

Ecosystem Enhancement Program

Lower Columbia Ecological Priorities

The following ecosystem priorities and project ideas were identified through a review of regional plans and research, and by seeking input from community groups, First Nations representatives, government agencies, and subject matter experts. Priorities and projects are listed in random order; no ranking is intended. Species and habitats are not limited to those listed below.

Aquatic		
Conservation, restoration, and enhancement of aquatic habitat		
<i>Priority Habitat</i>	<i>Priority Species</i>	<i>Priority Processes</i>
<ul style="list-style-type: none"> • Columbia River, Salmo River • Tributary streams spawning, rearing, overwintering valley bottom to upper basin headwaters • Cold water refugia 	<ul style="list-style-type: none"> • native fish (Rainbow Trout, Westslope Cutthroat Trout, Bull Trout, White Sturgeon) • freshwater mussels • waterbirds (Harlequin Duck, American Dipper, Cliff Swallows, Black Swift) • invertebrates 	<ul style="list-style-type: none"> • fish passage • connectivity • water temperature, water quality (nutrients, turbidity) • productivity • geomorphological function (erosion, sedimentation, large woody debris, gravel recruitment)
Wetland/Riparian		
Conservation, restoration and enhancement of wetlands and riparian areas		
<i>Priority Habitat</i>	<i>Priority Species</i>	<i>Priority Processes</i>
<ul style="list-style-type: none"> • floodplain ecosystems • cottonwood stands • riparian habitats directly adjacent to rivers • alluvial fans 	<ul style="list-style-type: none"> • western toad • western painted turtle • at risk migratory birds and waterfowl (Great Blue Heron, Western Screech-Owl, Bank Swallow, Barn Swallow, Olive-sided Flycatcher) • bats • American beaver • North American river otter • plants – rare and culturally important • macroinvertebrates 	<ul style="list-style-type: none"> • connectivity, linkage areas valley bottom to montane • hydrologic function, • geomorphological function • productivity
Terrestrial		
Protection, enhancement and identification of corridors and linkage areas		
<ul style="list-style-type: none"> • Priority: north-south and east-west corridors along Columbia and Salmo Rivers which link together upland habitats (ungulate winter range, core grizzly bear habitat) with low elevation riparian-wetland habitats 		
Conservation and restoration of upland habitats that support species at risk and of conservation concern		

<i>Priority Habitat</i>	<i>Priority Species</i>	<i>Priority Processes</i>
<ul style="list-style-type: none"> • dry interior forests in fire-maintained ecosystems • brushlands and grasslands • rock outcrops • old growth forests 	<ul style="list-style-type: none"> • mountain caribou • grizzly bear • bats • rubber boa • racer • western skink • wolverine • Yellow Brested Chat • Common Nighthawk • Lewis's Woodpecker • pollinators and other invertebrates • plants – rare, culturally important • fungi 	<ul style="list-style-type: none"> • wildlife movement and migration • connectivity • food web interactions (predator-prey, seed dispersal, pollination) • natural fire regime

Lower Columbia Subregion Emerging Issues

- Climate Change
- Invasive Species
- Cumulative effects (dams, forestry, recreation, rural/urban development)
- Emergent diseases/pests (White nose syndrome, whirling disease, mountain pine beetle)
- Imminent species/habitat decline
- Wildfire and Fire suppression
- Recreation and access management