

# Watershed m Advisory

**OM Program** 

George Low AAROM Coordinator/Biologist Mike Low AAROM Technical Advisor Dehcho First Nations

# Agenda DWEAC meeting

- Day1; AAROM Committee meeting
- Opening Prayer & Introductions
- Review of Minutes;2013 meeting
- Project Results; Mike Low
- Community Project Review & Member input



# Agenda DWEAC meeting;

- Day 2; ENR: Community Water Monitoring Day
- Overview of NWT Water Stewardship Strategy
- Overview of NWT-wide Community-based Water Quality Monitoring Program (CMB) And work with AAROM in the Dehcho
- Training on Equipment
- Dehcho Results
- Discussion better sharing of results
- Discussion on capacity building



# Agenda DWEAC meeting;

DAY 3; AAROM Committee meeting (Cont'd)

- Human Biomonitoring project
- Country Food Workshop 2014
- New projects new direction
- House Cleaning
- Participant round table
- Closing prayer



## Review of minutes



# Mike Low; Project results



# The Advisory Committee

The Committee's mandate is to "...protect and preserve the rights of all Aboriginal peoples to healthy waters, fish stocks and aquatic environments in the Dehcho."





# **AAROM Program Review**

- Deanna Leonard; DFO Fisheries Mgmt. is on educational leave.
- Dehcho AAROM has completed a three year Multi-year agreement.
- DFO has suggested we renew with a five year agreement
- The National AAROM Program funding remains in place
- " AFS project funding stable



#### Dehcho AAROM

- Partnerships ENR, Water Division; agreement with AAROM
  - Water Quality and contaminant data
  - Masters Student support for Sanguez Lake project
- GNWT, CIMP funding
  - Heidi Swanson, U of Waterloo; Mercury bioacc./biomag study
  - Environment Canada; mercury analysis of Dehcho lakes
- AANDC, NCP funding
  - "Return to Country Food" annual results workshop; share funding
  - Analysis support of Heidi's project
- GNWT; Transportation
  - Prov. Ck. Grayling Spawning Ground Rehabilitation
- Health Canada; Country Food survey, support of workshop

#### AAROM Projects and Studies

- We have good core funding for the AAROM program for
  - Staffing; Coordinator & Technical Advisor; 18 seasonal monitors
  - Meetings, admin, training, travel youth camps, projects, equip.
  - Funds JMR, Pehdzeh Ki & Nahanni Butte projects
- AAROM program has an experienced Technical Advisor. Mike Low works with the community monitors to ensure quality data is collected.
- Capacity building; ongoing most community programs are working well.



# Partnering with AFS;

- AFS Projects (DFN AAROM Administered) 250 K
  - Sambaa K'e f shery monitoring
  - FPRMB f shery monitoring
  - KFN & WPFN Fish stock assessment studies on Great Slave Lake
  - Ka'a'gee Tu Tathlina Lake stock assessment
  - Liidli Kue monitoring program
- O&M Equipment Funding





#### Katlodeeche; Peter Sabou

- Great Slave Lake Fish Stock & Lake Ecology Assessment Project
  - A DFO Science Assessment project
- " Vessels and field workers
  - Administered by Dehcho AAROM
- DFO GSL/Buffalo River Inconnu
- Stock Identif cation; Yates River & Whitesand River inconnu collection
- GSL IFMP
  - Involvement of FN's in the Great Slave Lake f sheries planning process
- Future Water Quality monitoring



#### West Point First Nation

- DFO; Great Slave Lake Project
  - Provide f eld worker for GSL project
  - Barry Buckley Jr.



### Kakisa – Ka'a'gee Tu; Melaine

- Kakisa R. Sports Fishery Survey; AAROM study-Melaine Simba
- Tathlina Lake Fish Stock assessment
  - Every second year (Fred Simba, Chris Chicot)
  - Ka'a'gee Tu gillnetting and sampling study
    - CPUE, size and age, sex and maturity, mercury levels etc.
    - Mike Low and crew did the f shing and sampling, Dec. 2014
    - DFO, Science Assessment responsible for the analysis.
- Tathlina Lake Monitoring
  - Melaine, with CIMP, U, AAROM
- Country Food Survey
- Human Biomonitoring Pilot \*
  - U of Waterloo



# Deh Gah Gotie - FPRMB, Priscilla

#### Canadien

- Sports f shery monitoring;
  - Joe Lacorne & Steven Nadli
  - Survey of anglers in the Mackenzie River
  - Regulation changes in effect!!!!
- Water quality monitoring
  - Mackenzie River
- Prov. Ck. Grayling Study \*
- AAROM boat support of "Yo Canoe Camp"
- Cabin Building





### Sambaa K'e; Jessica Jumbo

- Boat Patrol Fishery Monitoring,
   Victor and Tyler Jumbo
- Water Quality sondes, etc.
- Thermocline monitoring
  - Temperature Prof le
  - □ Lake Trout thermal habitat
- Climate Change
  - Fish Health occurrences
  - Fish Stock problems (Slinks)
  - "Country Food Survey"





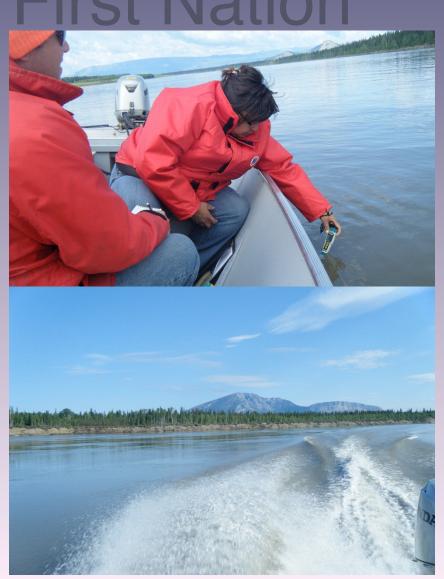
#### Liidlii Kue First Nation

- Boat patrol monitoring (Edward Cholo & Nick de Pelham
  - River usage
  - Traditional sites; GPS photos
  - Water Quality monitoring support (Mackenzie and Liard)
- Winter f shing;
  - Big Island Lake
  - Mustard Lake
  - Little Doctor & Cli lakes
- Country Food Survey



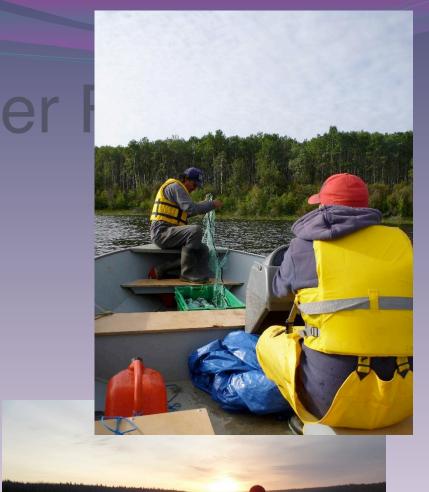
Nahanni Butte First Nation

- Boat patrol monitoring
  - River usage (limited data produced)
  - Water quality monitoring
  - Involvement with Prairie Creek monitoring
  - 2015-16
  - Metal Suite in Fish?
  - SONDE in South Nahanni



Jean Marie River

- Boat Patrol Monitoring
  - River usage (Angus Sanguez)
- Water Quality data (Jean Marie R
- Heidi's mercury study; Ekali, Sanguez, Gargan and McGill Lakes
  - Year two of three year study
- Hosted "Country Food workshop
- Biomonitoring Pilot Study





#### Pehdzeh Ki First Nation

- Charlie Tale
- Garage for boat and equipment storage
- Boat Patrol
- Water Quality support
- Winter f shing; Fish Lake



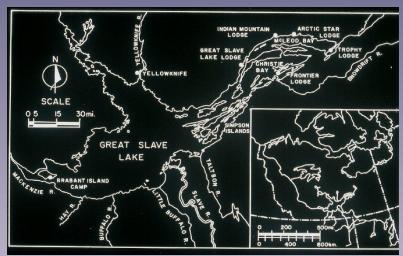
# Fort Simpson and Fort Providence Métis

- Danny Peterson Simpson member
- John McLeod; Providence member
- training
- Youth and elder programs
- Conferences/workshops
- Ecology camps



#### Partnering & Collaborative

- Extremely important to our AAROM program
  - \$\$\$; DFO, AANDC; CIMP & NCP, HC, ENR, MACA
  - Not only for \$\$\$ but to bring expertise into the Dehcho
    - Environment Canada, Aurora College, Taiga labs, GNWT Health, BEAT Environmental
  - Community Involvement





# What's Up for 2015-16?

# Water Quality and Contaminants Monitoring

- Agreement with ENR, Water Division
- Dehcho AAROM responsible for collecting wat quality data in community waters
- Hopefully a long-term program
- AAROM monitors involved in deploying, maintaining and retrieving water quality instruments
- Projects based on Community concerns
- Support of other aquatic projects such as the Sanguez Lake f ish-down project
- Aurora College; NRTP student internship
- Community Monitor training



# What's Up for 2015-16?

- Grayling Habitat Rehabilitation
  - Location; Providence Ck. (South Shore)
    - Partnerships; DFO Habitat, Deh Gah Gotie FN, Dehcho AAROM; GNWT Transportation (No Net Loss Project)
    - Removal of two abandoned beaver dams
    - Spawning bed improvement
      - 90 Cubic Yards of clean stone spread in riff &s
    - Counting weir
      - 1979; 601-805 grayling spawners
      - 2014; 154 177 grayling spawners
      - Great potential for run improvement
    - Sampling and tagging





What's up 2015-16

- "A Return to Country Food" workshop; Year 4
  - Liidlii Kue late August
    - Leadership, Resource Managers,
       Community Monitors
  - Results workshop
    - Govt. and University researchers, First Nations, Dehcho AAROM Projects
  - Community Issues and concerns
  - Project Planning Input.
  - Include AAROM meeting?



# What's up for 2015-16?

- Partnering: U of Waterloo
  - Dr. Heidi Swanson; experienced
     Arctic researcher
  - Works closely with the communities
  - Year 1; JMR and Sambaa K'e; Ekali
     & Sanguez lakes, Trout Lake
  - Year 2; Ka'a'gee Tu & JMR;
     Tathlina & Gargan & McGill lakes
  - Year3: Liidlii Kue; Horn Plateau lakes; Big Island, Mustard & Willow



Smog in China; photo - Mike Low

# What's Up for 2015-16

- Dr. Brian Laird; University of Waterloo
- Human Biomonitoring program (two to three year study)
- Best way to learn about mercury exposure in the Dehcho
- Hair and/or blood samples taken by HSS.
- Community consultation and involvement
- Pilot project completed by end of March with Kakisa and Jean Marie



# What's Up for 2015-16

- Sanguez Lake Fish-down
- Large Walleye and Pike high in mercury
- Stan Sanguez suggested we f ish out the large f ish to re-balance the f ish population
- Dehcho AAROM is partnering with the JMNFN, ENR, Water Division, the University of Waterloo & DFO to start a five year study in 2015
- Population study (Floy Tagging)
- Fish down



# Progress to Date, Training

- ENR Water Monitor Training
  - Mike, Jay Horesay & Kyle Nault
  - Mike; Community Monitors
- Med III and SVOPC course
  - In Nahanni Butte 2009
  - In Fort Simpson 2010
- CABiN course Kakisa 2010
- Env. Monitoring Cert.
  - Sambaa K'e 2010
  - 8 students certif ed
  - Nahanni Butte 2012
- Who is current now?





# Youth Program

- Youth and Elders
  - Youth Ecology Camp
  - Canoe Trip; Providence to Jean Marie River
  - Traditional knowledge
  - Bruce Townsend
- K'ehodi
  - Care for the Land by being on the Land
  - Mesh with the Dehcho AAROM program





# AAROM Logo



**AAROM** 

**Dehcho Aquatic Resource Management** 

# Salmon Program

- Mackenzie River Chum salmon run
- Non Indigenous salmons
  - Further down river
  - Pink, Chinook, Coho, Sockeye
  - DFO looking for samples
    - Whole salmon \$50 gift card
    - Salmon head \$25 gift card (c/w info when and where caught)



# Closing Prayer



Mahsi Cho

Thank You.

Have a safe trip home!

