic noise levels in the recreational portion of the Fort Vancouver NHS near the I-5/SR 14 interchange could increase slightly under the Modified LPA compared to the No-Build Alternative because highway infrastructure associated with the SR-14 interchange would shift slightly closer to the Fort Vancouver NHS.

The Modified LPA would not result in long-term direct effects on Waterfront Park, beyond changes in western and southern views from the new Columbia River bridges. These changes in views would not adversely affect the function or enjoyment of Waterfront Park.

### ***Old Apple Tree Park***

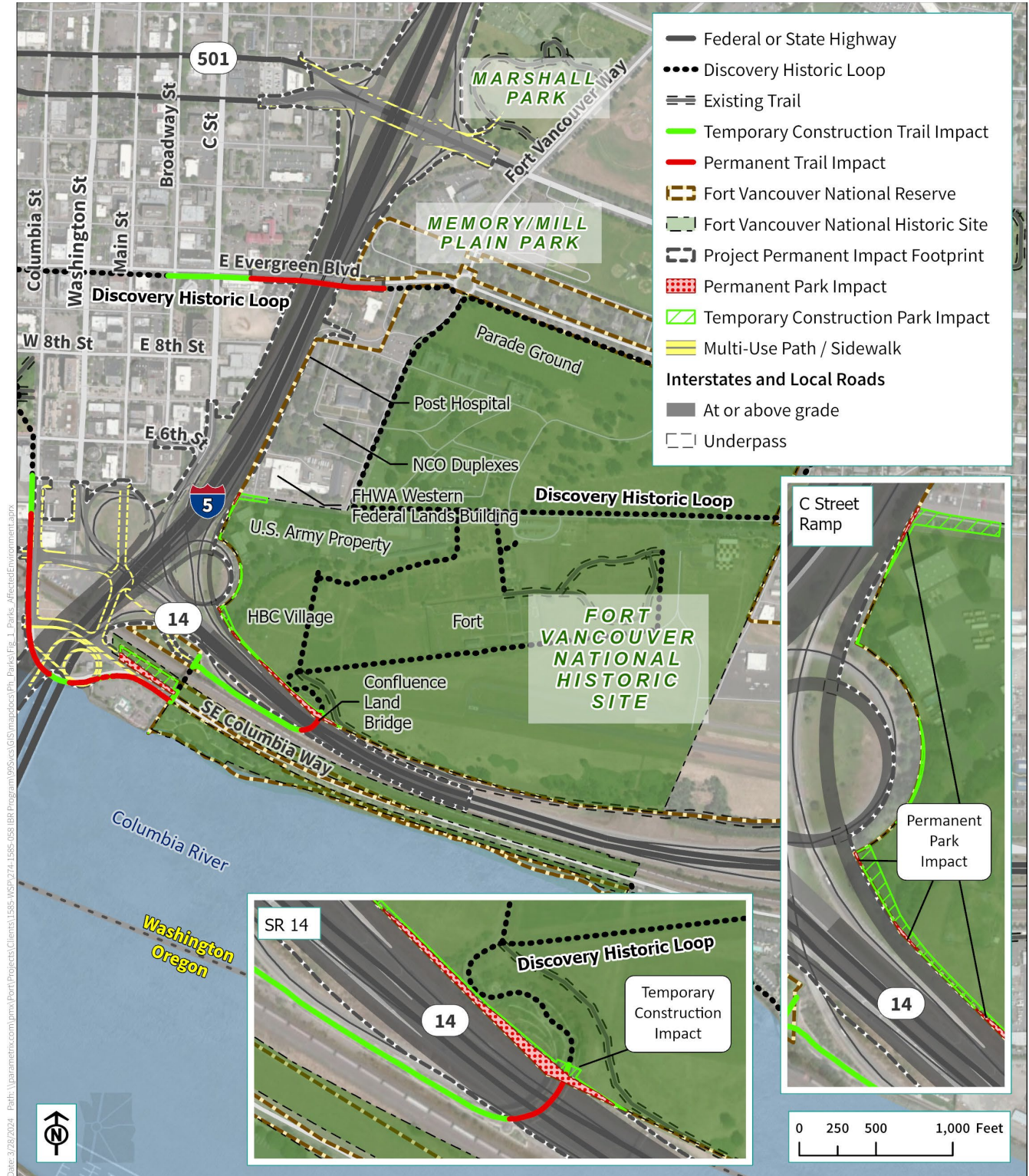
The Modified LPA would permanently acquire approximately 0.08 acres from Old Apple Tree Park for a new shared-use path that would link Main Street and downtown Vancouver. Users of the Confluence Land Bridge, which extends over SR 14 and connects the Vancouver waterfront with the Fort Vancouver NHS, would benefit from this new path as they travel through the park.

The Modified LPA, with or without the C Street Ramps and with either the I-5 centered mainline or westward shift, would also require a permanent airspace easement (less than 0.1 acres) over the northwest corner of Old Apple Tree Park for maintenance of the I-5 northbound to SR 14 elevated ramp. This easement would provide WSDOT with the right to enter Old Apple Tree Park with equipment to perform routine inspections of the ramp structure. This easement is not expected to affect landscaping on the park property. The new I-5 northbound to SR 14 interchange ramp would be located within 5 to 10 feet of the park's northern boundary, closer to the park than the existing ramp. The ramp is not expected to adversely affect the forested buffer along the northern edge of the park, which would remain.

Traffic noise levels in Old Apple Tree Park are predicted to be slightly lower under the Modified LPA than under the No-Build Alternative because the new SR 14 ramp would be higher in elevation than the existing SR 14 ramp, reducing noise levels at grade within the park. In the case of the SR 14 without C Street Ramps option, traffic noise levels would be eliminated.



Figure 3.7-2. Fort Vancouver National Historic Site – Comparison of Modified LPA and Design Options





### ***Marshall Community Center, Luepke Senior Center, and Marshall Park***

The Modified LPA would require the permanent acquisition of approximately 0.6 acres of land from the parcel that includes the Marshall Community Center, the Luepke Senior Center, and Marshall Park. The area needed would be for a retaining wall associated with the elevated exit ramp from I-5 northbound to Fourth Plain Boulevard.

The permanent acquisition would displace up to four horseshoe pits and trees (both in state right of way and within the park boundary), including several large sequoia trees that serve as a buffer between the community center campus and I-5. The retaining wall would be located along the border of the parking lot, with a height of up to 20 feet. The existing parcel also contains a few medium-sized trees and provides a partial vegetative buffer between the park and I-5. Specific tree replanting requirements would be determined by the City of Vancouver Urban Forester during the tree removal permitting process.

Traffic noise levels from I-5 are predicted to increase slightly at Marshall Community Center, the Luepke Senior Center, and Marshall Park under the Modified LPA compared to the No-Build Alternative. The addition of the light-rail transit (LRT) line along the west side of I-5 is not expected to result in an increase in noise levels.

With the re-establishment of a vegetated buffer and replacement of trees and landscaping that would be removed between I-5 and the community center.

### ***Kiggins Bowl Sports Fields and Stadium***

The Modified LPA would require the acquisition of less than 0.01 acres of the Kiggins Bowl Sports Fields and Stadium property for a retaining wall near the southern access, along the east side of Discovery Middle School. This permanent acquisition would not displace park use. A permanent subsurface easement, totaling approximately 0.3 acres, would extend from the retaining wall to under the access road for the installation of long ties that would anchor the wall into the soil. This subsurface easement would not permanently affect the aboveground use of this area, but would limit excavation below a depth that would be determined based on the final design of the retaining wall.

## **3.7.4 Temporary Effects**

### **No-Build Alternative**

Under the No-Build Alternative, construction and associated construction-phase impacts such as use of park lands; traffic detours; temporary closures; and noise, dust, and vibration would not occur. Overall, there would be no foreseeable temporary direct effects or benefits to park and recreation resources from the No-Build Alternative.

### **Modified LPA**

Construction of the Modified LPA includes construction of the new bridges and removal of the existing Interstate Bridge. Temporary effects of the Modified LPA on park and recreation resources include temporary easements on park land to stage construction and/or store materials; increased noise, glare, dust, and vibration; and temporary closures, detours, and congestion that could delay users traveling to parks or recreational activities. Temporary impacts on park and recreation resources are summarized in Table 3.7-6. The narrative following the table provides additional description for parks where more potentially substantial temporary effects would occur.

Table 3.7-6. Modified LPA Temporary Effects on Park and Recreation Resources

Resource	Description of Temporary Effects from Modified LPA
East Delta Park	<ul style="list-style-type: none"> <li>• Approximately 0.2 acres temporary impacts for construction of retaining wall.</li> <li>• Detours required for active transportation and vehicles.</li> <li>• Increased noise and dust.</li> </ul>
Marine Drive Trail	<ul style="list-style-type: none"> <li>• Trail users diverted during construction to opposite side of Marine Drive and at times along south side of Portland Expo Center, resulting in approximately 360 feet of temporary impacts.</li> </ul>
Gresham/Fairview Trail	<ul style="list-style-type: none"> <li>• No temporary effects from construction.</li> </ul>
Wy'East Way Trail	<ul style="list-style-type: none"> <li>• Temporary trail detours and disruptions at NW Burnside Court and NW Eleven Mile Avenue / Wy'East Way.</li> </ul>
Lower Columbia River Water Trail and Lewis and Clark National Historic Trail	<ul style="list-style-type: none"> <li>• Recreational marine travel along the Columbia River would be limited. Safe passage route or detours, if necessary, to be provided through construction.</li> <li>• Possible temporary closure of near-shore areas to recreational use due to safety considerations.</li> </ul>
Columbia River Renaissance Trail and Discovery Historic Loop Trail	<ul style="list-style-type: none"> <li>• Increased levels of noise, dust, glare, and construction equipment emissions.</li> <li>• Long-duration closures of connections between downtown Vancouver and SR 14. Trail users diverted to Columbia Way to reach downtown Vancouver.</li> </ul>
Vancouver Landing at Terminal One	<ul style="list-style-type: none"> <li>• Less than 0.1 acres temporary impacts.</li> <li>• Temporary construction impacts from increased noise, changes in views of the Columbia River at I-5, and glare from construction lighting.</li> </ul>
Fort Vancouver NHS	<ul style="list-style-type: none"> <li>• Temporary construction easement on approximately 1 acre of the Fort Vancouver NHS, which would be adjacent to I-5 near the C Street ramp and E Fifth Street and near the Confluence Land Bridge, for construction of retaining wall.</li> <li>• Increased noise, vibration, and dust.</li> <li>• Temporary construction impacts from increased noise, changes in views of the Columbia River at I-5, and glare from construction lighting at Waterfront Park.</li> </ul>
Vancouver Waterfront Park	<ul style="list-style-type: none"> <li>• No temporary effects.</li> </ul>
Old Apple Tree Park	<ul style="list-style-type: none"> <li>• Temporary construction easement on approximately 0.2 acres.</li> <li>• Increased noise, glare from construction lighting, additional dust, and possibly debris entering the park.</li> <li>• Temporary increases in traffic levels along Columbia Way may affect trail users leaving or entering the park.</li> </ul>

Resource	Description of Temporary Effects from Modified LPA
Marshall Community Center and Park	<ul style="list-style-type: none"> <li>• Temporary construction easement on approximately 0.4 acres during construction.</li> <li>• Realignment and/or closure of accesses and potential temporary closure of access and portion of parking.</li> <li>• Increased noise/vibration, as well as glare from construction lighting.</li> </ul>
Clark College Recreation Fields	<ul style="list-style-type: none"> <li>• Increased noise, vibration, dust, and glare.</li> </ul>
Arnada Park	<ul style="list-style-type: none"> <li>• Less than 0.1 acres of temporary impacts for construction, affecting landscaped areas including grass and small trees.</li> <li>• Increased noise, dust, and glare.</li> </ul>
Leverich Community Park	<ul style="list-style-type: none"> <li>• Revised access and traffic movements on 39th Street during construction of the SR 500/I-5 interchange.</li> <li>• Increased noise, dust, and glare.</li> </ul>
Burnt Bridge Creek Trail	<ul style="list-style-type: none"> <li>• No temporary impacts.</li> </ul>
Kiggins Bowl Sports Fields/Stadium	<ul style="list-style-type: none"> <li>• Temporary construction easement on approximately 0.01 acres.</li> <li>• Increased noise, vibration, and dust.</li> </ul>

### ***East Delta Park***

Under the Modified LPA, highway construction would require a temporary construction easement from approximately 0.2 acres from the western, eastern, and northern edges of East Delta Park. The affected area is covered by grass that is mowed periodically. The temporary construction easement would be required to gain access to the I-5 right of way to build a retaining wall that would support the I5 northbound bridge to the Marine Drive interchange ramp.

The duration of the temporary construction easement in East Delta Park is expected to be less than six months.

Construction activities would generate noise and dust and damage the grass where construction equipment would operate. All landscaping would be restored after construction. Detours for active transportation would reflect the Portland Bureau of Transportation guidance for detours around construction sites and would be maintained regularly. While detours may be required during some construction phases, vehicle access to East Delta Park would be maintained.

### ***Wy'East Way Trail***

The Wy'East Way Trail could experience trail detours and disruptions at NW Burnside Court and NW Eleven Mile Avenue / Wy'East Way.

### ***Lower Columbia River Water Trail***

During construction of the Columbia River bridges and the demolition of the existing Interstate Bridge, both recreational and commercial marine travel along the Columbia River would be limited. Users of the LCRWT would be provided with a safe passage route or detours, if necessary, through the construction zone. However, for safety purposes, it is possible that recreational travel through the study area would be limited at times and trail users may not be able to access some areas. For example, during construction or demolition of the shallow-water piers, near-shore areas may be closed to recreational use. Trail users in kayaks or canoes may not be able to venture into the mid-river detour routes that involve faster-flowing

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water and possible interactions with motorized boats. This impact would be the same for the Modified LPA with or without the C Street Ramp options.

Temporary effects of the Modified LPA with two auxiliary lanes and the single-level fixed-span (all bridge type options) and single-level movable-span configurations would be similar to those described above.

## ***Lewis and Clark National Historic Trail***

Temporary impacts to the Lewis and Clark National Historic Trail would be the same as those described above for LCRWT.

## ***Columbia River Renaissance Trail and Discovery Historic Loop Trail***

Access under I-5 between downtown Vancouver and the Columbia River would be maintained throughout the duration of construction, though temporary detours and trail realignments would occur. The Columbia River Renaissance Trail would extend directly beneath the construction of the new Columbia River bridges and demolition of the existing Interstate Bridge. Trail users would experience increased levels of noise, changes in views of the Columbia River, glare from construction lighting, emissions from construction equipment, and possibly dust from construction activities.

Additionally, during construction at the I-5/SR 14 interchange, connections between downtown Vancouver and SR 14 would be closed for periods of time. Drivers and bicyclists attempting to make this movement would be detoured to enter and exit SR 14 at Exit 1 (Columbia House Boulevard) and would be required to travel along Columbia Way to reach downtown Vancouver. This would temporarily increase traffic levels on this street, which is adjacent to the Columbia River Renaissance Trail. This increase in traffic levels could pose a risk to trail users crossing into Old Apple Tree Park or crossing Columbia Way for another reason.

## ***Fort Vancouver National Historic Site***

The Modified LPA would temporarily affect approximately 1 acre of the Fort Vancouver NHS for construction of a retaining wall along I-5 in the western portion of the park, representing less than 1% of the 204-acre park.

The Modified LPA with two auxiliary lanes would require temporary disturbance of 0.96 acres of park land at the Fort Vancouver NHS. This is an approximately 0.03-acre decrease in temporary impacts from the Modified LPA with one auxiliary lane, because portions of the area of temporary impacts become permanent impacts with the addition of the second auxiliary lane. Compared to the double-deck fixed-span configuration, the wider structure associated with the single-level fixed-span (all bridge type options) and single-level movable-span configurations would shift some of the temporary impacts to permanent, resulting in a decrease of less than 0.1 acres (approximately 762 square feet) of temporary impacts at Fort Vancouver NHS.

The Modified LPA with the removal of the existing C Street ramps at the SR 14 interchange would temporarily affect approximately 0.98 acres) of the Fort Vancouver NHS, which would be adjacent to the West Barracks and at the west end of Officer's Row, for construction of a retaining wall along I-5. This would represent a minimal decrease (less than 0.02 acres) in temporary impacts compared to the Modified LPA. The westward shift of the I-5 mainline would also reduce the temporary impacts by approximately 0.02 acres.

Figure 3.7-2 shows the permanent and temporary impacts for each of the Modified LPA design options.

Waterfront Park west and east of the Columbia River bridges may experience temporary construction impacts such as increased noise, changes in views of the Columbia River at I-5, and glare from construction lighting. Waterfront Park users would be far enough to the west and east that they would not likely be affected by vehicle emissions and dust associated with construction.

Construction at the I-5/SR 14 interchange and along I-5 would temporarily increase noise, vibration, and dust that would distract from recreational activities, particularly for those seeking quiet.

### ***Old Apple Tree Park***

The Modified LPA would temporarily affect approximately 0.2 acres of Old Apple Tree Park during construction of the new I-5 northbound to SR 14 westbound off-ramp. Demolition of the existing ramp and construction of the new SR 14 westbound off-ramp would result in increased levels of noise, glare from construction lighting, additional dust, and possibly debris entering the park. Temporary increases in traffic levels along Columbia Way, as described above, may make it more challenging for trail users to leave or enter Old Apple Tree Park.

### ***Marshall Community Center, Luepke Senior Center, and Marshall Park***

The Modified LPA would require realigning the accesses to Marshall Community Center, Luepke Senior Center, and Marshall Park along McLoughlin Boulevard. This would result in temporary construction-related effects to approximately 0.4 acres along the western boundaries of the parcel. Access to and from the Marshall Community Center would be maintained during the duration of construction. One of the two access points may need to be closed for short periods to complete construction. During potential access closures, the one-way access between the two main parking lots would likely be signed for two-way traffic to allow for full use of the parking facility, which would likely require flaggers because this access is only one lane. Access closures would be coordinated with VPR&C.

Users of Marshall Community Center, Luepke Senior Center, and Marshall Park would likely experience increased levels of noise and glare from lighting for construction of the I-5 northbound exit ramp to Fourth Plain Boulevard.

### ***Clark College Recreation Fields***

Approximately 4.5 acres adjacent to the Clark College recreational fields would be temporarily affected by construction of the Modified LPA, which would affect landscaping (including grass and small trees) in this area. This temporary easement would occur west of the fields and is not expected to affect the recreational experience of users.

Similar to Marshall Community Center and Park, users of this facility would likely experience increased levels of noise and glare from construction lighting. Additionally, users attempting to access this facility from McLoughlin Boulevard may experience delays as they navigate through the construction on this street.

### ***Arnada Park***

Less than 0.1 acres of Arnada Park would be used for a temporary construction easement during construction of the Modified LPA, which would temporarily disturb landscaping (including grass and small trees). This landscaping would be restored per Program-specific mitigation measures. Users of this facility would likely experience increased levels of noise and glare from construction lighting.

### ***Kiggins Bowl Sports Fields and Stadium***

Construction of the retaining wall along the access to Kiggins Bowl Sports Fields and Stadium would temporarily affect less than 0.01 acres of the property. Construction is not expected to limit access by passenger vehicles, bicyclists, or pedestrians. The movement of heavier trucks and buses along this road could be restricted during installation of the underground tiebacks for the retaining wall. Every effort would be made to minimize closures of this access to large vehicles during times that have been identified by Vancouver Public Schools as high use times (e.g., September 1 through November 15). If closures are unavoidable and access to the stadium or fields is needed, an appropriate detour route would be established. This detour would be signed and would direct users to the northern access point from Main Street. The contractor would be directed to coordinate with the Vancouver Public Schools on planned access closures.



Construction along I-5 would temporarily increase noise, vibration, and dust that would distract from recreational activities, particularly for those seeking quiet.

### 3.7.5 Indirect Effects

The Modified LPA would include improved bicycle, pedestrian, highway, and transit access in North Portland and Vancouver, which could make access to parks and recreation resources easier and result in additional park users. New light-rail stations located within walking distance to the Fort Vancouver NHS would also improve access to nearby parks and recreation facilities.

As described in Section 3.4, transit-oriented development may occur along the new LRT line, consistent with local land use plans. Such development is frequently relatively high-density, with limited space devoted to yards or communal greenspace; residents of these developments may therefore have a greater per-capita demand for off-site recreational facilities. Greater demand, if it occurred, could result in increased use of existing parks and recreational facilities, which could potentially result in overcrowding at facilities that are already highly used.

### 3.7.6 Potential Avoidance, Minimization, and Mitigation Measures

The following regulatory and Program-specific measures are proposed to address long-term and temporary effects on parks and recreation facilities.

#### Long-Term Effects

##### *Regulatory Requirements*

- If tree removal is unavoidable, replace trees on site and in kind at appropriate replacement ratios in compliance with applicable requirements of Portland and Vancouver city code.
- Evaluate the feasibility and reasonableness of noise mitigation in accordance with WSDOT or ODOT criteria to shield park visitors and trail users from increased noise levels.

##### *Program-Specific Mitigation*

- If the acquired park land includes play equipment or other amenities, replace those features either in the same park or at one nearby.
- Coordinate specific tree removal permitting process and tree replanting requirements (location and type) for each park with the appropriate jurisdiction.
- Screen portions of the transportation improvements from view with trees, vegetation, or built screens.
- Explore retaining wall façade treatments to improve the visual quality, where feasible.

#### Temporary Effects

##### *Regulatory Requirements*

- In compliance with the City of Vancouver's tree conservation requirements (VMC 20.770.090, Tree, Vegetation, and Soil Protection During Construction) or City of Portland preservation standards for trees in development situations (PCC 11.50.040, Tree Preservation Standards) and Tree Plan requirements (PCC 11.50.020) protect trees on park property that would be close to construction activities from adverse impacts as directed by the agency managing the park land (the cities of Vancouver, Portland and Gresham, NPS, and the Vancouver Public School District).

- Employ best management practices, including those outlined in WSDOT and ODOT construction manuals, to minimize increased levels of noise, vibration, glare from construction lights, emissions from construction vehicles, or dust from demolition of existing structures.
- Comply with local ordinance requirements to provide additional protection for park users.

### ***Program-Specific Mitigation***

- Restore landscaping to its original condition and select plants that are resilient or adaptive to future climate conditions for new landscaping once construction is complete.
- Protect trees on park property that would be close to construction activities but not removed, as agreed to with the appropriate jurisdiction.
- Restore landscaping to as close as possible to its original condition once construction is complete.
- Establish detour routes based on work zone Transportation Management Plan.
- Schedule construction-related closures at public parks and recreation facilities to minimize effects on large events, as feasible.
- Provide notice to users of the recreational trails of the temporary limits on recreation in the Columbia River.
- Notify recreational anglers of temporary access restrictions to fishing areas and consider other coordination efforts, including working with the Washington Department of Fish and Wildlife and the Oregon Department of Fish and Wildlife to share closure information and distribute this information at locations that serve the fishing community.