

Reach 7	City of Pasco
Reach Description: Columbia River from the upstream edge of Sacajawea State Park to Snake River just east of the Sacajawea State Park boat basin	
Shoreline Jurisdiction: 295 acres	
 <p data-bbox="667 1075 1409 1102">Source: https://fortress.wa.gov/ecy/coastalatlantools/UICoastalAtlas/Tools/ShorePhotos.aspx</p>	
Subreaches; see Map 4: Not Applicable.	
CHARACTERISTICS	
Ownership: Reach 7 is owned by Washington State Parks and Recreation Commission.	
Land Use/Current SMP: Land use designation: <ul style="list-style-type: none"> • Current land use is Industrial and Open Space Nature • Zoning – Medium Industrial (I-2), and Heavy Industrial (I-3) Current SMP Environment Designation: Conservancy	
Existing Land Cover/Development: This reach primarily consists of riparian vegetation in the Sacajawea State Park. There is also a boat launch, dock, a beach, and utility poles within this reach.	
Geomorphic Character: Description: Reach 7 consists of a topographic low area at the confluence of the Columbia River and Snake River. The shoreline throughout the reach consists of alluvium with relatively low banks throughout Sacajawea State Park.	

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<p>Hardened Banks: Approximately 100 feet of hardened banks exist along the reach extent associated with the State Park basin boat launch.</p>	
<p>Flooding and Geological Hazards:</p> <p>Flooding: Flooding is controlled by Lake Wallula pool levels. Sacajawea State Park in this reach is within the 100-year floodplain.</p> <p>Geological Hazards: There are no geologic hazard areas in Reach 7.</p>	
<p>Existing Public Access:</p> <p>Reach 7 consists of Sacajawea State Park at the confluence of the Snake and Columbia Rivers. This park has historic value regarding the Lewis and Clark Expedition and contains a museum and interpretive center. The park includes boat launch, dock, campsite, and beach area.</p> <p>Identified Public Access Improvements:</p> <p>The Rivershore Linkage and Amenities Plan (Pasco 2012) identifies adding camping facilities and educational opportunities to Sacajawea State Park, and extending the Sacajawea Heritage Trail toward the Columbia Plateau/Ice Harbor Dam trail linkage.</p>	
ECOLOGICAL CONDITIONS	
<p>Water Quantity and Sediment:</p> <p>No local impacts to water quantity or sediment are identified.</p>	
<p>Water Quality:</p> <p>Water quality in this reach may be impacted by recreational use. Wetlands part of Sacajawea State Park may also have a slight impact on water quality in this reach.</p>	
<p>Habitat Characteristics and PHS Presence:</p> <p>Reach 7 entirely contains Sacajawea State Park, which occurs at the confluence of the Snake and Columbia Rivers. The park has relatively large expanses of undeveloped or restored shoreline with landscaped or natural trees and pockets of off-channel shallow water habitat. The upland portion of the park contains shrub-steppe habitat for upland wildlife species. There is also one armored embayment with a dock and boat launch along the Snake River side of the park. ESA-listed fish species use both rivers for migration and rearing habitat. Compared to adjacent reaches, this reach provides enhanced nearshore aquatic habitat rearing and migratory functions as a result of the intact riparian habitat, characterized by multiple species of native plants, trees, and shrubs.</p>	
ECOLOGICAL FUNCTIONS ANALYSIS	
<p>Level of Existing Function: Partially Functioning</p> <p>Stressors</p> <p>Upland development: Park development including five overwater structures, a boat launch, a swim beach, upland turf areas. Overall contains substantial riparian buffer areas, outside of park within upland areas non-native Russian-olive species.</p>	

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<p data-bbox="212 338 846 369">Recreational use: Upland trails, water access, boat use.</p> <p data-bbox="212 384 1365 453">Potential Restoration Opportunities: Consider incorporating more riparian buffer plantings near the boat launch area at northeast side of subreach. Replace non-native species with native alternatives.</p> <p data-bbox="212 468 1300 537">Potential Protection Opportunities: Preserve existing riparian and shrub-steppe habitat. Provide stormwater controls consistent with Eastern Washington Stormwater Manual.</p>	

Reach 8	City of Pasco
Reach Description: Snake River just upstream of confluence with Columbia River, extending from City UGA eastern boundary to near Sacajawea State Park	
Shoreline Jurisdiction: 260 acres	
	
Source: https://fortress.wa.gov/ecy/coastalatlantlas/UICoastalAtlas/Tools/ShorePhotos.aspx	
Subreaches; see Map 4:	
SR 8a: Begins at Sacajawea Sate Park to the edge of industrial developments	
SR 8b: Extends 0.5 mile to the north ending at the US 12 bridge	
CHARACTERISTICS	
Ownership: SR 8a is owned by Washington State Parks and Recreation Commission and federal government. SR 8b is mostly private with a small amount (less than 10%) of federal ownership.	
Land Use/Current SMP:	
Land use designation:	
<ul style="list-style-type: none"> • Current land uses are Industrial and Open Space Nature • Zoning – Light Industrial (I-1), Medium Industrial (I-2), and Heavy Industrial (I-3) 	
Current SMP Environment Designation: Urban	
Existing Land Cover/Development:	
SR 8a is mostly unimproved natural land with riparian vegetation. SR 8a includes a rail crossing. SR 8b includes State Route 12 crossing, a fuel storage tank, and barge facilities.	
Geomorphic Character:	
Description: The shoreline in this reach consists mostly of outburst flood deposits. The reach consists of low bank areas near the confluence with the Columbia River. Lake Wallula levels fluctuate with downstream dam management practices.	
Hardened Banks: Approximately 7,200 linear feet of artificial hardened banks exist along the Columbia River (left bank) within all the subreaches.	

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Flooding and Geological Hazards:	
<p>Flooding: Flooding is controlled by Lake Wallula pool levels. Sacajawea State Park in SR 8a is located in the 100-year floodplain.</p> <p>Geological Hazards: SR 8b contains slopes that are greater than 15% underlain by alluvium, which make them designated landslide hazard areas.</p>	
Existing Public Access:	
<p>Reach 8 does not have public access. SR 8a is primarily unimproved and SR 8b is developed with industrial/barge facilities.</p> <p>Identified Public Access Improvements:</p> <p>The Rivershore Linkage and Amenities Plan (Pasco 2012) recommends planning and designing a Sacajawea Heritage Trail extension through the Ainsworth Town site (SR 8a), improving amenities, developing Town of Ainsworth archaeology site, and adding a pedestrian bridge to the side of the Burlington Northern Santa Fe bridge if feasible.</p> <p>Public Access Opportunities:</p>	
ECOLOGICAL CONDITIONS	
Water Quantity and Sediment:	
<p>Irrigation pumps in SR 8b may have a slight impact on water quantity. Agricultural runoff may cause slight sediment input.</p>	
Water Quality:	
<p>Water quality may be slightly impacted by agricultural and industrial runoff within the reach.</p>	
Habitat Characteristics and PHS Presence:	
<p>This reach is adjacent to industrial facilities and artificially hardened shorelines, including a railroad next to the water and numerous overwater structures. There are artificially hardened shorelines along the entire reach, which significantly reduce the function of the riparian zone.</p> <p>SR 8a: This subreach contains barge moorage area and overwater structures, which artificially shade the water in the river. Habitat is limited to open water areas of the Snake River that provide habitat for ESA-listed and resident fish species, as well as areas for waterfowl concentrations. Greater sage grouse breeding habitat occurs in the upland shrub-steppe areas flanking the shoreline of this subreach.</p> <p>SR 8b: This subreach contains the US 12 bridge, which creates artificially shaded overwater cover. Similar to SR 1a, habitat is limited to open water areas of the Snake River that provide habitat for ESA-listed and resident fish species, as well as areas for waterfowl concentrations. There is also greater sage grouse breeding habitat in the upland shrub-steppe areas flanking the shoreline of this subreach.</p>	

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ECOLOGICAL FUNCTIONS ANALYSIS	
SR 8a	
Level of Existing Function: Partially Functioning	
Stressors:	
Upland development: Non-native riparian species (Russian-olive), railroad corridor and railroad bridge.	
Potential Restoration Opportunities: Replace non-native species with native alternative.	
Potential Protection Opportunities: Provide stormwater controls consistent with Eastern Washington Stormwater Manual.	
SR 8b	
Level of Existing Function: Impaired	
Stressors:	
Upland development: Railroad corridor along shoreline, industrial structures and Port development and vessel use, very limited riparian buffers and non-native Russian-olive species where riparian buffer exists, US 12 bridge.	
Recreational use: Informal roads and possibly off-road vehicle recreation use within upland areas.	
Potential Restoration Opportunities: Incorporate riparian buffers where absent. Replace non-native species with native alternatives.	
Potential Protection Opportunities: Protect intact shrub-steppe habitat from degradation by limiting recreation use. Provide stormwater controls consistent with Eastern Washington Stormwater Manual.	