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CHARTING A COORDINATED APPROACH TO MANAGEMENT OF THE WESTERN
HUDSON BAY REGION. PROCEEDINGS OF THE WESTERN HUDSON BAY
WORKSHOP, WINNIPEG, MB, OCTOBER 23-25, 2000

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EXECUTIVE SUMMARY

INTRODUCTION

The Oceans Programs Division of Habitat, Fisheries and Oceans Management, Central and Arctic Region hosted a workshop in Winnipeg from October 23-25, 2000 titled “Charting a Coordinated Approach to Management for the Western Hudson Bay.”

The workshop brought together key parties with an interest in the Western Hudson Bay Region. The objective was to start a process for the development of a coordinated approach for the management of the estuarine, coastal and marine ecosystems of the Western Hudson Bay region.

Presentations were made by Nunavut organizations: Mike Ferris, Deputy Minister, Community Government and Transportation; Bert Dean, Director of Wildlife, Nunavut Tunngavik Inc.; Paul Kaludjak, President, Tongola Sandy, Chief Land Administrator and Luis Manzo, Lands Officer, Kivalliq Inuit Association; David Alagalak, Member, Nunavut Wildlife Management Board; Jim Stevens, Community Government and Transportation; and David Alagalak, Head, Keewatin Wildlife Federation.

Nunavut participants included: Nunavut Government (Community Conservation and Transportation; Sustainable Development); Nunavut Land and Resource Management Boards (Nunavut Impact Review Board; Nunavut Planning Commission; Nunavut Water Board); Nunavut Inuit Organizations (Kivalliq Inuit Association; Nunavut Tunngavik Incorporated); and Inuit Wildlife Organizations (Hunter and Trappers Organizations; and Keewatin Wildlife Federation).

Presentations for the Province of Manitoba were made by Merlin Shoesmith, Assistant Deputy Minister, Conservation, and Roger Schroeder, Protected Areas & System Planning, Conservation. Presentations made by Manitoba First Nations (FN) included Grand Chief Francis Flett, Manitoba Keewatinowi Okimakanak; Grand Chief Dennis White Bird, Assembly of Manitoba Chiefs; and Pharoah Thomas, Band Councilor from Shamattawa FN.

Manitoba participants included: the Government of Manitoba (Aboriginal and Northern Affairs; Conservation; Culture, Heritage and Tourism; Highways and Government Services; Intergovernmental Affairs); and Manitoba First Nation Organizations (Assembly of Manitoba Chiefs; Manitoba Keewatinowi Okimakanak Inc.; Shamattawa FN; Keewatin Tribal Council; and the Treaty and Aboriginal Rights Research Centre).

The federal government was represented by participants from the Canadian Wheat Board; Environment Canada; Fisheries and Oceans Canada (DFO); Indian and Northern Affairs Canada; Canadian Heritage-Parks Canada; and Transport Canada.

Other participants included representatives from: Ontario/Quebec FN and Inuit Organizations (Makivik Corporation; Fort Severn FN); Industry (Manitoba Hydro; Mining Association of Manitoba; Kaskattama Safari Adventures); Non-Governmental Organizations (WWF; Walter & Duncan Gordon Foundation; Canadian Parks and Wilderness Society; Taiga Rescue Network;

Manitoba Museum of Man and Nature); academics (the University of Manitoba; Churchill Northern Studies Research Centre; Yukon College) and consultants.

WORKING GROUP DISCUSSIONS

Participants were assigned to one of seven working groups. Discussions focused on five themes: (1) the environment; (2) information and knowledge acquisition, sharing and management; (3) Inuit/First Nation culture and subsistence harvesting; (4) the economy; and (5) jurisdictional issues.

Work completed by these groups has provided the foundation for next steps, and will serve as a benchmark to guide the development of a coordinated approach in Hudson Bay. Though the seven groups reflected the views of many individuals, who in turn represented many different interests, common themes emerged repeatedly. Working group discussions are summarized below.

The Environment: The Hudson Bay region is subjected to stresses, natural and human induced, resulting in widespread and unpredictable changes to the environment. Research is needed to understand these changes and their impacts on the land, sea and people of the region. The entire Hudson Bay acts as an ecosystem, and should be managed as such.

Information and Knowledge Acquisition, Sharing and Management: Effective communication processes for sharing scientific and traditional knowledge and information are a fundamental building block for management of the Hudson Bay region.

Once a management planning process is developed and management goals and objectives are articulated, it will be very important to evaluate information management options. Organizing existing knowledge and defining an approach to information collecting methods and priorities can be an important step to coordinated management.

Inuit/First Nation Culture and Subsistence Harvesting: The Hudson Bay ecosystem is highly valued. The region contains rich natural resources and is important for supporting and sustaining the culture and way of life of First Nation and Inuit people. Future management processes must reflect and be responsive to the values, traditions and culture of First Nations and Inuit. Both traditional knowledge and scientific approaches have an important role to play in all aspects of a coordinated management approach.

The Economy: Economic development of the region will be furthered, sustainable and consistent with the social values of the region. There is a need for northerners to develop a viable economy, and to link the modern and traditional economies within the region.

Jurisdictional Issues: The jurisdictional context is highly complex. A coordinated management approach should focus on developing a vision, goals and action plans that represent the best interests of the people and environment of the region. Jurisdictions are interested and willing to work together and apply methods from similar inter-jurisdictional management processes to the Hudson Bay region.

GUIDING PRINCIPLES

Workshop participants were asked to propose a set of principles that could be used to guide the development and implementation of a coordinated approach to management of the Western Hudson Bay region. A principle is described as being an important consideration directing both what the approach should be and how it should be implemented. The results of these discussions produced four initial guiding principles:

1. **Mutual respect:** This principle assumes understanding of and tolerance for different cultural values and attitudes, as well as respect for the environment. It implies incorporating the knowledge, values and attitudes of all interested groups into the planning and decision-making process. An atmosphere of mutual respect will lead to trust.
2. **Accountability and responsibility:** This principle implies a clear understanding of the expected outcomes of a coordinated approach, as well as a clear understanding of the roles and responsibilities of various stakeholders in achieving these outcomes. The decision-making process must be open and transparent, with resources and information shared among participants in an equal and timely way.
3. **Ecosystem-based:** This principle recognizes that Hudson Bay must be managed as an entity, both from the physical and human perspective. The area is one marine ecozone, and all of its coastal communities share a strong interest in matters that affect the Bay.
4. **Long term commitment of all parties:** This principle acknowledges that the numerous agencies, communities and others with interests in the Bay must be prepared to engage in a long-term complex process.

CLOSING COMMENTS

The closing plenary session provided an opportunity to consider alternative approaches to developing a management framework for the region. There was strong support for the development of a coordinated management approach, although steps proposed ranged across a spectrum of options.

There was general agreement on the need to establish a smaller core entity to guide the process. Participants urged that care be taken not to cement the composition of such a group too quickly. The importance of moving forward immediately was emphasized, while recognizing that arrangements should not be formalized too quickly. For example, it is desirable to ensure that key government departments are included in the design phase and that coastal communities have been consulted and involved. Time is needed to define the scope and boundaries of the management region before committing to a course of action.

Alternatively, using existing councils and organizations was suggested as a means of moving forward. Speakers commented that whatever body is created should have a broad representation and decision-making power. Participants observed that models of coordinated management

implemented elsewhere might provide valuable lessons for managing the Hudson Bay region. These lessons should be considered before developing a plan.

The importance of recognizing the political realities of a large and complex coordinated management endeavour in the Hudson Bay was stressed. Specifically, the importance of having a Memorandum of Understanding (MOU) between the key parties to establish the political leadership for the initiative was emphasized. Political will is needed to lead the actions. In the meantime, individuals and organizations were encouraged to continue working together.

It was suggested that annual meetings supporting the evolution of this initiative be held in the north, and that care be taken to involve youth and establish a communication network reflecting all parties.

Others noted that a large-scale planning process is needed to begin gathering information and identifying planning aspects. In the long-term, a management plan should be drafted and discussed by stakeholders. DFO should coordinate this effort as per its mandate in the *Oceans Act*.

Dan Topolniski, Oceans Policy Strategist, highlighted some of the key messages and comments that had been heard during the workshop, during his closing remarks on behalf of DFO. He acknowledged that the Bay's unique ecology, cultural makeup and jurisdictional complexity present challenges and opportunities that require working together. The approach for Hudson Bay must reflect the blend of resource uses across the region and show respect for Inuit and First Nation cultures and priorities. Information must be shared, accessible, clear, understandable and relevant.

Mr. Topolniski acknowledged the importance of moving forward and fine tuning the actions that had been developed during the workshop. DFO recognizes that there is a need to minimize jurisdictional obstacles by involving all interests in all stages of development and by implementing a coordinated approach.

DFO agrees on the need for a long-term commitment for a management process for Hudson Bay, and will participate to make the coordinated approach a reality

RÉSUMÉ

INTRODUCTION

La Direction des programmes des océans, Gestion de l'habitat, des pêches et des océans, région du Centre et de l'Arctique, a organisé un atelier à Winnipeg du 23 au 25 octobre 2000 intitulé « Vers une démarche de gestion coordonnée du secteur ouest de la baie d'Hudson. »

L'atelier a réuni des groupes clés ayant un intérêt dans le secteur ouest de la baie d'Hudson. L'objectif était de mettre au point un processus permettant d'élaborer une démarche coordonnée pour la gestion future des écosystèmes estuariens, côtiers et marins du secteur ouest de la baie d'Hudson.

Divers membres d'organismes du Nunavut ont présenté des exposés : Mike Ferris, sous-ministre, Administrations communautaires et Transports ; Bert Dean, directeur de la faune, Nunavut Tungavik Inc. ; Paul Kaludjak, président, Tongola Sandy, administrateur en chef des terres et Luis Manzo, agent des terres, Kivalliq Inuit Association ; David Alagalak, membre, Conseil de gestion des ressources fauniques du Nunavut ; Jim Stevens, Administrations communautaires et Transports ; David Alagalak, chef, Keewatin Wildlife Federation.

Parmi les participants du Nunavut, on comptait entre autres : le gouvernement du Nunavut (Administrations communautaires et Transports, Développement durable) ; les commissions de gestion des terres et des ressources du Nunavut (Commission du Nunavut chargée de l'examen des répercussions ; Commission d'aménagement du Nunavut ; Office des eaux du Nunavut) ; les organisations inuites du Nunavut (Kivalliq Inuit Association ; Nunavut Tunngavik Incorporated) ; et les organismes de ressources fauniques du Nunavut (les organisations de chasseurs et de trappeurs ; Keewatin Wildlife Federation).

La province du Manitoba a présenté des exposés par l'entremise de Merlin Shoesmith, sous-ministre adjoint, Conservation, et Roger Schroeder, Zones protégées et Planification des systèmes, Conservation. Les présentateurs des Premières nations (PN) du Manitoba comprenaient le grand chef Francis Flett, Manitoba Keewatinowi Okimakanak, Inc. ; le grand chef Dennis White Bird, Assembly of Manitoba Chiefs ; et Pharoah Thomas, conseiller de bande de la PN Shamattawa.

Parmi les participants du Manitoba, on notait : le gouvernement du Manitoba (Affaires autochtones et du Nord ; Conservation ; Culture, Patrimoine et Tourisme ; Voirie et Services gouvernementaux) ; des organisations des Premières nations du Manitoba (Assembly of Manitoba Chiefs ; Manitoba Keewatinowi Okimakanak Inc. ; PN Shamattawa ; Keewatin Tribal Council ; Centre de recherche sur les droits ancestraux et issus de traités).

Le gouvernement fédéral était représenté par des participants de la Commission canadienne du blé, d'Environnement Canada, de Pêches et Océans Canada (MPO), des Affaires indiennes et du Nord Canada, de Patrimoine canadien et Parcs Canada, et de Transports Canada.

Parmi les autres participants, il y avait des représentants des PN et des organisations inuites de l'Ontario et du Québec (Makivik Corporation ; PN Fort Severn), de l'industrie (Manitoba Hydro, Mining Association of Manitoba, Kaskattama Safari Adventures), d'organismes non gouvernementaux (WWF, Walter & Duncan Gordon Foundation, Société pour la protection des parcs et des sites naturels du Canada, Taiga Rescue Network, Musée manitobain de l'homme et de la nature), d'universités (Université du Manitoba, Churchill Northern Studies Research Centre; Yukon College) et des conseillers.

DISCUSSION DES GROUPES DE TRAVAIL

Les participants ont été séparés en sept groupes de travail. Les discussions ont porté sur cinq thèmes : (1) l'environnement, (2) l'acquisition, le partage et la gestion d'information et de connaissances, (3) la culture et l'agriculture de subsistance des Inuits et des Premières nations, (4) l'économie et (5) les questions de compétences.

Le travail effectué par ces groupes a fourni la base des prochaines étapes et servira de point de repère pour guider l'établissement d'une démarche coordonnée dans la région de la baie d'Hudson. Bien que les sept groupes exprimaient l'opinion de nombreuses personnes qui représentaient différents intérêts, des thèmes communs ont été soulevés à maintes reprises. Les discussions des groupes de travail sont résumées ci-dessous.

Environnement : La région de la baie d'Hudson est soumise à différents facteurs de stress, d'origine naturelle et humaine, ce qui entraîne des changements généraux et imprévisibles à l'environnement. Il est nécessaire de faire des recherches pour comprendre ces changements et leurs répercussions sur les terres, la mer et les gens de la région. La baie d'Hudson entière constitue un écosystème et devrait être gérée comme tel.

Acquisition, partage et gestion d'information et de connaissances : Des processus de communications efficaces permettant de partager l'information et les connaissances scientifiques et traditionnelles constituent une composante de base essentielle pour la gestion de la région de la baie d'Hudson. Lorsqu'on aura élaboré un processus de planification de gestion et qu'on aura fixé des objectifs, il sera important d'évaluer les options en matière de gestion de l'information. L'organisation des connaissances actuelles et la définition d'une démarche pour les méthodes de cueillette d'information et les priorités peuvent constituer une étape importante vers la gestion coordonnée.

Culture et agriculture de subsistance des Inuits et des Premières nations : L'écosystème de la baie d'Hudson a une très grande valeur. La région compte de riches ressources naturelles et est importante pour appuyer et conserver la culture et les mœurs des Autochtones et des Inuits. Les prochains processus de gestion doivent refléter les valeurs, les traditions et la culture des Premières nations et des Inuits et s'y adapter. Tant les connaissances traditionnelles que les démarches scientifiques ont un rôle important à jouer dans tous les aspects d'une démarche de gestion coordonnée.

Économie : On favorisera le développement économique de la région qui sera durable et conforme aux valeurs sociales. Il est nécessaire que les Nordistes développent une économie viable et lient les économies moderne et traditionnelle dans la région.

Questions de compétences : Le contexte des compétences est très complexe. Une démarche de gestion coordonnée devrait s'articuler autour de l'élaboration d'une vision, d'objectifs et de plans d'action qui défendent les intérêts des gens et de l'environnement dans la région. Les gouvernements veulent travailler ensemble et mettre en œuvre les méthodes utilisées pour des processus de gestion intergouvernementale semblables à celui de la région de la baie d'Hudson.

PRINCIPES DIRECTEURS

On a demandé aux participants de l'atelier de proposer une série de principes qui pourraient être utilisés pour guider l'élaboration et la mise en œuvre d'une démarche coordonnée pour la gestion du secteur ouest de la baie d'Hudson. Un principe se décrit comme une considération importante indiquant à la fois quelle devrait être la démarche et comment elle devrait être mise en œuvre. Les résultats de ces discussions peuvent être résumés en fonction de cinq principes directeurs initiaux :

1. **Respect mutuel**: Ce principe repose sur la compréhension et la tolérance des différentes valeurs culturelles et attitudes, ainsi que sur le respect de l'environnement. Il suppose l'inclusion des connaissances, des valeurs et des attitudes de tous les groupes intéressés dans le processus de planification et de prise de décision. Une atmosphère où règne le respect mutuel ouvrira la voie à la confiance.
2. **Obligation de rendre des comptes et responsabilité**: Ce principe suppose une compréhension claire des résultats prévus d'une démarche coordonnée, ainsi que des rôles et des responsabilités des différents intervenants pour atteindre ces résultats. Le processus décisionnel doit être ouvert et transparent et les ressources et les renseignements doivent être partagés entre les participants de façon équitable et opportune.
3. **Approche écosystémique**: Ce principe reconnaît que la baie d'Hudson doit être gérée comme une entité, tant du point de vue physique qu'humain. La région est une écozone marine et toutes les collectivités côtières partagent un vif intérêt pour les questions touchant à la baie.
4. **Engagement à long terme de la part de toutes les parties**: Ce principe reconnaît que les nombreuses agences, collectivités et autres ayant un intérêt dans la baie doivent accepter de s'engager dans un processus à long terme complexe.

CONCLUSION

La séance plénière de clôture a permis de tenir compte d'autres démarches pour élaborer un cadre de gestion pour la région. L'élaboration d'une démarche de gestion coordonnée obtient un fort appui, alors qu'il y a une vaste gamme d'options quant aux étapes proposées.

On s'est entendu sur le besoin d'établir un petit groupe de base pour guider le processus. Les participants ont fortement recommandé de ne pas former un tel groupe trop rapidement. On a mis l'accent sur l'importance d'aller de l'avant, tout en reconnaissant que les dispositions ne devraient pas être officialisées trop rapidement. Par exemple, il est préférable que les principaux ministères gouvernementaux participent à l'étape de la conception et que les collectivités côtières soient consultées et participent au processus. On a besoin de temps pour définir l'étendue et les limites du secteur de gestion avant de s'engager envers un plan d'action.

Il a aussi été suggéré de faire appel aux conseils et aux organisations existants pour aller de l'avant. Les intervenants ont précisé que l'organisme qui sera créé/utilisé devra avoir une grande représentation et un pouvoir décisionnel. Les participants ont indiqué que les modèles de gestion coordonnée en place ailleurs pourraient fournir des renseignements importants pour la gestion du secteur de la baie d'Hudson. On devrait tenir compte de ces renseignements avant d'élaborer un plan.

On a souligné l'importance de reconnaître les réalités politiques d'un effort de gestion coordonnée complexe dans la baie d'Hudson. On a particulièrement mis l'accent sur l'élaboration d'un protocole d'entente entre les principales parties en vue d'établir le leadership politique de l'initiative. La volonté politique est nécessaire pour prendre les mesures qui s'imposent. En attendant, on a invité les gens et les organismes à poursuivre leur collaboration.

On a suggéré que des rencontres annuelles aient lieu pour appuyer le développement de cette initiative dans le Nord et qu'on prenne les mesures nécessaires pour assurer la participation des jeunes et l'établissement d'un réseau de communication représentant toutes les parties.

On a aussi souligné qu'un processus de planification à grande échelle était nécessaire pour commencer à recueillir l'information et à déterminer les aspects de planification. À long terme, on devrait rédiger un plan de gestion qui sera commenté par les intervenants. Le MPO devrait coordonner cette initiative puisqu'elle s'inscrit dans son mandat décrit dans la Loi sur les océans.

Lors de son allocution de clôture au nom du MPO, Dan Topolniski a souligné quelques-uns des messages et commentaires importants entendus au cours de l'atelier. Il a reconnu que l'écologie particulière et le visage culturel de la baie d'Hudson et la complexité en matière de compétences dans cette région présentent des défis et des possibilités qui requièrent une collaboration. La démarche pour la baie d'Hudson doit refléter l'association des ressources utilisées dans la région et faire preuve de respect envers la culture et les priorités des Inuits et des Premières nations. L'information doit être partagée, accessible, claire, compréhensible et pertinente.

M. Topolniski a reconnu l'importance d'aller de l'avant et de préciser les mesures élaborées au cours de l'atelier. Le MPO reconnaît le besoin de réduire les obstacles de compétences en faisant participer les intervenants à toutes les étapes de développement et en mettant au point une démarche coordonnée.

Le MPO convient qu'il y a un besoin d'engagement à long terme en ce qui a trait au processus de gestion pour la baie d'Hudson et participera à la réalisation de la démarche coordonnée.

ACKNOWLEDGEMENTS

Oceans staff from Fisheries and Oceans Canada (DFO) in Winnipeg, Yellowknife and Iqaluit, would like to thank all those who contributed to the Western Hudson Bay workshop.

We are grateful to the more than 130 participants who brought enthusiasm, knowledge and a willingness to work together to share experiences particular to their community or area of interest. While members of the seven working groups represented the views of many individuals and interest groups, key themes emerged repeatedly in discussions. Their work provides the basis for moving forward and a benchmark to guide the development of a coordinated management approach for marine waters in the Hudson Bay region.

Workshop presentations provided background and context for the workshop objectives and we wish to acknowledge all presenters and the importance of their contribution. The range of subject matter covered and the range of views and values reflected was humbling. The complexity, relative significance and scale of matters to be considered in the development of a coordinated management approach in the Hudson Bay region was made explicit.

We also wish to thank those who provided posters and demonstrations of research and knowledge-gathering activities. These media provided a dramatic visual message which underscored the depth of feeling that coastal residents, academics, government researchers and others have for the Hudson Bay region.

The success of the workshop also depended on facilitation skills of Andy Swiderski and Jim Micak. We owe a debt of gratitude to the working group facilitators for their energy, good humour and willingness to adapt to changes in the schedule. The seven notetakers demonstrated patience and perseverance, producing final notes within a few days of the workshop. This enabled us to produce the proceedings in a timely way. We acknowledge the work of the translators for their energy and staying power throughout the plenary sessions.

A special thanks to Donn Pirie and Oksana Baniias for their outstanding efforts in organizing the workshop and preparing this final report. We also thank Sharon Leonhard and Amalia Pempengco who coordinated workshop communications, Sara Melnyk and Brenda Webster who assisted with the workshop registration, and Marta Wojnarowska who organized the poster displays. Thank you to Ole Nielsen and Patt Hall for their critical reviews of this manuscript report.

Finally, we would like to thank our sponsors: Manitoba Conservation, Nunavut Tunngavik Incorporated, Nunavut Community Government and Transportation, Nunavut Wildlife Management Board, Manitoba Hydro and the University of Manitoba Centre for Earth Observation Science.

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Le personnel de Pêches et des Océans, Direction des océans travaillant à Winnipeg, Yellowknife et Iqaluit, tient à remercier tous ceux qui ont contribué à l'atelier sur le secteur ouest de la baie d'Hudson.

Nous tenons à remercier les 130 participants et plus qui ont fait part de leur enthousiasme, de leur passion et de leur désir de travailler ensemble pour partager leurs expériences particulières à leur collectivité ou à leur domaine d'intérêt. Alors que les membres des sept groupes de travail représentaient les opinions de nombreux individus et groupes d'intérêts, les discussions ont continuellement fait ressortir des thèmes importants. Le travail des participants servira de base pour aller de l'avant et de point de repère pour guider la réalisation de prochaines recherches et la mise en œuvre de programmes de surveillance en vue d'appuyer une démarche de gestion coordonnée dans la région de la baie d'Hudson.

Les exposés présentés au cours de l'atelier ont fourni un historique et un contexte pour les objectifs de l'atelier et nous voulons reconnaître le travail des présentateurs et l'importance de leur contribution. La variété de sujets traités et la diversité des opinions et des valeurs reflétées étaient déconcertantes. On a précisé la complexité, l'importance relative et la valeur des sujets dont il faut tenir compte pour l'élaboration d'une démarche de gestion coordonnée dans la région de la baie d'Hudson.

Nous voulons aussi remercier tous ceux qui ont fourni des affiches et fait des démonstrations d'activités de recherche et de cueillette de connaissances. Ces médias ont transmis un message visuel saisissant qui a souligné la profondeur des sentiments exprimés par les résidents côtiers, les universitaires, les chercheurs du gouvernement et d'autres envers la région de la baie d'Hudson.

Le succès de l'atelier reposait aussi sur les talents d'animateur d'Andy Swiderski et de Jim Micak. Nous tenons à souligner leur dynamisme, leur bonne humeur et leur capacité à s'adapter aux changements d'horaire. Les sept preneurs de notes ont fait preuve de patience et de persévérance, rédigeant les notes finales quelques jours après l'atelier. Nous avons ainsi pu publier les comptes rendus de façon opportune. Nous reconnaissons le travail des traducteurs qui ont su faire preuve de dynamisme et d'endurance au cours des séances plénières.

Nous tenons à remercier tout spécialement Donn Pirie et Oksana Baniyas des efforts exceptionnels qu'ils ont déployés pour organiser l'atelier et en préparer le rapport final. Nous voulons aussi remercier Sharon Leonhard et Amalia Pempengco qui ont coordonné les communications tout au long de l'atelier, Sara Melnyk et Brenda Webster qui ont aidé au bon déroulement de l'inscription à l'atelier et Marta Wojnarowska qui s'est occupée des affiches. Nous remercions Ole Nielsen et Patt Hall pour leur analyse critique de ce rapport.

Finalement, nous voulons remercier nos commanditaires : Conservation Manitoba, Nunavut Tunngavik Incorporated, Administrations communautaires et Transports Nunavut, le Conseil de gestion des ressources fauniques du Nunavut, Hydro-Manitoba, et le Centre for Earth Observation Science de l'Université du Manitoba.

LIST OF ACRONYMS

ASI	Area of Significant Interest
CLARC	Community Lands and Resources Committee
CWS	Canadian Wildlife Service
DFO	Department of Fisheries and Oceans (Fisheries and Oceans Canada)
DIAND	Department of Indian Affairs and Northern Development (Indian and Northern Affairs Canada)
DOE	Department of Environment (Environment Canada)
DSD	Department of Sustainable Development
FN	First Nations
GIS	Geographical Information System
HTO	Hunters and Trappers Organization
IPG	Institute of Public Government
KHTA	Kitikmeot Hunter and Trapper Organization
KIA	Kivalliq Inuit Association
KitIA	Kitikmeot Inuit Association
KWF	Keewatin Wildlife Federation
MBS	Migratory Bird Sanctuary
MKO	Manitoba Keewatinowi Okimakanak
MOU	Memorandum of Understanding
NFA	Northern Flood Agreement
NGO	Non-governmental Organization
NIRB	Nunavut Impact Review Board
NLCA	Nunavut Land Claim Agreement
NP	National Park
NPC	Nunavut Planning Commission
NTI	Nunavut Tunngavik Incorporated
NWB	Nunavut Water Board
NWMB	Nunavut Wildlife Management Board
OMS	Oceans Management Strategy
PAI	Protected Areas Initiative
PCBs	Polychlorinated Biphenyls
PP	Provincial Park
QIA	Qikiqtani Inuit Association
QWB	Qikiqtaaluk Wildlife Board
SRT	Surface Rights Tribunal
TEK	Traditional Ecological Knowledge
TLE	Treaty Land Entitlement
TP	Territorial Park

1.0. INTRODUCTION

1.1. WORKSHOP PURPOSE AND OBJECTIVES

The Oceans Programs Division of Habitat, Fisheries and Oceans Management, Central and Arctic Region hosted a workshop titled “Charting a Coordinated Approach to the Management of the Western Hudson Bay Region”, from October 23-25, 2000, at the Ramada Marlborough Hotel in Winnipeg, Manitoba, Canada.

The purpose of the workshop was to initiate a process involving key parties with an interest in the Western Hudson Bay region. The long term objective was that this process should lead to the development of a coordinated approach for the future management of the estuarine, coastal and marine ecosystems of the Western Hudson Bay Region.

A range of interested parties and stakeholders participated in the workshop, each with a different set of needs, expectations and understandings of the Western Hudson Bay Region. They included federal, territorial, provincial, municipal and aboriginal government departments, agencies and organizations, community representatives including hunters and trappers, non government organizations (NGOs), industry, academics, and private consultants (Appendix A).

Detailed workshop objectives were established to provide guidance in the development of the workshop agenda. These workshop objectives were:

1. to introduce and describe the jurisdictional, legislative and regulatory relationships and responsibilities in the Western Hudson Bay region, and to develop a common understanding of who does what;
2. to present the rationale for a coordinated approach to the future management of the Western Hudson Bay region;
3. to identify, describe and develop a common understanding of the current and emerging forces and sources of change influencing the Western Hudson Bay region;
4. to identify and assess challenges and opportunities for the effective future management of the Western Hudson Bay region; and
5. to establish working relationships and partnerships to guide the development and implementation of a coordinated approach to the future management of the Western Hudson Bay region.

These workshop objectives were intended to achieve the following outcomes:

1. the active participation of key parties with an interest in the future management of the Western Hudson Bay region;

2. a shared understanding by participants of the jurisdictional, legislative and regulatory context of the Western Hudson Bay Region, and of the current and emerging sources of change influencing the region; and
3. the agreement and commitment of key parties to actively participate in the development and implementation of next steps in a coordinated approach to management of the region.

1.2. WORKSHOP AGENDA

The workshop agenda had both informative and consultative components. An extensive poster display and interactive computer demonstrations of current work and studies being conducted in the Hudson Bay region provided participants with background and information at the workshop opening on Monday evening.

The first day of the workshop consisted of a series of presentations. The first group of presenters described the responsibilities and interests of their department/agency in the region. This information was intended to clarify the nature of jurisdictional issues and complexities which characterize the region.

The second group of presenters reviewed what is meant by a coordinated approach, and outlined the experiences of other groups faced with similarly complex resource management scenarios. The benefits of a coordinated approach to management were also described.

The third group of presenters described the current and future activities and conditions of the Western Hudson Bay region in relation to five themes: i) the environment; ii) information/knowledge acquisition, sharing and management; iii) the economy; iv) Inuit and First Nation culture and subsistence harvesting; and v) jurisdictional issues.

Three working group sessions and a full plenary discussion dominated the agenda during the final day of the workshop. Working group sessions were led by facilitators who later presented summaries of the discussions in plenary. Each working group was supported by a note-taker who transcribed the discussion for inclusion in the proceedings.

The first task assigned to the working groups was to determine what the workshop participants considered to be important in developing a coordinated management approach for the region. This included identifying both current and future opportunities and challenges pertinent to the region. The second task was soliciting working group members' advice, guidance and preferences concerning next steps in developing a coordinated approach for the Western Hudson Bay Region. A third task was identifying key principles which should guide the development of a coordinated approach for the region.

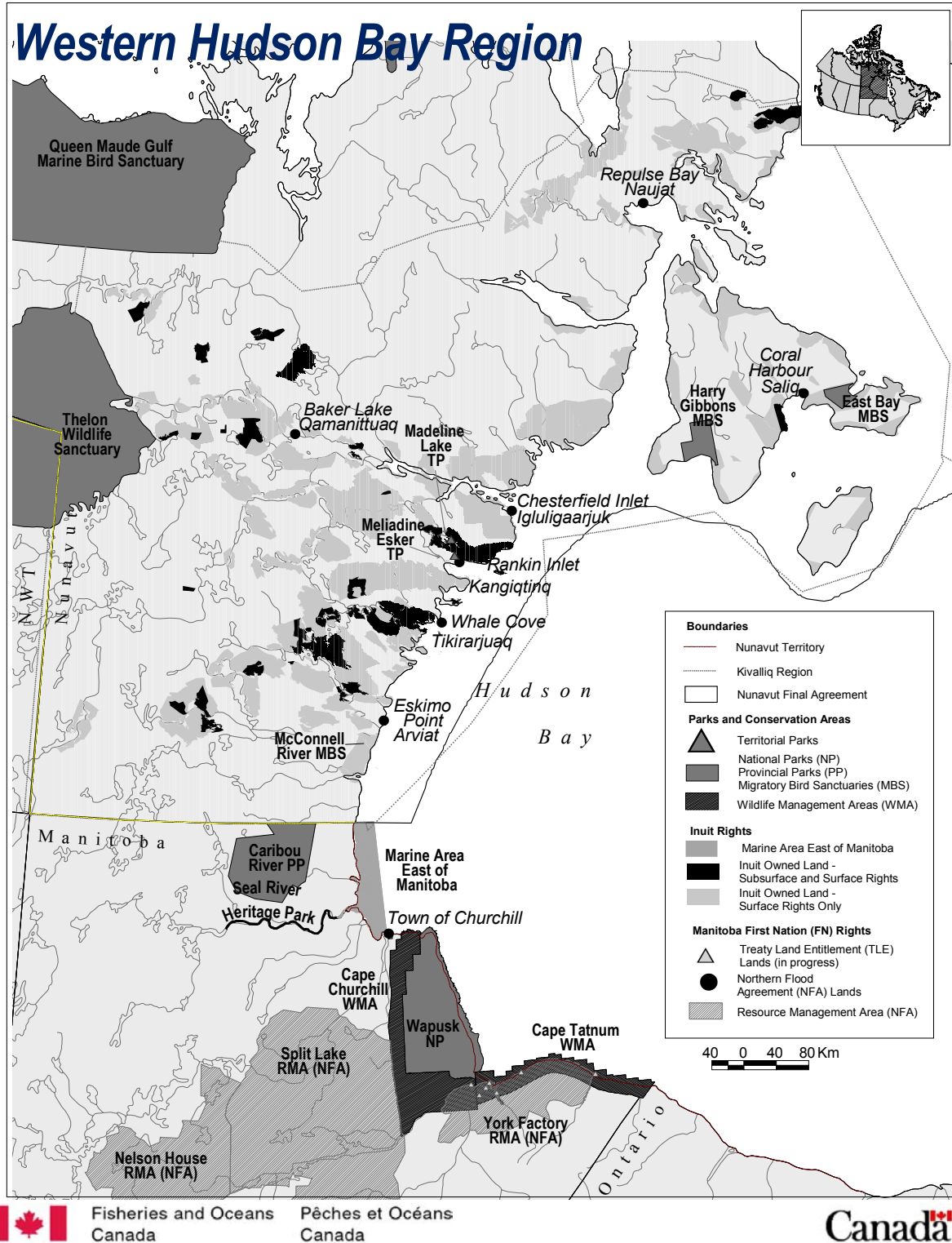


Figure I: Map of the Western Hudson Bay Region.

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2.0.

3.0. WORKSHOP PRESENTATIONS

3.1. DEVELOPING A COMMON UNDERSTANDING OF THE JURISDICTIONAL, LEGISLATIVE AND REGULATORY CONTEXT: GOVERNMENTAL, INSTITUTIONAL AND COMMUNITY PERSPECTIVES

3.1.1. An Overview of the Oceans Management Strategy

*Dan Topolniski, Oceans Policy Strategist,
Central and Arctic Region, Fisheries and Oceans Canada*

The *Oceans Act* has been in effect since January 1997. The Department of Fisheries and Oceans (DFO) is responsible for implementing the Act.

There are three parts to the *Oceans Act*: Part I recognizes Canada's Ocean Jurisdiction; Part II outlines the Ocean Management Strategy (OMS); and Part III consolidates federal responsibilities for Canada's oceans. The Act is guided by the principles of sustainable development, ecosystem-based management and the precautionary approach, with an emphasis on collaboration and citizen engagement.

The OMS is national in scope. It seeks to: balance economic, environmental and social goals for sustainable development; manage the increasing complexity and diversity of ocean use; develop new governance solutions for ocean space; and promote citizen stewardship and shared decision-making.

The OMS is currently under development. The national Oceans Sector and all DFO regions have a commitment to advancing the development of the OMS. There is a Ministerial Advisory Council on Oceans supporting the OMS goals and objectives. Regions are advancing the OMS through demonstration projects and building collaborative arrangements with other federal agencies, land claim settlement bodies and stakeholders.

The DFO is optimistic about the prospect for the future management of the Western Hudson Bay region. This is achievable through the application of the OMS, participation by the Province of Manitoba and the Territory of Nunavut, renewed interest in northern science and technology and through progress in defining interests and issues.

The DFO also perceives several challenges to implementing the OMS. These challenges include: identifying the defining issues; clarifying roles and responsibilities; horizontal policy coordination; capacity building; securing funding to proceed; and ensuring a realistic timetable for development.

3.1.2. *Manitoba's Role in Hudson Bay*
Merlin Shoesmith, Assistant Deputy Minister,
Manitoba Conservation

The *Oceans Act* can be instrumental in developing a national strategy for the management of coastal ecosystems. The Western Hudson Bay region represents an area of significant importance to representative jurisdictions. Manitoba has interests in this coastal area and wants to ensure that the Province's coastal resources and environment, its economy, social opportunities and concerns are understood.

Manitoba has a significant role to play in the management of its lands adjacent to Hudson Bay and waters that flow into Hudson Bay. Manitoba has the authority to allow development, to regulate controls and assert limitations for the carrying out of developments within its provincial mandate and boundary. The activities occurring in the vicinity of Manitoba's coastal area and the Bay involve a strong coastal citizenry of those who live and work in the area. Churchill is an increasingly active community, tourism and trade centre. This year, the Port will be shipping more than 700,000 tonnes of cargo and has a chance of beating the high of 735,000 tonnes of cargo shipped in the 1970s. In addition, northern research and studies about the north are facilitated at the Churchill Northern Studies Centre located east of the townsite, near the rocket range.

Over the past few years, Manitoba Conservation has been involved in many activities in the region. Among these are significant efforts undertaken to establish a network of protected areas representative of the biological diversity of Manitoba, including areas adjacent to Hudson Bay. Manitoba also has two designated provincial Wildlife Management Areas (WMA) located adjacent to Hudson Bay. These are Cape Churchill and Cape Tatnam. As you may also be aware, a significant portion of provincial lands that were once part of the Cape Churchill WMA, have been transferred to Canada for the development of the Wapusk National Park.

We are pleased that the federal oceans strategy will be guided by the principles of sustainable development, the integrated management of activities and the precautionary approach for determining levels of use. Manitoba is also committed to the principles of sustainable development. Our Sustainable Development Act was proclaimed in June 2000. Among other things, it establishes principles and guidelines of sustainable development, establishes the Manitoba Round Table for the review of sustainable development initiatives and requires government to develop a sustainable development code of practice.

3.1.3. *First Nations Involvement in Hudson Bay*
Francis Flett, Grand Chief
Manitoba Keewatinowi Okimakanak

An often forgotten concern in northern resource planning is the day to day issues in the lives of the First Nations people. Three-quarters of the province of Manitoba is traditional Native lands. These traditional lands extend past the political boundaries into Nunavut and Ontario. The objectives of Manitoba Keewatinowi Okimakanak (MKO) are to generally maintain, strengthen, enhance, lobby for and defend the interests and rights of First Nation peoples within its

jurisdiction, and to promote, develop and secure a standard and quality of life deemed desirable and acceptable by its member First Nations.

The MKO represents 27 communities with three tribal councils. As such, it has significant interest in coordinated management of the region. MKO resource harvesters share their knowledge with staff trained in Geographic Information Systems (GIS) who in turn apply this knowledge to projects in the region.

The combined effects of developments, in particular the regulation of the lake levels and the hydroelectric development on the Nelson River, have disturbed the ecosystems of the land, rivers and the Bay. None of the present hydroelectric developments were subject to an assessment of their effects before they were approved. We do not know what the long term effects of the changes they cause will be on the land and water.

The waters of Hudson Bay have a significant effect on the weather of the whole MKO region. The weather systems created by the Bay collide with those from the Gulf of Mexico, producing violent weather as far south as Kansas and Oklahoma. For this reason, Hudson Bay is familiar to many people across North America.

The elders of the region know that the environment is quickly changing. We are not against economic development, and are not blaming persons for problems occurring in the region. However, planners tend to forget about those who live in the region. This workshop allows the individual concerns of the northern and southern people to be brought together, shared and realized by all involved in this initiative. It is good to talk about our concerns, receive information from others and share our knowledge to benefit both the environment and the people.

***3.1.4. The Past and Future Involvement of First Nations in Hudson Bay
Dennis White Bird, Grand Chief
Assembly of Manitoba Chiefs***

I appreciate the opportunity to speak about the First Nations in the context of charting a coordinated approach to the management of the Western Hudson Bay region.

The history of the region is well known: a vibrant and ancient First Nation cultures; early conflict with Europeans on the coast of the Bay; the fur trade; marginalization of our people and economies; development impacts; and underdevelopment. It has been a long downhill slide for our people, but our rights remain undiminished. They have simply been ignored and denied. This is changing.

The Supreme Court ruling on the Marshall case is a good example of traditional treaty rights interpreted in a contemporary manner. Here, a 1760 Treaty carried the terms of continuing to harvest commercially viable resources: a right to make a living.

We should examine what contemporary terms mean in relation to the Western Hudson Bay region. The original spirit and intent was to share the land. Now we have land uses, regulatory

frameworks and management systems that exclude or diminish many traditional uses. There are devastating development impacts, but few benefits.

To bring the original spirit and intent of our relationships back into the plans, no management plan should be developed without the full involvement of the First Nations. Favourable policy and goodwill are not enough: legally binding documents are the appropriate mechanism. Traditional use must be guaranteed by formal agreement and plans should be designed around traditional use.

Who better than the First Nations to manage the Western Hudson Bay region? This would be an honourable expression of the true spirit and intent of our relations. There are many economic opportunities associated with resource use in the area. We must begin to capture the major economic benefits of resource use and retain them for the region. We need an approach that incorporates training, employment, business development, institutional and policy change and cultural development. A coordinated approach to the management of the Western Hudson Bay region can and should be oriented to revitalizing First Nations.

The promise of Canada's central policy on aboriginal peoples, Gathering Strength, is to bring all the resources of Canada, First Nations, provincial and territorial government, the private sector and the Canadian public together in a coordinated effort to make things right in our long and troubled relations. This is the right message and approach. Realizing that this kind of change is necessary requires real, sustained commitment and openness to honouring First Nations, treaties, rights and the realities of where we are right now.

3.1.5. Land and Water Resources in Nunavut

Mike Ferris, Deputy Minister

Nunavut Department of Community Government and Transportation

The lands and waters in the Western Hudson Bay are important wildlife habitat, including polar bear denning habitats and waterfowl - waterbird staging areas. The Hudson Bay waters supports walrus, seal, beluga whale and narwhal: the surrounding land provides habitat for caribou, musk ox, barren ground grizzly bears and other mammals.

The Kivalliq Region of Nunavut is also an area of high precious metal potential. Current exploration for gold, diamonds and uranium is ongoing; deposits of zinc, lead, copper and nickel have already been discovered.

The land and waters of the Western Hudson Bay region are important for Nunavummiut (the people of Nunavut) in terms of subsistence hunting and fishing, especially considering the high cost of food imported from the south. In addition, tourism is the largest non-traditional economic activity among Nunavut communities along the Hudson Bay coast, and the industry is growing. Over 100 companies/organizations in the Kivalliq Region support a wide range of tourism industries. Most of these are dependent on successful management practices in order to ensure sustainability and/or growth opportunities. The Kivalliq communities are dependent on the Hudson Bay waters as a marine highway for supplies of dry cargo and petroleum from Churchill.

The waters also serve as a highway for travel among the communities by boat in summer and by snowmobile/dogsled in winter.

The Government of Nunavut believes that all current uses of Hudson Bay resources will continue to be important to the future of the region. With projected increases in population, higher levels of education and increased exploration of mineral deposits, pressures to use these land and water resources will increase, thereby requiring a coordinated management approach.

*3.1.6. Government Structures in Nunavut
Bert Dean, Director of Wildlife
Nunavut Tunngavik Incorporated*

The Nunavut Land Claim Agreement (NLCA) was signed in 1993. Since that time, Nunavut Tunngavik Incorporated (NTI) has been responsible for implementing that Agreement.

The Wildlife Department of NTI is responsible for ensuring that Article 5 of the NLCA is implemented. Boards formed under NTI include the Nunavut Wildlife Management Board (NWMB), Nunavut Impact Review Board (NIRB), Nunavut Planning Commission (NPC), Nunavut Water Board (NWB), and the Surface Rights Tribunal (SRT).

The Nunavut Wildlife Management Board is the main instrument of Wildlife Management. Their nine member board consists of four appointments from Inuit organizations, (NTI, Kivalliq Inuit Association (KIA)/Keewatin Wildlife Federation (KWF), Kitikmeot Inuit Association (KitIA)/Kitikmeot Hunters and Trappers Organization (KHTA), and Qikiqtani Inuit Association (QIA)/Qikiqtaaluk Wildlife Board (QWB)), four appointments from Government [Department of Indian Affairs and Northern Development (DIAND), Department of Fisheries and Oceans (DFO), Department of the Environment (DOE)/Canadian Wildlife Service (CWS)], the Nunavut Department of Sustainable Development (DSD), and an independent chairperson.

The Nunavut Planning Commission has board appointees from government departments and Inuit organizations. The board establishes planning policies, goals, and objectives and develops Land Use Plans that direct resource use and development in the Nunavut Settlement Area.

The Nunavut Impact Review Board has appointees from government departments and Inuit organizations. This group screens project proposals in order to determine whether a review is required, gauges and defines the extent of regional impacts of a project and reviews the ecological and socioeconomic impacts of project proposals. The Nunavut Water Board is responsible for the regulation, use and management of waters in the Nunavut Settlement Area. The NWB also includes board appointees from government departments and Inuit organizations.

The Surface Rights Tribunal issues entry orders to operators to use and occupy lands to the extent necessary for their operations, subject to the payment of an entry fee. The tribunal holds hearings to determine compensation payable to the surface rights holders, periodically reviews the level of compensation payable under an entry order and terminates an entry order where lands are no longer being used for the purpose authorized.

The Nunavut Marine Council may be formed by the Institutes of Public Government (IPGs) as per Article 15 of the NLCA. The IPGs are an excellent example of the co-management process. We all have to work together to achieve the results and goals that we set.

3.1.7. The Kivalliq Inuit Association's Role in Nunavut

Paul Kaludjak, President

Tongola Sandy, Chief Lands Officer

Luis Manzo, Lands Officer

Kivalliq Inuit Association

The Kivalliq Inuit Association (KIA) is a ten-member board representing the seven communities of the Kivalliq region of Nunavut bordering Western Hudson Bay. The organization aims to preserve Inuit rights and interests in social, cultural and economic spheres.

With the signing of the Nunavut Land Claims Agreement in 1993, the Inuit became owners of vast areas of land. The KIA Lands Department was established to administer the surface and subsurface lands of the region.

The objectives of the KIA Lands Department are: to develop and implement policies and procedures for land management; to acquire funding to implement strategies for environmental clean-ups; to promote land resource uses for economic development; and to authorize and regulate land use activities.

Community participation is an essential part of the Inuit land management regimen. The management program encourages the participation of Inuit in all levels of decision-making in land management. Community Lands and Resources Committees (CLARCs) have been established in each of the communities. These committees have members representing elders, youth, Hunter and Trapper Organizations (HTOs), wildlife and the community. CLARCs are involved in land use planning as well as collecting and conveying information to the community.

A license is required in order to access Inuit-owned lands for various activities. The rules and procedures for the management of Inuit-owned lands are closely modeled on the existing regime in the Northwest Territories. These procedures are responsive to Inuit cultural needs as we welcome the input of all interested parties including Inuit, industry and others regarding possible changes to the rules and procedures.

The aim of Inuit Land Management is to promote the principles of self-reliance, cultural and social well being of all Inuit for their benefit now and in the future. The lands are being managed in a manner that will sustain and enhance their future value.

3.1.8. *The Role of NGO's in Environmental Planning and Management*
Gaile Whelan-Enns, Manitoba Director
Canadian Nature Federation

The aim of non-governmental organizations, such as the Canadian Nature Federation, is to increase awareness of environmental issues among the public. The environmental conditions, risks and cautions in the Western Hudson Bay region must be understood for the purpose of guiding workshop discussions and coordinated management efforts.

The precautionary approach is an important element of public policy. The definition of precaution in this sense is: taking precautionary action before scientific certainty of cause and effect; setting well defined goals; seeking out and evaluating alternatives; shifting the burden of proof to proponents; and developing and applying more democratic and thorough decision-making criteria and methods. Canada's *Oceans Act* is committed to the precautionary approach.

The Department of Fisheries and Ocean action plan for continued sustainable development focuses on many positive actions. These include: improved stakeholder involvement in shared stewardship of marine ecosystems and resources; improved knowledge and understanding of the impacts of oceans on the Earth's climate; fisheries management strategies based on the precautionary approach; and strengthened conservation and protection of ocean ecosystems. Terrestrial biodiversity decline due to global warming, in terms of high migration rates, loss of habitat, and carbon dioxide emissions are occurring in the region. Projections for climate change affecting the future of the region in terms of rise in sea level, changes in arctic sea ice cover, sea ice melt seasonal trends and changes in annual surface air temperature show that many changes are and will be occurring in the region. Ecosystem-based management is required for this region, but any new developments must be scrutinized and evaluated before allowing them to progress.

The polar ecosystem itself is a vital component of the global environment. Among its many roles are sequestering carbon, controlling temperatures and altering sea levels. Concentrations of persistent organic pollutants, increased ultra-violet rays and other effects of climate change or warming are already being felt in the Bay.

We must focus our discussions for developing a coordinated approach in the Western Hudson Bay region to applying the precautionary principle, using traditional ecological knowledge, setting standards and goals for long-term sustainability, applying conservation biology principles to planning and working together for the future of the region.

3.2. THE RATIONALE FOR A COORDINATED MANAGEMENT APPROACH

3.2.1. *Building a Coordinated Ocean/Coastal Management Approach* *Jack Mathias, Head – Oceans Programs Division* *Central and Arctic Region, Fisheries and Oceans Canada*

A coordinated ocean/coastal management approach is an attempt to bring together separate management elements in order to develop a system for coastal planning and management. Such elements are brought together by incorporating perspectives from all interested sectors, including non-governmental organizations, government agencies, industry, First Nations, academia, land claims groups and communities.

A management approach continuum exists, ranging from a fragmented approach, wherein the parties are not working together, to an integrated approach, in which the various sectors working together and share a common interest/goal that guides their work. Between these two extremes exist a series of approaches, ranging from token communication between the parties to harmonization, in which the parties are working together towards a goal to further their individual mandates.

The coordinated ocean/coastal management approach employs a series of direction-setting statements, with a broad purpose leading to various narrow focuses. This begins with the definition of an overall vision for the management program, such as that found within the *Oceans Act* in terms of integrated management. Following this are the goals and objectives for the coastal program that establish what is to be achieved through management. Lastly, action statements, in the form of strategies and policies, are developed to determine how the specific goals and objectives of the program are to be achieved.

For example, a planning system may begin with the identification of priority areas for management. Within these priority areas, area plans, species plans and response plans may be developed to manage various aspects of the area, coordinated to the extent that each is implemented to meet the vision of the broader management area. Action/project plans, such as government, private industry, co-management or community-based initiatives, may be initiated throughout the region, dealing with various small-scale projects and feeding back into the previous management plans and the management of the priority area.

Coordinated coastal planning has the following characteristics: it preserves the productivity of coastal ecosystems; it promotes sustainable development of coastal resources; it considers economic, social and environmental goals; it moves beyond a fragmented approach; it identifies priorities, trade-offs, problems and solutions; it moves beyond jurisdictional boundaries (such as land-sea); and it relies on the input of stakeholders.

A coordinated approach has several benefits, such that it: fosters an cooperation and consensus between sectors, provides mechanisms and tools for rational resource allocation, allows for the development of stronger solutions due to the involvement of all sectors, presents opportunities for the sharing of information, and enables early planning for opportunities and impacts. Within an integrated approach there are clear roles for land claim groups, industry, government and

communities to play. However, the coordinated approach is not without challenges. In order for such a management process to be effective, it must provide value to all participants, there must be a shared vision developed early on by all parties, resources to be managed need to be identified at an early stage, mechanisms must be in place to resolve conflict, and the management process and roles the sectors are to play must be agreed upon.

3.2.2. *Applying Co-management Principles to Hudson Bay*
Fikret Berkes, Professor
Natural Resources Institute, University of Manitoba

Co-management is a widely used term and is often interchanged with cooperative management, collaborative management, coordinated management, joint management, participatory management and multi-stakeholder management. The process is often implemented to encourage partnerships, to provide local incentives for sustainable use or to share power and responsibility for resource management and conservation. The definition of co-management in this presentation is “ the sharing of power and responsibility between the government and local resource users”.

There are various types of co-management recognized in the Canadian north including resource co-management under land claims agreements, environmental assessment, protected area planning, pollution research and climate change research. They all involve variable degrees of participation from stakeholders and local people, as well as inputs of traditional ecological knowledge. The cases discussed in this presentation include: the Beaufort Sea Beluga Management Plan; a study on co-management and a sustainable strategy for oceans by the National Round Table on the Environment and the Economy; Aboriginal co-management under land claims agreements; co-management and watershed partnerships in Manitoba; and a case study from a co-management report by the Standing Committee on Aboriginal Affairs and Northern Development.

The lessons learned from past co-management studies demonstrate many advantages to this approach. Local people, in particular, have a stake and sense of ownership in conservation and management. Many successful relationships have been developed between government agencies, local communities and resource users, bringing different interests together to solve problems. In order to be successful, however, co-management requires organization, the involvement of appropriate institutions, building of trust, incentives to cooperate and recognition by all stakeholders involved that the most important factor is the protection of land and resource rights.

3.3.

3.4.

UNDERSTANDING THE SOURCES AND FORCES OF CHANGE IN THE WESTERN HUDSON BAY REGION

3.4.1. *The Environment of the Western Hudson Bay Region*

*Peter Scott, Scientific Coordinator
Churchill Northern Studies Centre*

There are many important aspects of Hudson Bay that can only be understood by considering the Bay as an ecosystem. It has only been in the last ten years or so that the tools have been available to enable us to do this by putting together community knowledge with traditional science. Because the Hudson Bay region involves different peoples and political divisions, it will be necessary for everyone to work together to understand and manage various aspects of Hudson Bay.

The Hudson Bay region can be defined in a number of ways--all of which may have different implications as to how the system is managed. We can look at its immense watershed, at the Bay alone, or we can create many artificially defined boundaries, each with its own drawbacks. To focus on environmental and ecological considerations we should try to define a sub-unit of the region in terms that will be helpful. In the scientific sense this will require the use of monitoring and environmental indicators.

Land use studies on Hudson Bay generally examine the coast to about 100 km inland. This is also the region where the weather is strongly influenced by the presence of Hudson Bay. I consider this a good way to look at Hudson Bay because it includes a number of critical things:

1. The rivers are affected by what happens in the watershed. Inputs from the rivers into the Bay define processes that affect the food sources, salt-fresh water mixing, nutrient concentrations and ice conditions. Rivers also provide many communities with drinking water, with food sources such as char, and with river crossings that are necessary for hunters, winter roads and caribou.
2. Estuaries are formed where freshwater rivers mix with the salty Hudson Bay waters. Estuaries have plentiful food sources. The tidal areas are also important for shellfish, boating and re-supply by ship.
3. The coastal environment is home to the people of the region, and the weather in their communities is greatly influenced by Hudson Bay.
4. This defined region can be an excellent starting point to develop indicators for the health of the whole Hudson Bay system as well. If we find something changing in a river, we will know it before it enters Hudson Bay and we can locate the source of the change.
5. Hudson Bay is unique in that it seems to behave like a large river estuary on the surface and like the Arctic Ocean underneath. Everything at the water surface is highly dependent on the

freshwater input from rivers and this appears to take from four to fourteen years to mix with the lower waters.

People of the north are still highly dependent on their environment, and it is important to keep it healthy. The long-term effects of the weather and climate of the Hudson Bay region are poorly understood. Whether the warming that is happening now is natural, or because people are putting too many greenhouse gases into the air by burning carbon in the form of coal, oil and gasoline, we are in a strong warming period. In the last 100 years or so the global temperature average has gone up almost 0.8⁰ C. Each year, the winter, spring and summer seasons have been getting warmer on the west side of Hudson Bay while the fall seasons have been getting cooler. Overall the Bay now warms up earlier in the spring, as we can see from the melt of the sea ice.

Measurable impacts are becoming evident. The land around the coast of Hudson Bay is tundra, taiga, and peatlands. During the hot, dry summers there may be considerable stress on the trees and shrubs of the taiga. A retreat of the treeline may be occurring. The peatlands of the Hudson Bay Lowlands--one of the largest peat storage areas in the world--may undergo very important changes as well. The effects that the warming will have are unknown. The peat may either absorb more carbon from the air, or breakdown of the peat may release carbon back to the air. This could upset the natural temperature balance of the Earth.

As the period without sea ice increases, we can expect more frequent use of Hudson Bay during the summer for travel, distribution of goods and harvesting of the resources. Small boats are becoming more frequent in the face of more unpredictable and extreme weather. We must be ready now with more support systems to enable a marine small craft industry to develop safely in this changing environment.

Many changes are taking place in the Western Hudson Bay region. There are settled land claims, and those yet to be settled. Pollutants are coming in by the water and in the air. The climate is changing very quickly and this is affecting the environment, the plants and the animals. There is clear evidence that some polar bear populations on Hudson Bay are becoming increasingly stressed by the lengthening ice-free period on Hudson Bay. The people of Nunavut, in particular, have chosen a bold path to move into a technological society. Scientists need to undertake studies and to work with all the people to gather information about how Hudson Bay works. This knowledge will empower the people of Hudson Bay to deal with the changes that are happening. These concerns cross all sorts of political and jurisdictional boundaries. We need to be strong to ensure a clean and healthy environment in the face of these changes. Our strength is that we are a diverse group of people who are willing to work together to meet these challenges.

3.4.2. *Information/Knowledge Acquisition, Sharing and Management*
Roger Schroeder, Head of Protected Areas and System Planning
Manitoba Conservation

Manitoba is in the process of assembling a network of protected areas across the province to protect and conserve lands that represent the biological diversity of the natural regions in the province. This process is called the Protected Areas Initiative (PAI). Standards for this process are defined in legislation and are enforced by legislative means.

Protected areas will be free from logging, mining, hydroelectric, oil and gas development, as well as other activities that could significantly and/or adversely affect the natural habitat. These protected areas respect First Nations Rights and agreements.

Manitoba's network of protected areas currently includes two national parks, 27 provincial parks/reserves, 16 ecological reserves, 67 Wildlife Management Areas and over 8000 acres of provincial forestlands.

The PAI assesses biological diversity through an Enduring Features Analysis, which identifies the different and unique combinations of soils and landforms in the province. Areas of special interest (ASI) are additional areas that have been identified by Enduring Features Analysis: ASI boundaries may be flexible, and these areas have not been designated or protected in any formal manner.

There is forestry and mining sector support for protected areas along the Hudson Bay shoreline of Manitoba. Much of the coastal region presently consists of special areas, including the Cape Tatnam Wildlife Management Area, the Wapusk National Park, and the Caribou River Park Reserve. Initiatives and processes to facilitate decision-making for this initiative include those: within Manitoba; between Manitoba and Nunavut; First Nations/Industry levels; and National/Federal levels. Types of information being shared and managed include Geographical Information Systems (GIS), websites and newsletters from both scientific and traditional knowledge sources.

Information/knowledge management is a complex aspect of the PAI. For example, scientific knowledge of northern areas is often limited due to the difficulties and costs associated with conducting research in remote northern areas. The extent of traditional knowledge varies between communities, is not gathered in written form and may be lost if elders and youth are not able to speak the same language. Key to the success of the PAI initiative is establishing open relationships and trust between the First Nations, industry and community members.

Some unanswered/unanswerable questions that remain in terms of information/knowledge acquisition, sharing and management pertinent to the Western Hudson Bay are:

- how much information is really needed;
- how willing are organizations to share information; and
- how many organizations will be involved in the coordinated approach.

3.4.3. The Economy of the Western Hudson Bay Region

Jim Stevens, Senior Transportation Planner

Nunavut Department of Community Government and Transportation

Nunavut has initiated a Transportation Strategy to address the high cost of transporting people and goods within the territory. Our mandate is “to develop a comprehensive, multi-modal transportation strategy that improves and promotes the economic and social well-being of all Nunavut residents”. We are working to develop a realistic vision of the Nunavut Transportation System by the year 2020 that will address cost, safety and reliability, economic development, employment and business development.

Development of the transportation strategy is being guided by the Bathurst Mandate. The Bathurst Mandate represents a determination to create a transportation strategy based on the foundations of healthy communities, simplicity and utility, self-reliance and continued learning. The approach is to produce a “made in Nunavut” solution that will address the primary objective of the Bathurst Mandate, which is to improve the quality of life of residents and assess current and future demands at destinations and points of origin.

The various methods of transportation under consideration are marine, air and surface transportation. Each method presents its own issues for concern. Because of the large water mass in the region, marine transportation is a significant component of the strategy. The major issues under consideration that are unique to marine transportation include port infrastructure, possible damage to goods, creation of an ice regime system, and hydrographic charting. Air transportation is under consideration, but population growth, travel demands and market size may affect the success of air travel. Surface transportation solutions are a possibility and will allow for inter-community travel on land.

The maintenance and location of resource development are two of the issues that must be researched further. Several consultations have presented results that have identified concerns in the areas of cost, service availability, opportunities for local employment and the need for competition. As a result of the consultations, there are a number of further analyses under way including the assessment of the benefits, costs, government cooperation, and political implications of each service.

Several environmental and social issues are associated with potential new transportation initiatives in Nunavut. Environmental issues include river and lake crossings, effects on barren ground caribou calving areas and effects on major staging and denning areas. Social issues include land tenure/ownership under Land Claims, linking corridors to resources such as mining and tourism, and impacts on local and traditional lifestyles.

*3.4.4. Inuit/First Nation Culture and Subsistence Harvesting in Western Hudson Bay
David Alagalak, President
Keewatin Wildlife Federation*

Based on the experience and perspective of the Inuit of the region, it is important to protect the land and the resources of the Hudson Bay from environmental damage. For centuries the Inuit have survived on the resources of the land, the various types of wildlife and the availability of the wildlife throughout the seasons because of their traditional knowledge. The Inuit in the area intend to develop the region to make a sustainable economy. They can help to manage the wildlife of Western Hudson Bay in a sustainable manner but it is not a situation that can be resolved locally.

The Inuit acknowledge wildlife not only as suppliers of their needs, but also as their friends. They have observed that wildlife in the Western Hudson Bay region are suffering more from noticeable damage such as infections, swollen feet and markings on their coats than in the past. Many of the wildlife have less fat than in the past. Many are not safe for consumption. Hunters are concerned about what is happening to wildlife, and want to understand the reasons for the increased damage to wildlife. Areas in the Western Hudson Bay region need to be researched to determine the causes of impacts on wildlife.

There is a concern among the Inuit that there is a lack of knowledge regarding changing weather, changes in resource availability and the decline in resource health. The Inuit are concerned about changes in wind, weather and storm patterns in the area. There are concerns about the effects of PCBs and other pollutants on animal health, and a belief that more research on the subject is required. There is also a fear that smaller, more remote communities will be ignored by government organizations conducting research on these subjects. The wildlife managers and local hunters that know the area well are willing to assist for the betterment of the ecological health of the region. There is the need for additional help, and extended studies to assist the interested communities in protecting the wildlife, improving management plans and extending the personal knowledge base of community members.

*3.4.5. Inuit/First Nation Culture and Subsistence Harvesting in Western Hudson Bay
Raymond Ningeocheak, 2nd Vice President – Wildlife Portfolio
Nunavut Tunngavik Incorporated*

I'm very pleased that we, as Inuit, can be involved in this initiative. The ecosystem we live in supports us and is an important part of our lives.

There has been mineral exploration in the Hudson Bay region since the 1940s. When the mining companies leave, their garbage dumps are still on the sites. We have noticed that since then, animals on the land and sea have been affected. We are concerned that rules and regulations of the sea are not in proper order.

When I caught a ringed seal in 1992 it was full of oil. A ship had arrived in Coral Harbour and dumped oil under the ice without letting us know. When we asked, they said that nothing was dumped. These things should not happen.

Those are our concerns. I'm glad that we are involved and can start working together.

3.4.6. *Inuit/First Nation Culture and Subsistence Harvesting in Western Hudson Bay*
Pharoah Thomas
Shamattawa First Nation

Involving First Nations in the development of protected areas is important because what the province declares as significant may not be the same as what a First Nation would declare as significant. As First Nations still rely heavily on natural resources for their sustenance and livelihood and have a good understanding of land use, their knowledge should be included.

The importance of land to First Nations cannot be ignored. Fathers and mothers teach their children the ways of the land. Knowledge is based on personal experiences, passed from generation to generation “in the field” rather than at the table. Scientific knowledge, in contrast, cannot teach what has been learned from past personal experiences.

Lifestyle changes have significantly affected First Nation life and culture. Some of these changes may be beneficial to society, but there is a danger that if traditional culture is not protected and used, it may be lost. The loss of language and loss of a subsistence hunting-based lifestyle are two challenges facing First Nations. For the First Nations to have a future, the past must not be forgotten. The protection of First Nation lands, and how they are identified, can create a sustainable future for First Nations. Challenges that must be overcome include addressing First Nation concerns on a larger scale, and recognizing First Nation cultures as significant.

The Shamattawa First Nation is concerned about the possible effects of hydro line development and potential mining explorations on traditional hunting territories. The development may benefit the economy and the community, but the protection of the First Nation culture must also be considered. First Nations will continue to voice concerns over the potential loss of options for the young people and for the traditions that could be forgotten.

3.4.7. *Jurisdictional Issues in Western Hudson Bay*
Magdalena Muir, President
International Environmental and Energy Legal Services

The presentation discussed jurisdictional issues for the western Hudson Bay region, which is the northern Manitoba coast adjacent to Hudson Bay, the Kivalliq region of the Nunavut Territory, and adjacent offshore waters. Jurisdictional issues include: resource and environmental issues for the region; the application of the common law; the role of international agreements and conventions; the constitutional authority of the governments; and Inuit and Manitoba First Nation rights. The role of federal, territorial and provincial government departments, and land and resource management boards was also discussed.

There are a variety of resource and environmental issues for the western Hudson Bay region. These are subsistence and commercial wildlife harvesting and tourism activities in relation to wildlife and parks throughout the region. Mining and hydroelectric developments occur within and impact the region. Community re-supply and economic activities require marine, air and ground transportation. The region also experiences air-borne pollution that originates in distant locations in Europe and Asia, and the impact of global climatic changes.

Common law rights are those right arising through the common law, or successive legal decisions. Riparian rights are the rights of land-owners who own lands adjacent to a river or water body. Riparian land owners own the bed of rivers and water bodies to the mid-point of these waters. Ownership of the bed gives rise to the exclusive right to fish in waters above the bed. However, ownership of the bed of the water body is subject to the public right of navigation through these waters. Submerged coastal lands are owned by the state below the low water mark.

A number of international conventions and agreements apply to the western Hudson Bay region. These include conventions focusing on the sea and its resources such as the United Nations Convention on the Law of the Sea (1994), Straddling Stocks Agreement (1995), Agenda 21 (1992), Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities (1994), and agreements for marine shipping, oil spills from ships, and marine liability. Other applicable conventions and agreements focus on the arctic, a species or type of habitat, or on a global environmental issue. These include the Arctic Environmental Protection Strategy (1991), the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the RAMSAR Convention on Wetlands) (1971), the Agreement on the Conservation of Polar Bears and Their Habitat, 1973; and the United Nations Framework Convention on Climate Change (1994).

Governments within Canada have authority of governments under such constitutional documents as the Constitution Act, 1867, the Manitoba Natural Resources Transfer Agreement, 1930, and the Constitution Act, 1982. Federal and provincial authority is addressed in the Constitution Act, 1867, while territories have that authority delegated from the federal government. Section 35(3) of the Constitution Act, 1982 protects Inuit and Manitoba First Nation rights. Lastly, the Nunavut Territory is unique due to the close relationship between the territory and structures and rights described in the Nunavut Final Agreement.

The Inuit and Manitoba First Nations have rights throughout the region. Inuit rights and organizations are described in the Nunavut Final Agreement. Organizations include the Nunavut Tunngavik Incorporated, the Kivalliq Inuit Association and Inuit wildlife organizations. Manitoba First Nations have rights arising as a result of aboriginal rights, treaty rights, the Northern Flood Agreement, Treaty Land Entitlement process, and other federal and provincial initiatives.

Federal government departments with jurisdiction and responsibility in the western Hudson Bay region include the Department of Fisheries and Oceans, Department of Indian Affairs and Northern Development, Environment Canada, Canadian Heritage and the Parks Canada Agency and the Department of Transport. The government of the Nunavut Territory includes the Department of Sustainable Development, the Department of Community Government and

Transportation, the Department of Public Works, Telecommunications, and Technical Services, the Department of Health and Social Services and the Department of the Executive and Intergovernmental Affairs.

Land and resource management boards are established under the Nunavut Final Agreement. These boards are joint management board with the participation of the federal and territorial government and the Inuit. Relevant boards include the Nunavut Wildlife Management Board, the Nunavut Planning Commission, the Nunavut Impact Review Board, the Nunavut Water Board and the Nunavut Surface Rights Tribunal.

The government of Manitoba has a number of departments active in northern Manitoba. These include the Department of Conservation, Manitoba Highways and Government Services, the Department of Industry, Trade and Mines, the Department of Culture, Heritage and Tourism, and the Department of Aboriginal and Northern Affairs, and the Department of Intergovernmental Affairs. The Town and Port of Churchill is the centre of commercial and government activities for the Manitoba coast, and has a municipal government which is active within and adjacent to the town.

SYNTHESIS OF GROUP DISCUSSIONS

4.1. INTRODUCTION

Five major themes provided the context for the Western Hudson Bay workshop: (1) the environment; (2) information/knowledge acquisition, sharing and management; (3) the economy; (4) First Nation and Inuit culture and subsistence harvesting; and (5) jurisdictional issues. The five themes were developed as a result of more than 70 interviews conducted prior to the workshop with residents, regulators, resource users, researchers and others with an interest in the Western Hudson Bay region.

Workshop participants were divided into seven working groups. Each working group represented a cross-section of the interests participating in the workshop. Members of working groups were asked what they considered to be the major challenges facing the region, as well as the potential opportunities for developing a coordinated approach to future management of the region (Table I). Once the challenges and opportunities were listed, they were prioritized.

4.1.1. Theme #1 - The Environment

All seven working groups concluded that the best way to define, understand and assess the environment of the region was to adopt an ecosystem approach. This means focusing on the Hudson Bay in its entirety rather than only the western side. Dividing the Hudson Bay ecosystem into a western and eastern region is not desirable, since understanding and assessing the true significance of environmental change can only be determined from an overall ecosystem perspective.

Environmental changes are occurring in the Bay, particularly as a result of climate change and, perhaps to a lesser extent, because of economic development activities. Changes observed include the following: habitat modification; changes in species composition, number and location; changes in ice conditions and snowfall; and variations in weather patterns. These changes have the potential to result in significant disruption to the ecology and people of the region. For example, questions are being raised regarding abnormalities found by hunters in the animals being harvested for food. The effects on the health of those who consume these animals are unknown.

While it was recognized that climate change is a global challenge, potential impacts of climate change on the Hudson Bay ecosystem need to be identified, assessed and understood. A recurring message during discussions was the need to obtain baseline information and develop databases in order to assess the effects of climate change in the region. Data will allow the prediction of large-scale environmental impacts that may occur as a result of climate change. Climate change impact studies will help decision-makers balance environmental limits with development objectives. Workshop participants felt that once the outcome of these impacts is better understood, it will be possible to prepare and adapt to environmental changes.

The role that human activities play in causing environmental changes must also be examined. Participants agreed that the impacts of economic development activities on the environment are important considerations in designing a management approach. Projects such as hydroelectric generating facilities, river diversions, mining operations and shipping activities have the potential to impact environmental quality. A cumulative environmental assessment monitoring program is required. This would assess the combined environmental effects of economic development activities on an ecosystem basis.

The working groups concluded that the effects of environmental change are significant for the region. They anticipated that these changes would impact northern economies, traditional lifestyles and the success of subsistence harvests on which they depend. Working groups consistently identified the lack of basic information about Hudson Bay and the lack of understanding that the impacts of climate change will have on the ecosystem. This was recognized as a severe constraint to planning and development of adaptive management strategies.

4.1.2. Theme #2 - Information and Knowledge Acquisition, Sharing and Management

Improving the collection, sharing and management of information and knowledge about features of the Hudson Bay ecosystem was considered a high priority for developing of a coordinated management approach in the region. Ongoing information and knowledge collection activities are indeed occurring in the region. However, these activities tend to be fragmented and are often not easily accessed by the local community members. Many of the scientific studies done in the region are not translated to Inuktitut and are technically difficult to understand. Participants agreed on the need for more comprehensive and systematic information and knowledge collection and dissemination programs. Organizing and sharing information is a key challenge, as the success of an effort like this will depend on building trust and cooperation among all those who live, work or study in the Hudson Bay region.

There was consensus that both traditional knowledge and scientific studies can contribute to information and knowledge acquisition, sharing and management in the region. Traditional knowledge can contribute to understanding the historical ecology of the region, providing the information necessary to fill knowledge gaps, providing insight into current local conditions and providing an understanding of changes occurring in the region. The design of research and environmental monitoring programs should include a role for the local harvesters, hunters, trappers and fishermen, such as collecting samples of diseased animals for analysis or acting as field observers. Local knowledge can be particularly useful for detecting environmental changes to support ongoing scientific monitoring. The results of scientific studies can in turn assist local residents by providing answers as to why these changes are occurring and the extent to which they are occurring.

Working group members requested that researchers present their findings and results in terms, languages and concepts that are relevant to a northern audience. While many new technologies common to a southern audience offer significant opportunities for cost effective storage and widespread distribution, not all northerners are familiar with or have access to these technologies.

4.1.3. Theme #3 - The Economy

Working group discussions identified the desire of northerners to become self-reliant by developing a viable and sustainable northern economy. Northerners will have to play a major role in developing the framework for this economy. Benefits must be maximized for the local people and the traditional and modern economies must coexist.

While noting the importance of economic development, the discussions emphasized the need to balance economic development with environmental and cultural carrying capacity. The potential biological and social impacts of development activities must be understood in advance. It was suggested that all development projects be subject to comprehensive environmental and social impact assessment.

The development and expansion of infrastructure, such as transportation, power, water, sewage and waste management facilities, is needed to properly accommodate economic growth.

To facilitate the development of a northern economy, workshop participants suggested: that the economy should be developed on a regional level; that research funding should assess environmental and social impacts; that the necessary infrastructure to stimulate information flow across all interested groups should be developed; and that the use of all resources should be optimized by working together.

4.1.4. Theme #4 - Inuit and First Nation Culture and Subsistence Harvesting

Workshop participants noted that the culture, tradition and values of the people of the region should guide the coordinated management approach. Accommodating economic activities without affecting traditional subsistence harvesting was identified as a difficult challenge. An effective process for incorporating traditional values and knowledge into planning processes and project implementation should be developed. This basis will establish a shared responsibility and accountability by both the local people and others for the future management of the Bay.

Recognizing their shared interest in Hudson Bay, both Inuit and First Nation participants spoke of the need for both groups to develop a better understanding of each other's cultures, traditional knowledge and community harvesting practices. Because the main animal and fish species are highly migratory, it was recommended that a harvesting management plan for all species in the Hudson Bay region be developed.

Local Inuit and First Nation people must establish priorities for the region. They are particularly concerned with the social impacts of economic development and an unstable climate on their communities and on their subsistence harvesting practices. More research is needed to study and monitor the health of wildlife.

As part of a desire to have the First Nation and Inuit culture recognized and valued, traditional values and ways must be incorporated into the present school system.

4.1.5. Theme #5 - Jurisdictional Issues

Participants viewed the jurisdictional context of the region as very complex and multi-layered. They also perceived decision-makers to be driven mainly by self-interest and self-gain. One of the more significant challenges for the future of the Hudson Bay region is to identify ways for those with an interest in the Bay to work together. It was generally agreed that all parties with an interest in the Bay should set aside jurisdictional concerns, personal mandates and biases. They should instead work together in establishing a coordinated approach to the management of the whole region, across all jurisdictional boundaries involved. One participant commented that, “the animals, birds and fish know of no jurisdictional boundaries”.

There were many suggestions for addressing jurisdictional complexities in the region. The geographical boundaries of this initiative must be defined, keeping all those with interest in or impact on the region involved. Different types of cooperative arrangements are possible depending on the both the geographical boundaries and scope of this initiative. These should be examined. A land use plan for the whole region, rather than separate plans for each province, territory or area, should be developed in order to bring the jurisdictional groups together. Common initiatives and interests should be identified and meaningful community involvement ensured through inter-jurisdictional discussion forums.

The rights and responsibilities of people in the region need to be further clarified by settling outstanding land claims. This can only be facilitated by an agreement that all stakeholders be willing to share power, and accept that co-management requires both compromise and vision.

Table I: Key Challenges, Opportunities, and Priorities Identified by Working Groups.

Working Group 1				
Key priorities:				
<ul style="list-style-type: none"> • Develop a process for sharing information • Expand existing relationships and move forward • Learn from lessons in other inter-jurisdictional species management regimes 				
The Environment	Information/Knowledge Acquisition Sharing and Management	The Economy	Inuit/First Nation Culture and Subsistence Harvesting	Jurisdictional Issues
Take an ecosystem-based coordinated approach Get basic information on the changing environment	Study how organizations work together and how they obtain information from one another Organize forums for parties to meet, discuss common concerns and share information Build on existing approaches or create new ones as necessary	Develop a viable, sustainable economy for northern communities in a changing environment	Inuit and First Nation discussions to develop a better understanding of their cultures Take advantage of opportunities to learn from one another	All levels of government, communities and agencies should cooperate Implement aboriginal rights and land claims
Working Group 2				
Key priorities:				
<ul style="list-style-type: none"> • Agencies should begin to cooperate on smaller, specific initiatives as a start for the larger initiative of coordinated management 				
The Environment	Information/Knowledge Acquisition Sharing and Management	The Economy	Inuit/First Nation Culture and Subsistence Harvesting	Jurisdictional Issues
To assess the effects of climate change, get baseline information on coastal lands, mammals and fish, oceanography, etc. Develop an ecosystem based approach to managing the region Stop habitat degradation by reducing oil, gas and human wastes entering the Bay	Find ways to share both scientific and traditional information Develop communication processes that will build trust between interest groups	Recognize that economic development has impacts on the environment Conduct biological inventories before allowing economic development	Assess the effects of global warming on traditional ways of life Develop a harvesting management plan for all species in the Hudson Bay region Arrange to have subsistence hunters collect scientific data	Coordinate all jurisdictions Develop a land use plan for the Hudson Bay region to bring together jurisdictional bodies Find common initiatives and interests Get community involvement
Working Group 3				
Key Priorities:				
<ul style="list-style-type: none"> • Exchange knowledge and ideas in a transparent and open manner and increase the frequency and involvement of all parties • Preserve traditional knowledge but implement new technologies 				
The Environment	Information/Knowledge Acquisition Sharing and Management	The Economy	Inuit/First Nation Culture and Subsistence Harvesting	Jurisdictional Issues
Take an ecosystem approach that will lead to sustainability. Natural laws do not respect political boundaries Get baseline information and develop databases	Initiate two-way sharing of information in a way that is meaningful to all Clarify the role of local people in the research process Use education to provide tools to all people for decision making Assess collective information needs	Assess all effects of economic development including the social dimension Link the traditional and broader economies Develop a sustainable and viable economy Quantify the impact of development	Develop an understanding of culture, traditional knowledge, and community Consider the social dimensions of economic development and an unstable climate	Identify key issues between jurisdictions Have inter-jurisdictional forums Take a holistic approach

Working Group 4				
Key Priorities: <ul style="list-style-type: none"> • Identify stakeholders, identify next steps, confirm objectives, and let the process continue • Develop sustained communications with all levels of governments, non-governmental organizations and communities • Secure funding 				
The Environment	Information/Knowledge Acquisition Sharing and Management	The Economy	Inuit/First Nation Culture and Subsistence Harvesting	Jurisdictional Issues
Get information needed to know the current state of environment, and assess global warming, pollution and human carrying capacity Give northerners a greater say in decision-making Recognize the area is one marine ecozone that needs a coordinated approach Assess the risks of having wrong decisions made due to insufficient knowledge	Provide information in languages that all will understand Involve hunters, trappers and community members in data collection Coordinate local knowledge with scientific data and identify knowledge gaps	Allow northerners to develop an economic framework for the region Balance economic development with environmental carrying capacity Maximize benefits to local stakeholders	Recognize and place value on Inuit and First Nation cultures Incorporate traditional values into the school system Address the impacts of climate change and pollutants on subsistence harvests and culture First Nations and Inuit must establish priorities	Coordinate transboundary issues Develop infrastructure in Eastern Hudson Bay to compare with that in the Western Hudson Bay Develop awareness to ensure responsibilities of the parties involved are understood Make local people the most important component of the decision-making process

Working Group 5				
Key Priorities: <ul style="list-style-type: none"> • Stimulate horizontal and vertical information flow • Develop capability, capacity and resources to manage the region effectively • Develop transportation infrastructure 				
The Environment	Information/Knowledge Acquisition Sharing and Management	The Economy	Inuit/First Nation Culture and Subsistence Harvesting	Jurisdictional Issues
Take an ecosystem approach to facilitate regional planning Get information needed to allow climate change studies, predicting potential large-scale environmental impacts to the region	Develop a common terminology for overcoming communication barriers Identify knowledge gaps Improve baseline data Bridge western science with traditional knowledge	Coordinate economic development on a regional level Develop infrastructure to stimulate information flow	Develop an effective process for incorporating traditional values and knowledge into the planning process Monitor the health of fish, wildlife and humans in the north	Develop a common understanding of co-management Adopt a holistic management approach across jurisdictional and ecosystem boundaries

Working Group 6				
Key Priorities: <ul style="list-style-type: none"> • Build on organizations and programs already in place • Coordinate this effort through DFO (Department of Fisheries and Oceans) as per mandate in the <i>Oceans Act</i> • Create a new jurisdictional “box” that redefines the way jurisdictions work together • Develop a research time frame 				
The Environment	Information/knowledge acquisition sharing and management	The Economy	Inuit/First Nation Culture and Subsistence Harvesting	Jurisdictional Issues
<p>Ensure that the food chain remains healthy: involve Manitoba Health and Health Canada in the process</p> <p>Since cumulative impacts transcend disciplines, research must take a similar, holistic approach</p>	<p>Inventory and compile knowledge and make it accessible</p> <p>Balance and validate traditional and scientific knowledge</p> <p>Conduct research that reflects the needs of communities and management agencies</p> <p>Translate all documents into all relevant languages</p> <p>Develop capacity for northern research</p> <p>Define an approach to information collection</p>	<p>Address high transportation costs which constrain development</p> <p>Increase research funding</p> <p>Promote Churchill as a transportation hub</p>	<p>Develop capacity for northern research</p> <p>Get information on contaminants that is useful to harvesters</p> <p>Study contaminants in the northern wildlife</p>	<p>Clarify jurisdictional responsibilities</p> <p>Define the area to be managed and studied</p> <p>Consider the possible cooperative agreements between Nunavut and Manitoba</p>

Working Group 7				
Key Priorities: <ul style="list-style-type: none"> • Build on existing partnerships and legislation • Synthesize knowledge of all participants and stakeholders • Learn from others with relevant experience • Be flexible with rules and regulations, as standard ones may not apply to this region or initiative 				
The Environment	Information/knowledge acquisition sharing and management	The Economy	Inuit/First Nation Culture and Subsistence Harvesting	Jurisdictional Issues
<p>Conduct research, monitor, assess changes and seek ways to adapt to climate change</p> <p>Understand human impacts on climate change as well as natural impacts</p> <p>Reconcile environmental limits with development objectives to ensure the protection of biodiversity</p>	<p>Share information</p> <p>Inventory existing traditional and scientific knowledge</p> <p>Involve communities in the decision-making process</p>	<p>Anticipate resource development in areas of shipping, energy and transportation</p> <p>Optimize use of resources by working together</p> <p>Reconcile environmental and economic development</p>	<p>Maintain the land for future generations</p> <p>Discuss cultural exchanges</p> <p>Respect and work with land claim agreements</p>	<p>Respect and work with land claim agreements</p> <p>Share power</p> <p>Accept that co-management requires compromise</p>

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5.0.

SUMMARY AND NEXT STEPS

The Oceans Programs Division of Fisheries and Oceans Canada (DFO), Central and Arctic Region hosted the Western Hudson Bay Workshop: Charting a Co-ordinated Approach to Management for the Western Hudson Bay Region in Winnipeg during the period October 23-25, 2000. The purpose of this workshop was to initiate a process involving key parties with an interest in the Western Hudson Bay Region in the development of a co-ordinated approach to future management of the estuarine, coastal and marine ecosystems of the Western Hudson Bay Region.

This workshop brought together interested parties and led to discussions on an integrated approach to coastal management and marine protection for the region. Discussions at the workshops and independent communications suggest that a diverse range of parties-- including governments, the Inuit, Manitoba First Nations, academics, private parties, and environmental interests--are interested in participating in cooperative process for the region.

Four key management concerns were identified during the workshops:

1. The need for a co-ordinated management approach to marine resources;
2. The importance of examining the effects of climate change, contaminants and other pollution;
3. The need to assess the relative health of wildlife and health risks of country food eaters; and
4. The importance of establishing an effective information sharing process and feedback mechanism.

One of the recommendations made by Nunavut participants at the workshops was that a key next step in developing a management plan for the Western Hudson Bay must be to consult with the Kivalliq Region (Western Hudson Bay) communities. Based on this recommendation, DFO staff visited Churchill, the Kivalliq communities and Iqaluit between March 7 and March 19, 2001 to conduct further consultations concerning appropriate next steps. It is anticipated that a Western Hudson Working Group will be formed in Fall 2001 to begin work on developing a management plan for the region.

APPENDIX I: WORKSHOP PARTICIPANTS AND INVITED PERSONS

Participants are listed in bold text.

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Academic

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APPENDIX II: POSTER AND MULTI-MEDIA PRESENTATIONS

POSTER PRESENTATIONS

Jack Mathias Oceans Programs Division, Fisheries and Oceans Canada	“Working Together for Integrated Management” “Marine Environmental Quality”
Amalia Pempengco Communications Department, Fisheries and Oceans Canada	“Canada’s Arctic Coast”
Judy Freeman Oceans Programs Division, Fisheries and Oceans Canada	“Arctic Marine Education Curriculum – Oceans 10”
Sara Melnyk Oceans Programs Division, Fisheries and Oceans Canada	“Integrated Management for Manitoba’s Marine Coast” “Manitoba’s Marine Coastline – Summary Map” “Button Bay to Cape Churchill – Summary Map”
Steven Newton Oceans Programs Division, Fisheries and Oceans Canada	“Sustainable Development in Churchill, Manitoba” “Concentric Rings depicting annual Social, Economic and Environmental Activities in Churchill”
Donn Pirie Oceans Programs Division, Fisheries and Oceans Canada	“Marine Transportation for the Hudson Bay Port of Churchill”
Marta Wojnarowska Oceans Programs Division, Fisheries and Oceans Canada	“The Manitoba Coastline from Space – natural colour image” “The Manitoba Coastline from space – false colour image” “Hudson Bay Trivia”
William Franzin Science Division, Fisheries and Oceans Canada	“Rainbow Smelt: Humans help an Atlantic species to reach Hudson Bay via an Interior Route”
Lianne Maiers Science Division, Fisheries and Oceans Canada	“Identification of Genetically Defined Beluga Whale Stocks in Hudson Bay”
Ole Nielsen Science Division, Fisheries and Oceans Canada	“Brucellosis in Marine Mammals of Arctic Canada”
Daniel Brousseau Canadian Hydrographic Service, Fisheries and Oceans Canada	“The Use of Remote Sensing in Western Hudson Bay: A Canadian Hydrographic Perspective”
Indian and Northern Affairs Canada	“Petroleum and Mineral Resources North of 60”
Tom Naughten Canadian Heritage-Parks Canada	“Satellite Monitoring of Northern Ecosystems”
Peter Wilson Nunavut Planning Commission	“Knowledge – GIS Integration of Knowledge” “Land Use Planning for the Future of Nunavut”
Wendy Creed Parks and Natural Areas, Manitoba Conservation	“Manitoba’s Protected Areas Initiative: Areas of Special Interest”
Richard Remnant North/South Consultants and Manitoba Hydro	“Aquatic Ecosystem Studies of the Lower Nelson and Lower Churchill Rivers”

POSTER PRESENTATIONS

Allison Zacharias Wardrop Engineering Inc.	“Environmental Assessment of Dredging at the Port of Churchill”
Miriam Fleming Municipality of Sanikiluaq	“The Hudson Bay Traditional Ecological Knowledge and Management Systems Study”
Ryan Brook Natural Resources Institute, University of Manitoba	“Landscape Level Vegetation Mapping in the Hudson Bay Lowlands of Manitoba: Wapusk National Park and the Cape Churchill Wildlife Management Area” “Landscape Level Vegetation Mapping Using Landsat TM Satellite Imagery in Wapusk National Park”
Ronald Hempel Department of Geography, University of Manitoba	“G.I.S. Approaches to Compiling Marine Data for Hudson Bay” “Integrating Terrestrial Influences on Coastal Management for Western Hudson Bay”
David Moss crop Centre for Earth Observation Science, University of Manitoba	“Building on Strength: Northern Studies at the University of Manitoba”
Evan Richardson Department of Zoology, University of Manitoba	“Arctic Red Fox Dens in the Churchill Region: A Multi-scale Habitat Analysis”
Charles Burgy Makivik Corporation	“Land Use and Ecological Knowledge Project of the Inuit of Nunavik in Northern Quebec”

MULTI-MEDIA PRESENTATIONS

Peter Wilson Nunavut Planning Commission	“Land Use Planning and G.I.S. in Nunavut”
Marta Wojnarowska Oceans Programs Division, Fisheries and Oceans Canada	“Manitoba Coast From Space”
Bruce Stewart, Oksana Baniias, Ronald Hempel Fisheries and Oceans Canada	“Hudson Bay Databases CD: Introduction and Interactive Tutorial”