

General Effects and Mitigation

The Enbridge Northern Gateway Project has developed measures to avoid, reduce, or mitigate potential Project effects on wildlife during the construction and operation of the pipelines and Terminal.

Three main types of potential effects have been identified as follows:

- Reduced wildlife habitat (as natural areas are cleared for construction or through sensory disturbance)
- Changes in wildlife movement patterns (particularly along the right-of-way “ROW”)
- Mortality (from potential vehicle collisions or illegal hunting activities)

Mitigation measures include (but are not limited to):

- Reduce disturbance by routing the ROW along areas where other infrastructure development already exists (e.g., roads, seismic lines and pipelines)
- Use existing access roads wherever possible
- Limit the area cleared for temporary workspace and then re-vegetate these areas using native species
- Protect wetlands using a variety of measures:
 - using existing water course crossings where possible
 - minimizing disturbance of soil and sedimentation
 - reclaiming areas to the pre-construction profile
 - allowing wetlands to regenerate naturally
 - monitoring effectiveness of wetland reclamation, making adjustments as necessary
- Survey important wildlife habitat features (grizzly bear dens, nests of sensitive bird species, dens of other animals, mineral licks [i.e. salt licks], and elk migratory paths) and implement measures such as construction setbacks to avoid them
- Maintain habitat connections between key forested areas, where possible, by placing coarse woody debris on the ROW after construction or facilitating the re-growth of vegetation along the ROW
- Track and report all wildlife incidents (wildlife vehicle collisions, bear encounters or problems) and engage the appropriate wildlife authority as required

Additional Protection Measures for Some Key Species

Grizzly Bear

- Develop food and waste storage protocols to avoid attracting wildlife to camps and work sites
- Develop and implement protocols for avoiding and managing bear-human conflicts
- Avoid sensory disturbance in identified key habitat areas (winter denning and spring feeding areas)
- To minimize risk of wildlife-vehicle collisions, discourage bear use of the ROW near transportation corridors by planting non-palatable natural vegetation
- Explore additional protection measure opportunities by consulting with other infrastructure development projects (such as construction of roads, seismic lines, and other ROWs) in the area to reduce the density of linear features

Woodland Caribou

- Reduce line of sight along the ROW
- Minimize the length of the open trench and fence where falling hazards have been identified
- Maintain gaps in windrows (a row of cut hay or small grain crop allowed to dry before being baled) and raised pipes
- Minimize land disturbances within woodland caribou's preferred late winter foraging habitat
- Avoid sensory disturbance in key habitat areas during the winter season where feeding may be limited
- Explore opportunities, in consultation with land managers, First Nations and public stakeholders, to reduce the density of linear features

Mountain Goat

- Follow aircraft flight guidelines to avoid disturbing goats
- Avoid clearing and construction during sensitive timing windows
- Implement mountain goat setbacks. These setbacks vary by goat range and include:
 - avoiding road access within at least of 500 m of goat ranges
 - limiting ground-based industrial development within at least 500 m of identified goat winter ranges
 - limiting aerial-based industrial activities within a 2,000 m line-of-sight of goat winter ranges

Migratory Birds

- Clear natural vegetation outside of the breeding season

Trumpeter Swans

- Implement setbacks around identified trumpeter swan lakes, avoiding long-term development (roads, pipelines, and infrastructure) within 500 metres of the high water mark of the lake

Northern Gateway is committed to implementing wildlife setbacks. However there will be cases where this is not possible. Where disturbance is unavoidable, Northern Gateway will consult with appropriate regulator(s) and interested and affected Aboriginal groups to discuss best possible options and management strategies.

For a complete list of wildlife mitigation measures, see Volume 6A: Environmental and Socio-Economic Assessment, Table 9-10.