

SCEK Project Profile

Project Name:	Recommended Application of Ecological Buffering Criteria for Oil and Gas Activities in Northeast British Columbia
Project Number:	EI-2015-04
Proponent:	EcoLogic Research
SCEK Funding Envelope:	Environmental Impacts
Timeframe:	September 1, 2014 to October 31, 2015

Project objectives

The objectives of this project are to:

1. Identify the potential benefits of ecological buffering as a technique to mitigate impacts of oil and gas activities in northeast BC.
2. Develop recommendations for the use of ecological buffering, where warranted and practicable.

Project description

This project will conduct a review of scientific and management literature to characterize the potential benefits of using ecological buffers to mitigate the impacts of oil and gas development in northeast BC, and to provide recommendations for their use. The project will generate a manuscript suitable for publication in a peer-reviewed scientific journal, as well as extension materials with recommendations suitable for regulators and companies.

Project background

Buffering industrial infrastructure and other anthropogenic landscape features is becoming an increasingly common technique to: 1) protect ecosystems and features from modification and species from disturbance; and 2) measure the extent of the human footprint to index impacts on the land base. Buffer distances applied for these purposes vary significantly depending on the ecosystem or species of concern, characteristics of the industrial activity, the degree of precaution applied, and the objectives of the buffering. Although the application of buffers to mitigate impacts of oil and gas activities might be warranted in some circumstances, there has been no systematic review of the benefits of buffering to inform their use as a management technique.

Project approach

The project will comprise the following activities:

1. Collect and review scientific and management literature regarding the ecological benefits of buffering to mitigate impacts of industrial activities relevant to oil and gas operations in boreal forest environments.
2. Draft a manuscript for publication in a peer-reviewed scientific journal.
3. Circulate the manuscript for external review by relevant academic authorities and incorporate edits and comments.
4. Submit the manuscript for publication.
5. Consult with regulators, industry associations and companies to identify opportunities and risks related to buffering.
6. Draft extension materials, including recommendation.
7. Circulate extension materials for review.
8. Incorporate recommendations and submit final deliverables.

Project deliverables

The deliverables from this project include the following:

1. Peer-reviewed manuscript suitable for publication in a scientific journal.
2. Extension report highlighting major findings and recommendations for regulators and companies.