

MANAGEMENT ACTION PLAN

CESD - 2018 Spring Reports – Report 1 – Salmon Farming

Commissioner's Recommendations	Departmental Response to Recommendations	Actions Taken to Date to Address Recommendations (as of October 2018)	Offices of Primary Interest
<p>Recommendation 1.28: Fisheries and Oceans Canada should conduct its planned disease risk assessments by 2020 to increase its knowledge of the effects of aquaculture on wild salmon, as it committed to doing in its response to the Cohen Commission report.</p>	<p>Fisheries and Oceans Canada will deliver disease risk assessments, as planned, by the September 2020 deadline specified in the Cohen Commission report. This is an important analysis and initiative that will deliver on aquaculture-related recommendations made by Justice Cohen, and it is aligned with delivering on the Minister's mandate letter.</p>	<p>A plan has been developed to deliver the remaining nine individual peer-reviewed disease risk assessments, as well as a peer-reviewed risk assessment of the synthesis of the risk to Fraser River Sockeye salmon from pathogens that have caused disease on Atlantic Salmon farms in the Discovery Islands, prior to September 2020.</p> <p>In April 2018, a workshop was held to discuss risk assessments for four diseases related to bacterial pathogens that cause systemic infections. Working papers for the peer-review process have been completed for these four disease risk assessments, a steering committee was struck, and the peer-review meeting for these four risk assessments took place November 6-8, 2018.</p> <p>Planning and preparation for a fifth peer-reviewed disease risk assessment in early 2019 is underway.</p>	<p>A/ADM, Ecosystems and Oceans Science</p>
<p>Recommendation 1.46: Fisheries and Oceans Canada and the Canadian Food Inspection Agency should clarify their roles and responsibilities for managing emerging disease risks to mitigate the potential impacts of salmon farming on wild fish.</p>	<p>Fisheries and Oceans Canada will continue to work collaboratively with the Canadian Food Inspection Agency, the federal lead for managing diseases of both farmed and wild fish, to clarify roles and responsibilities for managing emerging diseases and agree on the most efficient and effective method for sharing information on fish health. The Department will work with the Agency to establish a formal process to discuss, assess, and share information on emerging diseases of interest to either government entity. This process will help to clarify the government response and framework for the assessment of risk for emerging</p>	<p>The draft policy is on target for final approval and implementation by the Agency and Department in April 2019.</p> <p>Fisheries and Oceans Canada (DFO) established an interdepartmental working group in May 2018 to clarify their respective roles and responsibilities regarding the federal management of emerging diseases of fish in Canada.</p> <p>The working group is currently finalizing a draft joint</p>	<p>ADM, Aquatic Ecosystems</p> <p>A/ADM, Ecosystems and Oceans Science</p>

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	<p>diseases to mitigate any potential impacts to wild fish. This formal process will be implemented by April 2019.</p>	<p>policy on the management of emerging diseases. This draft policy will outline the formation of an interdepartmental committee that would be responsible for monitoring and evaluating emerging infectious diseases, identifying impacts on susceptible aquatic species, evaluating the requirement for federal controls, and providing recommendations on oversight and management controls.</p> <p>The proposed committee would also provide the mechanism to ensure appropriate response coordination between the CFIA and DFO to effectively manage emerging diseases to protect wild fish.</p>	
<p>Recommendation 1.50: Fisheries and Oceans Canada should determine and communicate how it applies the precautionary approach to managing aquaculture when there is uncertainty about the effects of aquaculture on wild fish. The Department should also clearly articulate the level of risk to wild fish that it accepts when enabling the aquaculture industry.</p>	<p>Fisheries and Oceans Canada will continue to apply the precautionary approach according to the Government of Canada's framework on precaution. The Department applies the precautionary approach where appropriate, as a subcomponent within an overall decision-making approach, to deal with risks of serious or irreversible harm even with significant scientific uncertainty. Even when a particular activity is deemed "low" risk, lack of full scientific certainty shall not be used to postpone mitigation measures to prevent further potential environmental degradation. The Department will clearly communicate how it applies the precautionary approach to management decisions (for example, on the Department's website).</p> <p>To support this, the Department conducts research to characterize how individual species, populations, and communities respond to a range of stressors, including aquaculture. This research informs management decision making concerning establishment or refinement of</p>	<p>The Department is on track to complete this process by the proposed deadline of March 2019.</p> <p>The Department has developed a draft Framework for Aquaculture Risk Management, which incorporates the precautionary approach. We are currently undertaking an intradepartmental review of the draft Framework.</p>	<p>ADM, Aquatic Ecosystems</p> <p>A/ADM, Ecosystems and Oceans Science</p>

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	<p>thresholds to protect at-risk ecosystem functions and valued components.</p> <p>The Department will further explore options, building on best practices in the current pathway of effects framework, to more clearly articulate, by March 2019, how precaution and the application of risk assessments inform departmental decision making.</p>		
<p>Recommendation 1.61: Fisheries and Oceans Canada should establish thresholds for the deposit of drugs and pesticides into net pens to more effectively minimize harm to wild fish.</p>	<p>Fisheries and Oceans Canada will undertake further analysis and continue to work with its provincial and territorial partners, Environment and Climate Change Canada, and Health Canada to improve the protections provided by the Aquaculture Activities Regulations.</p> <p>The ongoing interdepartmental science review will provide advice on options for post-deposit monitoring of drugs and pesticides. This advice will inform planned regulatory changes to the Aquaculture Activities Regulations, beginning in 2020, as well as the need to develop and establish national thresholds.</p> <p>Further, a "traffic light" decision tree will be developed by March 2020 to help address the potential cumulative impacts on wild fish from the deposit of pesticides and drugs into fish-bearing waters. In partnership with Health Canada and Environment and Climate Change Canada, Fisheries and Oceans Canada will be in a better position to determine under which oceanographic conditions pesticides should no longer be deposited ("red light"), areas and conditions under which risks are acceptable ("green light"), and areas where the use of such products need to be more carefully studied and controlled ("yellow light").</p>	<p>The Department is on target to complete this initiative by the proposed deadline of March 2020.</p> <p>The Department is working closely with Environment and Climate Change Canada, and Health Canada on an interdepartmental science review to provide advice on a drug and pesticide monitoring program. Workshops to plan research and an approach to delivery of advice were held in 2017 and 2018. Field sampling and sample analysis commenced in 2017 and is on-going.</p> <p>An initial draft conceptual (traffic light) model for pesticide and drug deposits has been developed.</p>	<p>ADM, Aquatic Ecosystems</p> <p>A/ADM, Ecosystems and Oceans Science</p>
<p>Recommendation 1.63: Fisheries and Oceans Canada should develop and implement an</p>	<p>Fisheries and Oceans Canada will perform an analysis and costing exercise by March 2019 to determine options for a risk-based auditing program, which would enable it to</p>	<p>A contractor has been hired to develop options for a risk-based auditing framework for information collected under the Aquaculture Activities</p>	<p>ADM, Aquatic Ecosystems</p>

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<p>approach to validate the accuracy of information that aquaculture companies report regarding their drug and pesticide deposits.</p>	<p>effectively validate information provided by aquaculture companies so the Department can confirm the use of drugs and pesticides. These options will be considered in future program redesign.</p>	<p>Regulations. This work is on track for completion by March 2019.</p>	<p>ADM, Fisheries and Harbour Management</p>
<p>Recommendation 1.74: Fisheries and Oceans Canada should initiate discussions with its counterparts in the Atlantic provinces to address the quality and maintenance of equipment on salmon farms to prevent fish escapes.</p>	<p>Fisheries and Oceans Canada will work with provincial and territorial regulatory partners, as well as international colleagues (for example, Norway), to explore national standards considering current expertise and experience within the aquaculture domain. This type of regulatory work is currently not addressed by existing programs within the Department and will require the development of program capacity in collaboration with provincial and territorial partners.</p> <p>Through a feasibility study, the Department will initiate federal, provincial, and territorial discussions by December 2019 and study and potentially develop national standards regarding equipment quality and maintenance.</p>	<p>In May 2018, the Department initiated discussions on national standards with provincial and territorial partners under the umbrella of the Canadian Council of Fisheries and Aquaculture Ministers. Discussions on containment standards were also initiated with federal counterparts in Norway, Scotland, and Chile.</p> <p>The Department has also initiated an initial assessment of potential national containment standards (to be completed by February 2019). Provincial and territorial partners have been advised of this ongoing study and will review drafts as they become available. Federal, provincial, and territorial partners will discuss this final report early next year and explore the feasibility and potential development of national aquaculture standards on the quality and maintenance of equipment on salmon farms.</p>	<p>ADM, Aquatic Ecosystems</p> <p>A/ADM, Ecosystems and Oceans Science</p> <p>ADM, Fisheries and Harbour Management</p>
<p>Recommendation 1.85: Fisheries and Oceans Canada should more effectively enforce aquaculture regulations and pursue additional enforcement measures.</p>	<p>Fisheries and Oceans Canada will conduct an aquaculture-enforcement costing exercise by November 2019 to determine the full operational implications of enforcing aquaculture regulations in Canada.</p> <p>An internal evaluation in 2015 recommended that the Department examine expected efficiencies associated with an expanded ticketing regime. As a result, an initial phase was approved to take a more consistent approach to minor fisheries offences by the commercial and recreational sectors. Further information on Phase Two of the process</p>	<p>The Department is on target to complete this initiative by the proposed deadline of November 2019.</p> <p>DFO's Conservation & Protection Branch (C&P) has prepared a detailed costing proposal to address the identified risks of noncompliance by the aquaculture industry.</p> <p>C&P's National Fisheries Intelligence Service is developing internal capacity to analyze aquaculture</p>	<p>ADM, Fisheries and Harbour Management</p>

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	<p>can be found on the Department's website.</p> <p>The Department is currently working to expand and update its ticketing regime so that aquaculture regulations are addressed.</p>	<p>issues and develop intelligence products to support more effective and targeted enforcement measures.</p> <p>C&P has implemented operational service level agreements with Environment and Climate Change Canada to analyze aquaculture samples. Additional work is ongoing with other federal and provincial agencies with aquaculture oversight responsibilities to identify and promote a more coordinated and collective enforcement regime.</p>	
<p>Recommendation 1.88: Fisheries and Oceans Canada should provide timely public reports with detailed information on companies' drug and pesticide deposits, and on the health of farmed fish in British Columbia.</p>	<p>Fisheries and Oceans Canada will continue to provide compliance information for use in production of the aquaculture compliance index as part of the Canadian Environmental Sustainability Indicators.</p> <p>In addition, the Department is currently examining options to publicly report information collected as part of the Aquaculture Activities Regulations, including mitigation measures used to reduce the impact on fish and fish habitat. These options will be finalized by June 2018.</p>	<p>The Department continues to report on compliance through the Federal Sustainable Development Strategy and the Canadian Environmental Sustainability Indicator reporting process.</p> <p>The Department has begun publishing drug and pesticide data collected under the Aquaculture Activities Regulations. The data on our marine finfish and freshwater aquaculture sectors can be found on our website at http://www.dfo-mpo.gc.ca/aquaculture/management-gestion/apr-rpa-reporting-eng.htm.</p> <p>The Department has updated and continues to publish its Fish Health report for the Pacific Region.</p>	<p>ADM, Aquatic Ecosystems</p>