

ENKON Environmental

RECREATIONAL

Case Study: Whistler Nordic Centre

Among the many facilities constructed for the 2010 Olympic Winter Games was the Whistler Nordic Centre, a venue for ski-jumping, biathlon, cross-country skiing and Nordic combined events.

The Centre was constructed in the Callaghan Valley, which lies in the watershed of Madeley Creek, a tributary to Callaghan Creek.

ENKON Environmental was hired by the Vancouver Olympic Organizing Committee to conduct a series of studies on the environmental impact that construction, the Games, and post-Games activities would have on the area.

Environmental sensitivities of the site include the protection of fisheries resources, old growth forests, and the wildlife that use the forest habitat and stream, including rainbow trout and blue-listed Dolly Varden. Most of the valley has been logged and contains relatively recent growth, but much of the adjacent area is covered by old growth forests.

Wildlife species of particular concern in the area include the Coastal tailed frog (blue-listed), Rubber boa, Spotted owl (red-listed) and northern goshawk, Peregrine falcon (red-listed), Grizzly bear and wolverine (both blue-listed).



In June and July of 2002, ENKON completed a series of field studies that included:

- ~ fish population sampling and habitat characterization in Madeley Creek, its tributaries and an unnamed creek;
- ~ a vegetation survey to identify old growth trees, rare vascular plants and plant communities that could be affected by construction of trails or other facilities, and to identify areas that could be reclaimed or enhanced to improve wildlife habitat;
- ~ an herpetile (amphibian and reptile) survey that focuses on the blue-listed coastal tailed frog, which potentially occurs in Madeley Creek;
- ~ bird surveys to identify nests and potential nesting sites for all birds but particularly for the red-listed spotted owl and peregrine falcon; and
- ~ mammal surveys, including a foot survey to look for small mammals and wildlife signs, and a helicopter survey for ungulates.

ENKON prepared maps of environmental resources and land uses on which we overlaid the proposed trails, access roads and other project facilities. These maps were used to assess the potential impact of constructing the Whistler Nordic Centre.

Case Study: Whistler Nordic Centre *(continued)*

Phase II

ENKON subsequently completed additional field studies on sensitive environmental resources identified during the preliminary review, including:

- ~ a rare vascular plant and plant community survey to define preservation areas associated with the riparian areas of Tributary 1 of Madeley Creek, Tributary 2 of Callaghan Creek, and Wetlands 1 & 2
- ~ a survey to define the preservation boundaries of "Sensitive Ecosystems" (i.e., wetlands, riparian and old growth forests) within and adjacent to the Whistler Nordic Centre
- ~ a survey to define significant trees that should be protected
- ~ a diurnal and nocturnal raptor breeding survey (specifically focusing on Spotted Owls and Northern Goshawk) to identify nest locations and associated buffer zones
- ~ a Harlequin Duck survey to define potential preservation areas associated with nesting and breeding habitat



~ fish population surveys to assess fish utilization in upper Tributary 1 of Madeley Creek, Tributary 2 of Callaghan Creek and Wetlands 1 & 2 to determine no disturbance setbacks

~ additional passerine surveys that focused on both interior and edge habitats for habitat enhancement/mitigation

In both phases, ENKON prepared environmental impact assessments that addressed the potential effects of construction, Olympic operations, and post-Games operations on the environmental resources of Callaghan Valley.

ENKON recommended mitigation measures to avoid or minimize the potential effects identified, and liaised with environmental regulatory agencies to ensure that impact assessment and environmental studies met their requirements, where applicable.

Since completing the initial two phases of this project, ENKON was hired to monitor the construction phase and continues to monitor the operation and de-commissioning phases.



ENKON Environmental

Contact:
Cameron Kring,
Director of Business
ckring@enkon.com
tf: 1-800-374-5291

Victoria
Suite 310 - 730 View Street
Victoria, BC, Canada
V8W 3Y7
t: 250-480-7103

Vancouver
207 - 5550 152nd Street
Surrey, BC, Canada
V8S 5J9
t: 604-574-4477