



Fisheries and Oceans
Canada

Pêches et Océans
Canada

Departmental Plan



2019-20



© Her Majesty the Queen in Right of Canada,
as represented by the Minister of Fisheries, Oceans and the Canadian Coast Guard, 2019
Departmental Plan 2019-20
Cat. No. Fs1-82E-PDF
ISSN 2371-6061

Table of Contents

Minister’s Message	1
Plans at a Glance and Operating Context.....	3
Planned Results: What We Want to Achieve this Year and Beyond	7
Core Responsibilities	7
Fisheries	7
Aquatic Ecosystems	14
Marine Navigation	20
Marine Operations and Response	23
Internal Services	28
Spending and Human Resources	32
Planned Spending.....	32
Planned Human Resources	33
Estimates by Vote.....	34
Future-Oriented Condensed Statement of Operations	34
Additional Information	35
Corporate Information	35
Organizational Profile	35
Raison d’être, Mandate and Role: who we are and what we do	35
Reporting Framework.....	36
Supporting Information on the Program Inventory.....	37
Supplementary Information Tables	37
Federal Tax Expenditures	37
Organizational Contact Information	37
Appendix: Definitions	39
Endnotes	43

Minister's Message

As the Minister of Fisheries, Oceans and the Canadian Coast Guard, it is my honour to serve Canadians across this country and to represent dedicated employees in more than 400 locations. They work diligently with Indigenous peoples and other partners to keep our waters safe, secure and accessible while protecting our oceans, ecosystems, waterways, and fisheries.

I am proud to present to you the *2019-20 Departmental Plan for Fisheries and Oceans Canada and the Canadian Coast Guard*.

As Minister, it is my responsibility to meet the Government of Canada's [priorities](#)ⁱ and our departmental [mandate commitments](#)ⁱⁱ, including:

- better protecting our oceans, coasts, waterways and fisheries to ensure they remain healthy for future generations while providing important economic opportunities to Canadians and coastal communities;
- working with provinces, territories, Indigenous peoples, and Canadians to better co-manage our three ocean coasts;
- collaborating with Indigenous peoples to build a renewed, nation-to-nation relationship based on recognition of rights, respect, co-operation, and partnership;
- advancing Canada's *Oceans Protection Plan* in collaboration with other departments, and Indigenous and coastal communities;
- renewing the Canadian Coast Guard Fleet through the National Shipbuilding Strategy;
- completing a full review of Canada's *Fisheries Act* and tabling important amendments in Parliament to restore lost protections and introduce new and effective safeguards;
- developing federal aquaculture legislation that respects federal, provincial and territorial jurisdiction, and provides greater clarity to the sector to ensure that Canada's aquaculture industry is a global leader in producing high-quality aquaculture products in an environmentally sustainable manner; and
- conserving 10 percent of marine and coastal areas by 2020, including minimum protection standards in marine protected areas and marine refuges.

Our *2019-20 Departmental Plan* provides Canadians and Parliamentarians with information on our vital work and the key objectives we seek to achieve in the next fiscal year.

The four core responsibilities for our Department remain the same this year:

- **Fisheries** – how we manage Canada's fisheries, Indigenous fisheries programs, aquaculture activities and provide support for commercial fishing harbours while applying relevant legislation.
- **Aquatic Ecosystems** – how we conserve, protect, and manage Canada's oceans and other aquatic ecosystems and species from human impacts and invasive species.
- **Marine Navigation** – how we provide information and services to facilitate navigation in Canadian waters.
- **Marine Operations and Response** – how we provide marine response services and operate Canada's civilian maritime fleet.



In 2019-20, the Department plans to:

- continue to improve our relationship with and outcomes for Indigenous peoples through negotiations, and our reviewed and updated Indigenous commercial and collaborative fisheries programs;
- implement a modernized *Fisheries Act* once Bill C-68 becomes law;
- advance the conservation of wild salmon through promotion of and investment in the International Year of the Salmon throughout 2019;
- take further actions to protect marine mammal populations, in particular the Southern Resident Killer Whales, the North Atlantic Right Whales, and the St. Lawrence Estuary Belugas;
- continue engagement with Indigenous organizations, Arctic leaders, communities, provinces and territories, and other partners on the priorities and form of the Department's new Arctic region;
- continue to advance the renewal of Coast Guard's fleet by accepting delivery of two Offshore Fisheries Science Vessels and three Search and Rescue lifeboats;
- review proposed projects for funding under the Atlantic Fisheries Fund, the British Columbia Salmon Restoration and Innovation Fund, the Quebec Fisheries Fund, as well as the Canadian Fish and Seafood Opportunities Fund;
- announce the ratification of the historic Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean;
- take action to reach and surpass our goal to protect 10 percent of marine and coastal areas by 2020, including pursuing the development of marine protected area networks for five priority bioregions; and
- initiate Marine Spatial Planning processes in five marine areas in collaboration with other federal departments, provinces, territories, Indigenous peoples, and other stakeholders.

Each of these actions calls for continued science-based decision-making, advancing reconciliation through engagement and partnerships with Indigenous peoples, and reliance on and renewal of our world class Coast Guard fleet to protect and safeguard waterways.

Our *2019-20 Departmental Plan* represents my commitment, and that of the entire Fisheries and Oceans and Canadian Coast Guard family, to continue to deliver on all of our important work to date and to further protect our oceans, fisheries, marine ecosystems, coastlines, and waterways for current and future generations.

Working on behalf of all Canadians, I am extremely proud and committed to fulfilling our vision of healthy oceans and a sustainably sourced and well-managed fish and seafood sector, ensuring economic prosperity for the countless Indigenous and coastal communities from coast to coast who rely upon these vital resources for their livelihoods.

The Honourable Jonathan Wilkinson, P.C., M.P.
Minister of Fisheries, Oceans and the Canadian Coast Guard

Plans at a Glance and Operating Context

In 2019-20, the Department of Fisheries and Oceans and the Canadian Coast Guard (DFO-Coast Guard) will continue to make progress in fulfilling mandate commitments and key initiatives in support of Government of Canada priorities and delivering results to Canadians. More information on mandate commitments can be found in the [Minister's mandate letter](#)ⁱⁱⁱ and the Government of Canada's [Mandate Letter Tracker: Delivering results for Canadians](#)^{iv}.

Operating Context

Through sound science, forward-looking policy, and operational and service excellence, DFO-Coast Guard employees carry out a broad mandate in support of Canadians. This includes ensuring:

- the sustainable management of Canadian fisheries and aquaculture;
- the protection of Canada's oceans and aquatic ecosystems;
- that the Canadian maritime economy and all mariners operate in safe and navigable waters; and
- that Canada's civilian fleet can respond to on-water incidents and continue to support its clients.

Canada has an abundance of ecologically diverse and economically significant freshwater and marine and coastal areas. The Department's overarching goal is to protect Canada's three oceans, its coasts, waterways and fisheries, and to ensure these remain healthy for future generations.

Factors influencing DFO-Coast Guard's ever-evolving operational environment include trade diversification and economic trends, Indigenous reconciliation, climate change and severe weather events, growing interest in and accessibility of the Arctic, shifting demographics and income distribution, technological innovations, and variable geopolitical and macroeconomic conditions.

With a view to constant improvement, the Department continuously assesses how it conducts business, provides services, and delivers programs to clients and stakeholders, while helping Canada meet its responsibility to the world to steward its maritime and marine resources. Risk awareness is integral to this assessment.

Below are highlights of key initiatives the Department will advance this year to support the Fisheries, Aquatic Ecosystems, Marine Navigation, and Marine Operations and Response core responsibilities.

Fisheries – how we manage Canada's fisheries, Indigenous fisheries programs, aquaculture activities and support commercial fishing harbours while applying relevant legislation.

After having acted on all 75 recommendations in the **Cohen Commission** report, the Department will continue to maintain and restore wild Pacific salmon stocks through concrete actions outlined in the *Wild Salmon Policy 2018-2022 Implementation Plan*. These efforts will directly support the mandate commitment on developing a **broader strategy to protect Pacific salmon, and working with the Government of British Columbia to secure a healthy future for Pacific salmon, with concrete deliverables by 2019, the International Year of the Salmon**.

DFO-Coast Guard is **modernizing fisheries, aquaculture, and responsible economic development on all three coasts** by expanding on the successes of the [Atlantic Fisheries Fund \(AFF\)](#)^v through the creation of the [British Columbia Salmon Restoration and Innovation Fund](#)^{vi} and [Quebec Fisheries Fund](#)^{vii}. The Department will also begin funding the first projects under the [Canadian Fish and Seafood Opportunities Fund \(CFSOF\)](#)^{viii}, a pillar of the AFF launched in December 2018. In addition, DFO-Coast Guard is streamlining aquaculture regulations to reduce barriers to innovation, economic development, and investment in the aquaculture industry. The Department is also taking action on developing a new federal *Aquaculture Act*, as agreed to with provinces and territories at the Canadian Council of Fisheries and Aquaculture Ministers.

The Department will continue to advance **Indigenous reconciliation** through the implementation of the DFO-Coast Guard Reconciliation Strategy. DFO-Coast Guard will establish a coordinated approach for effective management and consultation with Indigenous groups at the national and regional levels and continue to advance treaty and other agreements. This work will also assist with the negotiation of agreements aimed at greater stability and predictability for all participants in the fishing industry.

In support of the mandate commitment to **use scientific evidence, traditional Indigenous knowledge, and the precautionary principle, and take into account climate change, when making decisions affecting fish stocks and ecosystems management**, the Department's scientists will continue to conduct research and monitoring to produce scientific data, products, services, and peer-reviewed advice that are essential for evidence-based decision-making and the development of policy, regulations, and standards.

Aquatic Ecosystems – how we conserve and protect Canada's oceans and other aquatic ecosystems and species from human impacts and invasive species.

The Department is taking active measures to meet the Government of Canada's **10 percent marine conservation target by 2020**. These include continuing to work with Parks Canada, Environment and Climate Change Canada, Indigenous peoples, provinces, and territories on new Areas of Interest for *Ocean's Act* marine protected areas (MPAs), other effective area-based conservation measures, and MPA network designs for five priority bioregions. As part of this process, the Department will also take into consideration the final recommendations from the [National Advisory Panel on MPA standards](#)^{ix}.

Building on recent collaborations and partnerships, the Department plans to advance **marine spatial planning** in five marine areas to better co-manage Canada's oceans.

The Department will continue to **implement and further develop the *Oceans Protection Plan* (OPP)** in partnership with Transport Canada, Environment and Climate Change Canada, and Natural Resources Canada. As part of the OPP's efforts to protect and restore marine ecosystems, the Department will continue to support projects that improve coastal aquatic habitats, through the \$75 million [Coastal Restoration Fund](#)^x.

To implement the mandate commitment on **the proposed reforms to the *Fisheries Act***, subject to Parliamentary approval of *Bill C-68*, the Department will establish an online public registry on permit and authorization decisions, and create a Fish and Fish Habitat Protection Program. In addition, the amendments are intended to advance reconciliation with Indigenous peoples and increase Indigenous participation. With funds received through the 2018 Fall Economic Statement, DFO-Coast Guard will also perform the work necessary to subject most major fish

stocks to the fish stock provisions which are part of the proposed *Fisheries Act* amendments and will promote sustainability.

The Department has supported the Government of Canada's focus on demonstrating international oceans leadership by **co-leading the implementation of the G7 Charlevoix Blueprint for Healthy Oceans, Seas and Resilient Coastal Communities** and the **G7 Ocean Plastics Charter**. To deliver on this mandate commitment, DFO-Coast Guard will also draft the Ocean Plastic and Ghost Gear Management Framework to reduce the impact of plastics pollution on the health of Canada's aquatic ecosystems.

DFO-Coast Guard will leverage the investments announced during 2018, towards **protecting, preserving, and restoring endangered whale species** in Canada, by conducting research and taking actions to support the health of North Atlantic Right Whales, Southern Resident Killer Whales, and St. Lawrence Estuary Belugas.

Lastly, DFO-Coast Guard continues to **protect the Great Lakes, the St. Lawrence River Basin, and the Lake Winnipeg Basin** through implementation of the *Aquatic Invasive Species (AIS) Regulations*, and other activities such as completing the Asian Carp management gap analysis by fall 2019, working with the United States and the Province of Ontario on suppressing sea lamprey populations, and engaging Indigenous communities on early detection surveillance of AIS.

Marine Navigation – how we provide information and services to facilitate navigation in Canadian waters.

To facilitate navigation in Canadian waters and support Government of Canada priorities on **transparency and accountability, economic development, and environmental conservation**, the Department will provide improved navigational information. In 2019-20, the Department will produce modern hydrography and charting within proposed Arctic Low Impact Shipping Corridors, conduct modern hydrographic surveys and update navigational charts for high-priority commercial ports, and conduct multibeam sonar surveys of priority near-shore areas across Canada.

In 2019-20, the Coast Guard will complete its icebreaker vessel conversion and refit. One vessel entered into service in 2018-19 and the second and third icebreakers are expected to enter into service in 2019-20 and 2020-21 respectively. In doing so, the Department is supporting Government of Canada priorities on growing the economy, creating jobs, and strengthening the middle class, as the new vessels will help to better enable commerce, including in coastal communities. The newly acquired ships will also contribute to the marine safety outcomes of the OPP.

Marine Operations and Response – how we provide marine response services and operate Canada's civilian maritime fleet.

The Department continues to be committed to advancing a world-leading marine safety system. Through the OPP, the Department, along with Transport Canada, Natural Resources Canada, and Environment and Climate Change Canada, will work to implement legislation to formalize an **oil tanker moratorium**, which seeks to protect habitats and Indigenous and coastal communities on British Columbia's North Coast. The OPP will also enable the Department to deliver 24/7 emergency response capacity at Coast Guard's existing regional operations centres, by

spring 2020. These centres will focus on planning and coordination of response to marine pollution incidents.

The Department also ensures that it has the vessels and related assets required to carry out its mission of ensuring the safety of Canada's navigable waters, maintain commercial shipping routes, defend Canada's sovereignty, and support scientific exploration. To support these priorities, the Department will continue **renewing its fleet** through the acquisition of three Search and Rescue lifeboats, two Offshore Fisheries Science Vessels, and one Full Flight Simulator. In 2019-20, Coast Guard will also continue Vessel Life Extension work on aging assets.

Internal Services

With respect to internal operations, the Department has a number of key priorities. DFO-Coast Guard will lead the Government of Canada by example in reduction of plastic consumption. This will directly support Canada's commitment, through the G7 Charlevoix Blueprint for Healthy Oceans, Seas and Resilient Coastal Communities and G7 Ocean Plastics Charter, to divert at least 75 percent of plastic waste from government operations by 2030.

Experimentation and innovation continue to be essential elements of the Department's core business and mandate. In particular, DFO-Coast Guard is experimenting with new processes to strengthen internal operations through the piloting of proactive approaches, such as a new Indigenous Recruitment Strategy, and new systems to improve real property information management. In addition, as a participant in the **Innovation Solutions Canada**^{xi} program, led by Innovation, Science and Economic Development Canada, the Coast Guard will soon begin to receive proposed solutions from businesses that supports the Government's priority of **greening its operations** as well as the commitment to **dedicate resources to experimentation** with new technologies and approaches to delivering service.

The Department remains committed to supporting the full implementation of **Gender-Based Analysis Plus (GBA+)** across all federal departments and agencies. To support the use of GBA+, DFO-Coast Guard will continue to use available data to inform robust analyses, as indicated in the best practices identified by Status of Women Canada (recently changed to the Department for Women and Gender Equality). This will ensure the consideration of identity factors, including Indigenous peoples are integrated into decision-making. The Department also continues to focus efforts on advancing a **diverse and inclusive workplace** through the Employment Equity, Diversity, and Inclusion Action Plan and a Diversity and Inclusion Framework, which have a target date of April 2019.

The Department will continue to build on the fall 2018 announcement of a new, stand-alone **DFO Coast Guard Arctic Region**^{xii}, which was created collaboratively with Indigenous and Northern partners. The new Region's transformative vision is intended to better address Northern priorities that span across all four core responsibilities, including fisheries, marine safety, and environmental issues such as **climate change impacts on Arctic marine ecosystems**. During 2019-20, the new Regional Director General and Assistant Commissioner, who lead the Arctic Region, will continue engagement on the priorities and form of the new Region with Indigenous organizations, Arctic leaders, communities, provinces and territories, and other Northern partners.

For more information on Fisheries and Oceans Canada's plans, priorities, and planned results, see the **Planned Results** section of this report beginning on page 7.

Planned Results: What We Want to Achieve this Year and Beyond

Core Responsibilities

Fisheries

Description

Manage Canada's fisheries, Indigenous fisheries programs, aquaculture activities and support commercial fishing harbours while applying relevant legislation.

Departmental Results

The Fisheries Core Responsibility is focused on advancing the following Departmental Results:

- Canadian fisheries are sustainably managed
- Canadian aquaculture is sustainably managed
- The commercial fishing industry has access to safe harbours
- Fisheries, oceans and other aquatic ecosystems are protected from unlawful exploitation and interference
- Scientific information on fisheries resources is available to inform management decisions
- Improved relationships with and outcomes for Indigenous people

The indicators used to measure progress towards these results appear in the [Planned Results](#) table beginning on page 12.

To support the Minister of Fisheries, Oceans and the Canadian Coast Guard in achieving these results, the Department will carry out the following key initiatives and activities.

Planning Highlights

In 2019-20, DFO will continue to **increase production of *Integrated Fisheries Management Plans (IFMPs)***. IFMPs help to guide the conservation and sustainable use of marine resources, support the management of sustainable fisheries, and combine science and traditional Indigenous knowledge on fish species with industry data to determine best practices for harvest. This is a key part of the Department's **response to the Commissioner of the Environment and Sustainable Development (CESD)**'s October 2016 [audit recommendations on sustaining Canada's major fish stocks](#)^{xiii}. DFO will also continue to refine and publish the annual work plan in response to the audit until the work is complete. This approach allows DFO to increase the transparency of its priorities while ensuring a strategy is in place for ongoing work to continue in the years ahead.

DFO has released the **Government of Canada's *Wild Salmon Policy 2018-2022 Implementation Plan***^{xiv}, which outlines concrete actions the Department will take to help rebuild Pacific wild salmon populations and their habitats. Through these activities, DFO will continue to take action on salmon conservation on the Pacific coast, supporting the **Minister's mandate letter commitment to continue to act on recommendations of the *Cohen Commission***^{xv}. DFO will also continue to work with the Government of British Columbia to secure a healthy future for Pacific

Salmon, with concrete deliverables by 2019, the International Year of the Salmon. The first annual report of the *Wild Salmon Policy* will be published in April 2019.

In addition, the Government of Canada will expand on the success of the [Atlantic Fisheries Fund \(AFF\)](#)^{xvi} with new initiatives and funding in 2019-20. The **British Columbia Salmon Restoration and Innovation Fund (BCSRIF)** was announced in the [Fall Economic Statement 2018](#)^{xvii} and represents a federal commitment of \$100 million over five years, starting in 2019-20, to support improved performance and sustainability of BC's wild capture and aquatic sectors, with a focus on salmon stocks protection and habitat restoration. It will be funded jointly with the Government of BC. The **Quebec Fisheries Fund** will provide \$30 million over five years, starting in 2019-20, to support projects focused on innovation; infrastructure investments that improve productivity, sustainability, and safety; and science partnerships. The [Canadian Fish and Seafood Opportunities Fund \(CFSOF\)](#)^{xviii}, a pillar of the AFF launched in December 2018 and operated in partnership with the provinces and territories, will advance a national approach to key cross-cutting market access issues and branding opportunities to maximize the value of our fish and seafood sector. The above activities support the Minister's mandate letter commitment to develop new and innovative approaches to modernize fisheries and aquaculture, as well as the responsible economic development of all three coasts. DFO is also committed to **increasing both aquaculture production and regulatory compliance** in the coming years in all four Atlantic provinces **through the AFF**. The Department has announced several new AFF projects and will complete initial reporting of medium-term results of the AFF initiative.

At the [Canadian Council of Fisheries and Aquaculture Ministers \(CCFAM\)](#)^{xix} meeting in St. John's, Newfoundland in December 2018, Ministers agreed to support the development of a **new federal Aquaculture Act**, which will provide enhanced certainty to businesses and improve transparency in the aquaculture sector, while respecting provincial and territorial jurisdiction. In addition, and in keeping with the Treasury Board Secretariat [Regulatory Review](#)^{xx} objectives, the **proposed General Aquaculture Regulations (GAR)** will consolidate all aquaculture-related regulatory content under the [Fisheries Act](#)^{xxi} into one comprehensive set of aquaculture regulations, which will support business competitiveness. The proposed consolidated and improved regulations will provide an opportunity to enhance DFO's aquaculture regulatory framework. The Department will explore the development of national standards for aquaculture as part of ongoing efforts with provinces and territories. The standards will provide regulatory consistency and long-term stability to the industry across the country.

DFO will also develop a **framework for aquaculture risk management**, based on the precautionary approach, which will ensure the sustainable management of aquaculture. It will be the overarching framework for future policies, and will **respond to the 2018 Spring Report of the CESD on Salmon Farming**^{xxii} in Canada. This framework will build on the Department's existing risk management framework on how fishery decisions are made and will aim to clearly outline and explain how decisions on aquaculture are made, including how the precautionary approach is used for aquaculture decision-making. In addition, DFO and the Canadian Food Inspection Agency will continue to address the report's recommendation regarding emerging aquatic diseases by leading an interdepartmental task team dedicated to developing a joint policy for federal evaluation and recommendations for the management of emerging fish diseases and their impacts on wild and cultured aquatic animals. DFO also remains on track to complete all **ten risk assessments** to understand potential threats to Fraser River Sockeye Salmon due to pathogen transfer from Atlantic Salmon farms in the Discovery Islands by 2020, as recommended in the *Cohen Commission's* report.

The National Fisheries Intelligence Service's (NFIS) purpose is to enable an intelligence-led process for the Department to address large-scale fisheries offences, resulting in increased protection of Canada's fisheries and aquatic ecosystems. DFO will complete the **expansion of NFIS** in 2019-20, which consists of staffing, training, and equipment, resulting in a fully operationalized service. DFO is enhancing its enforcement capacity by adding to its complement of NFIS fishery officers while also expanding capacity in its aerial surveillance program. This will facilitate responses to emerging threats, such as aquatic invasive species, for the protection of marine mammals, as well as the conservation of fish habitat in and near Marine Protected Areas (for more on Marine Protected Areas, see [Core Responsibility 2: Aquatic Ecosystems](#), in this report). The Department will also continue to invest in the ongoing safety of its growing intelligence force with the establishment of Operational Communications Centres as part of the ongoing radio modernization project, which enables fishery officers to work more safely and effectively in the field.

In December 2017, the Minister of Fisheries and Oceans announced the creation of the [Fisheries and Aquaculture Clean Technology Adoption Program \(FACTAP\)](#)^{xxiii}. **FACTAP** is a \$20 million, four-year initiative aimed at assisting wild fisheries and aquaculture operators and processors adopt clean technologies into their existing operations without incurring the risks that are often associated with these technologies. Since the establishment of the Program, the Department has approved funding totaling \$5.8 million for 41 projects across Canada and leveraged an additional \$6.9 million from private sector and provincial partners. In 2019-20, DFO will focus on continuing to work with stakeholders and improve general awareness of the program; establish new collaborative arrangements, particularly in the fisheries sector; and ensure the success of existing projects through increased monitoring and reporting of environmental results. In all, this will improve the environmental performance and competitiveness of Canada's fisheries and aquaculture producers.

In 2019-20, DFO will explore the power of [eDNA](#)^{xxiv} technologies **to provide fast, non-destructive identification of species in the field** and move towards the development of best practices and minimum standards. This rapidly advancing technology provides a sensitive, low cost alternative to monitoring aquatic organisms and will support DFO's research and management strategies. Several of the Department's programs (Aquaculture Management, Species at Risk, and Aquatic Invasive Species) are using eDNA technologies and are seeking science advice on their application of this technology. This work will contribute to the **Minister's mandate letter commitment to develop new and innovative approaches to modernize fisheries and aquaculture and responsible economic development** as well as effective surveillance of Canada's freshwater and marine ecosystems (which includes initiatives that **leverage new technologies** in support of the long-term sustainability of Canada's ocean economy).

The first session of DFO's new Science 360 lecture series was [Women of Science](#)^{xxv} at the [Atlantic Science Enterprise Centre](#)^{xxvi}. The first speaker was Chief Science Advisor, Dr. Mona Nemer.

In 2019-20, several notifications for *fish products of biotechnology* are anticipated to be submitted under the [Canadian Environmental Protection Act](#)^{xxvii} and will require DFO **to conduct risk assessments and provide science advice to Environment and Climate Change Canada and**

¹ Environmental DNA (eDNA) refers to molecules of DNA shed from organisms that are found in the environment and can be detected in a simple water or sediment sample.

Health Canada to inform their decision. To provide objective science to inform these assessments, the Centre for Aquatic Biotechnology Regulatory Research is expected to publish more than 10 articles in 2019-20 on the effects of genetically-modified fish in the peer-reviewed, open access literature. Also, in collaboration with the University of Victoria, DFO is expected to publish a legacy project to map the genomes of Chinook, Pink, Chum and Sockeye Salmon in 2019-20. This will provide the foundation for research to improve monitoring and understanding of the effects of stressors to better conserve and manage these species.

Economic evidence is integral to the delivery of the Department's fisheries, aquaculture, and oceans responsibilities, and is achieved by economic and statistical analysis; cost-benefit analysis; and collaborative research; as well as by partnering with provincial governments, other federal departments, and international agencies. DFO produces authoritative fishery and oceans economy data and statistics, and maintains a public-facing [website](#)^{xxviii} to broadly disseminate this information. These activities help to ensure that DFO has the necessary knowledge for evidence-based decision-making, to support economic prosperity while sustaining aquatic species and ecosystems. In 2019-20, DFO will update a key benchmark study of the [contribution of Canada's Maritime Sectors to the Canadian economy](#)^{xxix}.

Budget 2018^{xxx} announced \$250 million over two years to accelerate **repair and maintenance work at core harbours** across Canada, as well as to divest non-core harbours² through transfers to interested parties and closures of inactive non-core harbours that are unsafe but cannot be divested. This is in addition to the approximately \$92 million per year already assigned for repairs, maintenance, construction, and dredging at core commercial fishing harbours across Canada. Investment in small craft harbour infrastructure contributes to the economic prosperity of Canada's fisheries and Maritimes sectors, generates jobs in local communities, and promotes effective, safe, and accessible harbours that meet the needs of the commercial fishing industry and the broader interests of Canadians and coastal communities. It is expected that this investment will help to ensure that over 85 percent of core harbours under the Department's control are kept in fair or better condition. It is also expected to result in the repair of at least 40 non-core harbours to a condition that is suitable for divestiture or removal from the Department's inventory. This will help DFO focus its spending on core harbours that are critical to the commercial fishing industry and foster economic growth opportunities for local communities, which will take over the ownership of some marine infrastructure in their region. In total, 189 projects are planned for completion using Budget 2018 funding. This work will ensure that the commercial fishing industry has access to safe harbours and that safe harbours are maintained, and will also help remove non-core harbours from the Department's inventory.

DFO will also continue its five-year project to contribute to organizations that work to **reduce the number of abandoned vessels in small craft harbours**, with a final goal of removing 50 vessels by March 2022. In doing so, DFO will further improve the safety and operations of small craft harbours across the country and will support the preservation and restoration of Canada's marine ecosystems. For more information on this topic, see [Bill C-64](#) in the section on Marine Operations and Response.


² The term 'non-core harbours' refers to low-activity fishing harbours and recreational harbours. DFO focuses its resources on keeping fishing harbours that are critical to the commercial fishing industry in good repair.

The Department is committed to increasing the prominence of **reconciliation** in its internal governance structures; increasing employee awareness and knowledge; reviewing laws, policies, and operational practices; and ensuring Indigenous engagement becomes part of how every program operates. The **DFO-Coast Guard Reconciliation Strategy** (the Strategy), launched in 2018-19, is a roadmap for advancing reconciliation. It describes the Department-wide approach to how it will achieve reconciliation in fisheries, oceans, aquatic habitats, and marine waterways. It includes a vision, anticipated results, concrete actions, principles to guide the implementation of the actions, and a performance reporting model. The Department will initiate ongoing reporting on reconciliation results in 2020-21. These measures aim to incorporate reconciliation as a component in every program and internal service throughout DFO-Coast Guard over the long term. The Strategy benefits Canadians through strengthening Crown-Indigenous relations, increasing self-determination, and supporting the reduction of socio-economic gaps. It will work to improve relationships with, and outcomes for, Indigenous people.

DFO will also complete the [Indigenous Program Review](#)^{xxxii} (the Review) **in partnership with the National Indigenous Fisheries Institute**^{xxxiii}, with a focus on a process involving co-development, co-design, and co-delivery. Building on the recommendations of the Review, DFO will start implementing a multi-year action plan to renew and co-deliver its commercial and collaborative programs, including the launch of the Northern Integrated Commercial Fisheries Initiative, as well as enhancements to the [Aboriginal Aquatic Resource and Oceans Management program](#)^{xxxiii}, the [Aboriginal Fisheries Strategy](#)^{xxxiv}, and the Aboriginal Fishery Guardians.


Lastly, DFO will establish **Federal-Provincial-Indigenous partnership arrangements** to facilitate improved planning and management of aquaculture operations, beginning with a pilot project in British Columbia. Area-based management ensures that the planning, monitoring, and ongoing management of aquaculture activities take into consideration traditional knowledge and unique environmental, social, and economic conditions. This will result in improved collaborative arrangements with Indigenous communities and provinces, management plans tailored to regional environments and social conditions, and improved involvement of Indigenous peoples in aquaculture planning and operations. DFO is committed to building decision-making and collaborative management processes with Indigenous peoples wherever their rights are affected.

Planned Results

	Departmental Result	Departmental Result Indicator	Target	Actual Results
	Canadian fisheries are sustainably managed	Percentage of major fisheries that have limit reference points and harvest control rules	Greater than or equal to 50% by March 31, 2022	2015-16: 40% 2016-17: 42% 2017-18: 43%
		Percentage of decisions for major fisheries where harvest control rules were followed	100% by March 31, 2020	2015-16: N/A 2016-17: N/A 2017-18: 100%
		Percentage of major stocks in the cautious and healthy zone	Greater than or equal to 52% ³ by March 31, 2020	2015-16: 73% 2016-17: 67% 2017-18: 63%
	Canadian aquaculture is sustainably managed	Percentage of aquaculture farms that are compliant with the <i>Fisheries Act</i> regulations	Greater than or equal to 90% by March 31, 2020	2015-16: 100% 2016-17: 100% 2017-18: 83% ⁴
		Level of Canadian aquaculture production	Greater than or equal to 170,000 tonnes by December 31, 2019	2015-16: 133,000 tonnes 2016-17: 187,374 tonnes 2017-18: 200,565 tonnes
	The commercial fishing industry has access to safe harbours	Percentage of core harbours that are in fair or better condition	Greater than or equal to 85% by March 31, 2021	2015-16: 86% 2016-17: 86% 2017-18: 89%
	Fisheries, oceans and other aquatic ecosystems are protected from unlawful exploitation and interference	Percentage of compliance per inspection activity within the DFO regulated community	Greater than 90% by March 31, 2020	2015-16: 95% 2016-17: 94% 2017-18: 96%
	Scientific information on fisheries resources is available to inform management decisions	Percentage of scheduled fisheries science advisory processes that were completed	Greater than or equal to 90% by March 31, 2020	2015-16: 94% 2016-17: 96% 2017-18: 92%
		Percentage of sustainable aquaculture research projects which provide information and/or advice to policy and decision-makers	Greater than 90% by March 31, 2020	2015-16: 100% 2016-17: 100% 2017-18: 100%


³ The change in the value for this target resulted from the application of a stricter definition of what constitutes a stock in the healthy or cautious zone according to DFO policies. As a result, caution should be used when comparing the target to the results for previous years.

⁴ The decline in 2017-18 is due primarily to expanded inspection in the shellfish sector in the Pacific region.


	Departmental Result	Departmental Result Indicator	Target	Actual Results
	Improved relationships with and outcomes for Indigenous people	Percentage of eligible Indigenous groups represented in agreements	Greater than or equal to 97% for AICFI ⁵ by March 31, 2020	2015-16: 97% 2016-17: 97% 2017-18: 97%
			Greater than or equal to 85% for PICFI ⁶ by March 31, 2020	2015-16: 85% 2016-17: 85% 2017-18: 85%
		Number of Indigenous people employed in commercial and collaborative management activities	Greater than or equal to 4,610 ⁷ by March 31, 2020	2015-16: 4,529 2016-17: 4,535 2017-18: 4,529

Note: N/A indicates that the performance indicator was not in effect at that time, and therefore, historical data may not be available. In cases where historical data is available, past results are presented in the "Actual Results" column.

Budgetary Financial Resources (dollars)

	2019-20 Main Estimates	2019-20 Planned Spending	2020-21 Planned Spending	2021-22 Planned Spending
	882,963,127	882,808,991	733,518,470	697,821,257

Human Resources (full-time equivalents or FTEs)

	2019-20 Planned FTEs	2020-21 Planned FTEs	2021-22 Planned FTEs
	3,070	3,030	3,021

Financial, human resources and performance information for the Department of Fisheries and Oceans' Program Inventory is available in the [GC InfoBase](#)^{xxxv}.

⁵ AICFI is the Atlantic Integrated Commercial Fisheries Initiative.

⁶ PICFI is the Pacific Integrated Commercial Fisheries Initiative.

⁷ These 4,610 include the 1,610 "Indigenous people employed in aquatic ecosystems and oceans science" ([Planned Results](#) table on page 19).

Aquatic Ecosystems

Description

Conserve and protect Canada's oceans and other aquatic ecosystems and species from human impact and invasive species.

Departmental Results

The Aquatic Ecosystems Core Responsibility is focused on advancing the following Departmental Results:

- Negative impacts on Canada's oceans and other aquatic ecosystems are minimized or avoided
- Scientific information on Canada's oceans and other aquatic ecosystems is available to inform management decisions
- Improved relationships with and outcomes for Indigenous people

The indicators used to measure progress towards these results appear in the [Planned Results](#) table on page 19.

To support the Minister of Fisheries, Oceans and the Canadian Coast Guard in achieving these results, the Department will carry out the following key initiatives and activities.

Planning Highlights

DFO has numerous plans to support the implementation of proposed [Fisheries Act](#)^{xxxvi} changes, which, subject to parliamentary approval, will restore lost protections for fish and fish habitat and introduce new, modern safeguards. With the enactment of [Bill C-68](#)^{xxxvii}, DFO will establish an accessible online public registry to provide information concerning permit and authorization decisions, codes of practice, and more. DFO will also establish a Multi-Interest Advisory Committee to help guide early planning, with engagement from Indigenous peoples, provinces, territories, municipalities, and stakeholders. In addition, the Department will help to establish the National Aquatic Habitat Conservation Partnership (a [Canadian Wildlife Federation](#)^{xxxviii} initiative), which will leverage and enhance regulatory and stewardship efforts to achieve watershed-level⁸ conservation outcomes for fish and other aquatic wildlife. The partnership will consist of a national network focused on helping governments, communities, conservation organizations, and industry stakeholders more effectively restore and maintain healthy and resilient aquatic ecosystems.

DFO will work to mitigate the risks and impacts of marine stressors and restore marine ecosystems, including implementing the [Coastal Restoration Fund](#)^{xxxix} to support projects that help to improve coastal aquatic habitats. This fund is a key priority under the [Oceans Protection Plan](#) (OPP)^{xl}. In 2019-20, the fund will endeavour to allocate the remaining \$13.5 million among the 86 proposals received during its last public call for proposals in December 2018.

The Minister's mandate letter contains a commitment to work with the Minister of Environment and Climate Change Canada to **protect 10 percent of our marine and coastal areas by 2020**. DFO plans to reach this 10 percent target by continuing to implement a [five-point plan](#)^{xli}, which

⁸ A watershed is an area of land where precipitation, such as rain water, collects and drains off into a body of water.

includes completing the establishment of the Banc-des-Américains, Laurentian Channel, and [Offshore Pacific Area of Interest^{xliii}](#) as [Oceans Act^{xliii}](#) Marine Protected Areas (MPA), and exploring protection of the High Arctic Basin with Indigenous and Northern partners. DFO will also update the national policy on [other effective area-based conservation measures^{xliiv}](#) to align with international voluntary guidance, continue to advance network development in priority bioregions, and establish MPAs faster and more effectively through proposed amendments to the *Oceans Act*.

DFO will also implement the [Aquatic Invasive Species \(AIS\) Regulations^{xliv}](#) through the development of guidelines, policies, and other materials, as well as the training of federal and provincial officials who will administer and enforce the regulations. The building of new partnerships with other federal departments, provinces, and territories, and various stakeholders, as well as the strengthening of existing ones, will be central to the delivery and the success of the AIS program across the country. DFO is working towards the development of a gap analysis on Asian Carp management to highlight priority areas of work to be addressed. The Department also intends to engage key Indigenous communities to foster partnership opportunities towards enabling early detection surveillance in their waters. In concert with U.S. federal, state, and tribal agencies and the Province of Ontario, DFO will also protect fishery stocks of common interest in the Great Lakes by suppressing sea lamprey populations to levels that will not cause significant damage to host species. DFO will also complete infrastructure projects to refurbish and maintain barriers to sea lamprey migration in key tributaries to Lake Huron. In addition, DFO will conclude consultations with First Nations to enable the control of sea lampreys in streams within First Nation territorial waters. Together, the AIS National Program, Asian Carp Program, and Sea Lamprey Control Program will contribute to the Minister's mandate letter commitment to support the Minister of Environment and Climate Change to renew our commitment to protect the Great Lakes, the St. Lawrence River Basin, and the Lake Winnipeg Basin.

In February 2018, the Government announced \$167.4 million, starting in 2018-19, to better protect, preserve, and recover three **endangered whale species** in Canada. These funds will be used for research to gain better understanding of the factors affecting the health of North Atlantic Right Whales, Southern Resident Killer Whales, and St. Lawrence Estuary Belugas, and to take immediate action to address threats arising from human activities. Of this new investment, \$35.2 million over five years is dedicated for scientific research and monitoring of these three priority whale populations. DFO has committed to performing 525 hours of surveying on target whale species by March 2020 to support the collection of scientific information on fisheries resources to inform management decisions. The \$167.4 million also includes dedicated funds to minimize the impacts of fishing on these three endangered whale species. Targeted funds have been set aside for monitoring and surveillance in support of fisheries management measures to protect endangered whale species. These funds will support a minimum of 500 hours in dedicated air surveillance flights. An additional \$1 million of annual funding has been dedicated to support response to incidents of marine mammals in distress, particularly in the case of whale entanglement in fishing gear.

Furthermore, in October 2018, the Government of Canada [announced^{xlvi}](#) an investment of \$61.5 million dedicated to the **protection and recovery of Southern Resident Killer Whales** by addressing the key threats of prey availability, physical and acoustic disturbance, and contaminants. The work includes a number of activities and commitments, such as scientific research, enforcement, public outreach, investigating a technical solution for tracking the

location of the whales, exploring the feasibility of creating one or more sanctuaries, enhancing hatchery production of Chinook salmon, and working with the shipping sector on noise reduction. This investment builds on the OPP and the earlier investment of \$167.4 million for endangered whales, including Southern Resident Killer Whales, discussed above.

In [Budget 2018](#)^{xlvii}, the Government of Canada invested \$1.35 billion in the [Nature Legacy](#)^{xlviii}, which will shift the federal government's focus from a single-species/crisis-focused approach on species at risk to one that focuses on multi-species, ecosystem-based approaches. This will emphasize shared jurisdiction and responsibility for species at risk with Indigenous peoples, provinces, territories, environmental non-governmental organizations, industry, private landowners, and other stakeholders. Analysis of gender and other demographic factors influenced the design and will influence the delivery and implementation of the Nature Legacy for Canada. This includes \$11 million in grants and contributions funding for 2019-20 to support the implementation of recovery measures in priority areas and to reduce priority maritime threats. An additional \$43 million will be available for the following years of the initiative.

DFO will continue to take steps to address a backlog related to commitments for publishing recovery documents and protection requirements for critical habitat. The Department will continue to streamline processes and procedures; identify priority areas, threats, and species; and adopt multi-species and ecosystem-based approaches to guide [Species at Risk Act](#)^{xlix} implementation efforts in line with the Nature Legacy initiative mentioned above. The Department will also continue to address capacity challenges and clarify and communicate to stakeholders the role and use of non-regulatory tools in supporting conservation outcomes for at-risk species. These actions will **address recommendations made in the 2016-17 Horizontal Evaluation on Species at Risk**^l.

DFO will partner with Environment and Climate Change Canada and Parks Canada towards meeting international commitments under the [Convention on Biological Diversity](#)^{li} and national conservation target initiatives under the [Federal Sustainable Development Act](#)^{lii}. DFO will also deliver on commitments made in its *Management Action Plan on Conserving Biodiversity* by continuing to address backlogs of outstanding recovery strategies and management plans, as well as action plans and critical habitat orders for aquatic species listed under the *Species at Risk Act*. The Department will also focus on the implementation of recovery actions, which are measures that have been identified in recovery documents and are required to address threats to or promote recovery of species at risk. These actions will respond to an [audit by the Commissioner of the Environment and Sustainable Development \(CESD\) on conserving biodiversity](#)^{liii}.

DFO will undertake a **Marine Environmental Quality** initiative in order to increase understanding and address pressing issues affecting the health and quality of the marine environment, including to marine mammals. Initial emphasis will be on identifying and mitigating stressors, such as ocean noise, from marine shipping activities. In 2019, DFO will perform an analysis of existing mitigation strategies and identify areas for management improvement. The Department will also establish and maintain fora and networks for interdepartmental coordination and collaboration on underwater ocean noise issues.

As stated in the Minister's mandate letter, DFO will co-lead the implementation of actions on the commitments made in the [G7 Charlevoix Blueprint for Healthy Oceans, Seas and Resilient Coastal Communities](#)^{liv}, as well as the [G7 Ocean Plastics Charter](#)^{lv}, with the support of the

Minister of Environment and Climate Change. A particular focus will be on plastics; illegal, unreported, and unregulated fishing; and ocean monitoring. DFO will advance commitments made during Canada's 2018 G7 presidency, including:

- initiating investments of up to \$11.6 million to combat illegal, unreported, and unregulated fishing throughout the world;
- up to \$9.5 million to advance activities of the United Nations Decade of Ocean Science (2021-2030);
- up to \$1 million to the World Economic Forum's Friends of Ocean Action and for the Government of Canada's support to the United Nations Special Envoy for the Ocean; and
- up to \$5.6 million to support the Argo ocean array.

In addition, DFO will support the Inuit-led process of negotiating a bilateral agreement with Greenland and the Kingdom of Denmark for the Northwater Polynya⁹.

Also in support of this mandate letter commitment, the Department will draft the **Ocean Plastic and Ghost Gear¹⁰ Management Framework**, which is expected to reduce the impact of plastic pollution on safe navigation, on fishery and aquaculture industry prosperity and sustainability, on marine species at risk, and on the health of Canada's oceans and other aquatic ecosystems. The draft Framework will be used as the basis for consulting with stakeholders in the autumn of 2019, in collaboration with Environment and Climate Change Canada. Meanwhile, DFO will also develop an action plan to integrate the Department's relevant activities across all programs.

DFO will initiate **Marine Spatial Planning** (MSP) in five marine areas. MSP is a process that will bring together relevant authorities to better coordinate the use and management of marine spaces to achieve ecological, economic, and social objectives. One of the key features of these MSP processes will be the establishment of Indigenous/federal/provincial governance structures. The goal for each planning area will be the development of a marine plan that sets out the long-term spatial objectives and includes shared accountabilities for implementation. This process will not replace existing regulatory processes, but will offer a forum to advance cross-sector planning.

DFO and the Canadian Food Inspection Agency have been charged with leading an interdepartmental task team dedicated to exploring **experimental collaborative opportunities to mitigate and respond to emerging threats** resulting from globalization and climate change. The increased movement of people and goods, as well as climate change, have intensified a changing threat environment characterized by novel emerging threats with potential ecological, economic/trade, health, and security impacts. An intramural departmental team has been established to undertake an analysis of approaches for addressing emerging threats such as the spread of aquatic invasive species or the introduction of high-consequence pathogens, which can cause high levels of damage in short periods of time, and make recommendations to improve the federal government strategy to respond to these emerging threats by advancing innovative technologies and collaboration.


⁹ A polynya is a sea ice-surrounded but unfrozen, open area of water.

¹⁰ Ghost gear refers to any fishing equipment or fishing-related litter that has been abandoned, lost, or otherwise discarded and is some of the most harmful and deadly debris found in oceans.

DFO is conducting research and working with partners to better understand the **fate** (i.e. distribution and degradation), **behaviour, and effects of oil in the marine environment**. With new investments under the OPP, DFO will improve research capacity on this topic at the [Centre for Offshore Oil, Gas and Energy Research](#)^{vi} in Dartmouth, Nova Scotia. Collaborative research on marine oil spills includes monitoring the fate and behavior of petroleum products in the marine environment and testing various techniques to mitigate impacts of oil spills on coastal ecosystems. This research will increase understanding of marine oil spills and help guide response organizations in choosing the most effective response method, which will help keep our coasts and waters healthy. Information that has been gathered through research efforts will be shared with Canadians. This will enhance awareness about the effects of oil pollutants to Canada's marine ecosystem, as well as contributing to the effectiveness of emergency cleanups and mitigation strategies.

In 2019-20, DFO will create and administer a new Grants and Contributions program, entitled Indigenous Participation in the Management of Fish and Fish Habitat, with a commitment of \$50 million over five years. This program will provide support for capacity building of Indigenous peoples and facilitate greater participation in fish and fish habitat conservation and protection. The funding will also support the participation of Indigenous peoples in consultations related to project decisions, including in the consideration of potential impacts on their Aboriginal and Treaty rights.

Planned Results

	Departmental Result	Departmental Result Indicator	Target	Actual Results
Negative impacts on Canada's oceans and other aquatic ecosystems are minimized or avoided	Percentage of marine coastal areas that are protected	Greater than or equal to 10% ¹¹ by 2020	2015-16: 1.2% ¹² 2016-17: 1.14% 2017-18: 7.75%	
	Percentage of development projects occurring in or near water that effectively avoid, mitigate or offset impacts to fish and fish habitat	100% by March 31, 2020	2015-16: N/A 2016-17: N/A 2017-18: N/A	
	Percentage of aquatic species/populations at risk listed under the <i>Species at Risk Act</i> for which a recovery strategy/management plan is completed	Greater than or equal to 75% by March 31, 2020	2015-16: N/A 2016-17: N/A 2017-18: 88%	
	Percentage of approved requests for science advice on aquatic invasive species that are completed	Greater than or equal to 90% by March 31, 2020	2015-16: 100% 2016-17: 100% 2017-18: 0% ¹³	
Scientific information on Canada's oceans and other aquatic ecosystems is available to inform management decisions	Number of science products related to aquatic ecosystems that are available	Greater than or equal to 60 per year by March 31, 2020	2015-16: 58 2016-17: 64 2017-18: 60	
	Percentage of scheduled science advisory processes on aquatic ecosystems that were completed	Greater than or equal to 90% by March 31, 2020	2015-16: 88% 2016-17: 100% 2017-18: 93%	
Improved relationships with and outcomes for Indigenous people	Percentage of eligible Indigenous groups represented by collaborative management agreements and aggregate-level management bodies in support of aquatic ecosystems	Greater than or equal to 78% for Aboriginal Aquatic Resource and Oceans Management (AAROM) by March 31, 2020	2015-16: 78% 2016-17: 78% 2017-18: 78%	
		Greater than or equal to 90% for Aboriginal Fisheries Strategy (AFS) by March 31, 2020	2015-16: 90% 2016-17: 90% 2017-18: 90%	
	Number of Indigenous people employed in aquatic ecosystems and oceans science	Greater than or equal to 1,610 for AFS and AAROM by March 31, 2020	2015-16: 1,590 2016-17: 1,591 2017-18: 1,590	


Note: N/A indicates that the performance indicator was not in effect at that time, and therefore, historical data may not be available. In cases where historical data is available, past results are presented in the "Actual Results" column.

¹¹ DFO will contribute to the national target of 10%.


¹² The 1.2% value was an estimate of the percent coverage of *Oceans Act* MPAs and the potential "other effective area-based conservation measures" for which Departmental screening criteria were still under development. The 1.14% value was the actual coverage as of March 31, 2017. Before the end of 2017, DFO exceeded its target of 5% by 2017.

¹³ There was one request for science advice on aquatic invasive species in 2017-18. The final report was not completed by March 31, 2018 as planned but is expected to be completed by March 31, 2019.

Budgetary Financial Resources (dollars)

	2019-20	2019-20	2020-21	2021-22
	Main Estimates	Planned Spending	Planned Spending	Planned Spending
	259,872,522	259,872,522	263,637,530	244,978,487

Human Resources (full-time equivalents or FTEs)

	2019-20	2020-21	2021-22
	Planned FTEs	Planned FTEs	Planned FTEs
	1,612	1,613	1,626

Financial, human resources and performance information for the Department of Fisheries and Oceans' Program Inventory is available in the [GC InfoBase](#)^{lvii}.

Marine Navigation

Description

Provide information and services to facilitate navigation in Canadian waters.

Departmental Results

The Marine Navigation Core Responsibility is focused on advancing the following Departmental Results:

- Mariners safely navigate Canada's waters
- A Canadian maritime economy that is supported by navigable waters

The indicators used to measure progress towards these results appear in the [Planned Results](#) table on page 22.

To support the Minister of Fisheries, Oceans and the Canadian Coast Guard in achieving these results, the Department will carry out the following key initiatives and activities.

Planning Highlights

To facilitate navigation in Canadian waters, the Department will provide **improved navigational information**. The Department will produce modern hydrography and charting for enhanced electronic navigational chart coverage of areas within the proposed Low Impact Shipping Corridors in the Arctic that have not yet been sufficiently surveyed. Also, DFO will complete modern hydrographic surveys for 21 of 23 high-priority commercial ports, conduct LIDAR (Light Detection And Ranging) and multi-beam (a kind of sonar) surveys of near-shore areas identified as a priority or high risk on the British Columbia coast, in Newfoundland and Labrador, in the Gulf of St. Lawrence, and in the Great Lakes Basin. Lastly, DFO will create up-to-date paper and electronic navigational charts for high-priority commercial ports across the country.


Using **geomatics** technologies, the Coast Guard has developed the ability to visually display, process, and analyze geographic data, such as vessel Automatic Identification System tracking, radar area coverage, and blind spots to identify traffic patterns and areas for deploying new

radar assets. Other elements and information, such as search and rescue incidents and locations of bases and assets, will be added to support analysis and investments. The Coast Guard will continue to support mariner's voyage planning through the [e-Navigation Maritime Information Portal](#)^{lviii} that is available to all Canadians, and will enhance this service by examining opportunities to expand the marine navigation information provided. This initiative supports the Government of Canada's commitment to be open, transparent, and accountable to Canadians by improving the Department's reporting on Coast Guard activities.

In 2019-20, the Coast Guard will complete the implementation of the **National Quality Management System (QMS)**. Through the operation of 12 centres, strategically located throughout Canada's regions, MCTS provides distress and safety call monitoring, coordinates responses to calls, broadcasts maritime safety information (such as weather and navigational warnings), screens vessels entering Canadian waters, delivers information and advice to regulate marine traffic movement, and takes appropriate action to ensure the safe and efficient movement of vessels in Canadian waters. QMS will monitor its performance to continually improve its processes, services, and products to better meet client requirements, and to respond to a recommendation of the 2017 evaluation of the Marine Communications and Traffic Services (MCTS) program.


The Coast Guard's [acquisition of three icebreakers](#)^{lix} will bolster the reliability of icebreaking services and alleviate stress on the existing icebreaking fleet. The first of the three new icebreaking vessels is expected to begin operations for the upcoming icebreaking season, in 2019, and will be based in St. John's, Newfoundland and Labrador and will provide services in the Arctic. The other two vessels will be available to support Coast Guard programs by late 2019.

Planned Results


	Departmental Result	Departmental Result Indicator	Target	Actual Results
	Mariners safely navigate Canada's waters	Rate of marine incidents versus vessel movements	Less than 1% by March 31, 2020	2015-16: 0.04% 2016-17: 0.02% 2017-18: 0.01%
		Number of official navigational products created and/or updated from incorporation of new and/or archived modern hydrography per year in key areas	Greater than or equal to 200 by March 31, 2020	2015-16: 195 2016-17: 209 2017-18: 550 ¹⁴
	A Canadian maritime economy that is supported by navigable waters	Rate of marine incidents versus vessel movements	Less than 1% by March 31, 2020	2015-16: 0.04% 2016-17: 0.02% 2017-18: 0.01%
		Percentage of ship ice escort requests south of the 60 th parallel north that are delayed beyond level of service response time standards	0% by March 31, 2020	2015-16: N/A 2016-17: N/A 2017-18: N/A
		Average time (in hours) beyond level of service response time standards for ice escort requests south of the 60 th parallel north	0 by March 31, 2020	2015-16: N/A 2016-17: N/A 2017-18: N/A

Note: N/A indicates that the performance indicator was not in effect at that time, and therefore, historical data may not be available. In cases where historical data is available, past results are presented in the "Actual Results" column.

Budgetary Financial Resources (dollars)

	2019-20 Main Estimates	2019-20 Planned Spending	2020-21 Planned Spending	2021-22 Planned Spending
	353,094,537	353,094,537	345,959,300	341,211,972

Human Resources (full-time equivalents or FTEs)

	2019-20 Planned FTEs	2020-21 Planned FTEs	2021-22 Planned FTEs
	1,838	1,820	1,823

Financial, human resources and performance information for the Department of Fisheries and Oceans' Program Inventory is available in the [GC InfoBase](#)^{ix}.

¹⁴ The number increased substantially from previous years due to a broadening of the definition of a "navigational product" as well as increased demand from the Oceans Protection Program.

Marine Operations and Response

Description

Provide marine response services and operate Canada's civilian maritime fleet

Departmental Results

The Marine Operations and Response Core Responsibility is focused on advancing the following Departmental Results:

- Canadian Coast Guard has the capability to respond to on-water incidents
- Canada's Civilian fleet has the capability to meet established service standards for clients
- Increased Indigenous participation in Canada's marine response system

The indicators used to measure progress towards these results appear in the [Planned Results](#) table on page 27.

To support the Minister of Fisheries, Oceans and the Canadian Coast Guard in achieving these results, the Department will carry out the following key initiatives and activities.

Planning Highlights

As part of the Coast Guard's objective to create a world-leading marine safety system and in support of the government-wide [Oceans Protection Plan \(OPP\)](#)^{lxi}, the Department will establish **24/7 emergency response capacity** within the existing regional operations centres (ROC). These centres, along with the recently-implemented 24/7 capacity of the National Command Centre in Ottawa, will monitor and assess marine events and deliver tasking and reporting functions focused primarily on marine pollution incidents. This will reinforce the Coast Guard's capacity to better plan and coordinate an effective response during an incident and will reduce delays in communicating important information internally and to Indigenous groups and other partners, stakeholders, and the public. This initiative will better equip the Department to respond to and manage any major environmental pollution incident. It is anticipated that these centres will be fully operational by spring 2020.

Also in support of the OPP, the Coast Guard is enhancing the Environmental Response Services program and has undertaken a major procurement effort with the objective of purchasing and implementing all necessary **environmental response equipment** by 2021-22. In 2019-20, the Coast Guard plans to purchase oil containment and recovery equipment, recovered oil storage equipment, and safety equipment. The Coast Guard will also acquire Mobile Incident Command Posts, which will enhance the Coast Guard's ability to establish onsite command capacity and better operate with its partners. This modernized and integrated suite of environmental response equipment will increase the Coast Guard's operational preparedness capacity to monitor, investigate, and respond, as needed, to all ship source and mystery source pollution spills in Canadian waters, and will contribute to a national, streamlined environmental response strategy among stakeholders across the country.

Subject to Parliamentary approval, it is anticipated that [Bill C-64, An Act respecting wrecks, abandoned, dilapidated or hazardous vessels and salvage operations](#)^{lxii} will come into force in 2019. *Bill C-64* is a core element of the OPP's National Strategy to address abandoned and wrecked vessels. To ensure the effective implementation of this legislation, the Coast Guard is

developing a national inventory of vessels of concern and a risk assessment methodology to inform monitoring, contingency planning, and remediation activities. These tools will allow the Department, in partnership with Transport Canada, to understand the extent of the issue nationally and to prioritize problem vessels based on the risks they pose.

The National Strategy also contains two **short-term vessel removal programs** to help support coastal communities and other eligible recipients in removing and disposing of vessels of concern¹⁵, led by Transport Canada and DFO. DFO provides funding for Harbour Authorities and other eligible recipients to take action on legacy vessels of concern before they result in harmful consequences to the environment, human health and safety, or local economies, or in damage to the coastline or infrastructure. Looking forward to 2022, the Department plans to manage vessels of concern through an owner-financed long-term remediation fund that will aim to transfer the financial burden from taxpayers to ship owners.

Subject to Parliamentary approval, the Department will continue to work with Transport Canada to implement legislation to formalize an **oil tanker moratorium**^{lxiii}, which will protect habitats and Indigenous and coastal communities along British Columbia's north coast. This work will support the Minister's mandate letter commitment to work with the Ministers of Transport, Natural Resources, and Environment and Climate Change to formalize the moratorium on crude oil tanker traffic on British Columbia's North Coast, including the Dixon Entrance, Hecate Strait, and Queen Charlotte Sound.

Through the OPP and following work with Transport Canada to implement legislative amendments to the **Marine Liability Act**^{lxiv}, the Coast Guard will adjust its operations to ensure compliance. This will strengthen the polluter-pays principle and help ensure the Coast Guard, other responders, and pollution victims have access to timely and appropriate compensation for ship-source oil pollution costs.

The Coast Guard participates in **Innovation Solutions Canada**^{lxv}, a new program led by Innovation, Science and Economic Development Canada to support the creation of innovative solutions by Canadian small businesses. The Coast Guard will soon begin to receive proposed solutions from businesses for a challenge statement that supports the Government's priority of **greening its operations** as well as the commitment to **dedicate resources to experimentation** with new technologies and approaches to delivering service. A challenge statement invites the Canadian private sector to develop a new solution to a problem or gap that has no existing commercial solution. The Coast Guard challenge seeks solutions for harnessing kinetic energy from the movement of vessels in the water caused by waves, with the goal of reducing energy consumption. This will contribute to reducing the Coast Guard's production of greenhouse gas emissions caused by operations on the water, and will support Canada's **Paris Agreement**^{lxvi} commitment to **fight global warming and climate change** through significant greenhouse gas reductions through 2030. The Coast Guard has committed \$150,000 for a proof of concept to test the feasibility of the technology, and will further commit up to \$1 million if the full project is approved. In the event that a proposal qualifies, a completed prototype is expected within a three-year timeline.

¹⁵ The term "vessels of concern" refers to abandoned, derelict, and wrecked vessels that are either discharging or likely to discharge a pollutant, or are an obstruction or hazard to navigation.

The Coast Guard is committed to **gender equality, diversity, and inclusion** at all levels of the organization and will undertake a number of activities and initiatives to ensure this commitment is met. Specific attention will be placed on applying a Gender-based Analysis Plus (GBA+) lens to inform the Coast Guard's review of its crewing factor¹⁶, national recruitment and retention strategy, uniform manual, as well as in-ship design and refurbishment. The review of the first two items (crewing factor and national recruitment and retention strategy) is part of the Coast Guard's work to address recommendations from the 2018 [Evaluation in Support of the Canadian Coast Guard's Seafarers Establishment](#)^{lxvii}. The Coast Guard will build on previous years' efforts in creating more inclusive workplaces through employee and management empowerment, education, training, awareness, and leadership development. Diversity and inclusion considerations will also continue to be applied to existing and new policies, programs, and to how the Coast Guard interacts with partners and Canadians alike. The Coast Guard's Diversity and Inclusion Secretariat and Diversity Officer will lead transformation initiatives and act as enablers of change towards more inclusive, compassionate, and respectful workplaces.

In addition, to support the **recruitment, development, and retention of a diverse and skilled workforce**, the Coast Guard will continue to develop targeted recruitment strategies, leverage data to determine workforce trends and needs (including increasing participation of underrepresented groups), and support workplace well-being and career management. The Department will develop a seafarers-focused recruitment and retention strategy that will enable mandatory and career-based learning, allow for more flexible leave options and reduction of leave liability, and better support families. This will include reviewing the crewing factor while considering the importance of supporting family units. This initiative will have an end goal of updating the crewing factor to more accurately represent current family-related leave needs in the coming years.

The Coast Guard will also **review and update its recruitment strategies**. Building on previous efforts to create more comprehensive strategies to attract members of the LGBTQ2+ community, the Coast Guard aims to develop an organizational approach for introducing Positive Space initiatives during onboarding throughout the organization and at the Coast Guard College. In addition, recruitment and retention strategies will include professional development and apprenticeship programs to renew and grow the workforce in difficult-to-recruit positions. This will also expand competencies for all positions to support career planning and leadership development at all levels, and will include a wellness strategy to support a safe, caring, and compassionate workplace and a resilient workforce, as well as ensuring necessary supports are available to all employees.

[Budget 2018](#)^{lxviii} announced \$58 million over five years to **maintain existing fleet capabilities** and enable forward planning for a sustainable future. In partnership with other organizations such as Public Services and Procurement Canada, the Coast Guard will continue to advance multi-year procurements to replace aging vessels and ensure it has the proper assets in place to operate effectively. In 2019-20, the first two Offshore Fisheries Science Vessels will be delivered, followed by a third in 2020-21 under the [National Shipbuilding Strategy](#)^{lxix}. The Coast Guard will also advance the procurement process of one Near Shore Fisheries Research Vessel. These procurements will support Canada's commitment to scientific exploration and research. In

¹⁶ "Crewing factor" refers to the optimal staffing levels on vessels to enable program delivery while meeting legal, regulatory, and policy requirements and taking into consideration elements such as the size of the vessel, the type of personnel, the certification they require, leave entitlements, and required training.

In addition, the Search and Rescue Lifeboat project will continue with the expected delivery of three new vessels, with a goal of 20 lifeboats total to be acquired by the end of 2023 to ensure the safety and security of Canadian waters. The Coast Guard also anticipates the delivery of a Full Flight Simulator, which will be used to safely and efficiently train pilots on light and medium-lift helicopters. The Coast Guard will also continue its conversion and refit work on three medium icebreakers that were recently acquired, as well as vessel life extension work on aging assets, which is essential to the delivery of the organization's mandate until new vessels are delivered. Over the coming years, the Coast Guard is also planning to undertake the development of its next generation of vessels, including the identification and validation of requirements. This will ensure ongoing scientific, conservation, icebreaking, aids to navigation, search and rescue, and environmental response services in Canadian waters.


In addition, the Coast Guard will procure more than 40 emergency tow kits, in various sizes, for use in all regions and to be placed in strategic locations along the coasts. This is in addition to the 32 emergency tow kits that were procured for large Coast Guard vessels in 2018-19. This increase in towing capacity will improve safety and environmental protection in Canada's waters.

[Nunavut Tunngavik Incorporated](#)^{lxix} (NTI) has developed the Inuit Marine Monitoring Program (IMMP), an Inuit-led initiative that enables Inuit marine monitors to report on vessels using a terrestrial Automatic Identification System network. The Coast Guard will participate in the pilot project to explore these alternative service delivery models that will increase the capacity of Inuit and Northerners to have an active role in vessel monitoring. The pilot project will test the viability of establishing and maintaining the IMMP network in partnership between the Government of Canada and NTI, and to evaluate alternative delivery models for Coast Guard services in the Arctic. The IMMP pilot will contribute to the development of marine capacity and services in the North, for the North, and from the North. The pilot will support real-time monitoring of vessels subject to [Northern Canada Vessel Traffic Services Zone Regulations](#) (NORDREG)^{lxxi} in the pilot project zones, and will enhance maritime awareness of vessels not subject to NORDREG. Subject to Budget 2019, the Coast Guard plans to commit \$925,146 to this experimental project in 2019, and the pilot project will be completed by March 2020.

In addition, the Coast Guard will also initiate a new Canadian Coast Guard Auxiliary (CCGA) chapter in the Arctic to bolster Canada's response capacity in the North. The Search and Rescue operations of the Coast Guard and the CCGA have a proven record of being effective in assisting those in need of help in the maritime environment.

In support of the Government of Canada's commitment to reconciliation and renewed nation-to-nation relationships with Indigenous peoples, **the OPP will facilitate Indigenous Partnerships in the Marine Safety System**. Through the initiative entitled Building Meaningful Partnerships with Indigenous Groups in Marine Safety, the Department will work to create formal partnerships and meaningful roles for Indigenous groups in Canada's marine safety system. In 2019-20, the Coast Guard, DFO, and Transport Canada will continue to implement the [Reconciliation Framework Agreement for Bioregional Oceans Management and Protection](#)^{lxxii}. Other plans include implementing negotiated regional and bilateral partnership agreements in British Columbia; negotiating new agreements and building community capacity with interested Indigenous groups in Ontario, Quebec, and the Atlantic provinces; and delivering presentations and training workshops to interested Indigenous groups.

Planned Results


	Departmental Result	Departmental Result Indicator	Target	Actual Results
	Canadian Coast Guard has the capability to respond to on-water incidents	Percentage of responses to on-water environmental incidents that meet established standards	100% by March 31, 2020	2015-16: 100% 2016-17: 100% 2017-18: 100%
		Percentage of search and rescue responses that meet the established standards	Greater than 99% by March 31, 2020	2015-16: N/A 2016-17: N/A 2017-18: 97%
	Canada's Civilian fleet has the capability to meet established service standards for clients	Operational days delivered vs. planned	Greater than or equal to 90% by March 31, 2020	2015-16: 94% 2016-17: 93% 2017-18: 90%
		Percentage of operational days lost due to crewing and other logistic issues	Less than or equal to 3% by March 31, 2020	2015-16: N/A 2016-17: N/A 2017-18: N/A
		Percentage of operational days lost due to unplanned maintenance	Less than or equal to 3% by March 31, 2020	2015-16: 3.6% 2016-17: 3.4% 2017-18: 6.5%
	Increased Indigenous participation in Canada's marine response system	Percentage of responses to marine incidents by Indigenous Auxiliary units	Greater than 3% by March 31, 2022	2015-16: N/A 2016-17: N/A 2017-18: N/A

Note: N/A indicates that the performance indicator was not in effect at that time, and therefore, historical data may not be available. In cases where historical data is available, past results are presented in the "Actual Results" column.

Budgetary Financial Resources (dollars)

	2019-20 Main Estimates	2019-20 Planned Spending	2020-21 Planned Spending	2021-22 Planned Spending
	1,071,604,997	1,071,604,997	797,877,278	726,354,586

Human Resources (full-time equivalents or FTEs)

	2019-20 Planned FTEs	2020-21 Planned FTEs	2021-22 Planned FTEs
	3,973	3,976	3,976

Financial, human resources and performance information for the Department of Fisheries and Oceans' Program Inventory is available in the [GC InfoBase](#)^{lxixiii}.

Internal Services

Description

Internal Services are those groups of related activities and resources that the federal government considers to be services in support of programs and/or required to meet corporate obligations of an organization. Internal Services refers to the activities and resources of the 10 distinct service categories that support Program delivery in the organization, regardless of the Internal Services delivery model in a department. The 10 service categories are: Management and Oversight Services; Communications Services; Legal Services; Human Resources Management Services; Financial Management Services; Information Management Services; Information Technology Services; Real Property Services; Materiel Services; and Acquisition Services.

Planning Highlights

To support the Minister of Fisheries, Oceans and the Canadian Coast Guard in achieving the Departmental Results outlined within the four core responsibilities, the Department's Internal Services will provide essential support and oversight to DFO/Coast Guard personnel working on all three coasts and across the country.

The Minister's mandate letter contains a commitment to co-lead the implementation of the [G7 Charlevoix Blueprint for Healthy Oceans, Seas and Resilient Coastal Communities](#)^{lxxxiv} and the [G7 Ocean Plastics Charter](#)^{lxxxv} with the support of the Minister of Environment and Climate Change, with a particular focus on plastics; illegal, unreported and unregulated fishing; and ocean monitoring. At the 2018 meeting of G7 Environment, Energy and Oceans Ministers in Halifax, Nova Scotia, the Government of Canada committed to diverting at least 75 percent of the plastic waste from government operations by 2030. It will achieve this by eliminating the use of unnecessary single-use plastics, increasing recycling rates, and leveraging its purchasing decisions to focus on sustainable plastic products. In 2019-20, DFO/Coast Guard will lead the Government of Canada by example in initiating a reduction in plastic consumption by the Department. The Department's **Office of Environmental Coordination (OEC)** developed the Policy to Restrict the Procurement and Use of Single-use Plastics and the Directive to Restrict the Procurement and Use of Unnecessary Single-use Plastic for Government Meetings, Events and Conferences in support of this objective. The OEC works to improve environmental performance, promote monitoring and reporting on operational environmental compliance, and support federal government environmental initiatives.

The OEC also leads a national program to undertake assessment, remediation, and risk management with the goal of reducing risks to human and ecological health at the Department's contaminated sites. DFO is also a partner in the [Federal Contaminated Sites Action Plan](#)^{lxxxvi}, which aims to restore the ecological integrity of sites where past federal activities have led to contamination, or in situations where the federal government is the only available custodian.

The Department will continue to manage its operations and assets in an environmentally responsible manner through continued improvement of its **Environmental Management System (EMS)** in 2019-20. This will include a number of activities, such as renewing the procedure to guide environmental assessments of projects on federal lands, advancing the improvement of operational controls to manage impacts on species at risk and their habitats,

and supporting departmental initiatives to reduce greenhouse gas emissions associated with the Department's operations to contribute to Canada's [Greening Government Strategy](#)^{lxxvii}.

The Department is also participating in a Government-wide program to assess its portfolio of assets for **asbestos-containing materials** and to develop a management program for dealing with hazardous building materials by March 2020. The project is expected to cost \$2.5 million nationally over three years, and examines over 1,000 buildings, accounting for at least 50 percent of the real property in the Department's custody. The emphasis will be on occupied buildings but will also include some engineered assets, such as roads, bridges, and dams.

The Government of Canada is moving towards adopting a **"Digital Identity" for Canadian citizens and businesses**, which will result in faster online services for Canadians and stakeholders. A Digital Identity confirms that "you are who you say you are" in an online context. DFO/Coast Guard has been identified as a first-wave department to onboard the Business Number, a standard identifier issued by the Canada Revenue Agency to simplify business interactions with the Government. The Department's first phase began in 2018 with the Catch Certification System pilot project. It will be assessed in 2019-20, prior to implementation of additional phases of this initiative. This work will support the Government of Canada priority focusing on Government services and operations.

The Government of Canada is also transitioning towards a **shared Enterprise Data Centre**, which will facilitate online services to Canadians, provide greater physical and cyber security, and provide a long-term solution for the growth of online government services. In preparation, the Department will complete projects in support of the Application Rationalization Initiative to review and assess its portfolio of software and computer programs for redundancy and relevance, as well as taking the opportunity to review its business processes, which will improve the overall efficiency of both information technology (IT) systems and program delivery. The reduction of software is a key factor in making the Department's transition to the shared Enterprise Data Centre. For instance, by July 2019, the Modernization of Ocean Data Integration will provide a department-wide platform for the management of scientific data types such as ocean temperature and salinity. In 2019-20, the Department will also launch the Fisheries Management Systems Integration project, which will rationalize approximately 60 departmental software and computer programs.

The Oceans Protection Plan (OPP) is bringing about massive increases in data processing requirements to support world class scientific activities. DFO has worked closely with science leads across the country to coordinate, identify, and seek efficiencies towards supporting scientists in achieving their objectives under the OPP. The Department is making available core information technology services such as High Performance Computing used by the scientific community to process highly complex scientific models which are often used to forecast the future state of our oceans based upon differing variables.

The Treasury Board Secretariat (TBS) [Policy on Government Security](#)^{lxxviii} requires departments to have a departmental security plan that details decisions for managing security risks and outlines strategies, goals, objectives, priorities, and timelines for improving departmental security. The Department's **2018-2020 Departmental Security, Safety and Emergency Management Plan (DSSEMP)** meets this requirement and supports the government-wide priority on safety and security by ensuring that information, assets, and services are protected against compromise, and that individuals are protected against workplace threats and violence. The Department is

aiming to complete 90 percent or more of the action items outlined in the DSSEMP by March 2020. A new DSSEMP will be developed in 2019-20 (covering 2020-21 to 2022-23) to address emerging safety and security risks and upcoming changes to the Policy on Government Security and the revised Occupational Health and Safety legislation (*Bill C-65: An Act to amend the Canada Labour Code (harassment and violence), the Parliamentary Employment and Staff Relations Act and the Budget Implementation Act, 2017, No. 1*^{lxxix}).

In support of the ongoing **Federal Infrastructure Initiative**^{lxxx} and the Government of Canada priority of greater safety and security for Canadians, DFO/Coast Guard will complete its remaining 104 real property initiatives by the end of 2019-20, resulting in the construction of critical new infrastructure and the restoration of many facilities to good operating condition.

In the **management of real property**, the Department is improving its strategic information management capabilities. DFO/Coast Guard will implement new systems such as a maintenance management system and an activity-based management system (which helps to improve effectiveness and performance through analysis). The Department will also enhance the capabilities of the current Real Property Information Management System, with a target date of 2020-21. The improved information management capabilities are expected to greatly strengthen evidence-based approaches to problem-solving and measuring the effectiveness of plans by supporting managerial decision-making and by providing feedback through performance metrics. These improvements will allow DFO/Coast Guard to better report and respond to ministers and members of Parliament concerning specific locations or groups of properties within a particular geographic area, and will also improve the accuracy of information provided to Canadians on the **Directory of Federal Real Property**^{lxxxii}.

In support of the Government of Canada's commitment to **experimentation** with new or innovative approaches to delivering programs or services, DFO/Coast Guard is piloting a **new, proactive approach to staffing** positions to maintain an inventory of talent "at-the-ready" for non-specialized and large-volume positions. The Department is leveraging the use of third-party psychometric and technology companies, as well as proven assessment methodology, to conduct online interviews in an effort to produce a staffing model that is more cost effective, faster, and efficient. In addition, the Department will undertake a large **multi-year classification renewal initiative** that will seek to strengthen the Department's organizational design.

To support the government-wide priorities of gender equality, diversity, and inclusiveness, the Department will undertake a **Universal Design site assessment** of its largest research facility, the **Bedford Institute of Oceanography**^{lxxxii} in Dartmouth, in Fall 2019. This will ensure that physical spaces can be accessed, understood, and used to the greatest extent possible by all people regardless of their age, size, ability, or disability.


The Department is also working toward developing an inclusive workplace and a workforce that is reflective of the Canadian population, including gender parity. The Department has developed an **Employment Equity, Diversity, and Inclusion Action Plan** and a **Diversity and Inclusion Framework**, which will be implemented by April 2019. The goals of these initiatives are to support management, increase awareness of diversity and inclusion, reduce the gaps where there is under-representation of employment equity groups, and approach gender parity. In addition, a campaign will be launched to reduce the myths and misunderstandings that surround self-identification and to share the benefits of self-identification for the organization and its employees.

In addition, the Department will implement the new **Indigenous Recruitment Strategy**, beginning with trials of new methods of performing recruitment, consultation, and engagement in order to increase the representation of Indigenous peoples in the Department. DFO/Coast Guard will also continue to develop an **Indigenous Retention Strategy** to increase awareness of Indigenous history, culture, and reconciliation efforts among non-Indigenous employees to ensure that Indigenous employees feel more respected by their colleagues. Specifically, Indigenous Awareness learning activities will be promoted nationally and incorporated into onboarding and orientation initiatives and resources. The Retention Strategy will contribute to retaining Indigenous employees through targeted career development and talent management initiatives.


In the spirit of **Blueprint 2020**^{lxviii}, the Your Professional Network (YPN) will continue to deliver career development and networking opportunities for all employees, and also contribute to departmental initiatives that promote inclusion, diversity, and workplace wellness. This will include the Positive Space Initiative, which was launched by the YPN in 2018 as a means to better support LGBTQ2+ employees in the workplace. The YPN remains committed to promoting DFO-Coast Guard as one of the top employers of choice in Canada.

In support of the Department’s employees who have been affected by the **Phoenix Pay System** since its implementation in February 2016, DFO/Coast Guard will continue to implement its Pay Support Strategy. This strategy will increase the timeliness and accuracy of Human Resources data and actions, increase timely approvals by managers, and improve current systems and processes to prevent additional errors and stressors on the system. In-depth operational knowledge will be leveraged when resolving pay issues and the Department will maintain its current proactive communications approach to promote departmental objectives related to pay, while continuing to collaborate across government departments to develop enterprise solutions and share best practices. In addition, DFO-Coast Guard will continue to increase coaching and training opportunities allowing selected employees to acquire expertise on the Phoenix system and process certain transactions.

Budgetary Financial Resources (dollars)

	2019-20	2019-20	2020-21	2021-22
	Main Estimates	Planned Spending	Planned Spending	Planned Spending
	410,210,342	410,210,342	398,516,688	407,494,006

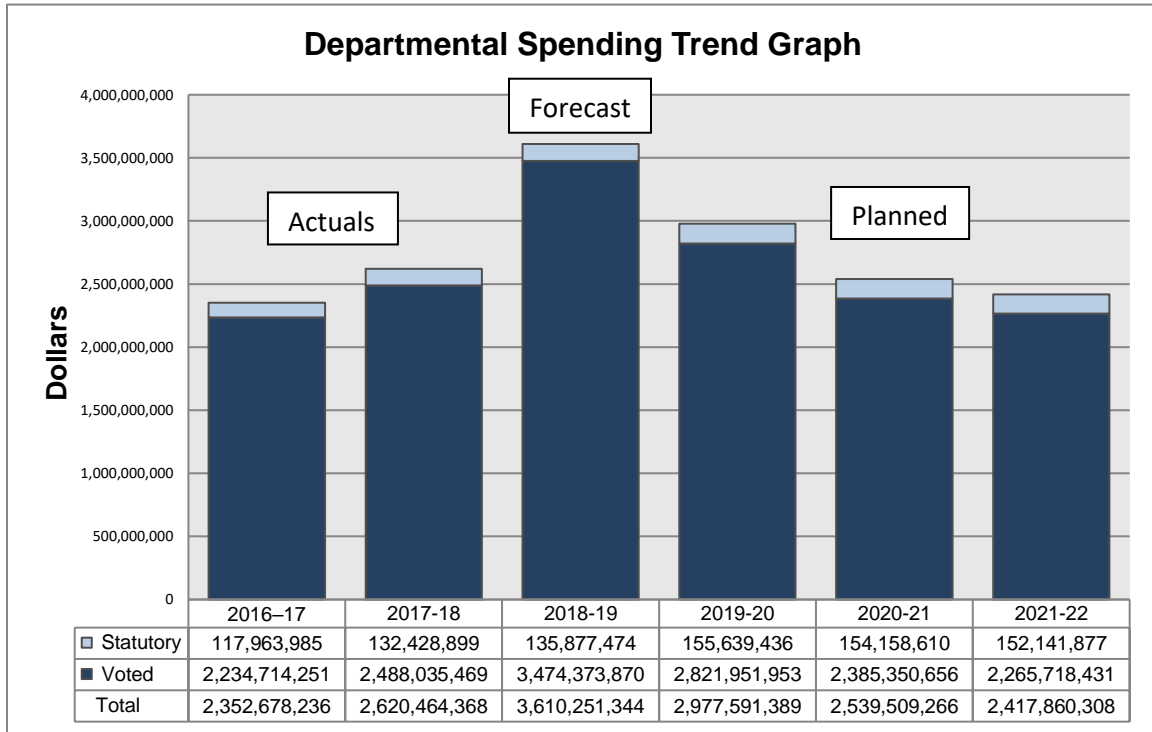
Human Resources (full-time equivalents or FTEs)

	2018-19	2019-20	2020-21
	Planned FTEs	Planned FTEs	Planned FTEs
	2,194	2,190	2,165

Spending and Human Resources

Planned Spending

Departmental Spending Trend



The variance between the 2018-19 forecast spending and the 2019-20 through 2021-22 planned spending is mainly attributable to Supplementary Estimates and operating and capital budget carry forwards, which have been included in the 2018-19 forecast spending but are not yet known for 2019-20 through 2021-22. The decreasing trend is also attributable to the sunsetting of various departmental initiatives.

Budgetary Planning Summary for Core Responsibilities and Internal Services (dollars)

Core Responsibilities and Internal Services	2016-17 Expenditures	2017-18 Expenditures	2018-19 Forecast Spending	2019-20 Main Estimates	2019-20 Planned Spending	2020-21 Planned Spending	2021-22 Planned Spending
Fisheries	708,078,659	693,291,563	856,979,024	882,963,127	882,808,991	733,518,470	697,821,257
Aquatic Ecosystems	159,544,548	206,486,345	224,073,012	259,872,522	259,872,522	263,637,530	244,978,487
Marine Navigation	242,274,553	308,053,064	320,788,794	353,094,537	353,094,537	345,959,300	341,211,972
Marine Operations and Response	848,039,885	925,024,349	1,776,713,530	1,071,604,997	1,071,604,997	797,877,278	726,354,586
Subtotal	1,957,937,645	2,132,855,321	3,178,554,360	2,567,535,183	2,567,381,047	2,140,992,578	2,010,366,302

Core Responsibilities and Internal Services	2016-17 Expenditures	2017-18 Expenditures	2018-19 Forecast Spending	2019-20 Main Estimates	2019-20 Planned Spending	2020-21 Planned Spending	2021-22 Planned Spending
Internal Services	394,740,591	487,609,047	431,696,984	410,210,342	410,210,342	398,516,688	407,494,006
Total	2,352,678,236	2,620,464,368	3,610,251,344	2,977,745,525	2,977,591,389	2,539,509,266	2,417,860,308

Budgetary Planned Gross Spending Summary (dollars)

Core Responsibilities and Internal Services	2019-20 Planned Gross Spending	2019-20 Planned Gross Spending for Specified Purpose Accounts	2019-20 Planned Revenues Netted Against Expenditures	2019-20 Planned Net Spending
Fisheries	882,808,991	0	0	882,808,991
Aquatic Ecosystems	259,872,522	0	0	259,872,522
Marine Navigation	376,478,879	0	-23,384,342	353,094,537
Marine Operations and Response	1,088,231,655	0	-16,626,658	1,071,604,997
Subtotal	2,607,392,047	0	-40,011,000	2,567,381,047
Internal Services	410,210,342	0	0	410,210,342
Grand Total	3,017,602,389	0	-40,011,000	2,977,591,389

Planned Human Resources

Human Resources Planning Summary for Core Responsibilities and Internal Services (full-time equivalents or FTEs)

Core Responsibilities and Internal Services	2016-17 Actual FTEs	2017-18 Actual FTEs	2018-19 Forecast FTEs	2019-20 Planned FTEs	2020-21 Planned FTEs	2021-22 Planned FTEs
Fisheries	Because of changes in the reporting framework for DFO/Coast Guard, figures for full-time equivalents by Core Responsibility are not available prior to 2018-19.		2,872	3,070	3,030	3,021
Aquatic Ecosystems			1,277	1,612	1,613	1,626
Marine Navigation			1,929	1,838	1,820	1,823
Marine Operations and Response			3,954	3,973	3,976	3,976
Subtotal	8,429	9,233	10,032	10,493	10,439	10,446
Internal Services	1,675	1,877	2,016	2,194	2,190	2,165
Total	10,104	11,110	12,048	12,687	12,629	12,611

Note: Because of rounding, figures may not add to the totals shown.

The Department's total planned full-time equivalents for 2019-20 (12,687) represents an increase of 5% over the forecast for 2018-19 (12,048). This increase is mainly attributed to recruitment under the Oceans Protection Plan, the hiring of compensation staff to address pay issues further to the transfer of pay files to the Public Service Pay Centre, as well as growth under the workplace well-being portfolio to address the Clerk of the Privy Council's priorities on mental health, disability management, harassment, and safe workspaces.

Estimates by Vote

Information on Fisheries and Oceans Canada's organizational appropriations is available in the [2019-20 Main Estimates](#)^{lxxxiv}.

Future-Oriented Condensed Statement of Operations

The Future-Oriented Condensed Statement of Operations provides a general overview of Fisheries and Oceans Canada's operations. The forecast of financial information on expenses and revenues is prepared on an accrual accounting basis to strengthen accountability and to improve transparency and financial management. The forecast and planned spending amounts presented in other sections of the *Departmental Plan* are prepared on an expenditure basis; as a result, amounts may differ.

A more detailed Future-Oriented Statement of Operations and associated notes, including a reconciliation of the net cost of operations to the requested authorities, are available on [Fisheries and Oceans Canada's website](#)^{lxxxv}.

Future-Oriented Condensed Statement of Operations for the year ended March 31, 2020 (dollars)

Financial Information	2018-19 Forecast Results	2019-20 Planned Results	Difference (2019-20 Planned Results minus 2018-19 Forecast Results)
Total expenses	2,467,373,941	2,589,761,928	122,387,987
Total revenues	39,000,559	40,011,000	1,010,441
Net cost of operations before government funding and transfers	2,428,373,382	2,549,750,928	121,377,546

The Net Cost of Operations in 2019-20 is projected to be \$2,549.7 million, an increase of \$121.3 million compared to \$2,428.4 million in 2018-19. This increase is mainly attributed to an overall increase in authorities available for spending (excluding Capital vote) of \$114.9 million (\$2,175.8 million in 2019-20 compared to \$2,060.9 million in 2018-19) and a net increase of about \$6.4 million in the total estimates for items not affecting authorities, mainly attributed to amortization on tangible capital assets and services provided without charge by other government departments. Authorities available for spending in 2019-20 do not include items such as Supplementary Estimates and carry forwards.

Additional Information

Corporate Information

Organizational Profile

Appropriate Minister:

The Honourable Jonathan Wilkinson

Institutional Head:

Tim Sargent, Deputy Minister

Ministerial Portfolio:

Fisheries and Oceans Canada and the Canadian Coast Guard

Enabling Instruments:

- [Oceans Act](#)^{lxxxvi}
- [Fisheries Act](#)^{lxxxvii}
- [Species at Risk Act](#)^{lxxxviii}
- [Coastal Fisheries Protection Act](#)^{lxxxix}
- [Canada Shipping Act, 2001](#)^{xc} (Transport Canada-led)
- [Fishing and Recreational Harbours Act](#)^{xci}

Year of Incorporation / Commencement:

1979

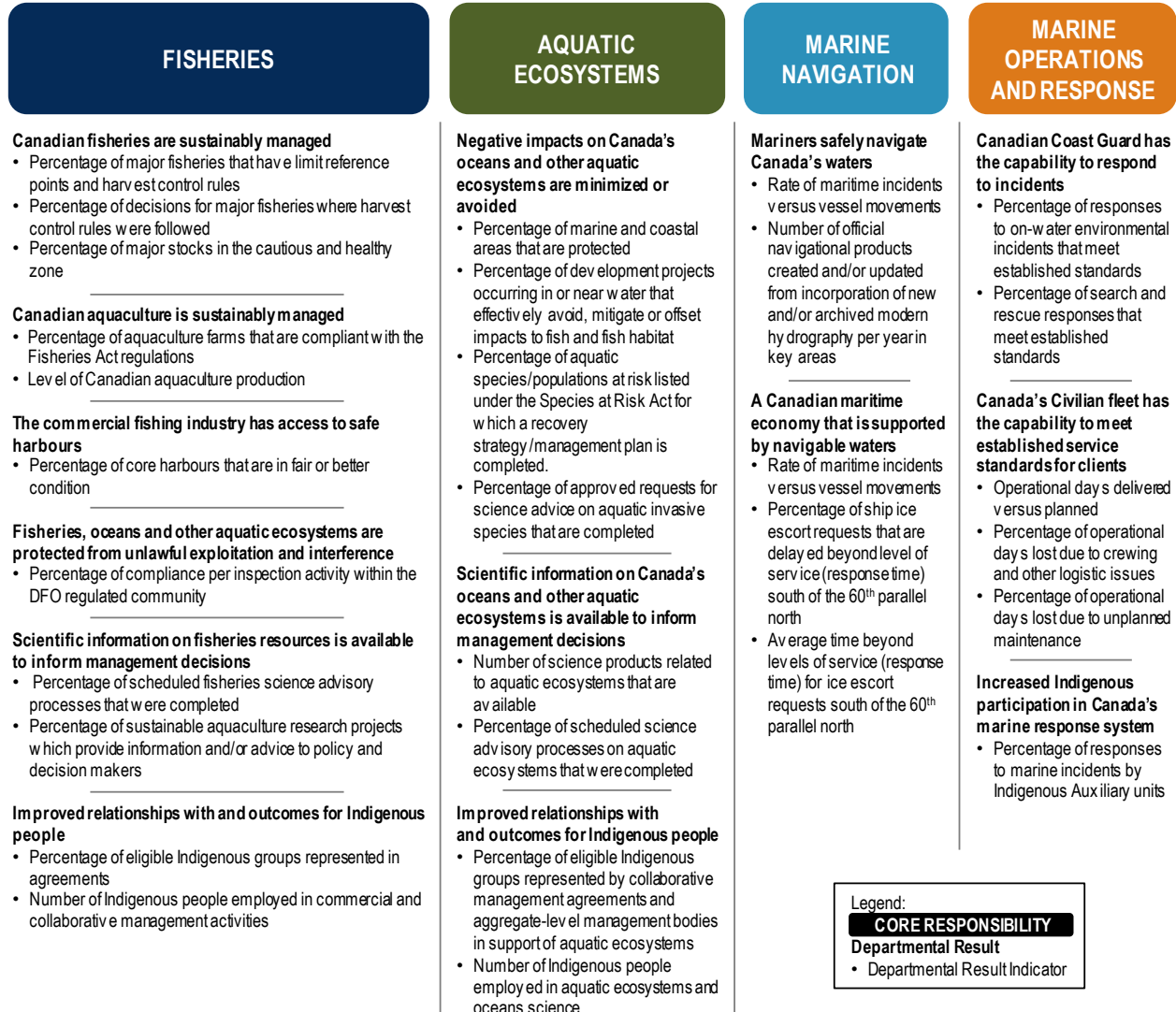
Raison d'être, Mandate and Role: who we are and what we do

Information on the Department's raison d'être, mandate and role is available on [Fisheries and Oceans Canada's website](#)^{xcii}.

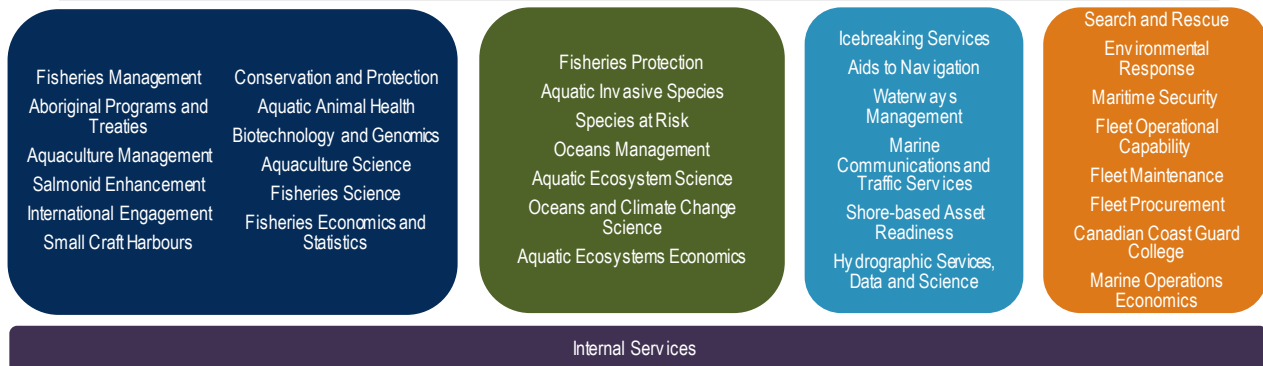
Reporting Framework

The Departmental Results Framework and Program Inventory for 2019-20 for Fisheries and Oceans Canada are shown below:

Departmental Results Framework



Program Inventory



Supporting Information on the Program Inventory

Supporting information on planned expenditures, human resources, and results related to the Fisheries and Oceans Canada's Program Inventory is available in the [GC InfoBase^{xciii}](#).

Supplementary Information Tables

The following supplementary information tables are available on [Fisheries and Oceans Canada's website^{xciv}](#).

- Departmental Sustainable Development Strategy
- Details on Transfer Payment Programs of \$5 Million or More
- Disclosure of Transfer Payment Programs Under \$5 Million
- Gender-Based Analysis Plus
- Horizontal Initiatives
- Status Report on Transformational and Major Crown Projects
- Up-Front Multi-Year Funding

Federal Tax Expenditures

The tax system can be used to achieve public policy objectives through the application of special measures such as low tax rates, exemptions, deductions, deferrals and credits. The Department of Finance Canada publishes cost estimates and projections for these measures each year in the [Report on Federal Tax Expenditures^{xcv}](#). This report also provides detailed background information on tax expenditures, including descriptions, objectives, historical information and references to related federal spending programs, as well as evaluations, research papers and gender-based analysis. The tax measures presented in this report are the responsibility of the Minister of Finance.

Organizational Contact Information

Fisheries and Oceans Canada
Communications Branch
200 Kent Street
13th Floor, Station 13E228
Ottawa, Ontario K1A 0E6

Telephone: 613-993-0999
Facsimile: 613-990-1866
TTY: 1-800-465-7735
Email: info@dfo-mpo.gc.ca
Web Address: <http://dfo-mpo.gc.ca/>

Appendix: Definitions

appropriation (crédit)

Any authority of Parliament to pay money out of the Consolidated Revenue Fund.

budgetary expenditures (dépenses budgétaires)

Operating and capital expenditures; transfer payments to other levels of government, organizations or individuals; and payments to Crown corporations.

Core Responsibility (responsabilité essentielle)

An enduring function or role performed by a department. The intentions of the department with respect to a Core Responsibility are reflected in one or more related Departmental Results that the department seeks to contribute to or influence.

Departmental Plan (plan ministériel)

A report on the plans and expected performance of appropriated departments over a three-year period. *Departmental Plans* are tabled in Parliament each spring.

Departmental Result (résultat ministériel)

Any change or changes that the department seeks to influence. A Departmental Result is often outside departments' immediate control, but it should be influenced by program-level outcomes.

Departmental Result Indicator (indicateur de résultat ministériel)

A factor or variable that provides a valid and reliable means to measure or describe progress on a Departmental Result.

Departmental Results Framework (cadre ministériel des résultats)

The department's Core Responsibilities, Departmental Results and Departmental Result Indicators.

Departmental Results Report (rapport sur les résultats ministériels)

A report on the actual accomplishments against the plans, priorities and expected results set out in the corresponding *Departmental Plan*.

evaluation (évaluation)

In the Government of Canada, the systematic and neutral collection and analysis of evidence to judge merit, worth or value. Evaluation informs decision making, improvements, innovation and accountability. Evaluations typically focus on programs, policies and priorities and examine questions related to relevance, effectiveness and efficiency. Depending on user needs, however, evaluations can also examine other units, themes and issues, including alternatives to existing interventions. Evaluations generally employ social science research methods.

experimentation (expérimentation)

Activities that seek to explore, test and compare the effects and impacts of policies, interventions and approaches, to inform evidence-based decision-making, by learning what works and what does not.

full-time equivalent (équivalent temps plein)

A measure of the extent to which an employee represents a full person-year charge against a departmental budget. Full-time equivalents are calculated as a ratio of assigned hours of work to scheduled hours of work. Scheduled hours of work are set out in collective agreements.

gender-based analysis plus (GBA+) (analyse comparative entre les sexes plus [ACS+])

An analytical process used to help identify the potential impacts of policies, Programs and services on diverse groups of women, men and gender-diverse people. The “plus” acknowledges that GBA goes beyond sex and gender differences. We all have multiple identity factors that intersect to make us who we are; GBA+ considers many other identity factors, such as race, ethnicity, religion, age, and mental or physical disability.

government-wide priorities (priorités pangouvernementales)

For the purpose of the *2018–19 Departmental Plan*, government-wide priorities refers to those high-level themes outlining the government’s agenda in the 2015 Speech from the Throne, namely: Growth for the Middle Class; Open and Transparent Government; A Clean Environment and a Strong Economy; Diversity is Canada's Strength; and Security and Opportunity.

horizontal initiative (initiative horizontale)

An initiative in which two or more federal organizations, through an approved funding agreement, work toward achieving clearly defined shared outcomes, and which has been designated (by Cabinet, a central agency, etc.) as a horizontal initiative for managing and reporting purposes.

non-budgetary expenditures (dépenses non budgétaires)

Net outlays and receipts related to loans, investments and advances, which change the composition of the financial assets of the Government of Canada.

performance (rendement)

What an organization did with its resources to achieve its results, how well those results compare to what the organization intended to achieve, and how well lessons learned have been identified.

performance indicator (indicateur de rendement)

A qualitative or quantitative means of measuring an output or outcome, with the intention of gauging the performance of an organization, program, policy or initiative respecting expected results.

Performance Information Profile (profil de l’information sur le rendement)

The document that identifies the performance information for each Program from the Program Inventory.

performance reporting (production de rapports sur le rendement)

The process of communicating evidence-based performance information. Performance reporting supports decision making, accountability and transparency.

plan (plan)

The articulation of strategic choices, which provides information on how an organization intends to achieve its priorities and associated results. Generally a plan will explain the logic behind the strategies chosen and tend to focus on actions that lead up to the expected result.

planned spending (dépenses prévues)

For *Departmental Plans* and *Departmental Results Reports*, planned spending refers to those amounts presented in the Main Estimates.

A department is expected to be aware of the authorities that it has sought and received. The determination of planned spending is a departmental responsibility, and departments must be able to defend the expenditure and accrual numbers presented in their *Departmental Plans* and *Departmental Results Reports*.

priority (priorité)

A plan or project that an organization has chosen to focus and report on during the planning period. Priorities represent the things that are most important or what must be done first to support the achievement of the desired Departmental Results.

Program (programme)

Individual or groups of services, activities or combinations thereof that are managed together within the department and focus on a specific set of outputs, outcomes or service levels.

Program Inventory (répertoire des programmes)

Identifies all of the department's programs and describes how resources are organized to contribute to the department's Core Responsibilities and Results.

result (résultat)

An external consequence attributed, in part, to an organization, policy, program or initiative. Results are not within the control of a single organization, policy, program or initiative; instead they are within the area of the organization's influence.

statutory expenditures (dépenses législatives)

Expenditures that Parliament has approved through legislation other than appropriation acts. The legislation sets out the purpose of the expenditures and the terms and conditions under which they may be made.

sunset program (programme temporisé)

A time-limited program that does not have an ongoing funding and policy authority. When the program is set to expire, a decision must be made whether to continue the program. In the case of a renewal, the decision specifies the scope, funding level and duration.

target (cible)

A measurable performance or success level that an organization, program or initiative plans to achieve within a specified time period. Targets can be either quantitative or qualitative.

voted expenditures (dépenses votées)

Expenditures that Parliament approves annually through an *Appropriation Act*. The Vote wording becomes the governing conditions under which these expenditures may be made.

Endnotes

- ⁱ Government of Canada priorities, <https://www.canada.ca/en/government/system/priorities.html>
- ⁱⁱ Minister of Fisheries, Oceans and the Canadian Coast Guard Mandate Letter, <https://pm.gc.ca/eng/minister-fisheries-oceans-and-canadian-coast-guard-mandate-letter-august-28-2018>
- ⁱⁱⁱ Minister of Fisheries, Oceans and the Canadian Coast Guard Mandate Letter, <https://pm.gc.ca/eng/minister-fisheries-oceans-and-canadian-coast-guard-mandate-letter-august-28-2018>
- ^{iv} Mandate Letter Tracker: Delivering results for Canadians, https://www.canada.ca/en/privy-council/campaigns/mandate-tracker-results-canadians.html?utm_campaign=not-applicable&utm_medium=vanity-url&utm_source=canada-ca_results
- ^v Atlantic Fisheries Fund, <http://www.dfo-mpo.gc.ca/fm-gp/initiatives/fish-fund-atlantic-fonds-peche/index-eng.html>
- ^{vi} British Columbia Salmon Restoration and Innovation Fund, <https://www.canada.ca/en/fisheries-oceans/news/2018/11/wild-pacific-salmon-get-a-boost-with-new-salmon-restoration-and-innovation-fund-for-the-province-of-british-columbia.html>
- ^{vii} Quebec Fisheries Fund, <https://www.canada.ca/en/fisheries-oceans/news/2018/12/the-governments-of-canada-and-quebec-support-the-fish-and-seafood-sector-through-the-quebec-fisheries-fund.html>
- ^{viii} Canadian Fish and Seafood Opportunities Fund, <http://www.dfo-mpo.gc.ca/fm-gp/initiatives/opportunities-fund-fonds-initiatives/index-eng.html>
- ^{ix} National Advisory Panel on Marine Protected Area Standards, <http://www.dfo-mpo.gc.ca/oceans/conservation/advisorypanel-comiteconseil/index-eng.html>
- ^x Coastal Restoration Fund, <http://dfo-mpo.gc.ca/oceans/crf-frc/index-eng.html>
- ^{xi} Innovation Solutions Canada, <https://www.ic.gc.ca/eic/site/101.nsf/eng/home>
- ^{xii} News Release: Fisheries and Oceans Canada, the Canadian Coast Guard and Inuit Tapiriit Kanatami announce new Arctic Region, <https://www.canada.ca/en/fisheries-oceans/news/2018/10/fisheries-and-oceans-canada-the-canadian-coast-guard-and-inuit-tapiriit-kanatami-announce-new-arctic-region.html>
- ^{xiii} *2016 Fall Report of the Commissioner of the Environment and Sustainable Development: Sustaining Canada's Major Fish Stocks*, http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201610_02_e_41672.html
- ^{xiv} *Wild Salmon Policy 2018 to 2022 Implementation Plan*, <http://www.pac.dfo-mpo.gc.ca/fm-gp/species-especies/salmon-saumon/wsp-pss/ip-pmo/intro-eng.html>
- ^{xv} *Cohen Commission of Inquiry into the Decline of Sockeye Salmon in the Fraser River*, <http://publications.gc.ca/site/eng/432516/publication.html>
- ^{xvi} Atlantic Fisheries Fund, <http://www.dfo-mpo.gc.ca/fm-gp/initiatives/fish-fund-atlantic-fonds-peche/index-eng.html>
- ^{xvii} Fall Economic Statement 2018, <https://www.budget.gc.ca/fes-eea/2018/docs/statement-enonce/toc-tdm-en.html>
- ^{xviii} Canadian Fish and Seafood Opportunities Fund, <http://www.dfo-mpo.gc.ca/fm-gp/initiatives/opportunities-fund-fonds-initiatives/index-eng.html>
- ^{xix} Canadian Council of Fisheries and Aquaculture Ministers, <http://www.dfo-mpo.gc.ca/aquaculture/collaboration/ccfam-eng.html>
- ^{xx} Treasury Board of Canada Secretariat: Regulatory Reviews and Modernization, <https://www.canada.ca/en/treasury-board-secretariat/corporate/transparency/acts-regulations/consultation-regulatory-modernization.html>
- ^{xxi} *Fisheries Act*, <https://laws-lois.justice.gc.ca/eng/acts/f-14/>
- ^{xxii} *2018 Spring Report of the Commissioner of the Environment and Sustainable Development: Salmon Farming*, http://www.oag-bvg.gc.ca/internet/English/att__e_42999.html
- ^{xxiii} Fisheries and Aquaculture Clean Technology Adoption Program, <http://dfo-mpo.gc.ca/aquaculture/business-entreprises/factap-patppa-eng.htm>

- xxiv Developing eDNA Techniques to Detect Aquatic Invasive Species and Aquatic Species at Risk, <http://www.dfo-mpo.gc.ca/science/rp-pr/grdi-irdg/projects-projets/022-eng.html>
- xxv Women of Science, <http://www.dfo-mpo.gc.ca/science/sec-ces/atlantique-atlantique/programmes-programmes/science360/lecture-conference/index-eng.html>
- xxvi Atlantic Science Enterprise Centre, <http://www.dfo-mpo.gc.ca/science/sec-ces/atlantique-atlantique/index-eng.html>
- xxvii Canadian Environmental Protection Act, <https://laws-lois.justice.gc.ca/eng/acts/c-15.31/>
- xxviii Fisheries and Oceans Canada: Economic Analysis, <http://www.dfo-mpo.gc.ca/ea-ae/economic-analysis-eng.htm>
- xxix Maritime Sector in Canada, <http://www.dfo-mpo.gc.ca/stats/maritime-eng.htm>
- xxx Government of Canada Budget 2018, <https://www.budget.gc.ca/2018/home-accueil-en.html>
- xxxi Indigenous Program Review, <http://indigenousfisheries.ca/en/indigenous-program-review/>
- xxxii National Indigenous Fisheries Institute, <http://indigenousfisheries.ca/en/>
- xxxiii Aboriginal Aquatic Resource And Oceans Management (AAROM) Program, <http://www.dfo-mpo.gc.ca/fm-gp/aboriginal-autochtones/aarom-pagrao/index-eng.htm>
- xxxiv Aboriginal Aquatic Resource and Oceans Management Program, <http://www.dfo-mpo.gc.ca/fm-gp/aboriginal-autochtones/aarom-pagrao/index-eng.htm>
- xxxv GC InfoBase, <https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start>
- xxxvi *Fisheries Act*, <https://laws-lois.justice.gc.ca/eng/acts/f-14/>
- xxxvii *Bill C-68*, <http://www.parl.ca/DocumentViewer/en/42-1/bill/C-68/first-reading>
- xxxviii Canadian Wildlife Federation, <http://www.cwf-fcf.org/en/>
- xxxix Coastal Restoration Fund, <http://dfo-mpo.gc.ca/oceans/crf-frc/index-eng.html>
- xl *Oceans Protection Plan*, <https://www.tc.gc.ca/eng/oceans-protection-plan.html>
- xli Plan for marine conservation targets, <http://www.dfo-mpo.gc.ca/oceans/conservation/plan-eng.html>
- xlii Offshore Pacific Area of Interest, <http://www.dfo-mpo.gc.ca/oceans/aoi-si/offshore-hauturiere-eng.html>
- xliii *Oceans Act*, <https://laws-lois.justice.gc.ca/eng/acts/o-2.4/>
- xliv Other effective area-based measures, <http://dfo-mpo.gc.ca/oceans/oeabcm-amcepz/guidance-eng.html>
- lv *Aquatic Invasive Species Regulations*, <https://laws-lois.justice.gc.ca/eng/Regulations/SOR-2015-121/FullText.html>
- lvi News Release: Government of Canada taking further action to protect Southern Resident Killer Whales, <https://www.canada.ca/en/fisheries-oceans/news/2018/10/government-of-canada-taking-further-action-to-protect-southern-resident-killer-whales.html>
- lvii Government of Canada Budget 2018, <https://www.budget.gc.ca/2018/home-accueil-en.html>
- lviii Canada's Nature Legacy, <https://www.canada.ca/en/services/environment/conservation/nature-legacy.html>
- lix *Species at Risk Act*, <https://laws-lois.justice.gc.ca/eng/acts/s-15.3/>
- ¹ 2016-17 Horizontal Evaluation on Species at Risk, http://publications.gc.ca/collections/collection_2018/eccc/En4-345-2018-eng.pdf
- ⁱⁱ Convention on Biological Diversity, <https://www.cbd.int/>
- ⁱⁱⁱ *Federal Sustainable Development Act*, <https://laws-lois.justice.gc.ca/eng/acts/f-8.6/index.html>
- ⁱⁱⁱⁱ *2018 Spring Reports of the Commissioner of the Environment and Sustainable Development: Conserving Biodiversity*, http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201804_03_e_42994.html
- ^{lv} G7 Charlevoix Blueprint for Healthy Oceans, Seas and Resilient Coastal Communities, <https://g7.gc.ca/en/official-documents/charlevoix-blueprint-healthy-oceans-seas-resilient-coastal-communities/>
- ^{lv} Ocean Plastics Charter, <https://g7.gc.ca/wp-content/uploads/2018/06/OceanPlasticsCharter.pdf>
- ^{lvi} Centre for Offshore Oil, Gas and Energy Research, <http://www.dfo-mpo.gc.ca/science/coe-cde/cooger-crpgce/index-eng.html>
- ^{lvii} GC InfoBase, <https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start>
- ^{lviii} e-Navigation Maritime Information Portal, <http://www.marinfo.gc.ca/e-nav/index-eng.php>

- lix News Release: Canadian Coast Guard adds to its icebreaker fleet for first time in twenty five years, <https://www.canada.ca/en/canadian-coast-guard/news/2018/12/the-government-of-canada-reaffirms-its-commitment-to-davie-and-its-workers.html>
- lx GC InfoBase, <https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start>
- lxi *Oceans Protection Plan*, <https://www.tc.gc.ca/eng/oceans-protection-plan.html>
- lxii Bill C-64, An Act respecting wrecks, abandoned, dilapidated or hazardous vessels and salvage operations, <https://www.parl.ca/LegisInfo/BillDetails.aspx?billId=9197605&Language=E>
- lxiii *Oil Tanker Moratorium Act*, <https://www.parl.ca/LegisInfo/BillDetails.aspx?billId=8936657&Language=E>
- lxiv *Marine Liability Act*, <https://laws-lois.justice.gc.ca/eng/acts/M-0.7/>
- lxv Innovative Solutions Canada, <https://www.ic.gc.ca/eic/site/101.nsf/eng/home>
- lxvi Canada's Paris Agreement, <https://www.canada.ca/en/environment-climate-change/services/climate-change/paris-agreement.html>
- lxvii Evaluation in Support of the Canadian Coast Guard's Seafarers Establishment, http://dfo-mpo.gc.ca/ae-ve/evaluations/17-18/6B188-eng.html#_60
- lxviii Government of Canada Budget 2018, <https://www.budget.gc.ca/2018/home-accueil-en.html>
- lxix National Shipbuilding Strategy, <https://www.tpsgc-pwgsc.gc.ca/app-acq/amd-dp/mer-sea/sncn-nss/index-eng.html>
- lxx Nunavut Tunngavik Incorporated, <https://www.tunngavik.com/>
- lxxi *Northern Canada Vessel Traffic Services Zone Regulations*, <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2010-127/FullText.html>
- lxxii Reconciliation Framework Agreement for Bioregional Oceans Management and Protection, <https://pm.gc.ca/eng/news/2018/06/21/reconciliation-framework-agreement-bioregional-oceans-management-and-protection>
- lxxiii GC InfoBase, <https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start>
- lxxiv G7 Charlevoix Blueprint for Healthy Oceans, Seas and Resilient Coastal Communities, <https://g7.gc.ca/en/official-documents/charlevoix-blueprint-healthy-oceans-seas-resilient-coastal-communities/>
- lxxv Ocean Plastics Charter, <https://g7.gc.ca/wp-content/uploads/2018/06/OceanPlasticsCharter.pdf>
- lxxvi Federal Contaminated Sites, <https://www.canada.ca/en/environment-climate-change/services/federal-contaminated-sites.html>
- lxxvii Greening Government Strategy, <https://www.canada.ca/en/treasury-board-secretariat/services/innovation/greening-government/strategy.html>
- lxxviii Policy on Government Security, <https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=16578>
- lxxix Bill C-65: An Act to amend the Canada Labour Code (harassment and violence), the *Parliamentary Employment and Staff Relations Act* and the *Budget Implementation Act*, 2017, No. 1, <http://www.parl.ca/DocumentViewer/en/42-1/bill/C-65/royal-assent>
- lxxx 2016 Federal Infrastructure Initiative, <http://dfo-mpo.gc.ca/transparence-transparence/fii-ifi-eng.htm>
- lxxxi Directory of Federal Real Property, <https://www.tbs-sct.gc.ca/dfrp-rbif/home-accueil-eng.aspx>
- lxxxii Bedford Institute of Oceanography, <http://www.bio.gc.ca/index-en.php>
- lxxxiii Blueprint 2020, <https://www.canada.ca/en/privy-council/topics/blueprint-2020-public-service-renewal.html>
- lxxxiv 2019-20 Main Estimates, <https://www.canada.ca/en/treasury-board-secretariat/services/planned-government-spending/government-expenditure-plan-main-estimates.html>
- lxxxv Future-Oriented Condensed Statement of Operations, <http://www.dfo-mpo.gc.ca/rpp/2018-19/fin-eng.html>
- lxxxvi *Oceans Act*, <http://www.laws-lois.justice.gc.ca/eng/acts/O-2.4>
- lxxxvii *Fisheries Act*, <http://laws-lois.justice.gc.ca/eng/acts/f-14/>
- lxxxviii *Species at Risk Act*, <http://laws-lois.justice.gc.ca/eng/acts/S-15.3/>
- lxxxix *Coastal Fisheries Protection Act*, <http://laws-lois.justice.gc.ca/eng/acts/C-33/>
- xc *Canada Shipping Act*, 2001, <http://laws-lois.justice.gc.ca/eng/acts/c-10.15/>
- lxi *Fishing and Recreational Harbours Act*, <http://laws-lois.justice.gc.ca/eng/acts/F-24/>

^{xcii} Raison d'être, Mandate and Role, <http://www.dfo-mpo.gc.ca/about-notre-sujet/org/mandate-mandat-eng.htm>

^{xciii} GC InfoBase, <https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start>

^{xciv} Supplementary Information Tables, <http://www.dfo-mpo.gc.ca/rpp/2019-20/tables-eng.html>

^{xcv} *Report on Federal Tax Expenditures*, <http://www.fin.gc.ca/purl/taxexp-eng.asp>