NUNAVUT FISHERIES Strategy

MARCH 2005



GOVERNMENT OF NUNAVUT AND Nunavut Tunngavik Incorporated







News Release

Strategy Aims to Make Fishery Key Economic Driver

IQALUIT, Nunavut (May 5, 2005) – Nunavut Tunngavik Inc. President Paul Kaludjak and Environment Minister Olayuk Akesuk today released the Nunavut Fisheries Strategy. The strategy is designed to turn the emerging fishing industry into a major contributor to Nunavut's economic growth.

"This strategy will provide direction for the successful development of our fishery for the benefit of all Nunavummiut. It builds upon the strong cultural attachment that Inuit have with their marine environment," said Akesuk.

"By developing the Nunavut Fisheries Strategy, NTI and the GN are clearly demonstrating that our territory and our people are ready to develop our shrimp and turbot fisheries. Now, Fisheries and Oceans Minister Geoff Regan needs to do his part by increasing our quotas in our adjacent waters. Other jurisdictions in Canada enjoy 85 to 100 per cent of the total allowable catch in their adjacent waters. Inuit receive just half of that," said Kaludjak.

Akesuk recently presented the Nunavut Fisheries Strategy to the federal Department of Fisheries and Oceans and asked it to help remove several obstacles that stand in the way of realizing the significant potential of the fishery.

The strategy focuses on five key issues that need to be addressed. They are:

- More scientific and other research to determine the extent and sustainability of the fishery;
- Increased access to the fishery. Current access and allocation arrangements discriminate against Nunavut, which is the only coastal jurisdiction in Canada that does not have access to the majority of its adjacent fish resources;
- Infrastructure to enable Nunavut to land and process its resource. Nunavut has been excluded when the federal government has made major marine infrastructure investments for harbours, ports, service centres, processing plants and cold-storage facilities;
- Education and training so that more Nunavummiut can participate in the fishery and reduce the need for southern workers. This would increase Inuit employment and generate economic spin offs from income earned by Nunavummiut; and
- Local decision-making, which needs to be expanded so that the fishery better reflects the interests of Nunavut.

The fisheries strategy stems from the Nunavut Economic Development Strategy, which was developed and adopted in 2003 by the Government of Nunavut, NTI and other organizations. Development of the fisheries strategy began shortly after NTI and GN signed *Iqqanaijaqatigiit – Working Together*, a protocol that reflects and guides the growing co-operation between the organizations.

"This strategy helps us ensure that one day we will have trained Inuit ready and willing to work in our fisheries. This is key to developing a strong, self-reliant economy in Nunavut," said Kaludjak.

"With this strategy, we are demonstrating our continuing commitment to building a constructive and co-operative relationship between the GN and NTI that will benefit the people of Nunavut," said Akesuk.

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NUNAVUT FISHERIES STRATEGY

Government of Nunavut & Nunavut Tunngavik Incorporated

March 2005

Message from the Minister and NTI President

The Nunavut Economic Development Strategy (NEDS) prepared in 2003 is a great example of what can be achieved through a process of broad collaboration. The strategy lays the foundation for the development of the Nunavut economy over the next decade and sets out achievable goals and objectives. It also identifies the need to develop sector specific strategies in key areas of the Nunavut economy such as the fishing industry.

We view the completion of the Nunavut Fisheries Strategy as a continuation of the partnership approach taken during the NEDS process. It builds upon the strong cultural attachment that Inuit have with their marine environment and presents a clear vision to guide our efforts over the upcoming years. We are committed to moving this strategy forward through a continued and enhanced collaborative approach.

Nunavut's fishing industry can be a major contributor to our economic growth over the upcoming years. We recognize that achieving this growth will not be easy and all responsible Nunavut agencies must play an active role in moving the fisheries agenda forward.

Given the rapidly evolving nature of the fishing industry it is very important that the Nunavut Fisheries Strategy be a 'living document' that is updated and revised on a regular basis, through the development of annual work plans to reflect the changes that are occurring in the industry.

Over the coming weeks and months we will work, in cooperation with the Nunavut Economic Forum, on a broad engagement process with all stakeholders to ensure the effective implementation of the goals, objectives and recommendations identified in this strategy.

In closing we would very much like to acknowledge the agencies that committed financial resources to the completion of this initiative: Indian and Northern Affairs Canada; the Government of Nunavut's Departments of Economic Development and Transportation, and Environment; as well as Nunavut Tunngavik Incorporated.

The Honourable Olayuk Akesuk Minister Department of Environment Government of Nunavut Paul Kaludjak President Nunavut Tunngavik Incorporated

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1. INTRODUCTION

1.1 The Need for a Nunavut Fisheries Strategy

The new territory of Nunavut was created on April 1, 1999 after years of discussions and negotiations between Inuit and the Canadian government. Nunavut comprises an area that spans more than two million square kilometers of Canada and includes nearly two thirds of its coastline. As a result it is little surprise that 25 of its 26 communities are located on the coast with an historic attachment to the sea that far pre-dates European contact.

This new political jurisdiction faces a number of challenges in shaping the development of its coastal economy. In an effort to address these challenges the Government of Nunavut (GN) and Nunavut Tunngavik Incorporated (NTI) completed Nunavut's first Economic Development Strategy in 2003. This landmark document outlines a vision for Nunavut's economic development over the next decade. Economic growth is necessary if Nunavummiut are to attain what the Conference Board of Canada has described as the basic goal of any economic development strategy; "a high and sustainable quality of life."

The Nunavut Economic Development Strategy (2003) identified the need for specific strategies to strengthen emerging sectors of the Nunavut economy such as the fishing industry. Last fall the GN and NTI began developing a Nunavut Fisheries Strategy to build upon the goals and objectives of the Nunavut Economic Development Strategy.

Twenty years ago, the extent of Nunavut's marine resources was virtually unknown. Today we take part in a highly competitive offshore fishery as well as near shore and inland fisheries.

With the recent emergence of the fishing industry, came the rising expectations of the Nunavut constituency. Actions must now be taken to ensure that public expectations do not outstrip the rate of actual development. This strategy will attempt to focus constituency expectations on the best use and maximum benefit of this renewable resource for Nunavummiut.

Four Factors for Wealth Creation

Both the Nunavut Economic Outlook (2001) and the Nunavut Economic Development Strategy highlight the focus on four factors for wealth creation.

- **Physical Capital**: The need to address the infrastructure issues in Nunavut that are affecting both its economic and social development.
- **Human Capital**: The importance of putting the necessary support structures in place to help Nunavummiut achieve their full potential.
- **Natural Capital:** The need to conserve, sustain and monitor Nunavut's natural resources to support its mixed economy.
- Social and Organizational Capital: The requirement to develop competence in and cooperation between Nunavut's various organizations, at all levels.

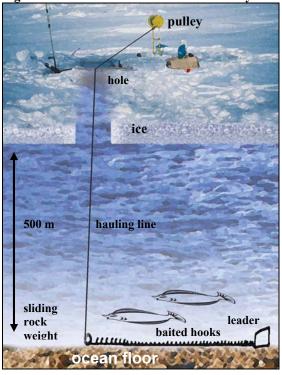
1.2 Industry at a Glance

The Inuit of Nunavut have a long history of harvesting the rich bounties of the sea. For centuries Inuit relied heavily on Arctic char, seals and other marine mammals for their livelihood, as evidenced by the fact that all but one of Nunavut's communities is situated along the coast.

This subsistence lifestyle continues today in all of Nunavut's coastal communities, however, over the past twenty years Nunavut's fishery has become increasingly commercialized. The result is the emergence of a unique 'mixed economy' of commercial and subsistence use.

Fisheries are now in development in all three regions of the territory. In the Kivalliq and Kitikmeot regions have focused primarily on continued commercial development and marketing of the Arctic char resource, however, over the past several years, these two regions have begun to explore new fisheries, such as flounder, clams, crab and scallops, with some success. There is little doubt that these emerging fisheries will continue to grow. The Baffin region is where large-scale offshore turbot and shrimp fisheries have been established. There is also an inshore commercial fishery for turbot in Cumberland Sound, (See Figure 1.1). In addition to the continued development of turbot and shrimp, the potential exists for the establishment of fisheries for clams, scallops and crab.

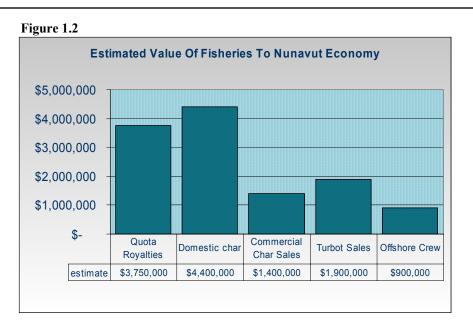
With the recent development of the offshore turbot fishery in NAFO (Northwest Atlantic Fisheries Organization) Division 0A (See Appendix A) the expectations for this industry to create meaningful employment opportunities have grown significantly.





In 1986 a small group of Greenlandic fishermen partnered with fishermen from Pangnirtung to conduct a test fishery in Cumberland Sound using longline gear set through the ice in holes. The longlines consist of a series of baited hooks on short lines (gangions) attached to a long ground line. The gear, with an average of 100-200 baited hooks, is fed through a hole in the ice using an underwater *'kite' fabricated from sheet* metal. The line is fished for approximately 2 hours, and then retrieved using a motorized hydraulic hauler. *The fish are then headed and* gutted on the ice, and stored in slush ice for transport to the local plant.

It is estimated that Nunavut's fisheries currently contribute between \$12 and \$14 million annually to the territorial economy and create more than 300 seasonal jobs. Of this amount, \$7.5 to \$9.5 million enters the economy as income, and another \$4.4 million is imputed to enter the land-based economy (See Figure 1.2) e.g. the territory's four modern, efficient and federally registered fish processing facilities positioned in strategic locations throughout Nunavut.



Kitikmeot Foods Ltd. in Cambridge Bay, Kivalliq Arctic Foods Ltd. in Rankin Inlet and Iqaluit Enterprises focus on the production of Arctic char, while Pangnirtung Fisheries Ltd. focuses heavily on turbot with more limited production of Arctic char.

Profile of Offshore Shrimp and Turbot Fisheries

Two species of shrimp are abundant off Nunavut's coastline.

Northern or pink shrimp (Pandalus borealis): This is the most common and valuable species in the Northwest Atlantic distributed from Baffin Bay to the Gulf of Maine.

Striped shrimp (Pandalus montagui): Localized species found most commonly in Hudson Strait, Ungava Bay and surrounding Resolution Island. This species is harvested at a much more limited level primarily due to its poor market price compared to *P. borealis*.

Turbot (*Reinhardtius hippoglossoides*) – also known as Greenland halibut – is a flatfish species found commonly in the North Atlantic waters surrounding Canada, Greenland, Iceland, the Faeroe Islands, Norway and Russia.

All species are harvested almost exclusively by offshore trawlers due to the harsh environment of the North and the lack of infrastructure in place to support smaller vessels. The Davis Strait turbot fishery does have a number of smaller fixed gear vessels (65'-100') operating during the summer. Both fisheries normally take place between the months of April and December depending on seasonal ice conditions.

1.3 Challenges to Fisheries Development

Science Deficiencies

The recent successes of Nunavut's fishing industry can be primarily attributed to well-focused scientific initiatives. A great example of this was the research conducted on turbot in NAFO Sub-area 0 from 1999-2001 that resulted in the establishment of the 4,000 ton turbot quota in NAFO Division 0A. This modest scientific investment has created significant wealth for the region and an opportunity to further diversify the industry. Unfortunately this investment has been the exception to a history of Arctic knowledge-base deficiencies.

Access and Allocation Arrangements

Nunavut is the only coastal jurisdiction in Canada that does not have access to the majority of its adjacent fisheries resources. This situation continues despite a number of parliamentary, senate and independent reports advocating that Nunavut have fair and equal access to its fisheries in the same manner as other jurisdictions. In addition the Nunavut Land Claims Agreement obliges the federal government to recognize the principles of adjacency and economic dependence of Nunavut communities on marine resources. Despite these obligations, the economic interests of private companies far removed from the region have prevailed over the rights of Nunavummiut. This severe inequity has resulted in a loss of Nunavut's potential wealth generation.

Infrastructure

Historically, the federal government has made major investments into marine infrastructure throughout Canada with Nunavut being the only exception. Investments required include harbour and port facilities, marine service centres, processing plants and cold-storage operations. The vast majority of Nunavut's communities currently do not have the necessary infrastructure to support fishing vessels even of the most modest of sizes. Without such investments Nunavut will struggle to bring the benefits of its adjacent fisheries to its coastal communities.

Labour Force

One of the unfortunate characteristics of Nunavut's fishery during this developmental phase has been its reliance on a southern labour force. This reliance has been exacerbated by problems of recruitment and retention of Inuit in the fisheries work force. Nunavut's labour force deficiencies have been a key source of economic leakage from the territory. Efforts must be made to reverse this trend and to provide the training and employment opportunities that Nunavummiut seek.

Organizational and Business Capacity

Similarly, Nunavut's fishery is now heavily controlled by interests from outside of the territory. Fishing enterprises that fish Nunavut quotas are owned and operated by companies primarily based in southern Canada. Decisions are often made that may not reflect the interests of Nunavut and often result in a loss of economic opportunity for the territory. Efforts must be undertaken to generate the necessary "in house" managerial and entrepreneurial capacity to enable Nunavummiut to take control of their own destiny.

1.4 Nunavut Land Claims Agreement Obligations

In 1993, the Nunavut Land Claims Agreement (NLCA) was signed into law as the most comprehensive land claim agreement in Canadian history. It is officially known as the "Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada."

The NLCA clarifies the rights to ownership and use of land and resources, and the rights of Inuit to meaningfully participate in decision-making concerning the use, management and conservation of land, water and resources, including the offshore. The agreement also provides Inuit with wildlife harvesting rights and rights to participate in decision-making regarding policies of wildlife harvesting.

There are two articles within the NLCA that deal directly with Nunavut fishing rights, Articles 5 and 15. Article 5.2.33 of the NLCA clearly lays out the role of the Nunavut Wildlife Management Board (NWMB):

"Recognizing that Government retains ultimate responsibility for wildlife management, the NWMB shall be the main instrument of wildlife management in the Nunavut Settlement Area and the main regulator of access to wildlife and have the primary responsibility in relation thereto in the manner described in the Agreement"

Part 3 of Article 15 of the NLCA deals with "Wildlife Management and Harvesting Beyond the Marine Areas of the Nunavut Settlement Area". In particular it acknowledges that the federal government must seek the advice of the NWMB with respect to any fisheries management decisions outside of the Nunavut Settlement Area that may affect Inuit harvesting. Probably of most relevance is Article 15.3.7, which acknowledges the desires and aspirations of Inuit to become active participants in the offshore fishing industry. It states:

"Government recognizes the importance of the principles of adjacency and economic dependence of communities in the Nunavut Settlement Area on marine resources, and shall give special consideration to these factors when allocating commercial fishing licenses within Zones I and II. Adjacency means adjacent to or within a reasonable geographic distance of the zone in question. The principles will be applied in such a way as to promote a fair distribution of licenses between the residents of the Nunavut Settlement Area and the other residents of Canada and in a manner consistent with Canada's interjurisdictional obligations."

At the time the NLCA was being negotiated Canada's involvement in the offshore fishery was limited. Not knowing the full potential for offshore fisheries development, the authors of the NLCA did not include any provisions identifying the percentage shares that Nunavut should receive, although the negotiators did believe that Article 15.3.7 would protect Nunavut's interest as the only Canadian jurisdiction adjacent to Sub-area 0. However, in the years since the signing of the NLCA major concerns have arisen that the federal government has not lived up to the spirit and intent of Article 15.3.7. Nunavut still does not have a level of access to its adjacent fisheries resources comparable to that of other jurisdictions.

Another relevant article of the NLCA from a fisheries standpoint is Article 2.7.3, which states:

"nothing in the Agreement shall affect the ability of Inuit to participate in and benefit from government programs for Inuit or aboriginal people.."

Despite this clause, to date Nunavut Inuit have not been able to obtain funding support under programs such as the Aboriginal Fisheries Strategy because it has the NLCA in place. The successful development and diversification of Nunavut's fishing industry will be largely contingent upon its ability to access funding from the federal government's suite of Aboriginal fisheries support programs. Efforts must be taken to remedy this situation.

1.5 Consultation Process

The Nunavut Fisheries Strategy development process was initiated in the winter of 2004 by a framework document entitled "A Strategic Framework for Nunavut Fisheries – Consultation Document." The document highlighted some of the key issues that need to be addressed and recommended possible approaches to resolve these developmental issues. The document was also used as a tool for stakeholder consultation.

Following a comprehensive stakeholder mail-out of the framework document and other associated materials, three regional public consultation sessions were held in Rankin Inlet, Cambridge Bay and Iqaluit. A report summarizing the results of these consultations was also produced and made available to stakeholders. In addition to these public sessions, groups and individuals were invited to provide written comments on the framework document. This invitation was provided both through a stakeholder mail-out as well as through newspaper ads.

1.6 Organization of Strategy

This strategy document is organized into 10 chapters. Chapter 2 presents a vision for fisheries development in Nunavut through five guiding principles. It also identifies six key objectives to make the vision a reality and to guide fisheries decision-making in the territory for the long term.

Chapters 3 to 8 highlight the objectives and recommend detailed strategies and action plans for each.

Chapter 9 focuses on the need to build fishing capacity in the territory through partnership between all levels of government and private sector interests.

Chapter 10 concludes the strategy with a review of key strategic areas and the identification of a 'road map' to guide fisheries development efforts over the years to come.



GN - DOE

2. A VISION FOR NUNAVUT'S FISHING INDUSTRY

2.1 Vision

This strategy provides clear direction for the long-term development of Nunavut's fishing industry.

The central element of Nunavut fisheries strategy must be a sustainable biological resource where conservation and sustainable use are recognized as paramount. Such an approach must be incorporated into the day-to-day decision-making process and be recognized and supported at all levels.

Nunavut's fishery will be recognized as a dynamic and diversified industry that achieves a balance between locally owned, community-based inshore operations, and highly competitive offshore enterprises that are owned and operated by Nunavummiut. This will be achieved though the development of integrated partnerships within the territory as well as organizational and business capacity initiatives.

Vision Statement

"To see fisheries emerge as a driving economic catalyst for Nunavut resulting in increasing prosperity for current and future generations of Nunavummiut recognizing the principles of sustainable use and Inuit Qaujimajatuqangit (IQ)."

Opening up the benefits of Nunavut's fishery will require strategic investments in physical infrastructure. This will include key investments such as harbour and port facilities as well a cold storage and processing operations in proven locations. Such developments will realize the potential of the inshore fishery and create sustainable long-term employment opportunities in both harvesting and processing. It will also aid in the development of the offshore fishery and reduce the leakage of economic benefits and opportunities from the territory.

Nunavut's fishery of the future will also be recognized both nationally and internationally as providing high quality niche brand products representative of the crisp clean Arctic environment in which they are harvested.

Finally, an essential component of Nunavut's future fishery will be an increased level of self-determination achieved though a partnership approach among all stakeholders.

2.2 Guiding Principles

The Nunavut Economic Development Strategy identified six guiding principles for the development of Nunavut's economy. As these principles were recognized and accepted by a broad group of stakeholders in the territory they will also be applied to this strategy. These principles will be used to evaluate future fisheries development decisions in Nunavut.

2.2.1 Cultural Integrity

The strategy is based upon the values that come from Inuit Qaujimajatuqangit, "*what Inuit have always known*." It will foster the use of Nunavut's languages – Inuktitut and Inuinnaqtun, English and French – in all areas of activity. It will direct Nunavut's activities in the larger Canadian and global economy while maintaining its culture and traditions.

2.2.2 Determination and Realism

The strategy reflects Nunavut's determination to achieve significant results over the next ten years and beyond. At the same time, Nunavut is realistic. Nunavut recognizes that it has limited resources at its disposal. The ambitious strategy, accordingly, seeks the resources that will be required for its full implementation. Nunavut recognizes fiscal realities and the need to be creative within existing funding structures. Funding pressures will require that Nunavut choose between competing priorities.

2.2.3 Self-Reliance

The strategy builds the capacity of individuals, families and communities in order to reduce dependency and benefit from the development of Nunavut's economy.

2.2.4 Community Control

The strategy seeks to place, as much as possible, the control of economic development in the hands of community members, to assist them in developing strong organizations that represent their interests, and to enable them to develop their assets and take advantage of economic opportunities.

2.2.5 Co-operation and Co-ordination

The strategy aims to integrate economic development with community wellness, community learning and community governance. It seeks to promote the development of social networks that can help community members develop a shared vision and motivate them to work together. On a territorial level, it will foster cooperative working relationships between government, Inuit and non-governmental organizations (NGO's) and the private sector.

2.2.6 Sustainability

The strategy will help Nunavut build local and territorial economies that are sustainable and benefit its youth and future generations. Nunavut will put people and the environment at the centre of its thinking about the economy.

2.3 Objectives

Moving Nunavut's fisheries vision forward requires the development of clear objectives. The strategy identifies six key objectives that Nunavut must achieve. It also sets out specific actions that are recommended to achieve these objectives. The remainder of this strategy document is dedicated to addressing these core objectives and achieving successful fisheries development in Nunavut.

2.3.1 Science and Conservation

Conservation and sustainable use must be recognized as paramount for any strategy. Without them there will be no fisheries development. Achieving these objectives requires strategic investment in northern science initiatives, development of an overall conservation ethic and recognition of Inuit Qaujimajatuqangit (IQ) in the decision-making process.

2.3.2 Organizational Capacity and Governance

To control its own destiny, Nunavut must develop strong organizational capacity at the community level as well as strategic regional partnerships. There is also a need for a new level of engagement with the federal government to deliver on policy statements.

2.3.3 Access and Allocation

Efforts will be taken by all stakeholders to ensure that Nunavut achieves access to the vast majority of its adjacent fisheries resources. There is no other example within Canada, and perhaps worldwide, where the resources of an adjacent jurisdiction are granted primarily to interests far removed from the resource (See Figure 5.1). This presents a major challenge, as allocation revenue is critical to Nunavut's fisheries development efforts.

2.3.4 Labour Market Development and Training

Nunavut's fisheries labour force capacity will be increased through vocational training. Education in workplace dynamics will lead to improved retention of workers.

2.3.5 Infrastructure

Marine infrastructure is a basic building block required for fisheries development. Such infrastructure will also be essential to address Canada's sovereignty issues in the Arctic.

2.3.6 Funding and Revenue Generation

Major investments are required to support the science, training, infrastructure, business development and other capacity building activities that are required to achieve Nunavut's fisheries development vision. Sources of funding and strategies to generate revenues to support these activities must be developed.



Sean O'Neill

3. SCIENCE AND CONSERVATION

3.1 Context

Historically, the amount of scientific research carried out in Nunavut adjacent waters has been a fraction of that in the rest of Canada. This has been a function of the large number of species and stocks in the south and the grossly inadequate financial resources available to carry out research in the north.

Significant knowledge gaps exist in Nunavut's commercial fisheries for arctic char, shrimp and turbot. As an example, the last significant scientific research carried out on northern shrimp was in the late 1970's. In addition, emerging fisheries such as flounder and clams are subject to virtually no scientific research upon which to make management decisions.

The current trend of federal agencies is towards a 'user pay' model for fisheries research, whereby the industry groups that benefit from the results of the research are expected to cover the necessary costs. Such an approach is not workable in Nunavut where fisheries are not established and industry cannot afford the cost burden of the research. During the emerging stages of other fisheries in Canada it has been the federal government that has taken on the responsibility for carrying out research on these public resources.

In addition, much research is required to understand fundamental multispecies ecology and relations between species health and marine environmental conditions which clearly have a 'public value.'

A concern in Nunavut over the past few years has been the high federal regulatory costs associated with the shellfish industry. The costs associated with the implementation of the Canadian Shellfish Sanitation Program (CSSP) in Nunavut are significant even given economies of scale. The relevant federal agencies must make the financial commitment to support the implementation of this program.

These scientific deficiencies pose a significant challenge for the development of a conservation framework for fisheries in Nunavut. Two strategies have been proposed to address these challenges:

- > Development of a Nunavut Fisheries Science Agenda.
- > Incorporation of a conservation ethic into decision-making process.

3.2 Strategic Considerations

3.2.1 Development of Nunavut Fisheries Science Agenda

It has become evident that current scientific efforts are not keeping up with Nunavut's requirements for a greater understanding of arctic marine ecosystems. In addition they are not providing the knowledge needed to develop a sustainable marine-based economic sector.

What Nunavut requires is a multi-species ecosystem-based approach to fisheries development. This research needs to build upon both scientific and Inuit Qaujimajatuqangit approaches to knowledge and resource management. Also required is a balance between publicly driven and industry driven research recognizing that northern science has both a public and private value.

Development of a "*Nunavut Fisheries Science Agenda*" to address strategically important fisheries research areas will achieve this goal. Work to be covered under this approach includes fundamental marine ecosystem and hydrographical research, regulatory requirements, climate change impact assessment and modeling, research in support of inshore and offshore industry development, and research related to sustainable domestic and commercial use of Arctic char.

The upcoming International Polar Year activities in 2007-2008 present a tremendous opportunity for the fisheries research community in Canada to focus on Arctic questions and to move the Nunavut Fisheries Science Agenda forward.

This science agenda will require support from government, Inuit organizations and industry agencies in a coordinated manner. Part of this process will require particular recognition at the federal level to make a special case for federal investment in Arctic science given the special conditions in Nunavut and the emerging nature of Nunavut's fishing industry.

3.2.2 Incorporation of Conservation Ethic into Decision-Making Process

The development of a science agenda will also contribute to the incorporation of a conservation ethic into Nunavut's fishing industry. Decisions related to fisheries development will be based upon sound scientific advice and Inuit Qaujimajatuqangit (IQ). In light of past lessons learned in Canada about the fragile Arctic environment, Nunavut must develop and maintain high conservation standards to ensure the sustainable use of its resources.

Achieving this high standard will require the active engagement of the fishing industry as well as the public, in the conservation of fish stocks and their habitats.

In addition, there is a strong need for Nunavut and Canada to maintain an active relationship with Greenland regarding shared fish stocks in Davis Strait and Baffin Bay. This includes the need for an active Canada-Greenland bilateral annual meeting process and the sharing of scientific information and conservation standards.



Wayne Lynch



GN - DOE

3.3 Recommended Actions

Actions Required to Achieve Science Strategies

By 2005

- Develop Nunavut Fisheries Science Agenda as well as a multi-year funding strategy for implementation. This should incorporate multiple sources of funding and address issues related to Arctic char and marine fisheries.
- Prepare concept paper on the development of a 'Stewardship Fund', which would utilize a portion of the current access fees in the shrimp and turbot fisheries for fisheries research purposes. Part of this process would also look at the establishment of research quotas in Nunavut to fund scientific activities.
- Initiate fisheries research programs to complement International Polar Year activities in 2007-2008.
- NTI to develop an IQ policy on its best use and application in the fishery.

By 2006

- Complete study on possible impacts current gear types may be having on the Arctic marine environment and make recommendations to reduce any adverse impacts.
- Engage responsible agencies in full implementation of Canadian Shellfish Sanitation Program (CSSP) in Nunavut.
- Explore means of developing Arctic char enhancement programs for water bodies requiring support.
- Move towards the implementation of Article 12.7.6 (b) of the NLCA regarding periodic reporting on the ecosystemic and socio-economic environment of the Nunavut Settlement Area (NSA).

By 2007

• Expand tagging studies in Cumberland Sound and initiate new studies in other Baffin fjords to determine their relationship with the offshore populations. Tagging studies should also be initiated in the offshore to determine the relationship between the stocks throughout the range of the species.

Ongoing

- Compliment Formal science with Inuit Qaujimajatuqangit for a better understanding of the land and its natural resources.
- All business planning related to fisheries must include an assessment of the potential pressures that proposed developments would place on the resource.
- Incorporate co-management approaches into all aspects of the decision-making process.
- The long-term monitoring of Arctic marine ecosystem health should be an ongoing scientific priority.
- Maintain a strong bi-lateral relationship with Greenland on shared fish stocks particularly as it relates to science and overall conservation measures.

4.1 Context

There is little doubt that Nunavut's fishery requires vocal proponents at all levels: community-based inshore fisheries, large-scale offshore development as well as for the on-shore processing and marketing sectors.

Historically, Nunavut's involvement in offshore turbot and shrimp fisheries has been largely in the form of royalties paid by outside fishers. This is due to a lack of organizational capacity and limited local infrastructure, which leads to limited fisheries allocations to locals. This has caused significant economic leakage from the territory. Efforts must be taken to reduce these leakages by increasing Nunavut's organizational capabilities in the fisheries industries.

Inshore fishery organizational-capacity in Nunavut has been limited primarily to owner-operated Arctic char fishing. As a result, many communities have expressed concern about an inability to fully benefit from abundant stocks of Arctic char and other emerging fisheries.

Some exceptions exist, in communities such as Pangnirtung, where an existing fish plant has enabled the development of a significant winter turbot fishery, through the ice in Cumberland Sound. However, it is important to recognize that this facility was developed based on an identified resource of turbot in Cumberland Sound.

While it is not feasible to establish a processing facility in every Nunavut community, attention must be directed to the development and support of community-based inshore organizations.

To date, Nunavut has not significantly utilized the inherent marketing advantage it has as an 'Arctic' jurisdiction. Strategies must be developed to build the organizational capacity required to successfully market Nunavut as a source of high-end, top-quality fish products.

Organizational development within Nunavut's fisheries, and the decisionmaking processes directing that development, must be open, transparent and accountable.

Key federal, territorial and Inuit agencies must work co-operatively to support Nunavut's development efforts.

Achieving the organizational capacity and governance objective will require the adoption of strategies in four areas, namely:

> Development of community-based, inshore capabilities.

- Strategic Nunavut partnerships in the offshore fishery.
- Coordination of marketing activities.
- > Identifying 'best use' of Arctic char resource.

4.2 Strategic Considerations

4.2.1 Development of Community-based, inshore capabilities

Efforts must be taken to support community-based, inshore-fisheries development initiatives, particularly Arctic char and turbot fisheries. Community consultations have highlighted an overwhelming desire for this approach.

The turbot fishery has, with the exception of the Cumberland Sound winter fishery, focused almost exclusively on the offshore fishery. Further efforts must be made to achieve a greater balance between inshore- and offshore-based activities, given the benefits this will bring to coastal communities.

Community aspirations for inshore fisheries development will require significant investment in infrastructure. This issue will be discussed in detail in Chapter 7.

4.2.2 Strategic Nunavut Partnerships in the Offshore Fishery

The ultimate goal of Nunavut's offshore fisheries development must be to control its own destiny with an economically viable and sustainable industry. This can be achieved only with strategic partnerships between Nunavut interests in the offshore fishery.

The level of investment required for an offshore fishery in Nunavut necessitates partnerships. Without such partnerships, Nunavut will remain dependent on southern interests and associated long-term royalty arrangements.

In order to ensure that Nunavut's offshore fisheries development efforts serve the overall public interests of Nunavut, they should meet the following standards:

- ➢ Economic viability.
- Investment in, and support of, inshore capacities in Nunavut communities.
- > Operation within a conservation framework.
- Transparency and accountability.
- > Creation of meaningful employment opportunities.
- Support for infrastructure development.

A diverse, Nunavut owned and operated offshore fishing industry will reduce current economic leakages and contribute to overall self-reliance.

4.2.3 Coordination of Marketing Activities

Nunavut has the significant marketing advantage of having products of unmatched quality, unique to the Arctic environment. Arctic char, for example, is found in abundant numbers throughout the territory, and should fetch high market prices given its appeal.

Efforts must be taken to create and promote a 'crisp and clean' Nunavut brand; targeting markets within Nunavut, as well as strategic, high-value export markets. This brand must be developed through partnerships between the various Nunavut fisheries organizations, and through increased coordination between government and Nunavut-based marketing companies.

As part of Nunavut's market-development process, further efforts are required in the area of secondary and value-added production. Recent successes with smoked and packaged Arctic char are steps in the right direction, and should be encouraged on a more consistent basis. Emphasis in this area could lead to further employment and other benefits within the territory, as well as the expansion of high-end export markets.

In addition, work is required to increase market demand for Nunavut fisheries products within the territory. This market opportunity has not been fully exploited, and further efforts will result in increased inter-settlement trade, reduced overhead costs, greater economic and employment opportunities, and a reduced dependence on food imports.

4.2.4 Identifying 'Best Use' of Arctic Char Resource

Arctic char are found throughout Nunavut, and have been a vital component of the Inuit diet for centuries. In recent decades, fishing activities have expanded to include both the commercial and recreational use of char placing significant pressure on individual water bodies.

Table 4.1: Arctic Char Quotas in Nunavut by Region (kg) (2005) Source: DFO Statistics							
Region	# of water bodies	Quota					
	# of water boules	Sea-run	Landlocked				
Kivalliq	44	165,500	0				
Kitikmeot	131	195,600	124,900				
Baffin	60	161,500	35,100				
Total	235	522,600	160,000				

It has been estimated that approximately 80% of Nunavut's char fishery is utilized in the domestic economy, with the commercial fishery making up the remainder. The domestic use of char will continue to be a top priority for the territory into the foreseeable future, given its social and cultural importance to Inuit.

Profile of Arctic Char Fishery

- Most northerly distribution of any freshwater fish in the world.
- Both "landlocked" and "sea-run" populations exist.
- Harvesting occurs by individual fisherman, either by gillnet or by weir.
- An estimated 400,000 kg is harvested annually for domestic use, with a food replacement value of approximately \$4.4 million.
- Annual commercial harvest ranges from 80,000 100,000 kg, and involves approximately 75 individuals earning a total of approximately \$220,000.
- Processing char employs 50-70 individuals, who earn a total of between \$275,000 and \$400,000 per year.
- Commercial char sales are estimated to total between \$1 million and \$1.2 million per year.
- Processing occurs in four federally registered facilities throughout territory.

Recreational fishing for char in Nunavut has been somewhat limited, and there appears to be a significant opportunity to expand this activity. A federal study of recreational fishing in Canada estimated that 3.6 million anglers spent \$6.7 billion in 2000. Nunavut and its Arctic char present a unique opportunity to further tap into this market, while having a limited impact on the overall resource.



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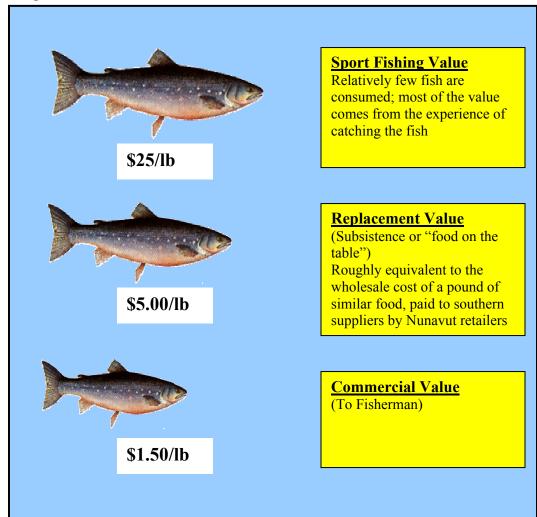


Figure 4.1: Different Uses and Estimated Values of Arctic char resource



Stefan Romberg

4.3 Recommended Actions

Actions Required to Achieve Organizational Development and Governance Strategies

By 2005

- Conduct a comprehensive review of Nunavut's offshore fishery to make recommendations regarding its future development. Key areas to be covered include:
 - An assessment of how this resource can best be balanced between community-based inshore and large-scale offshore development efforts, recognizing the importance of diversity.
 - A review and assessment of Nunavut's larger industry organizations.
 - An assessment of appropriate vessels to be used in the offshore fishery i.e. trawlers vs. fixed gear vessels of various sizes.
- Complete a review of inter-settlement trade opportunities for Arctic food products in Nunavut.

By 2006

- Complete and implement a Nunavut-branding process for high-end products.
- Explore means for applying 'eco-labels' to Nunavut fisheries that practice responsible, conservation-minded fishing activities.
- Conduct review of Nunavut's Arctic char fishery, to determine 'best use' of this resource.
- Engage all relevant parties in a serious discussion regarding the formation of the Nunavut Marine Council, as identified in the NLCA.
- Conduct review of existing territorial legislation related to the fishing industry and recommend changes as required.

Ongoing

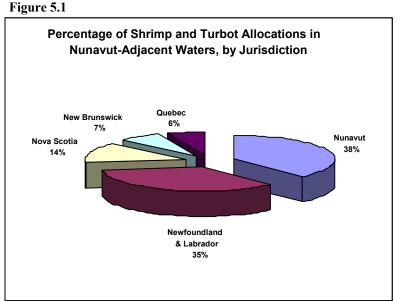
- Assist interested communities in initiating 'Community Development Plans' to structure their organizational activities, and to outline their regional fisheries development strategies.
- Support and encourage federal government efforts to address unfair foreign tariff issues, particularly the current European tariff on cooked and peeled shrimp entering EU markets from Canada.

5. ACCESS & ALLOCATION

5.1 Context

Issues of access and allocation are often highly contentious, and extremely challenging for decision-makers and fisheries-dependent communities. Nunavut is no exception. What separates Nunavut from other jurisdictions is that it does not have access to the vast majority of its adjacent resources.

There is no other example within Canada, and perhaps worldwide, where the resources of an adjacent jurisdiction are granted primarily to interests far removed from the resource (See Figure 5.1). This presents a major challenge, as allocation revenue is critical to Nunavut's fisheries development efforts.



Source: DFO Statistics (2004)

In recent years there has been a litany of parliamentary, senate and independent reports stating that Nunavut must realize the same equal access to its adjacent fisheries enjoyed by other jurisdictions in Canada. For example, Recommendation 6 of the March 2002 "Report of the Independent Panel on Access Criteria" called for no additional resource access by non-Nunavut interests in Nunavut-adjacent waters until the territory has gained access to a major share of those resources. The Minister of Fisheries and Oceans accepted this recommendation in the fall of 2002.

While some progress has been made, the economic interests of outside, private companies have prevailed over the rights of Nunavummiut. Overall, Nunavut still has access to only about 38% of its adjacent shrimp and turbot resources (see Table 5.1).

	Share in 2	004		
SFA	Description	2004 TAC t	NU Share t	NU Share %
	Northern (pink)	shrimp		
0	Davis Strait (NAFO 0A, west of 60°30'W)	500	44	9%
1	Davis Strait (NAFO 0A, east of 60°30'W)	18,417	4,978	27%
2	Davis Strait (NAFO 0B, SFA 2 and SFAs 3 and 4 north of $60^{\circ}30$ 'N and west of $63^{\circ}00$ 'W)	5,250	463	9%
2	Davis Strait (NAFO 0B, east of 63 ⁰ 00'W)	3,500	1,904	54%
	Total Northern Shrimp	27,667	7,389	27%
	Striped shri	mp		
2	Davis Strait (NAFO 0B, fished inside the NSA)	2,000	2,000	100%
2,3,4	SFAs 2,3 and 4 west of 63 ⁰ 00'W	3,800	791	21%
3	Eastern Hudson Strait and Ungava Bay (inside the NSA)	500	500	100%
	Total Striped Shrimp	6,300	3,291	52%
Totals Shrimp		33,967	10,680	31%
	Greenland halibu	t (turbot)		
0A	Davis Strait/Baffin Bay (NAFO Division 0A exploratory)	4,400*	4,400	100%
0B	Davis Strait (NAFO Division 0B)	5,500**	1,500	27%
	Totals Turbot	9,900	5,900	60%
	Grand Total	43,867	16,580	38%

*4,400t provided in 2004 on one time basis as overall quota is set at 4,000t

** 500t separate quota to be established for inshore fishery in Cumberland Sound in 2005 Source: DFO Statistics

The consequence is a generation of young Inuit growing up in an economy less able to support them than was envisioned in the land claim negotiated by their grandparents.

What is at stake? The royalty value of the quota allocated to non-Nunavummiut in the Baffin region is worth at least \$6 million per year. This would be sufficient to support processing plants in several communities, creating plant jobs and opening up a market for locally harvested products. This quota revenue could be the engine for carrying out both inshore and offshore development activities at the same time, which would greatly add to the value of this resource. It is a tremendous loss to the territory.

While this strategy does not advocate long-term, royalty-based fisheries, it does support the use of royalty revenue for investment and capacity-building purposes. Over the medium- to long-term, Nunavut requires the quotas to develop viable, self-sustaining operations.

One of the best ways for Nunavut to address its access and allocation concerns is to identify new fisheries-resources that can be developed for its own benefit.

Achieving the access and allocation objective will require the adoption of strategies in five areas:

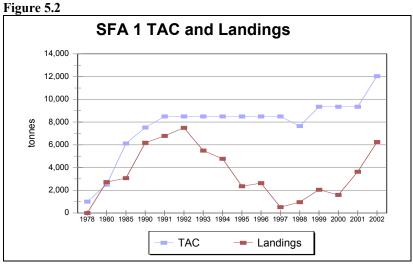
- Develop unified approach to addressing access and allocation issues, targeting key areas.
- > Address internal access and allocation issues.
- Ensure companies receiving access to Nunavut quotas are reinvesting into the territory's industry.
- > Development of access framework for Nunavut fisheries.
- > Initiate fisheries development and diversification efforts.

5.2 Strategic Considerations

5.2.1 Develop Unified Approach to Addressing Access and Allocation Issues Targeting Key Areas

Continuing current efforts to gain an 80 to 90% share of the quota in each of Nunavut's adjacent fisheries should remain an urgent priority. This is the engine to drive fisheries development and the foundation of future fisheries.

Achieving this will require a unified strategic approach among many Nunavut stakeholders, particularly industry, Inuit, and territorial government agencies. In developing this approach, key areas of weakness must be targeted. For example, Shrimp Fishing Area 1 in Davis Strait is currently fished almost exclusively by the offshore shrimp sector, which is primarily southern based. Over the past decade, an average of approximately 6,000 tons of shrimp has been left in the water annually (See Figure 5.2). Emphasis should be placed on having this quota transferred to Nunavut interests.



Source: DFO Statistics

Another example is the allocation of 1,900 tons of turbot in the Davis Strait to a southern-based organization. This quota has been granted for more than a decade despite the company not fulfilling their obligation to use the quota in support of their processing facilities in southern Canada. Strong efforts must be taken to have the quota transferred to Nunavut interests.

There is also a 1,500 ton competitive quota for turbot in Davis Strait that Nunavut has been excluded from accessing (See Figure 5.3). There is no legitimate reason to deny access by Nunavut interests to compete in this fishery, and efforts must be taken to address this situation.

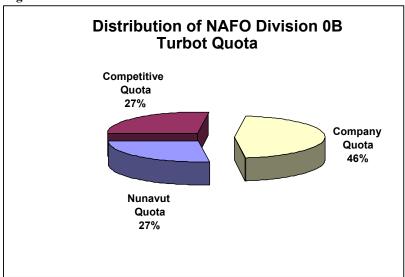
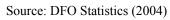


Figure 5.3



5.2.2 Address Internal Access and Allocation Issues

Nunavut stakeholders have recently expressed concerns as to which Nunavut organizations should receive access to adjacent stocks. As the territory's industry grows, these concerns will no doubt intensify. Efforts must be made to ensure the decision-making process is open and transparent.

Chapter 4 of this strategy outlines an organizational structure for Nunavut's fishing industry that achieves a balance between inshore community-based development and strategic offshore partnerships. Further research is required to determine how this approach can best be balanced between Nunavut's existing fisheries and the overall aspirations of industry stakeholders.

Given the importance of maintaining an open and transparent decision-making process, management bodies such as Fisheries and Oceans Canada (DFO) and the Nunavut Wildlife Management Board (NWMB) must ensure consistency with their policies, as well as with the overall vision that this strategy promotes.

5.2.3 Ensure Companies Receiving Access to Quota are Reinvesting into the Nunavut Fishery

In providing quota to industry organizations, management agencies are, in essence, distributing wealth. It is essential that these quotas be utilized in a publicly accountable manner that benefits the territory at large. This includes the adoption of policies that ensure companies are reinvesting some of the revenue from the fishery into development and diversification efforts.

Progress has been made in this area in recent years. Nunavut-based fisheries companies are increasingly investing in and supporting the development of their industry. This has been done primarily through a partnership approach, whereby industry has used their capital to leverage additional funding from government, non-government, and Inuit organizations. These innovative partnership approaches will be key to the successful diversification of Nunavut's fishing industry.

5.2.4 Development of Access Framework for Nunavut Fisheries

As Nunavut's fishery continues to develop, there will be a need to develop a licensing structure that supports the expansion. Current licensing structures were developed primarily around the needs and realities of the Atlantic fishing industry, which has focused on downsizing and other monetary issues. As such they do not necessarily reflect the interests of Nunavut's emerging industry.

The development of a licensing policy for Nunavut would ideally align existing DFO policy with Nunavut Land Claims Agreement obligations into a cohesive structure that reflects Nunavut's fishing industry.

5.2.5 Initiate Fisheries Development and Diversification Efforts

One of the most exciting features of Nunavut's fishery is that it is still very much an emerging industry, with vast areas unexplored. As such, there is limited knowledge of the potential of the industry to create sustaining economic opportunities for the territory.

GN Fisheries Development and Diversification Program

In 2002 the Government of Nunavut established the Fisheries Development and Diversification Program in an effort to support the development of a sustainable and viable fishing industry in Nunavut.

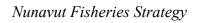
The program has an annual funding allocation of \$525,000 and provides individual contributions of up to \$50,000 per project, which is directed primarily towards community-based activities.

In 2003-2004 funding contributed through this program was used to leverage more than \$1.2 million from other sources resulting in more than \$1.5 million in funding being injected into Nunavut's fisheries development and diversification efforts.

As is the case with any emerging industry, further effort in development and diversification is needed. This includes the need for extensive exploratory fisheries activities throughout the territory, utilizing available and proven technologies. This will result in the expansion of existing resources, and the identification of new fisheries that will create significant employment opportunities in communities.



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5.3 Recommended Actions

Actions Required to Achieve Access & Allocation Strategies

By 2005

- Facilitate efforts to ensure the Cumberland Sound turbot fishery is established as a separate management zone, with a separate inshore quota.
- Explore means to immediately establish a small inshore exploratory turbot quota in NAFO Division 0A, to allow adjacent coastal communities to determine the viability of winter and summer based inshore operations.
- Move towards the implementation of the MOU on Emerging Fisheries Development between the Government of Nunavut and DFO through the identification of emerging fisheries projects throughout the territory.
- Develop quality control workshops throughout the territory on Arctic char fisheries, to ensure the optimal use and benefit of this resource.
- Conduct assessment of appropriate vessels to be used for inshore fisheries development in Nunavut, and invest in appropriate vessels (one for western Nunavut and one for eastern Nunavut) to be used as platforms for exploratory fishing, pilot projects, training, etc.
- Encourage DFO and NWMB to develop a licensing policy for Nunavut's fishing industry.

By 2006

- Conduct reviews of DFO and NWMB access and allocation policies to ensure consistency with one another, as well as with this strategy.
- Develop an advocacy and communications strategy to achieve Nunavut's access and allocation goals.
- Explore means to increase sales of Nunavut fisheries products within the territory.

Ongoing

- Invest in exploratory and test fisheries Nunavut-wide to identify opportunities for further quota development in the territory.
- As a condition of licensing, the NWMB and DFO should ensure that companies receiving access to Nunavut quotas are required to re-invest into the fishing industry.

6. LABOUR MARKET DEVELOPMENT & TRAINING

6.1 Context

Labour market development issues are often considered a community's bottom line as job creation is recognized as the first tangible benefit of a fishing industry. The challenge is to find qualified people to carry out the work the industry provides as well as the creation of the kind of work opportunities that Nunavummiut seek.

The individuals, organizations and entrepreneurs that are involved in the fishing industry are the most critical element to developing the fishery. People will either make it happen or prevent it from happening. Therefore, significant efforts must be made to create an environment that supports and encourages active participation in the fisheries labour force.

Developing Nunavut's labour market will require that key challenges be addressed, such as recruitment, retention, training, workplace safety, jobcreation versus mechanization, as well as cultural sensitivities.

The positioning of Inuit in the fisheries sector is less than the current available opportunities. The factors leading to this situation are complex. Inadequate skills training is one factor, however, there are other, less understood issues and the measures required to mitigate them have not been well developed. They may include preferences related to working in the community versus working on remote vessels, type of jobs preferred, culture and language of the workplace, economic earnings, etc.

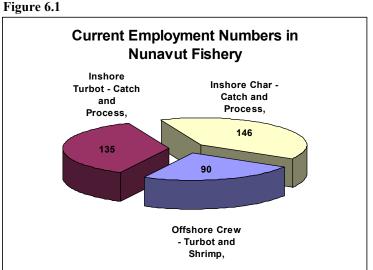


Figure 6.1

Source: (Brubacher, 2004)

Training efforts need to be matched with recruitment strategies, to ensure those being trained match the kind of work they are being trained for. Retention strategies are also needed to ensure that trained individuals who take up positions remain in those positions.

This strategy proposes three approaches for addressing Nunavut's labour market development and training objectives:

- Improve recruitment by understanding Inuit demand for fisheries work.
- > Build fisheries labour-force capacity through training.
- > Understand workplace dynamics to improve retention of workers.

6.2 Strategic Considerations

6.2.1 Improve Recruitment by Understanding Inuit Demand for Fisheries Work

Nunavut's labour-market development efforts need to move beyond simply identifying available jobs in the fishing industry. It must move towards the identification of the kinds of jobs Nunavummiut wish to obtain in the industry. Considering both labour supply and job demand will lead to a holistic labour-market approach to Nunavut's fisheries sector.

This approach will also assist in determining where best to focus Nunavut's fisheries development efforts. An immediate assessment of Inuit job-demand is required to influence, where possible, the kinds of jobs that fisheries development creates. The results of this assessment may influence, for example, the relative focus Nunavut places on inshore versus offshore development. It may also influence efforts to design workplaces that are attractive to Inuit workers i.e. management styles, language use, workplace culture, etc. Matching demand with supply preferences will improve Nunavut's labour-market success.

6.2.2 Build Fisheries Labour Force Capacity Through Training

The lack of an adequately trained workforce within Nunavut has been a major source of economic leakage from the territory. While training efforts in the fishing industry have been promising, there is still a significant shortage of training activities to meet expanding labour force requirements. New efforts need to be made to develop a workforce capable of supplying productive and cost-effective labour to the fisheries sector.

As is the case with any sector, Nunavut's fisheries labour-force development efforts need to begin with the fundamentals of literacy, life skills and education. During the recruitment stage, screening programs need to be in

place to ensure those who enter training streams have these fundamentals in place. This will result in the investment of training the right people for the right positions.

In addition, training activities in the industry must take more of a career approach. To date, efforts have focused primarily on entry-level positions in the industry. For Nunavut to truly take control of its own destiny, focused efforts must be made to train for highly qualified positions throughout the industry including management and industry development. This will involve extensive career recruitment oriented towards Nunavut's youth.

Table 6.1: Business Opportunities & Current Economic Leakage in Nunavut Fisheries		
Opportunity	Sector	Current Status
Inshore and offshore vessel owners and their crews	Private	Major source of current employment in industry, still a major source of economic leakage from territory. Tremendous potential for expansion
Fisheries Managers/ Developers	Public	Primarily imported from outside the territory. Opportunities exist within DFO, NWMB, NTI, GN & industry
Training & Certification Providers	Public/Private	Primarily performed by non-Nunavut organizations. Nunavut Arctic College is building capacity in this area.
Fisheries Observers	Public/Private	None from Nunavut at present. Tremendous opportunity.
Marine Service Providers	Public/Private	Extremely limited. Opportunities will emerge with marine infrastructure development
Processors	Public/Private	Limited processing capacity at present. Opportunity for significant employment expansion.
Inspection Services	Public/Private	Limited at moment. Will grow with development of fishery
Product Brokers & Marketers	Private	None at moment other than fish plants. Opportunity for expansion.
Investors	Private	Limited lending institutions within Nunavut to support fishery at the moment.

6.2.3 Understanding Workplace Dynamics to Improve Retention of Workers

In recent years, considerable funding and resources have been put into training initiatives, particularly in the offshore and processing sectors of the industry. However, employers have noticed a significant problem in their ability to retain employees. The result is a level of employee turnover detrimental to the success of these industry sectors.

To address this issue, job retention strategies are required, particularly for the processing and offshore vessel sectors. These strategies need to be based on a good understanding of the workplace-qualities sought by Inuit workers, and the critical issues that contribute to job retention.

6.3 Recommended Actions

Actions Required to Achieve Labour Market Development & Training Strategies

By 2005

- Organize Nunavut's first ever Fisheries Symposium, to educate stakeholders and the general public about the opportunities in the fishing industry.
- Fund and begin implementing the "Long-Term Training Initiative for Nunavut's Fishing Industry" through the Aboriginal Skills and Employment Partnership Program (ASEP).

By 2006

• Conduct detailed analysis of Inuit 'fisheries workers' experience and expectations. This analysis will contribute to retention in the industry, as well to guiding fisheries development efforts.

Ongoing

- Conduct educational and recruitment sessions in Nunavut schools, to inform students about career opportunities in the fishing industry.
- Encourage Nunavut fisheries organizations to partner on strategic training initiatives.
- Encourage business and financial management training.
- Incorporate fisheries training needs and opportunities into community development plans.

7. INFRASTRUCTURE

7.1 Context

Nunavut needs more federal investment in its fundamental economic infrastructure. The development of marine-based infrastructure is an essential building block for a viable and sustainable fishing industry. It is the foundation for all fisheries, and without it opportunities for expansion and development will be limited.

It must be acknowledged that infrastructure development in Nunavut poses a number of significant challenges, most notably the harsh environment. The remote geography, combined with extended seasonal-ice conditions and the isolation of communities, also present difficulties in the territory's ability to operate in a competitive industry.

The current level of infrastructure to support fisheries development in Nunavut is basic. Current needs include the investment in harbour and port facilities, marine service centres, processing plants, and cold-storage facilities. Analysis is required to determine the best locations for these strategic investments.

Marine infrastructure development is key to realizing the potential of the fishery. Such infrastructure will also play a key role in improving safety, and in facilitating the improvement of other important activities such as hunting, sea-lift re-supply, and tourism.

There is little doubt that this infrastructure would enable Nunavut to extract additional value from its adjacent resources, and reduce Nunavut's fisheries use as a 'reservoir of resources' for southern interests. The "Arctic Human Development Report (2004)" indicated that the Arctic region is an economic powerhouse, but little of the benefits stay in the region. Reversing this trend will require a strategic investment in infrastructure in three key areas:

- > Investment into harbours, ports and marine service centres.
- Investment into processing capacity.
- Investment into cold storage capabilities.

7.2 Strategic Considerations

7.2.1 Investment into Harbours, Ports and Marine Service Centres

Establishing harbours, ports and marine services centres in Nunavut can be equated to the development of highway infrastructure in southern Canada. It is the infrastructure required to open up the potential of Nunavut's fishing industry.

The Government of Nunavut, in partnership with DFO, has developed a small craft harbours investment strategy for Nunavut entitled "Safe Harbours – Healthy Communities." This strategy established a vision to "Provide safe, efficient and effective marine facilities for small craft subsistence harvesting, commercial fishing boats and re-supply vessels as well as to create new opportunities for commercial fishing/plants, marine service centres, tourism and other related economic development opportunities."

Interest in the establishment of a deep-sea port facility in Nunavut has increased recently. Such a facility could become a full-fledged service and support centre for the offshore fishing industry, as well as for many other activities. Such an operation would also play an important role in exerting Canadian sovereignty and security in the Arctic.

7.2.2 Investment into Processing Capacity

Nunavut's processing sector is limited to four, federally registered facilities, and a number of small-scale, community-based operations. These facilities are a significant contributor to the communities in which they are based, both with jobs in the facilities and as an opportunity for inshore fisherman to sell their products. However, there are many communities in Nunavut with abundant fisheries resources, but no means to sell their product. This has resulted in a significant loss of economic opportunity.

While it is acknowledged that Nunavut cannot build fish plants in every community, there are 'best bet' communities for processing capacity-development, based on a number of clear guidelines:

- > Assessment of economic viability of operation.
- > An abundant and sustainable supply of available resources.
- ➢ Community-based focus.
- > Adequate marine-infrastructure to support operation.
- An available labour force.
- > Opportunities for significant inshore fisheries development.
- No negative impact on existing facilities.
- Priority consideration to non-decentralized communities.

Where possible, processing-sector investments should attempt to identify benefits to other communities. This could be achieved through the establishment of feeder operations and other support structures.

7.2.3 Investment into Commercial Cold Storage Capabilities

Current offshore shrimp and turbot quotas in Nunavut-adjacent waters amount to more than 40,000 tonnes. While some of this product goes into processing operations in Canada, much of it is frozen at sea and landed at cold storage facilities then shipped to markets worldwide. The fact that virtually none of these resources are landed in Nunavut, either for processing or trans-shipment purposes, represents a significant loss for the territory.

The opportunity exists for a seasonal cold storage operation in Nunavut, which could provide vessel operators a place to land their product in Nunavut for trans-shipment purposes. This could be a major benefit for vessels that normally travel for days to offload their catch before returning to the fishing grounds. Given the short fishing season in the Arctic, each day lost is costly to a company. A Nunavut-based operation could provide a significant competitive advantage over operations in Newfoundland and Greenland. This could also create spin-off benefits, such as vessel re-supply, maintenance and crew changes.

On a smaller scale, commercial cold storage capacity is required in some Nunavut communities to support community-based fisheries activities. Such infrastructure, even using modular designs, could greatly aid the development of under-utilized fisheries such as Arctic char.



Wayne Lynch

7.3 Recommended Actions

Actions Required to Achieve Infrastructure Strategies

By 2005

- Continue with implementation of Small Craft Harbours Investment Strategy.
- Complete feasibility studies on '**best bet**' communities for fish processing plant capacity.
- Provide support and assistance for Nunavut deep-sea port feasibility studies.

By 2006

- Conduct feasibility study on commercial cold storage capabilities in Nunavut.
- Assess applicability of modular designs for small-scale processing and cold-storage capacity.
- GN to develop a policy document on processing facilities in Nunavut, as no legislation currently exists.

Ongoing

• Ensure that future fisheries opportunities are considered when communities plan for their capital infrastructure requirements.



Wayne Lynch

8. FUNDING & REVENUE GENERATION

8.1 Context

The federal government contributed significantly to fisheries development in other regions of Canada during the early stages of their development. This has not been the case in Nunavut, where there has been a shortage of necessary funding to support the development and diversification of the fishing industry.

Major investments are required to support the science, training, opportunity identification (feasibility studies, pilot projects, etc.), infrastructure, business development and harvest activities of Nunavut's fisheries. Strategies to find funding for these activities need to be developed.

The key message of this strategy is that investments must be made in strategic areas to provide the foundation for the economic growth of Nunavut. Well-focused investments into Nunavut's fishing industry will result in significant job creation.

This strategy proposes four principle mechanisms for funding Nunavut's fisheries development objectives:

- > Expanding federal program investments into Nunavut.
- > Utilization of fisheries revenues for development purposes.
- > Making the best use of existing territorial resources.
- > Attracting and making the most from private investment.

8.2 Strategic Considerations

8.2.1 Expanding Federal Program Investments into Nunavut

Federal policy trends are currently out-of-sync with Nunavut's fisheries development needs. While the Atlantic industry can currently be characterized as downsizing, Nunavut's industry is emerging, and new opportunities are being identified.

What is required now is a massive re-engagement of the responsible federal agencies, from both a policy and funding perspective. This must include investment in fundamental infrastructure, as was the case in other regions throughout Canada.

Inuit also need to be able to access the suite of federal Aboriginal fisheries support programs to significantly enhance Nunavut's fisheries development efforts.

DFO Atlantic Fisheries Policy Framework (2004)

"In the North, and particularly in Nunavut, communities are looking to the fisheries resources as a focus for economic development...a fisheries development strategy for the North is required to ensure priority is also given to science and management of existing and emerging fisheries in those regions."

"In AFPR Phase II...the department will assist in supporting economic development in coastal communities. Specific actions may include:

• Working jointly with Aboriginal organizations and communities, other resource users, processor groups and local, provincial and territorial governments to help develop and implement an approach to the management and development of fisheries for Nunavut and northern areas"

8.2.2 Utilization of Fisheries Revenues for Development Purposes

The revenues from Nunavut's expanding resources must be used for fisheries development purposes. Revenues from the shrimp and turbot fisheries have the potential to contribute significantly to Nunavut communities, through reinvestment in fisheries related industries.

Nunavut's industry must not be required to bear the burden of large-scale investments required for infrastructure in the territory. In other jurisdictions, these investments have been funded primarily with federal programs.

It must be acknowledged that in the Kivalliq and Kitikmeot regions, fisheries organizations do not have the benefit of revenues currently received in the Baffin region through turbot and shrimp fisheries. Innovative approaches must be taken to come up with funding to support industry development in these other regions.

8.2.3 Making the Best Use of Existing Territorial Resources

As the Nunavut Economic Development Strategy has identified, all agencies of economic development in Nunavut must assess their own spending initiatives, and find a way to support the NEDS. In addition, they must make efforts to align their programs and expenditures with each other as much as possible. This can be achieved with partnerships working towards the implementation of the NEDS. Partnerships will contribute to the alignment of resources, and assist in making the best use of limited financial resources.

The Fisheries and Sealing division of Nunavut's Department of Environment will need to ensure that it works with all Nunavut fishing interests. This can be ensured through the creation of fisheries sector specialist positions based in the Kivalliq and Kitikmeot Regions.

8.2.4 Attracting and Making the Most of Private Investment

As a relatively new industry, Nunavut currently lacks the full capacity to control its fishing industry. As such, there is opportunity for private investment in Nunavut's fishing industry. Nunavut agencies must support this process by attracting investors who share Nunavut's development values and principles. This can be achieved through strategic joint ventures in the harvesting, processing and marketing of Nunavut's fishing industry.

Care must be taken to ensure that these investments are to the benefit of Nunavummiut and result in significant capacity building. As Nunavut builds further capacity within its industry, more autonomy must be sought to obtain an increased level of self-reliance control.



Wayne Lynch

8.3 Recommended Actions

Actions Required to Achieve Funding & Revenue Generation Strategies

By 2005

- Ensure the funding identified by the GN, the Nunavut Economic Development Fund, the Nothern Strategy and other funding sources are accessed and allocation in the fishing sector areas are consistent with the goals and objectives of this strategy.
- Investigate means to provide the necessary support structures in the Kivalliq and Kitikmeot regions for fisheries development activities.

By 2006

- Begin accessing federal program resources utilizing Article 2 of the NLCA. This should include access to federal Aboriginal programs such as the Aboriginal Fisheries Strategy, through DFO.
- Review relevant government subsidy programs to determine their impact on economic development, and their contribution to capital formation.
- The Department of Environment should identify fisheries sector specialist positions for western Nunavut, to support fisheries development efforts in the Kivalliq and Kitikmeot regions.

By 2007

• Conduct a review of all Nunavut economic development agencies and their fisheries development initiatives to eliminate duplication of effort and overlapping expenditures, and to optimize program effectiveness.

Ongoing

• As a condition of allocation, management agencies should ensure that organizations receiving quota are reinvesting into the fishing industry and supporting community development goals.

9. BUILDING CAPACITY THROUGH PARTNERSHIP

The vision and objectives identified in this strategy will only be achieved through the development of a partnership approach among all interested and responsible stakeholders. This includes organizations such as federal and territorial departments, Inuit organizations, resource users, individual stakeholders, and others.

The Nunavut Economic Development Strategy states, "Nunavut enjoys a rich variety of organizations, each of which brings resources, energy and knowledge that is critical to our social and economic success. We envision the development of strong, collaborative partnerships that focus the full diversity of Nunavut's collective vision, while ensuring tangible benefits for all partners."

A key threat to this partnership approach has been outside interests advocating division amongst industry organizations in Nunavut. A divided approach is not conducive to Nunavut's development efforts and will result in tension within the territory that can only constrain capacity building efforts. These divisive actions must be avoided at all costs.

Given the complexities of the industry, there is no perfect fisheries development model for Nunavut to follow. A co-operative and diversified approach that fits within the vision and objectives of this strategy is highly encouraged.

What is required now is a massive engagement of stakeholder organizations to implement this strategy. None of these organizations has the mandate or capacity to do so alone, and strategic partnerships must occur. There is strength in numbers, and this strength must now be applied to Nunavut's fisheries development efforts.



Larry Simpson

10. CONCLUSION

This strategy has been developed as a guide to move Nunavut forward in the realization of its fisheries potential. The vision, guiding principles, and objectives of this strategy have been carefully developed to achieve this purpose.

Nunavut's fishing industry has the potential to become a major driver of Nunavut's future economy. What makes this potential so exciting is that it's not something that will take twenty years to achieve; if the right steps are taken, there are opportunities for immediate impact and benefit in many of Nunavut's communities, particularly in non-decentralized communities where other opportunities are more limited.

It is also important to note that Nunavut's fishery is currently at a crossroads, and the decisions made over the coming years will determine if its full potential is achieved. The stakes and expectations are currently high, and educated, responsible decisions must be made to ensure these expectations do not exceed the rate of development.

This strategy identifies conservation and sustainable use of fisheries as its key, overarching objective for Nunavut's fishing industry. This must be built into Nunavut's day-to-day decision-making process. A fisheries science agenda must be developed that establishes a foundation for a biologically sustainable resource and that supports the economic and social well being of the territory.

A current, unfortunate characteristic of Nunavut's fishery is that it is full of economic leakage. A number of strategic objectives have been developed in this strategy to address and reduce this trend. The development of strong organizational capacity and governance structures in Nunavut is one of the best means to reduce economic leakage from the territory. To increase selfreliance, Nunavut must reduce its dependence on outside interests and develop the organizations and partnerships necessary to control its fisheries.

Without a fair and equitable access and allocation regime, Nunavut's fisheries development efforts will be limited. Each year millions of dollars in potential revenue leave the territory because the majority of Nunavut-adjacent resources are allocated to interests from southern Canada. Gaining access to strategic portions of these lost allocations will drive Nunavut's future fisheries diversification efforts.

Another key challenge facing the development of Nunavut's fishing industry is the need to build a labour-force capable of meeting the demands of Nunavut's fisheries development efforts. This will be achieved through the improved recruitment, turnover minimization, and the development of training programs that meet the needs of the industry while understanding the jobs that Nunavummiut wish to obtain.

Without the development of adequate marine infrastructure, Nunavut will not be able to achieve its vision for fisheries. This is the foundation on which all fisheries are developed, and major investments are required in key areas to realize the true potential of this industry.

Achieving the vision and objectives of this strategy will require significant investments in a number of areas. Such investments were made during the developmental period of fisheries in other regions, and similar investments are required in Nunavut's emerging fishery today. These investments will provide the foundation for Nunavut's future economic growth.

Finally, the success of Nunavut's fishery will be achieved through the development and implementation of partnerships, at all stakeholder levels. The Nunavut Fisheries Strategy has provided a framework and direction for this joint action, and steps must now be made towards implementation.



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Appendix A

