

Ecosystem Enhancement Program

Columbia Valley Sub-Region 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"> • Upper Columbia River • Tributary streams that support rearing, spawning, overwintering, foraging from valley bottom to upper basin headwaters • Cold water refugia • Lakes and ponds 	<ul style="list-style-type: none"> • native fish (Westslope Cutthroat Trout, Rainbow Trout, Burbot, Bull Trout, Burbot, Kokanee) • waterbirds (Harlequin Duck, Western Grebe, American Dipper, Cliff Swallow, Black Swift) • freshwater mussels • 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 Habitat</i>	<i>Priority Habitat</i>
<ul style="list-style-type: none"> • low elevation wetlands and floodplain ecosystems in the Upper Columbia Valley including Columbia River Wetlands • cottonwood stands • alluvial fans • mid elevation riparian habitats 	<ul style="list-style-type: none"> • western toad • northern leopard frog • western painted turtle • Columbia spotted frog • at risk migratory birds and waterfowl (Great Blue Heron, Western Screech-Owl, Osprey, Long Billed Curlew, Bank Swallow, Barn Swallow, Olive-sided Flycatcher) • bats • American beaver • culturally important plants • 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: Columbia Wetlands, Columbia Lake South, Dutch Creek – Columbia Lake, Sinclair Canyon – Kindersley, Luxor – Pinnacle 		
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"> • open forests and grasslands in fire-maintained ecosystems • mature aspen • high elevation grasslands • rock outcrops • old growth forests 	<ul style="list-style-type: none"> • mountain caribou • grizzly bear • mountain goat • elk, deer • bighorn sheep • bats • American badger • Wolverine • Lewis' Woodpecker • Bobolink • Flammulated Owl • rubber boa • whitebark pine • limber pine • huckleberry • other culturally important and rare plants • pollinators and other invertebrates • fungi 	<ul style="list-style-type: none"> • wildlife movement and migration • connectivity • food web interactions (predator-prey, seed dispersal, pollination) • natural fire regime
Cultural		
Protection and enhancement of Indigenous cultural values		
<i>Priority Habitat</i>	<i>Priority Species</i>	<i>Priority Processes</i>
<ul style="list-style-type: none"> • cultural use areas 	<ul style="list-style-type: none"> • culturally significant species 	<ul style="list-style-type: none"> • traditional knowledge • traditional practices

Columbia Valley 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