







### Monitoring

### Monitoring provides information about:

- Baseline conditions *before* changes takes place (either development or climate change)
- Changes that occur *during* development or as a result of climate change
- Changes that unfold *after* development

It helps build a picture of what is happening on the land over time and can signal a need to "change course" if problems are encountered.



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## Traditional Knowledge & monitoring

Indigenous Peoples have deep **traditional knowledge** of animals, habitats, weather and environmental conditions, as they have watched over their land.

Indigenous communities have seen that climate change and resource development have been accelerating. They want to be prepared for these changes.









# ON obligations on TK inclusion

The Government of Ontario is obligated to include Indigenous peoples and their traditional knowledge in ecological monitoring and land-use planning processes

One of the best ways to do this is by developing a Community-based Monitoring (CBM) program.







# Community-based monitoring (CBM)

CBM approaches include traditional knowledge in a respectful and culturally appropriate way that empowers local communities and are:

- Designed and carried out *by* the community and *for* the community
- Based on community needs and interests
- Culturally relevant and appropriate
- Community controlled, including results and data
- Advance community-led decision making
- Based on traditional knowledge and local worldviews



Coastal Guardian Network



# CBM - designed BY the community

#### Local communities decide:

- what to monitor (species, areas, etc.)
- what information to collect and use (oral stories, historical records, interviews)
- how to collect, interpret, store, and share the information
- how decisions are made based on this information.









Garth Lenz



### Designed FOR the community

### CBM is built from the ground up:

- Focus on issues (subsistence harvest) and species (lake sturgeon) that are important to the community.
- Focus on information that is easy to collect, but that helps to inform decision making (shifts in harvest areas)
- Focus on areas that make sense for the community in terms of access, use and ability to detect change.



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### Cultural benefits of CBM

- Supports local people spending time on the land
- Traditions, language and knowledge are passed on to younger generations
- Local traditions of decision-making, governance and resource management are supported





David Pearson



# Where is CBM being used?

Lots of places in Canada and around the world!

A few examples:

- The Coastal Guardian Watchmen Network on the central B.C. coast
- The Lutsel K'e Dene First Nation (LKDFN)
   Ni hat'ni Dene Program Watching the Land
- Mikisew Cree First Nation TEK-based CBM project in the Athabasca River Watershed
- The Gwich'in Harvest Study (GHS) in Yukon



Coastal guardian training



### Large CBM toolbox

<u>Patrol</u> – when on the land, local people record their observations of specific environmental conditions important to the community.

<u>Human Sensor</u> – interviews during one-on-one, group or community meetings.

<u>Journal</u> – keeping a journal, to regularly record personal observations of environmental conditions.

<u>Community maps</u> – collecting and sharing traditional knowledge-based spatial information about past and current land use.

<u>Seasonal calendars</u> – documenting changes in fish & wildlife, and other important sources of local subsistence.

<u>Participatory media</u> – community radio and/or video to document an share information about environmental changes.



# **Key Elements of a CBM Project**

- Local agreement about the CBM methodology
- A diverse team of local participants and outside partners working on a basis of trust and respect
- A long-term commitment to monitoring
- Traditional knowledge is complemented by scientific resources and technical support
- Proper recording, evaluation and sharing of results
- Integration of CBM results into decision making at the local and regional levels
- Sustained funding



WCS Canada / Justina Ray

## Getting CBM project started

#### **INTRODUCTION**

 Community explores CBM (report, brochure, discussions, meetings, workshop)

#### **COMMON LANGUAGE**

 Community Gatherings to develop terminology in the local language

#### **PROJECT INCUBATION**

- Staff training;
- Methodology tested;
- Pilot stage (data collection, archival, verification & interpretation)

#### LAYING THE FOUNDATION

- Working Group created;
- Fundraisings begins;
- Project Secretariat (Project Director, Community Coordinators) established

#### **INDICATORS & METHODOLOGY**

 Locally-appropriate indicators and methodology developed

#### **PROJECT IMPLEMENTATION**

- Methodology fine-tuned, implementation refined,
- Project continues and/or is scaled up



### Questions to consider

- ① What kind of changes have you seen on the land in the last 15-20 years?
- 2 Why do you think these changes are happening?
- 3 Are any of these changes a concern? If so, why?
- 4 Are any of these changes being monitored on your traditional territory on a regular basis? If so, who is doing it and how?
- **5** Would you be interested in developing a CBM project on your traditional territory?
- 6 Would you be interested in participating in a future workshop to learn more about the CBM approach and meet members of Indigenous communities working on such projects?



### Get in touch!

To learn more about CBM approaches, discuss a community visit, or talk about holding a workshop to explore your community's interest in developing a CBM project, please get in touch with:

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