Wildlife in Cumulative Effects Assessment: Assessing Needs and Processes in Southwest Yukon

Executive Summary

Honours Undergraduate Thesis

Shailyn Drukis
shailyn.drukis@gmail.com

Supervisor: D.S. Slocombe

Geography and Environmental Studies
Wilfrid Laurier University

Introduction

The southwest Yukon is a large mountainous area, famed for its wilderness and wildlife resources. Wildlife is of particular significance in this region because of its ecological and cultural values, and as a base for considerable tourism. While Kluane National Park and Reserve encompasses 22,000 km^2 at the heart of this area, there are increasing concerns for the current and future proliferation of small and large-scale activities.

The process of conducting environmental impact assessments in the Yukon is still relatively new. Within the territory, devolution occurred in 2003, transferring the responsibility of land and resource management from the Government of Canada to the Yukon Government. This lead to the development of a variety of processes and legislated frameworks in conjunction with comprehensive land claims, including the Yukon Environmental and Socio-Economic Assessment Act. While the Act states that projects must be evaluated for the adverse socio-economic and environmental cumulative effects that may occur, it does not provide a definition of cumulative effects, or guidance on how to assess them. Despite the growing attention given to cumulative effects assessment (CEA), there are a number of challenges that continue to hinder its effectiveness. While many of the challenges are not unique to the southwest Yukon, this area's distinct characteristics exacerbates the obstacles to effective CEA.

Overall Research Goal

The overall research goal of this thesis was to outline the needs and challenges for identifying and monitoring cumulative effects on wildlife in the southwest Yukon, and to review and assess relevant tools and approaches for this in the Yukon's institutional, policy and legislative context.

Objectives

To achieve the research goal, the objectives were to:

1) Review literature on wildlife cumulative effects identification, monitoring and assessment to develop options, an assessment framework, and identify best practices.

2) Undertake a detailed review of the needs and existing options in southwest Yukon via the literature and document review, and key informant interviews.

3) Identify and evaluate southwest Yukon options to develop specific recommendations and avenues for further research.

Methods

To achieve the research goal, a qualitative, multi-method case study methodology was used. The goal and objectives of this thesis stem from meetings held in the Yukon prior to the commencement of my research, where I scoped research needs in the community. The southwest Yukon was chosen as the case study due to the previous research that has occurred in this region, local First Nations interest for this project, and its complex and unique land use planning situation.

A literature review and document analysis was conducted on cumulative effects assessment, as well as wildlife monitoring and management in the Yukon. Subsequent fieldwork occurred in Whitehorse and the southwest Yukon in 2013 and 2014. I obtained qualitative data from nineteen key-informant interviews with staff from federal and territorial government agencies, YESAB, academia, non-governmental organizations, and First Nations.

Results

Each participant recognized that addressing cumulative effects on wildlife in the southwest Yukon is imperative because of the important role that healthy wildlife populations and functioning ecosystems play for the area's cultural, social, economic and ecological values. Despite the CEA mandate within YESAA, many respondents felt that cumulative effects on wildlife are not being addressed as effectively as impacts from single-projects. Six common needs, gaps and obstacles (Data, Research, Monitoring, Limited capacity and time, Political will, Land use planning) emerged from the key-informant interviews, which are believed to be hindering effective CEA in the southwest Yukon.

Data

The most common challenge identified in participants' responses for effectively assessing cumulative effects on wildlife in the southwest Yukon is the lack of useful

baseline data. While a great deal of data is being collected in the region by governments, researchers, consultants, and First Nations, there are still a number of gaps. This has been a challenge for understanding the current environmental conditions of the area, and how projects interact with each other. With many individuals living and working on the land, there are not enough mechanisms for converting their wildlife observations into useful data, nor tools for managing existing and future data.

Research

Connected to the challenges of baseline data gaps in the southwest Yukon is the opportunity that research can play in helping to address these information gaps. Despite the large amount of data being produced through research in this region, many research projects are not necessarily relevant to local communities and for making management decisions for CEA. Concern was expressed surrounding the lack of long-term commitments by researchers, as well as a shortage of mechanisms that ensure research results are captured and disseminated back to the community.

Monitoring

Despite the obvious benefits of having monitoring mechanisms in the CEA process, a shortage of consistent, standardized, and relevant long-term monitoring programs on wildlife continues to hinder the ability to integrate meaningful data into the assessment process. This, in part, is attributed to the lack of support provided towards broader biodiversity studies, current political will, and the capacity of the region. There are a number of stakeholders, agencies and boards within the southwest Yukon that could play a stronger role in ensuring that these long-term monitoring programs are established and maintained, and not enough effort is being made to ensure that project proponents and regulators follow through with monitoring, before and after the assessment

Limited Capacity and Time

Some of the challenges that were highlighted as being distinctive to the southwest Yukon include the context of it being a large region with a very small population. This has opened up a variety of obstacles associated with the high costs connected with conducting wildlife surveys in remote areas, the limited amount of human and resource capacity for conducting CEA's, the transient nature of staff (frequently moving between

contracts and positions), as well as challenges of integrating traditional and local knowledge into the short assessment time frames.

Political Context

Some of the other challenges that were revealed in my research pertain to the political context and EIA processes in the Yukon. While it was believed by some key-respondents that there is limited political will to address some of the key challenges of CEA, other obstacles, such as the disjunctive nature of the EIA process, lack of collaboration and transparency, and the shortage of mechanisms for follow-up enforcement and monitoring of development activities, are hindering the effectiveness of CEA. There are also concerns surrounding how CEA is communicated to the public and stakeholders. It is argued that not enough is being done to ensure that proponents understand the information needs for CEA, as relevant stakeholders are still unclear about how the CEA process is supposed to occur.

Land Use Planning

One of the most complex challenges expressed during the key-informant interviews was the lack of regional land use planning in the southwest Yukon. Though the Kluane region is one of the eight recommended land use planning regions, land use planning is not expected to occur any time soon for a variety of legal, financial and practical reasons. This lack of land use planning context has created large hurdles for managing and monitoring cumulative effects on wildlife, making it harder for assessors and managers to visualize (through defined thresholds), the future state of wildlife.

Recommendations

In response to the challenges identified by key-informants, my thesis aimed to provide recommendations that could assist with making assessment of CE on wildlife more effective in the southwest Yukon. I therefore recommend that financial resources, effort and time be allocated towards conducting a comprehensive data gap analysis that is specific to the southwest Yukon. If done collaboratively between stakeholders involved with environmental assessment, it would help determine baseline data that is missing, and what data needs to be updated. Tied directly to this, more guidance needs to be provided to assist researchers in working on projects that directly address these data needs.

Stronger mechanisms need to be developed to guarantee that the data from these research projects is transferred into a data management system and is available for assessments.

Focus should also be placed on increasing the number of long-term, standardised wildlife monitoring programs in the area, and developing a comprehensive data management system that includes a practical and meaningful way for individuals to share their data. Increased collaboration between departments, boards and stakeholders would help tie together the current fragmented EA system, especially if the roles of stakeholders within an assessment are clearly defined. An updated and common guide for CEA also needs to be developed, accompanied with useful resources and tools. Additionally, a stronger focus needs to be placed on developing a land use-planning context for the region.

Conclusion

The Yukon presents a unique opportunity in that the wilderness values and populations of wildlife are relatively intact, with fewer development pressures occurring compared to many of the southern parts of the country. There is also an exhilarating and inimitable consensus that wildlife must be the main consideration within any development activity assessment because of the acknowledged variety of values that wildlife holds for Yukoners. Despite the complexities and challenges associated with conducting CEA in the southwest Yukon, these challenges are on the radar of many stakeholders, and progress is slowly being made towards addressing them. With a relatively new system of conducting environmental impact assessment in the Yukon, we still have a prime opportunity to develop effective mechanisms, tools, and approaches that will help to ensure that cumulative effects on wildlife are properly monitored, managed, and mitigated in the future.

This summary is based on my undergraduate thesis, as below. For a digital copy please email shailyn.drukis@gmail.com

Drukis, S.K. 2016. *Wildlife in Cumulative Effects Assessment: Assessing Needs and Processes in Southwest Yukon*. Undergraduate Thesis, Department of Geography & Environmental Studies, Wilfrid Laurier University, Waterloo, ON.