

DFO's New Direction and the Implications for the East Coast Fishery

INTRODUCTION

On October 13 2011, a memo was circulated to all employees of the Department of Fisheries and Oceans Canada (DFO) with the subject heading 'Transformation at Fisheries and Oceans Canada (TFOC).' This memo outlines the new direction that DFO will be taking as it moves into the second decade of the 21st century (DFO, 2011).¹ Upon its release, the memo immediately drew criticism from many within the marine policy and research communities. The media began to report that the science branch of the DFO was in the process of being "gutted" and that employees should expect to see a much smaller DFO with fewer responsibilities in the future.



By the time the TFOC memo was released, it appeared that many aspects of the "dynamic change agenda" were already underway. Some of these changes make genuine economic and practical sense. The decommissioning of the Long Range Aid to Navigation (LORAN) system, for example, caused no great controversy. While it was a useful tool in the past, a decision by the United States Coast Guard to decommission their section of the LORAN array will render the vast majority of our LORAN sites inoperable. As such, there is very little argument that the decommissioning of LORAN-C is anything but a prudent financial decision. Similarly, the shifting of the responsibility for environmental assessments to the Canadian Environmental Assessment Agency seems to have garnered little criticism from the general public.

1. DFO. 2011. Transformation at Fisheries and Oceans Canada. Unpublished. Retrieved from <http://www.cbc.ca/news/pdf/nl-dfo-memo-20111013.pdf>

However, other changes made by the DFO leading up to the release of the TFOC memo have been less well received. The announcement in June 2011 that the Maritime Rescue Sub Center in St. John's would be closed drew large amounts of negative attention to DFO. Similarly, the subsequent disbanding of the Fisheries Resource Conservation Council in October of 2011 seemed to validate the assertion that the priorities of the DFO are changing.

The TFOC memo makes several broad statements about changes that will be occurring within DFO's structure and alludes to a new strategy being adopted for more effective and efficient coastal management in Canada. These changes purport to be able to deliver similar levels of service as DFO currently offers, while saving the country at least \$56.8 million dollars. In terms of how these changes will be implemented on a practical level, the TFOC memo outlines the four next steps that will be taken by the Government:

1. Finding efficiencies in the way that science is managed
2. The winding down of large ocean management areas pilot projects
3. Focusing aquaculture science activities on issues relevant to the department's regulatory duties
4. Modernizing the management of fisheries

This change in direction raises the question: Do the proposed changes put forward by the TFOC Memo actually make sense in the context of developing a more efficient marine resource management strategy? This article will endeavor to answer that question by examining the four next steps mentioned above in closer detail.

STEP 1 FINDING EFFICIENCIES IN THE WAY THAT SCIENCE IS MANAGED

When the TFOC memo was first released, it was the section regarding finding efficiencies within Science Branch that drew the most initial criticism. The shift to multi-year quotas and a stated emphasis on ecosystem-based management would appear to call for more scientific resources, not less.

That said, the Federal Government made the first move in order to try and find some efficiencies in the field of marine scientific research when in October 2011, it was reported that the Fisheries Resource Conservation Council (FRCC) had been terminated.

Despite the Government's assertions that the FRCC had become a redundant organization, there was much dissenting opinion within the House of Commons. No fewer than five members of the NDP and the Liberal parties expressed concern over the closure of the FRCC at the parliamentary debate held on October 17, 2011. At the same time, members of the scientific and environmental communities were using the media to convey the message that due to policies like the ones being adopted by the current Government, Canada was no longer considered to be the gold standard for fisheries and conservation policy.

One major point of contention is a shift towards the more common use of multi year fish stock assessments. According to the TFOC memo this move will provide commercial fish harvesters with more certainty of their annual quotas and allow them to make more informed decisions on how large their fleets will need to be. Unfortunately, not everyone agrees with this assessment. Critics of the idea to reduce annual quota assessments assert that since stocks have been so mismanaged in the past, there is a need for more rigorous scientific study, not a reduction in monitoring.

More moderate critics suggest that the concern is not so much about the setting of multi-year quotas, this strategy has proved effective before, but the ambiguity of what kind of scientific monitoring will be taking place in the interim years. Multi-year quotas can be effective, but only if they are properly monitored during the interim.

Once the 2012 budget was released, it became clear that while there were certainly serious cuts, at least in the short term, much of the research slated to be done in Nova Scotia will continue. The budget even seemed to offer some good news in potentially allowing for the return of practices like supporting scientific research amongst fisherman with additional fish quotas, a practice that was ceased in 2005.

However, now that cuts have begun to happen, concerns are being raised once again. With the elimination of positions of leading experts in the fields of oil spills and aquaculture, there are serious questions being raised about Canada's ability to effectively understand and protect our marine ecosystems. In fact, Sterling Belliveau, the Minister of Fisheries for the Province of Nova Scotia voiced similar concern to the Federal Government regarding how these cuts will affect local fisheries operations.

Finding efficiencies is a laudable goal. However, when those efficiencies include eliminating the most expert scientists, the motivation behind the cuts becomes questionable in both the national and international communities.

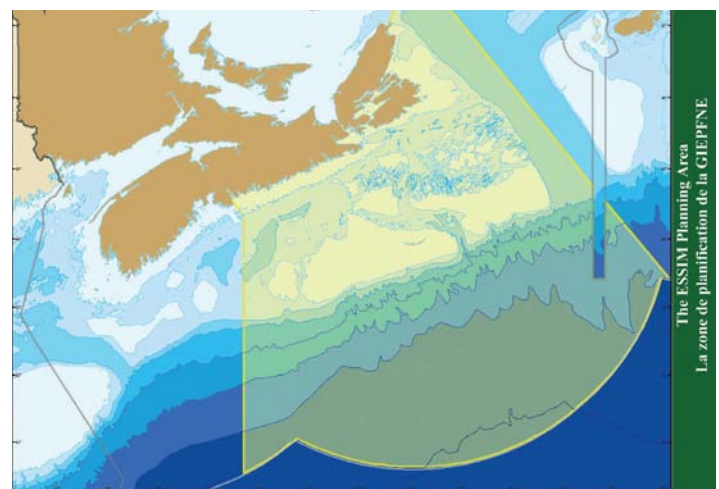
STEP 2 THE WINDING DOWN OF LARGE OCEAN MANAGEMENT AREAS PILOT PROJECTS

A troubling aspect of the wording of this section of the TFOC memo is its referral to the Large Ocean Management Areas (LOMAs) as pilot projects. The argument provided by the Government for its winding down was explained in the memo as: "now in a position to begin applying integrated management approaches as part of our regular operation." This is a confusing development because, as stated in the 2002 Ocean Strategy, the principle reason that the LOMAs were developed was to form a large ecosystem based approach within which smaller coastal management areas could be nested (DFO, 2002).

The emphasis on LOMAs in Canada's Oceans Strategy, as well as in the Oceans Action Plan would seem to indicate that they are a core initiative, not a pilot project.

Canada's Oceans Strategy goes into detail about the kinds of aspects of ecosystems that should be examined within the LOMAs in order to provide the important information necessary to properly develop the smaller coastal management areas. LOMAs were to be used for assessing current ocean space uses and future opportunities, the identification of potential areas of interest for marine protected areas, identification of ecologically sensitive habitat, as well as the assessment of general large marine ecosystem characteristics.

Representatives from DFO have admitted that that while the Eastern Scotia Shelf Integrated Management program, the first LOMA, was viewed as a pilot within the maritime region, many of the other groups managing the LOMAs were under the impression that they were working within a more permanent policy framework.



There can be no doubt that LOMAs did have their problems. They were slow to progress and tended to get bogged down in questions of administration and jurisdiction. Numerous academics and practitioners alike have discussed the challenges confronted, including establishing a coherent set of definitions for what they were trying to accomplish.

That said, there are a lot of positives that came out of the LOMA projects as well: The Beaufort Sea Management Project came up with the first federally approved integrated management plan; LOMAs helped to begin rebuilding of the relationships between fishermen and the DFO; they improved the role that science played in decision making; and they generated knowledge and lessons on how integrated coastal management works.

As the Government shifts towards a more bioregional approach, the important thing to remember is to not throw the proverbial baby out with the bathwater. LOMAs did have their problems, but there is a lot of good that happened as well. The shift to bioregionalism needs to be conducted in such a way that it allows for new ideas to enter the discussion, but not at the expense of the hard won knowledge that has already been gained.

STEP 3 FOCUSING AQUACULTURE SCIENCE ACTIVITIES ON ISSUES RELEVANT TO THE DEPARTMENT'S REGULATORY DUTIES

Initially, this particular section of the TFOC memo garnered very little attention. However, now that the proposed cuts have begun to take effect, the concerns over just what this refocusing means are starting to emerge. Recent reports have stated that in New Brunswick, large numbers of scientists that are directly involved with the monitoring of the impacts of pesticides on marine environments have received notice that they will be either laid off or transferred. While it is still too early to say definitively whether these scientists will in fact lose their jobs, it does raise an important concern about whether or not an attempt to streamline scientific process will result in the industrialization of aquaculture science.

The practice of encouraging private industry to fund its own studies, while simultaneously reducing the ability of the Government to determine the veracity of those reports is a treacherous one. Even if one trusts that the private interests are working in good faith, the optics of a Government relying on a scientific study on aquaculture funded by a large aquaculture company could be immensely damaging should something go wrong.

This scenario has already been played out in the oil industry, where much of the hard work done by both public and private



Cooke Aquaculture open pen net fish farm in Nova Scotia.

sector geologists and conservation scientists is disregarded by the general public off-hand because a long history of contradicting 'science.' Both the oil industry and the conservationists have ostensibly impartial scientists coming up with contradictory results. It is understandable why the general public is hesitant to trust either side.

If the focusing of aquaculture science activities on issues relevant to the DFO's regulatory duties does not include regulating the effects of aquaculture on the surrounding environment and something goes wrong, there can be no doubt that questions will be asked. It will not take long for the public to find a convenient scapegoat in both the privately funded aquaculture scientists as well the Government who took their advice without being able to verify its validity. The impression the Government was not able to foresee the disaster due to a lack scientific resources will not only end up damaging the credibility of the scientists, but of the Government as well.

STEP 4 MODERNIZING THE MANAGEMENT OF FISHERIES

The assertion of the TFOC memo that there will be a move to modernize the management of fisheries seems, at first, to be a relatively benign one. The example given as to the form that this modernization would take is a plan to switch to an online web-based licensing and renewal and payment system.

Actions by the Government since the release of the TFOC memo however, have led many to believe that cyber-billing is by no means an accurate reflection of the entirety of Government's plans. For example, in early 2012, the DFO released a discussion document entitled: The Future of Canada's Commercial Fisheries (TFCCF). The stated purpose of this document was to give stakeholders and aboriginal groups the opportunity to get a better sense of DFO's modernization plans fisheries management, and to offer their feedback. Much of the language in the TFCCF is very positive and its three primary goals of a long term and stable decision making process,

supporting conservation and sustainability goals, and setting the context for greater prosperity cannot be criticized. However, it is an item that is very specifically not mentioned that is drawing the ire of critics from both Government and private industry alike – the omission of any mention of the policy of owner/operator and fleet separation.

Known officially as the Policy for Preserving the Independence of the Inshore Fleet in Canada's Atlantic Fisheries (PIIFCAF), what this policy does, in essence, is protect small scale fisherman from being out competed by large, well financed and powerful operations.

If PIIFCAF is not maintained, then there is a good chance that the East Coast fisheries will undergo the same sorts of transformations that have been seen on the West Coast, which uses Individual Transferable Quotas (ITQs) as their primary regulatory mechanism. This is cause for some concern.

When one examines the more academic work on the effectiveness of ITQs it becomes clear that the relative success of the program depends very much on how one measures it. On one hand, the benefits to the BC fishery are concrete and undeniable. ITQs are more convenient for managers, result in higher ex-vessel fish prices, more security for vessel owners and, on the whole, higher earnings for deckhands coming as a direct result of the switch to ITQs. On the other hand however, there can be no doubt that the switch to ITQs also results in the loss of jobs both on vessels and in coastal communities as licenses get sold to absentee holders and fish processing plants move to larger urban centers.

Current research indicates that there are indeed many economic benefits of running a system involving ITQs as opposed to under the protection of PIIFCAF. However, those benefits do come at the expense of the small coastal communities who tend to see a sharp reduction in the local job market if protections like PIIFCAF are removed. With fewer members of the community involved in the fishery, and those fishers who do remain merely occupying a relatively low position within a larger corporation, there can be little doubt that coastal communities will suffer. When it comes to the East Coast, one can see why the fishermen in small coastal communities are concerned. The removal of the PIIFCAF protection may well bring higher levels of economic prosperity and efficiency to the fishing industry as a whole, however that prosperity will not necessarily be enjoyed by the people doing the actual fishing.

While in the short term, the removal of the PIIFCAF may improve the economics of fishing itself; what also must be considered are the negative consequences. While most of the profit from this policy shift will benefit private enterprise,

much of the burden of supporting thousands of unemployed fisherman and their families will fall on the Government. One must consider not simply the bottom line of the fishing industry itself, but also all the associated local economies, cultural wealth and even a reduction in tourist dollars as the small fishing villages that so many people come to Nova Scotia to experience begin to disappear. This is by no means a foregone conclusion, but it is something that should be examined very closely.

CONCLUSION

The question remains: Do the proposed changes put forward by the TFOC memo actually make sense in the context of developing an efficient coastal management strategy? It must be concluded that this really depends on one's point of view. From an economic perspective, many of the decisions make a certain amount of sense. Studies seem to indicate that the removal of the PIIFCAF rules could, in fact, increase the economic viability of the East Coast fishery. Similarly there is a real possibility that a shift to multi-year stock assessments could save the Government a considerable amount of money without causing any large amount of impact to the quality of the stock assessments.

Unfortunately, what may appear prudent on a balance sheet may have other, less computable consequences. The removal of PIIFCAF protection could result in undue hardships to coastal communities in the Atlantic regions. The elimination of LOMAs could undo decades of work that has gone into trying to implement effective integrated coastal management strategies, and the reduction of the Science Branch of DFO could lower the quality and reliability of the very information that is depended upon to maintain viable fish stocks. These impacts are all such that while they might not affect a balance sheet in the short term, over time their costs could be incalculable.

The strategy that the Government appears to be adopting as indicated by the TFOC memo carries considerable risk. The proposed actions may not have any great negative effect on Canada's fisheries or the communities that depend on them, but if they do, it will be virtually impossible to get them back. This is obviously a risk that the Government is willing to take, and only time will tell if the result is a balanced budget, or an economically crippled region.

This document is based on research undertaken by Mike Reid at the **Marine Affairs Program**, Dalhousie University. To enhance readability, references are not included but are available upon request at marine.affairs@dal.ca