

OIL SANDS

Wildlife and Biodiversity



our challenge

Like anywhere in the world, where there are people, there are impacts on ecosystems and wildlife. This is no different in the oil sands region, where significant industrial development coexists with a thriving ecosystem, bringing with it potential habitat changes that are major challenges to manage.

our actions *

Alberta monitors both natural and human-caused changes to wildlife and biodiversity. We work with industry to reduce impacts to wildlife on sites and to address the unique issues facing wildlife in this rapidly growing industrial region. Actions require site-specific plans to keep wildlife safe, minimize habitat disturbance and ensure long-term health of ecosystems.

fast facts

- > Animals like moose, caribou, deer, wolves, black bears, songbirds and owls are characteristic of the boreal forest that overlaps the oil sands region.
- > Alberta is home to over 580 wildlife species, including amphibians, reptiles, birds, fish and mammals. Nearly half the species of birds in North America use the boreal forest each year.
- > Modern wildlife management includes the conservation of plants and invertebrates like insects. About 3,500 species of plants and fungi and many thousands of invertebrates are found in the province.
- > The Alberta Biodiversity Monitoring Institute reports that the Lower Athabasca region shows a species intactness index of 94 per cent—close to a completely intact condition for the region.



THE GREAT BLUE HERON NESTS IN COLONIES THROUGHOUT MUCH OF ALBERTA, INCLUDING THE BOREAL FOREST.

alberta biodiversity monitoring institute

- > The Alberta Biodiversity Monitoring Institute (ABMI) is a non-profit organization composed of government, industry, academia and environmental groups.
- > ABMI collects data and reports on thousands of species, habitats and human footprint activities at 1,656 sites across the province.
- > The data is used to achieve responsible environmental management in the oil sands area.
- > The human footprint index used by ABMI indicates seven per cent of the Lower Athabasca region's landscape has been altered as a result of human development.
- > The ABMI will be the source of data for evaluating changes over time for approximately 75 per cent of the land, water and biodiversity indicators identified in the Lower Athabasca regional plan under Alberta's Land-use Framework.

managing wildlife and biodiversity

- > Wildlife and biodiversity are protected by laws and regulations. Environmental impact assessments are required for large-scale industrial operations.
- > Operators are required to have plans in place to minimize their effects on wildlife and other biodiversity. The Alberta government's role is to monitor and verify that industry undertakes their plans effectively.



RESEARCHERS WORK AT THE ALBERTA BIODIVERSITY MONITORING INSTITUTE.



THE BEAVER RIVER RUNS THROUGH THE COLD LAKE OIL SANDS DEPOSIT IN EASTERN ALBERTA.

mitigating impacts

- > Various techniques are used by industry to minimize impacts on wildlife and biodiversity. Operators of large-scale industrial projects must follow government-approved plans for the responsible development of resources. Techniques include:
 - Restricting industrial activity during key biological periods, such as calving and nesting.
 - Maintaining the integrity of large river corridors to enable wildlife movement.
 - Progressively reclaiming land in key wildlife areas.
 - Increasing access for wildlife movement.
 - Deterring wildlife from entering industrial areas using sound, effigies and other deterrence tools.
 - Reducing industrial footprints by encouraging different operators to share site access (e.g. roads) where possible and requiring the use of lower impact technology for seismic exploration.
 - Constructing nesting sites that replace natural sites lost to industrial activity.