

Biodiversity Action Plan

Meeting December 6th, 2002
Yellowknife

Minutes

Team members present:

Suzanne Carrière	RWED Wildlife and Fisheries
Ray Case	INAC
Ryan Crago	WMAC(NWT)
Bob Decker	RWED Forest Management
Paul Latour	Western Parks, Parks Canada
Ian MacDonald	CPAWS
Jennifer Morin	CWS
Bas Oosenbrug	RWED Protected Areas
Joslyn Oosenbrug	RWED Wildlife and Fisheries
Mike Preston	WWF
Jody Snortland	SRRB

Regrets: Aurora College, Dene Nation

Team facilitator: Suzanne Carriere, RWED W&F

START 9:00

1.0 Background

RWED provided a copy of the letter sent by the DM to organizations to invite them to participate to the Action Plan. Some organizations had not responded and were not sure if they ever received the letter.

RWED will send follow-up letters to the original organizations and additional ones (discussed later), and confirm invitation.

2.0 Matrix

2.1 Review status of Matrix

Actions listed to date were reviewed and many missing activities were added to the list using the team members' knowledge. See revised list in *Appendix 1*.

The Matrix will continue to be drafted until the Team is confident that all long-term and current activities are listed.

2.2 Questionnaires

Completed questionnaires have been submitted by the majority of team members. Team members commented that although the questionnaires were too long and very repetitive, they were more manageable than the Excel matrix.

Questionnaire results will be reviewed and completed as follows:
A list of actions/activities organized into the 5 Goals will be forwarded to Team members for their review and drafting of additional activities.

2.3 Discussions on missing information and invitations to other agencies

The team went through the list of proposed missing partners and suggested initiatives and agencies that should be added. Please see attached list of proposed agencies to be invited to join the team (*Appendix 2*).

2.4 Further consultations

See point 1.0

3.0 Report 1: NWT Progress Report on Biodiversity

3.1 Discussion of Chapter 1 (Background on NWT biodiversity)

There was general agreement that Chapter 1 (outline in *Appendix 3*) will provide useful and interesting background on biodiversity for the Report 1. Members noted that the chapter may be too large as a part of the report, but would be very useful even as a stand-alone text. If required due to its length, a summary of the Chapter could be included in the Report 1 of the Plan.

The team was in general agreement that Jamie Bastedo is best suited to author this chapter. Team members may consider other authors if Jamie is not interested. **Final decision on Chapter 1 author will be made in early January when Jamie returns.**

3.2 Review of Chapter 2 outline (Summary of major initiatives)

3.2.1 List of initiatives

Team looked over outline and suggested changes and additions (see revised outline in *Appendix 4*).

A table of wildlife-related monitoring will be distributed to team members so that they may add their own monitoring programs.

A table of non-governmental organizations in the NWT will be distributed to team members for comments, additions etc.

LUNCH

3.3 Writing principles

3.3.1 Writing assignments

Some team members have agreed to write certain sections:

- Bob Decker will cover forests and forestry;
- Suzanne will cover species-at-risk initiatives and some of sustainable use (terrestrial wildlife);
- Paul Latour will also cover some of the sustainable use (terrestrial wildlife);
- Bas Oosenbrug will cover protected areas;
- Other team members will provide advise, review, and edit.

Team members were invited to send a note if they would like to author any section of Chapter 2.

3.4 Layout and web products

The Team agreed that a website would be a very useful tool for the dissemination of information about the Action Plan to the public. It was proposed that work on the website should begin as soon as possible so that information on the Action Plan and its status would be available before the release of Report 1.

3.5 Publication principles (use of logos, citation, etc.)

Suzanne proposed that although the RWED logo may have to stand alone because the report is funded by the department, it should not take prominence on the report. All logos of participating agencies will be featured in the report. There is still the possibility of creating a logo for the Biodiversity Team, if someone is willing to do so inexpensively.

Final decisions on publication principles will be made at a later date.

3.6 Timelines

A timeline for the completion of the first report was discussed (see *Appendix 5*) and there were no objections on due dates and tasks. A draft web page task was added prior to Report 1 publication, reflecting earlier discussion on web products (see point 3.4).

4.0 Other Items

All Team member were invited to send a note if they know of any meeting or conference where a presentation could make about the NWT Biodiversity Action Plan and hence provide opportunity of other organizations to see work done so far and be part of the Team.

Ian McDonald has agreed to present on the Action Plan at the EMAN North conference in January.

4.1 Next meeting

A next meeting was proposed for March.

ADJOURNED 15:00

Appendix 1

There is a wide range of environmental and biodiversity-related initiatives, tools, and actions presently underway in the NWT. Some of the initiatives submitted by our Biodiversity Team members are listed below.

List of Initiatives

Conservation

- Protected Areas Strategy
- National Parks system and the Parks Act
- RAMSAR wetlands
- Northern Rivers Ecosystem Initiative
- Conservation of Arctic Flora and Fauna (CAFF) (Arctic Council)
- NWT Wildlife Act is currently being revised
- WWF's Ten Principles for Arctic Tourism
- NWT Digital Atlas produced by WWF
- Habitat Stewardship (EC, Parks, DFO)
- Northern Ecosystem Initiative
- NWT Territorial Parks Act is currently being revised
- CPAWS and WWF Conservation First Initiatives

Monitoring and Research

- Department of Transportation sampling/reporting programs
 - Highway 3 monitoring program: monitoring nutrients, metals and other parameters at upstream and downstream sites along realignment
 - Aquatic Effects Study to determine the impacts of ferries on the river system
 - Glycol and biochemical oxygen demand sampling program at the Yellowknife Airport to mitigate impacts of glycol on the aquatic ecosystem
- Highways Initiative?
- Ecological Monitoring and Assessment Network for the North (EMAN North), includes:
 - International Tundra and Taiga Experiment
 - Climate and Water monitoring
 - INAC Evaporation Studies Program
 - Yellowknife River Research Basin at Lower Carp Lake
 - Mackenzie GEWEX Study (MAGS)
 - GNWT Small Mammal Program
 - Yellowknife Waterfowl Study Area (YKSA)
 - Wolf Denning Studies

- Tibbitt Lake Post Fire Study
 - Nature Watch Programs – Frog Watch and Plant Watch
- Monitoring in national parks includes records of visitor numbers, campsite monitoring and some long-term ecological monitoring programs
- National Forest Inventory (NFI) Permanent Monitoring Plots
- Sahtu Settlement Harvest Study (SRRB and local hunters)
- A range of studies and monitoring of wildlife species, including musk-ox, moose, caribou, sheep, and waterfowl (including Willow Lake Duck Banding Project)
- Cumulative Impacts Monitoring Project (CIMP)
- Western NWT Biophysical Impacts Study
- West Kitikmeot Slave Study
- Advisory Group for the Identification of the Biophysical Information and Research Gaps Associated with Hydrocarbon Exploration, Development and Transmission in the Mackenzie Valley (SRRB and WWF) – Linked to Biophysical Study and Federal science agenda
- Sahtu GIS Project and others (GIS detail table in Perspective box)
- Northern Rivers Ecosystem Initiative
- Northern Ecosystems Initiative
- CEAMF
- Actions addressing Exotic Species: FM, DOT?
- PRISM – Program for Regional and International Shorebird Monitoring
- Gwich'in and Inuvialuit Harvest Studies
- North American Waterfowl, Sea Duck Plan, Land bird Strategy, Shorebird Strategy
- Ducks Unlimited Western Boreal Initiative
- ESR Fund (?) – Industry \$\$
- Climate monitoring – C-CIARN,
- Acid rain monitoring plots?

Resource Management

- Co-management of wildlife and lands through the establishment of various co-management boards
- Caribou management boards (BQ, Bathurst and Porcupine)
- Polar bear management? Boards and committees for other species?
- Great Bear Lake Working Group
- NWT Cumulative Effects Assessment & Management Strategy & Framework
- Regional Renewable Resource Committee (RRRC)
- HTC
- Forest Fire Management Plan
- Forest Management Plans and Agreements
- Deh Cho Forest Management (Bob Decker)

- ESR Fund
- ALCES modeling } Modeling of cumulative impacts using
- CPAWS Globio } different products
- Northern Contaminants Program
- GeoScience Forum – Environmental program component (C of Mines)

Impact Assessments and Mitigation

- 24-hour spill line (Environmental Protection, RWED)
- Environmental site assessments conducted by DOT to determine contamination on DOT property and steps for remediation
- Spill contingency plans
- Environmental Agreements (for the mines, incl. clean-up of Giant) – Refer to Ray and Ryan
- Tour Ship regulations, guidelines for the eastern Arctic
- DIAND and DFO – measures for environmental disaster mitigation
- DND – DEW line cleanup and reclamation
 - Map of contaminated sites (INAC)
- Impacts of tourism monitored by Parks Canada
- Mine site reclamation policy (INAC)
- Mackenzie River Basin Impact Study

Education

- WWF's "Nature Audit"
- WWF has drawn attention to many important biodiversity issues in the NWT, including the need for representative protected areas and for advancing conservation in the Beaufort Sea
- WWF's school awareness/education program, including distribution of educational materials for integration with school curriculums across Canada
- Environmental Stewardship program (Western Arctic Field Unit, Parks Canada)
- Aurora Research Institute
- Science/Ecology/Fire forestry camps
- Traditional knowledge and land-use camps
- Dene Cultural Institute
- Wildlife week, Earth week
- Gwich'in Social/Cultural Institute
- Inuvialuit Corp
- School system (ECE, school districts, individual schools)
- Web pages (kids sites)
- New learning centre in Deline (Mike Salomons)

- Internet access report (public internet access)
- Public Education Specialists within RWED (Cathy Lewis and Brenda Hans)

Appendix 2

Invitations to other Agencies

Agriculture

Territorial Farmers Association*
(Contact Gene Hachey,
Rafe and Lisa Smith)

Atmosphere and Climate

GNWT Environmental Protection*
EC Environmental Protection
INAC Environmental Protection
Natural Resource Canada - Northern Forest Service
Arctic Energy Alliance

Biosafety/Genetic Resources

Western Agrifood Canada
Hook Lake Recovery Program – Brett Elkin and John Nishi

Ex Situ Conservation

Wood Bison National Recovery Team
RWED Forest Management (Seed banks)
RWED Animal Care Committee

Human Population and Settlement

Municipal and Community Affairs
Community Governments – zoning, green space, community conservation, etc.
Chamber of Mines
Mines (BHP-Ekati, Diavik)
Canadian Association of Petroleum Producers

Pest Management

Territorial Farmers Association*

Pollutants

GNWT Environmental Protection*
EC Environmental Protection
INAC Environmental Protection
Canadian Association of Petroleum Producers
Chamber of Mines
Mines (BHP-Ekati, Diavik)

Restoration and Rehabilitation

Oil and Gas	}	Reclamation and abandonment plans
Mining		- as part of environmental agreements
Other Industry		- land-use licences

- Re-forestation projects
- Re-vegetation for seismic lines (Rafe Smith in Hay River)
- Contact DND regarding restoration of DEW line sites (Environmental Services Group within DND)

Participation and Consultation

Dene First Nation
Deh Cho First Nations*
Dogrib Treaty 11 Tribal Council*
North Slave Metis Alliance*
Yellowknives Dene First Nation*
Lutsel K'e Dene Nation*
Akaitcho Territorial Government
Gwich'in Tribal Council
NWT Metis Nation
SSI (Sahtu)
Inuvialuit Regional Corporation

Emergency Planning and Environmental Accountability

GNWT Environmental Protection*
EC Environmental Protection
INAC Environmental Protection
Land use and Water boards
Canadian Association of Petroleum Producers
NWT & Nunavut Chamber of Mines
Mining industries
Oil and Gas industries (up stream) – Oil spill contingency planning
Winter Road Oil Spill contingency plans (managers, planners)
Coast Guard
Fire Emergency Response Guidelines

Monitoring, Indicators and Inventories

Nahanni and Wood Buffalo NP (D. Tate & M Bradley)

Traditional Knowledge

Dene First Nation
Deh Cho First Nation*
Dogrib Treaty 11 Tribal Council*
North Slave Metis Alliance*
Yellowknives Dene First Nation*
Wildlife, Land and Environment Committee*
Lutsel K'e First Nation*
Gwich'in Social and Cultural Institute
Tlicho Government (Dogrib)
Arctic Borderlands Coop (ongoing TK Survey)
Gwich'in Tribal Council
NWT Metis Nation
POW Heritage Centre
Dene Cultural Institute
Prince of Wales Heritage Centre

Research and Expertise

University researchers
Consulting companies?
Aurora Research Institute

Resource Management

Fisheries Joint Management Committee*
North Slave Metis Alliance*
Yellowknives Dene First Nation*
Ft. Providence Resource Management Board*
Gwich'in Renewable Resource Board*
Caribou Management Boards
Regional Management Boards (Lutsel K'e, Fort Resolution)
Inuvialuit Game Council
HTCs
West Side Working Group

* Second invitation.

Appendix 3

Outline Chapter 1 - draft

Report 1 NWT Biodiversity Action Plan

Proposed outline of Chapter 1

Proposed title of chapter: A Changing Diversity - Status and Causes of Change

Introduction

- Context: International and national
- Focus of Chapter 1
- Introduction of major cause: human population
- Organization of Chapter 1

Geography

- General description of NWT geography, as a “canvas for biodiversity”.
- “What and where are the NWT”
- General description of area including Shield, Ocean, Plains, Mountains, Islands - How old each are
- Evidence for pre-glacial biodiversity
- Pre-glacial changes

Past changes (Glaciations and post-Glaciations)

- How past changes helped create our current biodiversity: Glaciations, (with emphasis on last Glaciations), Beringian land bridge, non-glaciated areas, McConnell Lake
- Human use post Glaciation
- Biodiversity changes as a result – invasions and extinctions
- Past rates of change (summary)

Current Status

- Major ecosystems (Ecozones and basins) – related to past changes discussed earlier
- Species - latitudinal gradation of number of species
- Historical distribution of present species (past 500 years)
- Populations and sub-populations – genetic and behavioural diversity – northern species have high potential for adaptations to changes (seasonal and annual)

Current Causes of Change

- Human population (World, Canada, NWT)
- Economic changes – value of biodiversity
- Human-caused changes – Local Causes
 - o Current and near-future changes in direct biological resource use: tree cutting, hunting, trapping, fishing) – effects on biodiversity
 - o Current and near-future changes in land use and pollutants: forestry, energy resources, mineral resources, transportation, settlements, agriculture – indirect effects on biodiversity
- Human-caused changes – Global Causes
 - o Current and near future changes in pollutants – NWT's contribution to pollutants - direct and indirect effects on biodiversity
 - o Current and near future changes in climate – NWT's contribution of green-house gases - direct and indirect effects on biodiversity (e.g., present invasions of new species)
- Present and near future rate of changes (species and population)

- Jurisdictional changes in the NWT: Land Claim settlements, Federal-Territorial jurisdictions – effects on activities related to biodiversity.
- Changes in management and monitoring responsibilities.

Long-term Forecast (the next 25 years)

- Human Population, Economy, Land-use and Biodiversity.

Introduction: 1 page

Geography: 5 pages

Past changes (Glaciations and post-Glaciations): 5 pages

Current Status: 5 pages

Current Causes of Change: 7 pages

Long-term Forecast (the next 25 years): 2 pages

TOTAL 25 pages + Literature Cited. + Figures

All final artwork (figures, diagrams, tables, and pictures) will be done by RWED.

Appendix 4

Revised outline Chapter 2

Report 1 –

Chapter 2

Title: Contributions – Major NWT initiatives on biodiversity

Goal 1

2.1 Conservation and Sustainable Use of Biodiversity

- 2.1.1 Species at Risk Initiatives
- 2.1.2 Protected Area Strategy
- 2.1.3 Climate Change Initiatives
- 2.1.4 Forest Initiatives
- 2.1.5 Sustainable use (Terrestrial Wildlife)
- 2.1.6 Sustainable use (Aquatic Wildlife)
- 2.1.7 Contaminants Program
- 2.1.8 Community Initiatives

- Perspective Boxes
Conservation and Sustainable Use
- Forestry
 - Parks
 - Energy and Mining
 - Geography
 - Species numbers
 - Human population
 - Hunting and trapping

Goal 2

2.2 Ecological Management

- 2.2.1 Co-management System and Traditional Knowledge
- 2.2.2 Monitoring
- 2.2.3 Integrated Research Programs
- 2.2.4 Land use Planning and Management
- 2.2.5 Cumulative Impact Assessment
- 2.2.6 Data and Information Management Initiatives
- 2.2.7 Emergency Planning and Environmental accountability

- Perspective Boxes
Ecological Management
- Land Settlements and Ownerships
 - Northern Research
 - Internet Access
 - GIS in the NWT
 - What is TEK

Goal 3

2.3 Education and Awareness

- 2.3.1 Education programs
- 2.3.2 Traditional Knowledge Camps

- Perspective Boxes
Education and Awareness
- Non-governmental Organizations in the NWT
 - Education in the NWT

Goal 4

2. 4 Incentives and Legislation

2.4.1 Federal Legislation

- 2.4.1.1 Land Settlement Acts
- 2.4.1.2 Mackenzie Valley Resource Management Act
- 2.4.1.3 Ocean Act
- 2.4.1.4 Parks Act
- 2.4.1.5 SARA
- 2.4.1.6 Migratory Bird Convention Act
- 2.4.1.7 Fisheries Act

2.4.2 Territorial Legislation and Policies

- 2.4.2.1 Revision of the NWT Wildlife Act
- 2.4.2.2 Proposed Species at Risk Act
- 2.4.2.3 Sustainable Development Policy

Perspective Box
Legislation
- The difference
between a Territory
and a Province

Goal 5

2.5 Cooperation – Northern Perspectives

2.5.1 Cooperation within Canada

- 2.5.1.1 Mackenzie Basin Initiatives
- 2.5.1.2 Monitoring Initiatives

2.5.2 International Cooperation/Agreements

- 2.5.2.1 Arctic Council
- 2.5.2.2 Transboundary Species
- 2.5.2.3 Climate change initiatives

Perspective Boxes
International Cooperation
- Shared Arctic
biodiversity
- International Threats
to northern
biodiversity

Concern list per Goal:

G1 - Conserve biological resources and genetic diversity

G1 - Conserve ecosystems and critical habitats

G2 - Determine and mitigate human impacts on biodiversity

G2 - Determine and mitigate the effect of alien and genetically modified organisms on biodiversity

G2 - Develop and deliver effective biodiversity education and awareness programs

G3 - Develop management plans for the conservation and sustainable use of transboundary biological resources

G2 - Encourage community and stakeholder participation in the implementation of biodiversity strategies

G3 - Enhance the sharing of knowledge, data and expertise

G1 - Ensure that the ecological integrity of protected areas is maintained

G4 - Fill gaps and **reduce** duplication in legislation, resources, methodologies and implementation strategies

G2 - Improve monitoring and inventories

- G3 - Improve** training and information programs
- G2 - Increase** our understanding of ecosystems and our ability to manage human use
- G2 - Integrate** multiple land and resource-use objectives into policies and programs
- G2 - Investigate** relationships between atmospheric changes and changes in biodiversity
- G1 - Minimize** adverse impacts on biodiversity resulting from resource use
- G5 - Participate** in biodiversity actions at a national and international level
- G1 - Promote** the conservation of biodiversity and the sustainable use of biological resources
- G1 - Protect or recover** Species-at-Risk and their habitats
- G1 - Restore and/or rehabilitate** degraded ecosystems

Appendix 5

Revised accepted Timeline

Date	Actions
December 2002	<ul style="list-style-type: none">- Draft matrix- Report 1 outline- Draft Introduction Report 1
January 2003	<ul style="list-style-type: none">- Draft matrix- Issue contract chapter 1- Draft Chapter 2- Review and finalize Introduction- Draft and publish a simple Web page on work so far
February 2003	<ul style="list-style-type: none">- Finalize matrix- Review Chapter 1- Draft Chapter 2- Draft RFP for web matrix
March 2003	<ul style="list-style-type: none">- Finalize Chapter 1- Review Chapter 2- Draft Chapter 3- Draft RFP for report layout
April 2003	<ul style="list-style-type: none">- General Review & Final draft
May 2003	<ul style="list-style-type: none">- Publication of printed Report 1 and web page- Gap analysis for Report 2 (Action Plan)
June 2003 - September 2003	Report 2