

Castlegar and Lower Columbia Region

The following are interests area residents identified in past public engagements.

Category	Sub-category	Objective	Notes
General	<ul style="list-style-type: none"> • Ecosystem integrity • Climate Change • Balance competing land use needs. • Water Use Plan (WUP) for Kootenay River 	<ul style="list-style-type: none"> • Support ecosystem resilience and productivity • Understand impact of climate change and glacial recession on water levels 	<ul style="list-style-type: none"> • Consideration of current and future domestic water needs
Recreation	<ul style="list-style-type: none"> • Water and shoreline access for recreation • Access for boating and fishing • Parks and recreation trails 	<ul style="list-style-type: none"> • Maximize quantity/diversity of water recreation • Sufficient beach area/shoreline access • Boating access for recreational and fish harvest – spring to fall • Boating/swimming safety (debris) • Increase parks and recreation trails on remaining slope land 	<ul style="list-style-type: none"> • Preferred levels for recreation between 1435 ft and 1440 ft – offset with new boat ramps? • Arrow Recreation Management Plan – monitoring and physical works (ramps, debris management, dredging)
Quality of Life	<ul style="list-style-type: none"> • Aesthetic impacts for beach front properties • Water quality and quantity • Health and nuisance issues like dust storms and mosquitoes • Domestic water wells 	<ul style="list-style-type: none"> • More stable reservoir levels • Communication of changes in levels • Minimize periods of below 1435 ft • Increase re-vegetation program • Protect wells from lower water levels 	<ul style="list-style-type: none"> • Duncan Management Plan – mosquitoes • Arrow Recreation Management Plan – monitoring and physical works (ramps, debris management, dredging)
Flood and Erosion	<ul style="list-style-type: none"> • Property Damage • People Safety • Erosion, e.g. from Gyro Beach • Sediment impacts, e.g. Indian Eddy Boat Launch • Fluctuating water levels 	<ul style="list-style-type: none"> • Minimize high flows at Trail and Castlegar • Minimize flooding of Nelson Lakeside Park • Minimize dramatic daily flow fluctuations • Minimize negative impact of high water levels on waterfront property owners • Minimize wave and 	<ul style="list-style-type: none"> • Septic field impacts at Whispering Pines Trailer Park above 168kcfs • Minor/Major flood damage EI 426.7/428.2 m (Castlegar), 225/280 kcfs (Trail) • Kootenay Lake local flooding above 1755 ft, some flooding at 1750 ft • Data collected for 3 of 5 years monitoring of wave

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		<ul style="list-style-type: none"> wind impacts on scarp stability (Arrow) • Minimize surcharging of Arrow reservoir • Minimize full pool events and sudden draw downs • Avoid double peaks 	<ul style="list-style-type: none"> and winds impacts on scarp stability on Arrow • Multi-year monitoring & protection plans to be developed for Arrow following inventory • Protection of Argenta Slough
First Nations	<ul style="list-style-type: none"> • Representation of aboriginal interests • Understand and protect cultural sites and artefacts • Support and ensure First Nations' ability to harvest for food, cultural and ceremonial purposes • First Nation involvement in research, monitoring and management 	<ul style="list-style-type: none"> • Involve First Nations in Review process • Increase understanding of sites and locations • Minimize impact of destructive human behaviour to sites • Access to archaeological sites by appropriate people • Abundance/ diversity of traditional plants, fish & wildlife • Reservoir levels high enough to access tributaries 	<ul style="list-style-type: none"> • Separate First Nations consultation process under the Columbia River Treaty Review • BC Hydro Reservoir Archaeology Program • Exploratory/conservation evacuations/ monitoring at Arrow and Duncan • Duncan: 2 of 5 years of studies completed. Arrow: initial 2 year study completed (at least 50 sites identified) and continuing studies to be conducted. • Physical protection of known sites through re-vegetation.
Wildlife and vegetation	<ul style="list-style-type: none"> • Migratory birds • Nesting Habitat • Wetlands • Great Blue Heron habitat (GBH) • Wildlife habitat • Riparian Habitat • Littoral Productivity • Protected Areas 	<ul style="list-style-type: none"> • Lower reservoir levels in spring and summer to protect migrating birds and nesting habitat • Maximize wetlands (e.g. Kootenay Lake)/other bird habitat to provide for spring nesting, shore birds and fall migratory birds. • Maximize winter GBH habitat at Waldie Island and 	<ul style="list-style-type: none"> • Lower Columbia wetland enhancement program • Arrow Reservoir Wildlife Management Plan – 7 studies & physical works • Columbia Basin Amphibian Inventory • Arrow Re-vegetation Management Plan uses local species and traditional plants where possible. • FWCP – West Kootenay Enhancement program for ungulates

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		Breakwater Island <ul style="list-style-type: none"> Minimize human impact to GBH habitat Maximize abundance /diversity of wildlife populations/habitat Minimize inundation of vegetation during growing season Maintain Arrow vegetation at and above 1424 ft Minimize impacts to riparian habitat, e.g. Genelle gravel bars 	<ul style="list-style-type: none"> Optimal Arrow water levels at 435 m for shorebird habitat and below 438 m by Aug 7 for migratory birds Maintain water elevations at or above 418.7 m to limit public access to GBH habitat Soft constraint – Apr-Oct min Arrow water levels above 1424 ft (434m) Aquatic Invasive plant control on Lower Columbia/Kootenay
Fish and Aquatic Resources	<ul style="list-style-type: none"> White Sturgeon Rainbow Trout Bull Trout Mountain Whitefish (MWF) Kokanee Salmon Nutrient restoration Total gas pressure effects downstream of Keenleyside and Kootenay system Stranding Var Q 	<ul style="list-style-type: none"> Avoid sudden and significant flow fluctuations on the Lower Columbia River Increase tributary access and minimize migration barriers Build self sustaining population of white sturgeon. Maximize juvenile recruitment of white sturgeon Minimize sturgeon predation Minimize the number dewatered MWF eggs Maximize Kootenay Lake Kokanee shore spawning habitat Maximize abundance /diversity of priority fish species. Minimize stranding of juvenile fish/rainbow trout 	<ul style="list-style-type: none"> Arrow – Mid-Columbia White Sturgeon Aquaculture program – alignment with CPC Lower Columbia Fish Management Plan – 8 studies: includes MWF, dace and invasive species Negotiated rainbow trout protection flows from Hugh Keenleyside Habitat restoration at Sproule, Salmo, Norns, Murphy and Blueberry Creeks Soft constraint – low flows below Keeleyside dam during MWF incubation and emergence (Dec-May) Arrow outflows reduced for whitefish spawning (Whitefish Operating Agreement) Multi-year study of tributary fish migration (late Aug – Nov) and Burbot life history study

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		<ul style="list-style-type: none"> • Minimize entrainment through Keenleyside dam • Establish fish hatcheries on Arrow Lakes • Fish ladders on dams • Bring Salmon up the Columbia if technically and economically feasible • Minimize fish related impacts associated with Var Q 	<p>under Arrow Lakes Reservoir Management Plan</p> <ul style="list-style-type: none"> • Duncan dam operated to allow bull trout in and out of the reservoir and prevent fish stranding • Duncan fall flows developed for spawning and incubation of Kokanee and whitefish • Aquatic Nutrient Restoration Program on Arrow Lakes and Kootenay Lake
Cross border collaboration	<ul style="list-style-type: none"> • Cross border engagement and collaboration 	<ul style="list-style-type: none"> • Cross border understanding of issues/mutual interests • Input from those living along the Columbia River – Canal Flats to Astoria 	<ul style="list-style-type: none"> • Provincial biologists working with U.S. on Kootenay River White Sturgeon program and on a bulltrout enhancement program
Commercial Interests/ Economic Development	<ul style="list-style-type: none"> • Tourism and other waterfront businesses • Navigation/Commercial transport • Log Handling • Agriculture • Aesthetic impacts for beach front commercial properties • Reduce barriers/ increase opportunities for economic diversification/benefits • Power generation 	<ul style="list-style-type: none"> • Maximize waterfront business activities • Support fruit growers • Maximize land for agriculture • Fluctuating water levels reduces quantity/size of fish-impacts fishing tourism • Maximize power generation, eg Whatshan Project, Duncan Dam 	<ul style="list-style-type: none"> • Ferry Navigation on west arm of Kootenay Lake impacted if water below 1738 ft