WILDLIFE RESOURCES

VOLUME 2, SECTION 14

The Environmental Impact Statement (EIS) details the environmental assessment undertaken for the Site C Clean Energy project. The EIS includes the project rationale, identifies potential effects and proposes measures to avoid or mitigate these effects. The EIS also describes the benefits Site C would provide for customers, Aboriginal groups, northern communities and the province as a whole.

ABOUT THE ASSESSMENT

The assessment considered the potential effects of Site C to habitat alteration and fragmentation, disturbance and displacement, and direct and indirect mortality to the following key indicator groups: butterflies and dragonflies, amphibians and reptiles, migratory birds, non-migratory gamebirds, raptors, bats, furbearers, ungulates, and large carnivores.

ASSESSMENT AREA

The local assessment area encompasses the project activity zone, buffered by an additional 1,000 metres. It also extends downstream from the Site C dam to the Alberta border and includes a 1,000 metre buffer on both the south and north banks of the Peace River. The regional assessment area includes most of the Peace lowlands eco-section and incorporates all project components.

SUMMARY OF POTENTIAL EFFECTS AND MITIGATION MEASURES

POTENTIAL EFFECTS	KEY MITIGATION MEASURES
Habitat alteration and fragmentation	• Develop a wetland mitigation and compensation plan • Establish barriers and environmental protection zones to avoid direct disturbance to wetland sites • Create new wetland habitat areas as partial compensation for wetland loss due to the reservoir • Retain non-merchantable trees and vegetation in riparian areas within a 15 metre buffer zone from the reservoir's high water mark, where feasible • Incorporate nest boxes for cavity-nesting waterfowl into wetland mitigation plans and within riparian vegetation zones, where feasible • Incorporate bat roosting habitat features into new bridge designs, where feasible • Install bat boxes on free-standing poles or on facility walls where their presence will not interfere with operations and maintenance • Incorporate artificial snake dens into habitat compensation works, as feasible. • Provide artificial fisher den boxes with forested stands with limited natural den trees • Maintain the surface flow patterns to maintain wetland function, as feasible
Disturbance and displacement	• Erect Bald Eagle nesting platforms along the reservoir shoreline • Remove nests that could be lost during seasonal flooding associated with construction • For active nests retained through the construction period, a "no-clearing buffer" around each active nest will be implemented • Establish barriers around Sharp-tailed Grouse leks adjacent to project activity zones

Potential Effects	Key Mitigation Measures
Mortality	• Design a portion of the wetlands created to compensate for habitat loss to remain fish-free to eliminate predation to invertebrates (dragonfly larva), amphibians, and reptiles • Include amphibian passage structures in road design where roads are adjacent to wetlands or amphibian migrations • Clear forested habitat before inundation begins

Key Findings

- The primary effect of the project on wildlife resources is considered to be habitat alteration and fragmentation.
- Breeding habitat of Canada, Cape May and Bay-breasted Warblers, Yellow Rail and Nelson's Sparrow will be affected by the construction of the dam and creation of the reservoir. Because these migratory birds are considered species at risk, a determination of significance has been made.
- For all other key indicator species, proposed mitigation will be effective, and the project will not jeopardize the persistence of these groups in a regional context.

ABOUT THE SITE C CLEAN ENERGY PROJECT

Site C is a proposed third dam and hydroelectric generating station on the Peace River in northeast B.C. Site C would provide 1,100 megawatts (MW) of capacity, and produce about 5,100 gigawatt hours (GWh) of electricity each year – enough energy to power the equivalent of about 450,000 homes per year in B.C.

Site C is undergoing a cooperative environmental assessment by the Canadian Environmental Assessment Agency (CEA Agency) and the British Columbia Environmental Assessment Office (EAO). The environmental assessment process commenced in August 2011 and is anticipated to take approximately three years to complete.

FOR MORE INFORMATION visit bchydro.com/sitec

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