

Ecosystem Enhancement Program

Upper 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.

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"> • low elevation wetlands and adjacent upland areas in Upper Columbia Valley • historic wetlands and adjacent upland areas in Canoe Reach and Robson Valley • high elevation wetlands • riparian areas associated with rivers and streams 	<ul style="list-style-type: none"> • northern leopard frog • western painted turtle • western toad • At risk wetland and migratory birds (Great Blue Heron, Western Screech-Owl, Western grebe, Bobolink, Common Nighthawk, Bank Swallow, Barn Swallow, Long-billed Curlew, Olive-sided Flycatcher) • American beaver • culturally important plants • rare plants • macroinvertebrates 	<ul style="list-style-type: none"> • connectivity • hydrologic function • geomorphological function • productivity
Terrestrial		
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"> • grassland and open forest (ungulate winter range) • mature aspen • old growth forest • alpine and high elevation grasslands 	<ul style="list-style-type: none"> • elk • mule deer • bighorn sheep • mountain caribou • mountain goat • bats • grizzly bear • American badger • wolverine • Lewis's Woodpecker • whitebark pine • limber pine • huckleberry • pollinators and other invertebrates 	<ul style="list-style-type: none"> • wildlife movement and migration • connectivity • food web interactions (predator-prey, seed dispersal, pollination) • natural fire regime

	<ul style="list-style-type: none"> • rare plants • fungi 	
Aquatic		
Restoration and enhancement of aquatic habitat		
<i>Priority Habitat</i>	<i>Priority Species</i>	<i>Priority Processes</i>
<ul style="list-style-type: none"> • Kinbasket Reservoir • spawning, rearing, overwintering areas <ul style="list-style-type: none"> ○ rivers ○ tributary streams 	<ul style="list-style-type: none"> • native fish (Westslope Cutthroat Trout, Bull Trout, Kokanee, Rainbow Trout, Burbot) • 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 • geomorphological function (erosion, sedimentation, large woody debris, gravel recruitment)
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

Upper Columbia Emerging Issues

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