

Restored Luxor Creek Links to Wildlife Corridors

Luxor Creek now flows free, and will provide complex habitats for fish species in all life stages.

Submitted by Brent Persello, Provincial Manager, Environmental Service Delivery



Large bags filled with gravel were used to divert the creek temporarily into a small culvert (right of the worker), so the original large culvert could be removed.

In early June 2015, the ministry began construction of a new three-span bridge over Luxor Creek, along scenic Highway 95, about 20 kilometres north of Radium.

Key elements of the project included construction of a new 66-metre-long, two-lane bridge, installation and operation of a signalized one-lane detour alignment, removal of a 3.3-metre diameter culvert and restoration of an 80-metre long section of Luxor Creek, completed in March.

Luxor Creek is an important tributary stream to the biologically rich Columbia River wetlands area, which provides habitat for a diverse array of aquatic and terrestrial wildlife. The stream itself provides important fish habitat for species such as rainbow trout, Westslope cutthroat trout, bull trout and kokanee.

The culvert in the creek was a seasonal fish passage barrier, due to it small diameter and strong water velocities. For many decades, it restricted a number of species from being able to access critical spawning habitat above the Highway 95 crossing. Channel enhancements in the restored section of the stream include the installation of large woody debris, construction of large boulder clusters and rock weirs, creation of resting pools, addition of spawning gravel and planting of riparian vegetation.

The new channel now allows juvenile and adult species to freely move between various reaches of the stream, both above and below the bridge, under all flow conditions. Over time, as the habitat restoration measures mature, they will provide a variety of complex habitats for fish species in all life stages.

Due to its proximity to Kootenay National Park, the Luxor Creek project will also enhance a key ecological connectivity and movement corridor for wildlife, and benefit species such as badgers, coyotes, mule deer, elk, moose and black bears which all frequent the project limits. The kokanee fall spawning run in Luxor Creek is known for attracting large concentrations of bald eagles each September, as well as other birds of prey.

The new bridge project also ties in nicely with a large-scale conservation initiative currently being undertaken by the Nature Conservancy of Canada, involving lands immediately adjacent to the project area. The Purcell/Rockies Connectivity Initiative is seeking to secure, restore and enhance land and water resources in the area commonly referred to as the Rocky Mountain Trench.



Removing sections of the small temporary culvert, once rip rap was in place to shore up the creek.

Key contributors to the success of the Luxor Creek project included the entire ministry team led by project manager Tim Dyer, Brent Shypitka of Glacier Technical Services, and TYBO Contracting Ltd. All were instrumental in helping achieve the final end product that improves fish habitat and contributes to wildlife conservation work beyond. •