

Ecosystem Enhancement Program

Arrow Slokan Sub-Region Ecological Priorities

The following ecosystem priorities 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 are listed in random order; no ranking is intended. Species, habitats and processes 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"> • rivers and tributary streams spawning, rearing, foraging, overwintering valley bottom to upper basin headwaters • mainstem spawning • side channel habitat • ponds and lakes • lake foreshore • shallow open water • cold water refugia • alluvial fans and creek mouths • groundwater-surface water interface (warm water spring; mineral springs; cold water source) • fisheries sensitive watersheds 	<ul style="list-style-type: none"> • native fish (Rainbow Trout, Burbot, Bull Trout, White Sturgeon, Kokanee, Westslope Cutthroat Trout, Umatilla Dace, Columbia Sculpin, Shorthead Sculpin, Sculpin spp.) • waterbirds (American Dipper, Black Swift, Cliff Swallow, Kingfisher, Eared Grebe, Western Grebe, Great Blue Heron) • native freshwater mussels • invertebrates • periphyton • species at risk 	<ul style="list-style-type: none"> • fish passage • fish overwintering, spawning and rearing • connectivity • water availability • water temperature, water quality, nutrient cycling • productivity • geomorphic processes (erosion, sedimentation, levees, large woody debris, gravel recruitment) • habitat complexity (large woody debris, gravel, rocks, sediment) • climate change refugia
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"> • wetland and riparian systems from Summit Lake and Bonanza Creek south to Slokan Lake and along the Slokan River • mid elevation benchland wetlands • floodplain ecosystems • mature riparian cottonwood forests • riparian habitats directly adjacent to rivers 	<ul style="list-style-type: none"> • western toad • Columbia spotted frog • western painted turtle • migratory birds and waterfowl (Great Blue Heron, Osprey, Western Screech-Owl, Barn Swallow, Bank Swallow, Olive-sided Flycatcher) • bats • Coeur d'Alene salamander • Coeur d'Alene Oregonian 	<ul style="list-style-type: none"> • landscape connectivity valley bottom to top • ecological corridors • hydrologic processes (filtering, recharge, flooding, storage) • geomorphic processes (erosion, levees, gravel, sedimentation, woody debris) • productivity

<ul style="list-style-type: none"> interconnected floodplain wetlands migratory stopover sites nesting and perching trees ecosystems at risk 	<ul style="list-style-type: none"> American beaver American marten river otter plants – species at risk and culturally important • macroinvertebrates (vivid dancer damselfly) species at risk 	<ul style="list-style-type: none"> wildlife movement and migration carbon storage breeding and nesting beaver wetland creation biodiversity resiliency
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Terrestrial

Protection, enhancement and identification of corridors and linkage areas

- Priority: Slocan River Valley, Bonanza biodiversity corridor, valley bottom to mountain top connectivity, cross valley-corridors (Lemon Creek Corridor, Passmore Corridor) Retallack-Hwy 31A, Central Selkirks Key Biodiversity Area.

Conservation and restoration of upland habitats that support species at risk and focal species

<i>Priority Habitat</i>	<i>Priority Species</i>	<i>Priority Processes</i>
<ul style="list-style-type: none"> old growth forests inland temperate rainforest dry interior open forest types alpine and high elevation grasslands ungulate winter range deciduous forests huckleberry patches grizzly bear habitat and connectivity corridors camas meadows rare plant communities rock outcrops and caves nesting and/or roosting sites burrows or denning areas hibernacula wildlife trees and snags mineral licks calcerous rock / soils ecosystems at risk wildlife habitat areas (WHAs) and wildlife habitat features (WHFs) 	<ul style="list-style-type: none"> mountain caribou grizzly bear black bear mountain goat elk moose wolf wolverine porcupine bats Common Nighthawk Lewis' Woodpecker Clark's Nutcracker Pileated Woodpecker Great Grey Owl Pacific Wren Vaux's swift rubber boa western skink northern alligator lizard rubber boa whitebark pine huckleberry camas plants – species at risk and culturally important • pollinators and other invertebrates (Western bumblebee, Coeur d'Alene Oregonian Snail) fungi species at risk 	<ul style="list-style-type: none"> wildlife movement and migration connectivity climate refugia food web interactions (predator-prey, seed dispersal, pollination) natural fire regime biodiversity resiliency

Cultural
Supporting Indigenous Stewardship through: <ul style="list-style-type: none">• Indigenous-led conservation• Incorporating Indigenous knowledge, values and approaches

Arrow Slokan Subregion Emerging Issues

- Climate change
- Invasive species
- Biodiversity loss
- Wildfire and fire management
- Cumulative effects (dams, forestry, agriculture and range management, recreation and access management, rural/urban development, shoreline/foreshore development)
- Emergent and persistent diseases/pests
- Loss of snowpack and cold water creeks
- Human wildlife conflicts

Key References (Priorities and Emerging Issues):

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