

RESULTS AT A GLANCE

Evaluation of the Sustainable Aquaculture Program

The Sustainable Aquaculture Program's overall goal is to contribute to an environmentally, economically and socially sustainable Canadian aquaculture industry. To achieve that goal, the Program leads and manages Fisheries and Oceans Canada's (DFO) regulatory frameworks associated with aquaculture activities. The Program derives its regulatory mandate from the *Fisheries Act* and also has a lead role in the regulation of aquaculture in British Columbia. In all provinces and territories, DFO builds partnerships with other federal departments and provincial/territorial governments to coordinate and implement regulatory frameworks and management decisions. Partnerships are also maintained with Indigenous peoples and the aquaculture industry. The Program's regulation and policy development activities are supported by aquaculture research and peer-reviewed science advice carried out and provided by the Department. Federal fishery officers from the Conservation and Protection (C&P) division assess compliance for all national and regional regulations under the *Fisheries Act* that apply to aquaculture, including the *Aquaculture Activities Regulations* (AAR) and, in British Columbia, the *Pacific Aquaculture Regulations* (PAR).

WHAT THE EVALUATION FOUND

Sustainable Aquaculture Program – Key Findings

Aquaculture Management Division

- The Sustainable Aquaculture Program (SAP) activities directly support DFO's obligations related to s.35 and s.36 of the *Fisheries Act*. DFO's regulatory framework is not a major barrier to industry growth. Only a limited number of DFO-specific regulatory incongruences were identified and other factors appear to explain the stagnation of the aquaculture industry in Canada over the last 10 years.
- The evidence shows that although the AAR helped strengthened DFO's regulatory framework in support of its core responsibilities, it did not result in a streamlined regulatory framework. In fact, the AAR created regulatory overlap with benthic impact monitoring programs in some provinces, increased the reporting burden on the industry and did not provide the level of legal clarity that was expected by the industry and other key stakeholders.
- Overall, Aquaculture Management Division (AMD) has the right resources to deliver its Program. Interviewees in these two regions raised concerns about their ability to handle an increase in workload resulting from the growth of the industry or the transfer of further new responsibilities. The evaluation identified opportunities for improvement in DFO's involvement in provincial siting decision-making processes.

Ecosystems and Oceans Science

- There is an ongoing need for aquaculture-related research to support decision-making and policy development at DFO. Interviewees from both AMD and Ecosystems and Oceans Science (EOS) identified an unmet and emerging need for research concerning the field of fate and biological effects of contaminants. Further to previous decisions, EOS does not have the resources and expertise to produce science advice concerning the fate of drugs and pesticides. This research is

being sourced externally through the National Contaminants Advisory Group.

- EOS delivered scientific knowledge and advice in support of decision- and policy- making. There is evidence that science knowledge and advice is strongly valued and used by AMD management.
- EOS operates in an efficient manner, although B-base funding is creating minor inefficiencies. The AAR and the anticipated growth of the industry have created a need for additional resources in order to maintain an equivalent level of service to policy- and decision-makers.

Conservation and Protection

- Conservation and Protection (C&P) made progress towards the establishment of key elements required for the enforcement of the AAR and the transfer of s. 36. However, many other activities will have to be completed before a comprehensive and proactive enforcement system is in place.
- Due to increased responsibilities and limited funding, C&P management recognizes that it will not be able to conduct enforcement activities and site coverage to a level that matches the estimated level of risk of non-compliance with the aquaculture regulations associated with the finfish aquaculture industry.

RECOMMENDATIONS

1. It is recommended that the Assistant Deputy Minister, Aquatic Ecosystems Sector, as part of the upcoming program funding renewal process, clarifies and better articulates the program objectives to ensure that these objectives align with its core responsibilities.
2. It is recommended that the Assistant Deputy Minister, Ecosystems and Oceans Science develop, or secure access to, research in the fields of fate and biological effects of contaminants. This research should allow EOS to:
 - support DFO's commitments identified in the Science Advice Implementation Plan in a timely manner; and,
 - meet, to the extent possible, the other knowledge and advice needs of DFO regarding the fate and biological effects of contaminants used by the aquaculture industry.
3. It is recommended that the Assistant Deputy Minister, Fisheries and Harbour Management assess the risk of non-compliance with the aquaculture regulations by the aquaculture industry; and, use this assessment to develop a proposal for enhanced enforcement of aquaculture regulations by C&P detachments across Canada to inform the renewal of the Sustainable Aquaculture Program.
4. It is recommended that the Assistant Deputy Minister, Fisheries and Harbour Management establish Regional Working Agreements with the relevant federal and provincial partners in the Atlantic regions to ensure that C&P has access to key information and expertise; and that a coordinated enforcement regime is put in place.
5. It is recommended that the Assistant Deputy Minister, Aquatic Ecosystems Sector, in collaboration with the Assistant Deputy Minister, Ecosystems and Oceans Science, review the siting decision process to:

- clarify the roles and responsibilities between the Fisheries Protection Program and the Regional Aquaculture Management Division in the provincial siting decision process;
- define the roles and responsibilities and expected level of involvement of EOS in the provincial siting decision process;
- define clear criteria for decision-making that are harmonized and applied consistently across the regions; and
- establish service standards to ensure timely delivery of advice to the provinces.

ABOUT THIS EVALUATION

The evaluation covers the period from 2013-14 through the first quarter of 2017-18 and was conducted by DFO's Evaluation Directorate. The evaluation covers the National Capital Region and all six DFO regions, although it places emphasis on Eastern Canada because an evaluation of the British Columbia Aquaculture Regulatory Program (BCARP) was completed in August 2015. The Sustainable Aquaculture Program was last evaluated in 2012. In 2016-17, total spending by SAP was \$22,414,111.

For more information about this evaluation and its findings, please consult the Evaluation of the Sustainable Aquaculture Program report, including the Management Action Plan accessible online at <http://www.dfo-mpo.gc.ca/ae-ve/evaluations-eng.htm>.