

Ecosystem Enhancement Program

Southern Rocky Mountain Trench 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 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				
 rivers and tributary streams spawning, rearing, overwintering valley bottom to upper basin headwaters side channel habitat alluvial fans/creek mouths cold water refugia ponds and lakes lake foreshore and shallow water lake habitat groundwater-surface water interface migratory stopover sites Wetland/Riparian 	 native fish (Westslope Cutthroat Trout, Rainbow Trout, Burbot, Bull Trout, Kokanee, Mountain Whitefish, Sculpin spp.) waterbirds (Western Grebe, American Dipper, Cliff Swallow, Bank Swallow, Black Swift) Rocky Mountain tailed frog native freshwater mussels invertebrates 	 fish passage connectivity water availability water temperature, water quality (nutrients, turbidity) productivity geomorphic processes (erosion, sedimentation, levees, large woody debris, gravel recruitment) fish overwintering fish spawning and rearing 		
	enhancement of wetlands and rip			
Priority Habitat	Priority Species	Priority Processes		
 low elevation historic wetlands and small upland wetlands floodplain ecosystems mature riparian cottonwood forests riparian habitats directly adjacent to rivers steep sided clay banks 	 western toad northern leopard frog western painted turtle at risk migratory birds and waterfowl (American Avocet, American Bittern, Forster's Tern, Great Blue Heron, Western Screech-Owl, Longbilled Curlew, Olive-sided Flycatcher, Swallows (all)) bats Coeur d'Alene salamander American beaver plants – species at risk and culturally important macroinvertebrates 	 connectivity, linkage areas valley bottom to montane hydrologic processes (filtering, recharge, flooding, storage) geomorphological function productivity beaver wetland creation breeding and nesting carbon storage wildlife movement and migration 		

Terrestrial

Protection, enhancement and identification of corridors and linkage areas

• Priority: Wycliffe Corridor, area between Koocanusa Reservoir and Cranbrook

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

Priority Habitat	Priority Species	Priority Processes
 grassland open forest old growth forest mature aspen brushlands and grasslands rock outcrops climax grasslands old growth western larch stands nesting and/or roosting sites burrows or denning areas steep-sided slopes ungulate winter range hibernacula wildlife trees and snags mineral licks calcareous rock/soils 	 mountain caribou grizzly bear mountain goat elk, deer, moose bighorn sheep wolf bats porcupine American Badger Lewis' Woodpecker Common Nighthawk Bobolink Barn Swallow Sandhill Crane Williamsons Sapsucker Flammulated Owl rubber boa whitebark pine limber pine western larch ponderosa pine huckleberry rare plants including Spalding's campion, pinewood peavine, Montana larkspur pollinators and other invertebrates fungi 	 wildlife movement and migration connectivity climate refugia food web interactions (predator-prey, seed dispersal, pollination) natural fire regime natural vegetation succession

Cultural

Protection and enhancement of Indigenous cultural values

Priority Habitat	Priority Species	Priority Processes
cultural use areas riparian areas and wetlands fisheries sensitive watersheds berry habitat	Priority Species culturally significant and medicinal plants furbearers wide ranging carnivores ungulates	Indigenous knowledge and traditional practices Indigenous-led conservation Cultural heritage resources Wildlife food resource
 old growth grizzly bear habitat and connectivity corridors fire maintained ecosystems species at risk ungulate winter range caribou habitat 	 species at risk traditional fish food sources 	conservation Connectivity Bioculture connections (traditional travel and trade routes) Maintenance of subsistence networks (hunting, trapping and fishing)

wildlife habitat areas (WHAs)	
and features (WHFs)	
 biodiversity 	

Southern Rocky Mountain Trench Subregion Emerging Issues

- Climate change
- Invasive species
- Imminent species/habitat decline
- Emergent and persistent diseases/pests
- Wildfire and fire management
- Recreation and access management
- Grazing and range management
- Conifer encroachment on native grasslands
- Human wildlife conflicts

Key References (Priorities and Emerging Issues):

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