Evolving Co-Management Practice:
Community-Based Environmental Monitoring with Tl'azt'en Nation on the John Prince Research Forest

Deanna Yim, Erin Sherry, and Chris Johnson

Study Objectives

The purpose of this research is to develop, apply, and evaluate methods for identifying indigenous measures of co-management success, which support meaningful local involvement and give voice, respect, and legitimacy to traditional knowledge and values. Using a case study of Tl'azt'en Nation and their co-managed John Prince Research Forest the research will address the following objectives:

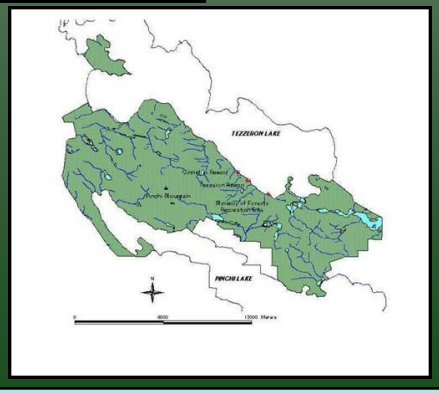
►**Measures formulation**: develop and implement a process to identify Tl'azt'en measures of co-management success, specifically related to environmental sustainability;

►**Measures assessment**: define a framework to assess and screen measures of co-management success from an indigenous perspective;

►**Measures application:** apply a priority set of Tl'azt'en measures and assess the challenges and opportunities involved;

►**Comparison with other studies:** compare Tl'azt'en measures with those generated in similar settings; and,

► **Methodological evaluation:** evaluate and refine methods for elaborating indigenous measures of co-management success.



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Preliminary Research Framework:
This collaborative research partnership with Tl'azt'en Nation uses participatory research methods and seeks to provide an integrative, flexible framework to apply indigenous and scientific knowledge in community-based environmental monitoring.

Establish a Forest Team (FT) and an Elder Resource Team (ERT) comprised of knowledgeable and respected community members using peer nominations and a snowballing technique.

With the FT, identify and discuss important plants and animals to be monitored on the JPRF related to critical traditional land use activities, including: hunting, trapping, fishing, food and medicine plant gathering.

Hold a multi-day ERT retreat at the JPRF to share expectations and needs concerning environmental monitoring, and to discuss knowledge, values, practices, and beliefs related to identified plants and animals.

Develop a Tl'azt'en set of environmental measures from content analysis of FT and ERT feedback.

Develop a candidate set of environmental measures from literature analysis and archival record review.

Verify and prioritize environmental measures with the FT based on assessment criteria developed by Tl'azt'en participants and from the literature. Measures will be organized into three categories; those that are recommended, proxy, and optional.

Develop monitoring protocols for the sub-set of recommended measures, including methods of data collection, sources of data, scale of measurement, timeframes, and methods for reporting to JPRF partners and stakeholders. With the FT, assess the challenges and opportunities involved in applying this priority set of measures.

- Compare Tl'azt'en environmental measures with those generated by other First Nations or co-management partnerships.
- Evaluate and suggest modifications to the methods used to develop Tl'azt'en measures of co-management success.
- Elaborate a set of criteria used to define "good" environmental measures from an indigenous perspective.

Why is community-based environmental monitoring important for First Nations?

►First Nation communities are attempting to maintain and improve environmental health, cultural integrity, socio-economic well being, and traditional practices across territories subject to centralized regulatory institutions and unprecedented levels of industrial development. Community-based environmental monitoring is an approach by which First Nation communities can apply traditional knowledge, track the health of their environment, and implement locally relevant sustainability objectives.

► Involvement of First Nations in environmental monitoring can lead to the maintenance of knowledge within the community, prevent its simplification and misuse, and protect against expropriation of decision-making by higher-level agencies (ARCUS 2004). Other benefits relate to engaging people who spend time on the land, acknowledging the legitimacy and value of traditional knowledge, building organizational capacity, capturing knowledge for future generations, and sharing observations between communities and with scientists (Whitelaw et al. 2003; Berkes 2004).

►Knowledge co-production can generate a more holistic understanding of the environment than either scientific or indigenous knowledge can alone (Berkes 1999).

► There is growing recognition that monitoring approaches developed for broad scales using a top-down approach do not translate well to the local level (Wright et al. 2002). Communities may define sustainability differently from each other and from experts, requiring a unique set of progress measures (Beckley et al. 2002).

► Research also demonstrates that bottom-up approaches to environmental monitoring increase relevance; this may translate into interest and motivation on the part of local people to become more involved in processes of decision-making and co-management (Sherry et al. 2005).

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