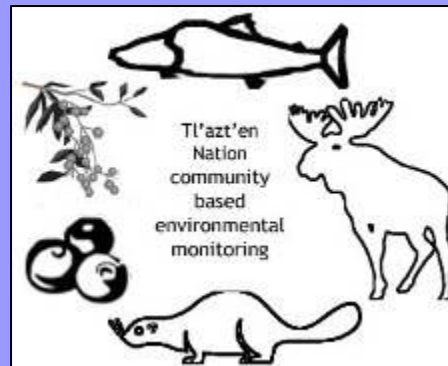




**Evolving Co-Management Practice:  
Developing a Community-Based Environmental Monitoring  
Framework with Tl'azt'en Nation  
on the  
John Prince Research Forest**



**Deanna Yim,  
Tl'azt'en Nation Community Thesis Presentation**

**August 19, 2009**



# Purpose of this research...

- ▶ to develop and evaluate a community-based process for developing Tl'azt'en Nation environmental measures
- ▶ to identify and verify Tl'azt'en Nation environmental measures
- ▶ to make examples of an applied environmental monitoring method for each traditional use activity

# Many People Have Contributed to this Project...



Forest Team



Elders Team



Together with the Research Team

# Welcome Information Session

July 20, 2007



# First Forest Team Focus Group August 2, 2007



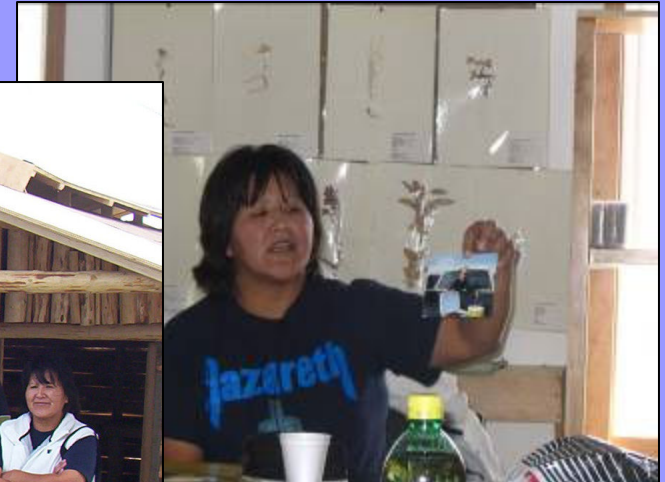


Elders Team  
Workshop  
August 20-21, 2007



# Second Forest Team Focus Group

September 20, 2007



# Data Analysis





# Community Product Development Workshop

November 1, 2008



# Third Forest Team Focus Group

## August 19, 2008

Aspects of health	Signs & signals	How to measure the signs & signals
Salmon habitat	Water temperature of Stuart Lake during salmon season	Temperature of water in Stuart Lake during salmon season
	Water levels of Stuart Lake during salmon season	Depth of water in Stuart Lake during salmon season Description of physical injuries observed on salmon caught in Stuart Lake due to low water levels

# Wrap-Up Celebration

October 16, 2008



# How was our research process evaluated?

- In-progress evaluation
  - Final project evaluation
  - Methodological evaluative comments
- ▶ Overall project rated 4.44 out of 5 between 'very satisfied' and 'extremely satisfied' (n=10)
  - ▶ Team members were able to participate when, where, and how they wanted to throughout the project (FPE: 100%, n=13)
  - ▶ Team members learned something new through their involvement with the project (FPE: 100%, n=13)
  - ▶ Team members built stronger relationships with team members (FPE: 100%, n=12)
  - ▶ Team members were satisfied with the facilitation and coordination provided by the community researchers and lead research throughout the project (FPE: 100%, n=13)

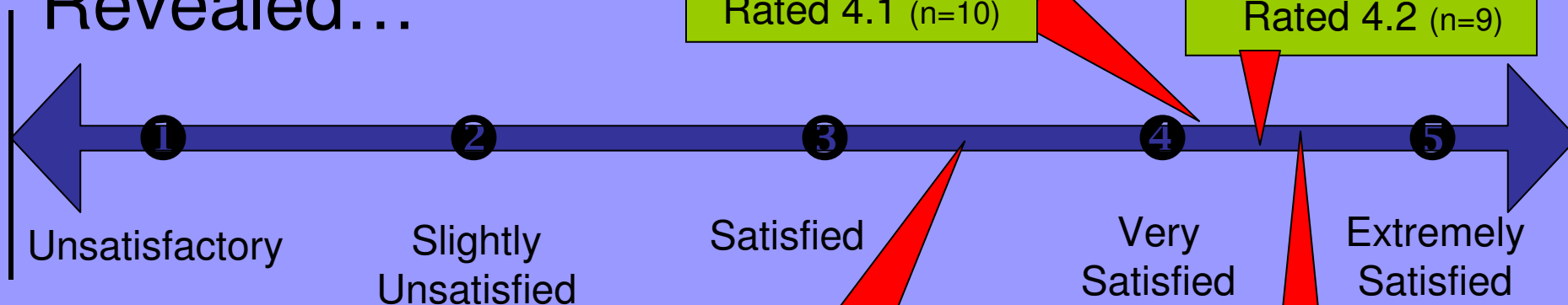
# Evaluation Results of Central Participatory Methods Revealed...



Focus groups  
Rated 4.1 (n=10)



1-on-1 Interviews  
Rated 4.2 (n=9)



Photovoice  
Rated 3.33 (n=6)



Elders team workshop  
Rated 4.43 (n=7)

# So, through all of those research events – What were the final results?

→252 Tl'azt'en Nation environmental measures developed in total

→Measures were developed for monitoring:

- environmental change across Tl'azt'en Nation Traditional territory
- adherence to Tl'azt'en traditional environmental land use methods and principles
- 5 Tl'azt'en traditional use activities

*Talo ha'hut'en*



**Fishing Salmon**

*Huda ha'hut'en*



**Hunting Moose**

*Tsa ha tsayilh  
sula*



**Trapping Beaver**

*Yoo ba ningwus  
hunulht'o*



**Gathering  
Soapberries for  
Medicinal Use**

*Duje  
hoonayin*



**Picking  
Huckleberries**

# Tl'azt'en Nation Environmental Measures

→ Measures for the 5 traditional use activities were related to three major topics (or critical local values):



Abundance



Habitat



Health & Quality for  
Consumption or Use

# Tl'azt'en Nation Community-Based Environmental Monitoring Prototypes

Tl'azt'en Nation  
Community-Based  
Environmental Monitoring

**Tl'azt'enne Environmental Assessment of Salmon Health in Stuart Lake**

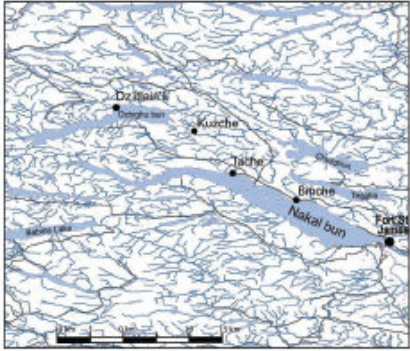
Monitoring Team:

- \_\_\_\_\_ (Elders Team Member)
- \_\_\_\_\_ (Forest Team Member)
- \_\_\_\_\_ (Youth Team Member)

Recorder

Location of Monitoring: (please describe & identify on map)

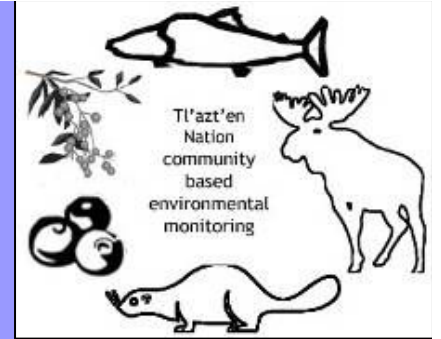
\_\_\_\_\_



Date of Monitoring: \_\_\_\_\_  
Time of day: \_\_\_\_\_



# Evaluating the Tl'azt'en Nation Community-Based Environmental Monitoring Prototypes



- ✓ - A good tool for gathering important information about the health of plants/ animals and changes seen on the land
- ✓ - Easy to complete (effort)
- ✓ - Provide important information (validity)
- ✓/✗ - Accurately and appropriately represent the knowledge of community monitors (trustworthiness)
- ✓ - Many suggested formats to present monitoring results to the community (i.e. newsletters, meetings, slideshow, storybooks, Elders gathering, reports)
- Feedback about what worked well, what was tricky, and what team members would do differently to improve the prototype

## Tl'azt'en Nation Community-Based Environmental Monitoring

-Science and Tradition-  
Respect for our Elders  
Respect for our People  
Respect for our Land


Tl'azt'en Nation Community-Based Environmental Monitoring

This DVD shares the knowledge and experiences of team members during the course of a research project titled, "Evolving Co-Management Practice: Community-Based Environmental Monitoring with Tl'azt'en Nation on the John Prince Research Forest," which took place in Northern British Columbia, Canada.

Two teams of Tl'azt'en Nation community members, a Forest Team and an Elders Team worked to shape and inform the development of the Tl'azt'en Nation Community-Based Environmental Monitoring Method. This method was developed for five Tl'azt'en Nation traditional use activities and their representative plant or animal species. These were: Fishing Salmon - Talo ha' h'ut'en; Hunting Moose - Huda ha' h'ut'en; Trapping Beaver - Taa ha' t'ap'it'isak; Gathering Soapberries for Medicinal Use - Taa ha' w'eg'as h'um'it'it'is; and, Picking Huckleberries - Duje hoo'ay'it'is. This DVD shares our experiences, and the voices, knowledge, and wisdom of the team members.

This DVD was generously funded by:  
- Social Sciences and Humanities Research Council of Canada through their Community-University Research Alliance (CURA) Program  
- Real Estate Foundation of BC  
- John Prince Research Forest  
and supported by the University of Northern British Columbia.

By: Tl'azt'en Nation and Deanna Yim  
© Chugach Resources Corporation 2008



## Collaborative Book & DVD

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

Deanna Yim<sup>1</sup>, Chris Johnson<sup>1</sup>, and Erin Sherry<sup>2</sup>

University of Northern British Columbia, Natural Resource and Environmental Studies Graduate Program, 3333 University Way, Prince George, BC, V2H 4Z1; Integrated Land Management Bureau, BC Ministry of Agriculture and Land, 2004 Park Building, 1011 4th Ave., Prince George, BC

### Community-Based Environmental Monitoring

- Community-based environmental monitoring (CBEM) is an approach to achieving effective co-management that uses bottom-up, community centered methods to translate local values and beliefs into formal monitoring frameworks that contribute to improved management practices
- Through CBEM, First Nation communities can realize local visions of environmental health and contribute to the sustainable management of resource through culturally relevant means
- CBEM builds communities into the co-management framework as an essential component of the feedback loop that informs current and future management decisions
- CBEM can utilize indigenous and scientific knowledge in a complementary manner; co-production of knowledge can generate a more holistic understanding of the environment with benefits to co-management (James 1999)

### Tl'azt'en Environmental Monitoring

Tl'azt'en environmental measures of co-management success are being developed for 5 focal plant and animal species representative of traditional use activities. These traditional use activities and representative species are:



### Research Objectives

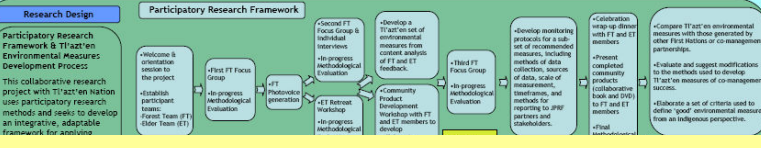
Our principal objective is to develop and apply community-based methods that will allow us to identify and evaluate Tl'azt'en measures of environmental health and sustainability. Through a case study with Tl'azt'en Nation and the John Prince Research Forest (JPRF), we will:

- develop and evaluate a community-based process for identifying Tl'azt'en environmental measures of co-management success;
- identify Tl'azt'en environmental measures for 5 plant and animal species that will contribute to the development of a Tl'azt'en CBEM system;
- work with Team members to pilot and evaluate a proposed CBEM framework for select Tl'azt'en measures of environmental health and sustainability; and,
- assess the challenges and opportunities involved in community-based environmental monitoring and recommend improvements for future projects.

### Research Design

**Participatory Research Framework & Tl'azt'en Environmental Measures Development Process**

This collaborative research project with Tl'azt'en Nation uses participatory research methods and seeks to develop an integrative, adaptable framework for analysis



## Posters

### Mr. McKay's Gr. 4,5,6,7 Class

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

November 1, 2007

**~ Project information ~**

This community-based environmental monitoring project is working with two groups of Tl'azt'en Nation community members to create a way to monitor and protect important plants and animals on the John Prince Research Forest, a part of Tl'azt'en territory.

The two groups of Tl'azt'en community members working on this project are:

Netso whudilhdzuhlne 'ilhozdilne, Elders Team



(Betty Dennis, Doreen Austin, Pierre John, Seraphine Mattess, Willie Mattess, Celestine Thomas, Helen Johnnie, Lizzie Alexis, Mary Lebrun, missing John Alexis)

Chuntoh 'ilhozdilne, Forest Team

  
John Alexis

  
Michael Aslin

  
Doreen Austin

  
Harry Austin

  
Isaac Felix

  
Mary-Ann Hanson

## Community Updates & Extension Products

# Community Products

### Community Products


- Tl'azt'enne environmental monitoring method
- DVD made from a compilation of this project's events
- Photobooklet made from photographs and stories of Forest Team members
- Photopamphlets distributed to the community after every research event summarizing who was involved and what took place
- Posters & presentations


### Want to join the team?


Make the *commitment*- come fill out an acceptance package and become a member of this project!

Talk to us for more information!

  
Deanna Yim  
deannayim@yahoo.ca


  
Bev John  
bev-jprf@james.com

  
Amelia Stark  
amelia-jprf@james.com


  
Annie-Jean Anatole  
annie-jprf@james.com


Phone: 250-996-0028

Others involved in this project!

  
Erin Sherry

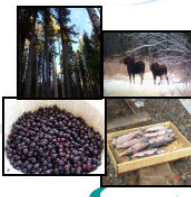
  
Sue Grainger

  
Chris Johnson

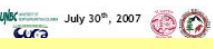
  
Dexter Hodder

### PROJECT INFORMATION

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



July 30<sup>th</sup>, 2007



## Upcoming dates

August 2: First Forest Team meeting

August 20 & 21: Elders Resource Team retreat at Cinnabar

September: Second Forest Team meeting

October: Third Forest Team meeting

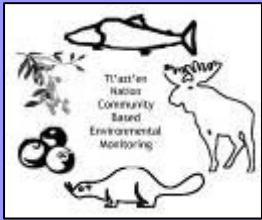
Spring 2008: Project wrap-up celebration dinner

Tl'azt'en Nation and the University of Northern British Columbia



Community-University Research Alliance  
Partnering for Sustainable Resource Management

# CURA-related Products



# Next Steps to Tl'azt'en Community-Based Environmental Monitoring on the JPRF

Team & community meetings to evaluate and discuss monitoring results



3

Adjust John Prince Research Forest co-management and community-based environmental monitoring goals (if necessary)

4



2

Tl'azt'en Nation Community-Based Environmental Monitoring

**Tl'azt'enne Environmental Assessment of Salmon Health in Stuart Lake**

Monitoring Team:

- \_\_\_\_\_ (Elders Team Member)
- \_\_\_\_\_ (Forest Team Member)
- \_\_\_\_\_ (Youth Team Member)

Name: \_\_\_\_\_

Location of Monitoring: (please describe & identify on map)

Date of Monitoring: \_\_\_\_\_  
Time of day: \_\_\_\_\_

1

Develop additional indicators and measures of environmental health (if necessary)

Community-based environmental monitoring



# Snachailya

## (Thank you & Acknowledgements)

- Tl'azt'en Nation
- Tl'azt'en Nation Chief and Council
- Elders and Forest Team members
- Mr. Mckay's Eugene Joseph Elementary School Gr. 5,6,7 class
- **Supervisors:** Dr. Christopher Johnson, Dr. Erin Sherry
- **Steering committee members:** Sue Grainger, Dexter Hodder, Bev John, Amelia Stark
- **Research assistants:** Annie Anatole, Theresa Austin
- **Committee members:** Karyn Sharp, Dr. Pamela Wright
- **CURA project members**
- **Funding:** Social Sciences and Humanities Research Council of Canada through their Community-University Research Alliance (CURA) program, Real Estate Foundation of BC, John Prince Research Forest