
EXECUTIVE GROUP POSITION DESCRIPTION

POSITION TITLE: Assistant Deputy Minister, Oceans and Science

SECTOR: Oceans and Science Sector

DEPARTMENT: Fisheries and Oceans

POSITION NUMBER: 4897

LOCATION: Ottawa, Ontario

GENERAL ACCOUNTABILITY

Is accountable, as DFO's senior scientific authority on all matters including oceans, for: providing federal and corporate leadership in the development, management, and implementation of a comprehensive strategy and program delivery framework to protect and sustain the health of Canada's three oceans and their renewable and non-renewable resources; leading the development and implementation of a corporate oceans research agenda encompassing fisheries, oceanographic and hydrographic sciences; the management of science research institutes, and the leadership and coordination of horizontal science initiatives affecting the health of the oceans and their ecosystems; designing and co-ordinating the implementation of policies, plans and programs related to the scientific investigation of aquatic and marine environments, their processes and their resources in cooperation with federal, provincial, academic, industry and international partners; leading DFO's scientific activities under the Northern Strategy, Health of the Oceans (HOTO) and Science Renewal initiatives; providing authoritative scientific advice and information to the Minister, Department and Cabinet on macro-level issues affecting the health of the oceans; ensuring sound evidence-based information as a basis for the delivery of the conservation and fisheries resource management mandates and the sustained, environmentally sound, economic utilization of ocean and fresh water resources; and representing Canada in bilateral and multilateral fisheries science and management fora.

ORGANIZATION STRUCTURE

This position is one of a number of senior positions reporting to the Deputy Minister. They include the: Associate Deputy Minister, Commissioner of Canadian Coast Guard; ADM, Fisheries and Aquaculture Management; ADM Policy, ADM, Human Resources and Corporate Services; DG, International Affairs Directorate; DG, Communications; 6 Regional Directors General; DG, Executive Secretariat; Chief Financial Officer; Chief, Audit Executive; and Executive Director, VICR.

Specific functions of the positions reporting to the Assistant Deputy Minister, Science and Oceans are:

Director General, Oceans (Staff of 46) is responsible for providing corporate leadership in developing, designing and co-ordinating the implementation of national research policies, plans and activities related to advancing the Department's knowledge base with respect to biological, chemical and physical characteristics of the fish resource, its habitat, aquaculture and oceans to support the sustained economic utilization of Canada's renewable fisheries and aquatic resources.

Director General, Canadian Hydrographic Service (Staff of 60) responsible for: developing, designing and implementing national policies, plans and programs related to surveying Canadian waters and the accuracy and availability of nautical charts in paper or electronic form, volumes of sailing directions, tide and current tables and other related navigational documents covering the navigable waters of Canada as well as for the publication of maps depicting the bathymetric, magnetic and gravitational fields in Canada's waters produced in conjunction with the Geological Survey of Canada (GSC) of the Department of Natural Resources Canada.

Director General, Ecosystem Science (Staff of 46) responsible for: providing corporate leadership in developing, designing and co-ordinating the implementation of national research policies, plans and activities related to advancing the Department's knowledge base with respect to biological, chemical and physical characteristics of the fish resource, its habitat, aquaculture and oceans to support the sustained economic utilization of Canada's renewable fisheries and aquatic resources.

Director General, Science Strategies and Engagement (Staff of 14) is responsible for directing the development and monitoring the implementation of national operational policies, strategies, plans and initiatives to support and advance the cost effective management of the Science Program; for providing leadership in supporting changes to the business culture of the Sector and managing the activities of the Atlantic Zone Management Committee.

The Assistant Deputy Minister also provides functional direction over the six regional Science Sector Offices with respect to ocean science matters, and has functional management of Canada's hydrographic program through the Director General, Canadian Hydrographic Service.

NATURE AND SCOPE

The Department of Fisheries and Oceans is engaged in the development and delivery of policies and programs in support of Canada's economic, ecological and scientific interests in oceans and inland waters and the safe, efficient and environmentally sound movement of commercial and other traffic over Canada's oceans and inland waterways. The Department is responsible for the

development and delivery of operational programs and policies, standards, directives, cost recovery services related to the legislated mandate of the Canadian Coast Guard and the management of major scientific and technical activities related to renewable fisheries resources, and aquatic and oceans research and management programs of national and international consequence. These programs are delivered through six regional operational centres across Canada: Newfoundland, Maritimes, Gulf Fisheries Management, Laurentian, Central and Arctic, and Pacific.

The Department is unique within the federal government in that it maintains a custodial responsibility over a natural resource for the people of Canada. As the custodian of the resource, the Department supports the sound management of the fishery through an extensive enforcement program. For many of the decisions taken by the Department, information from the Science Program forms the basis of the fisheries management plan and the conservation regime that is utilized. The Department, in the past, has relied heavily on developing and administering regulations to carry out its responsibilities for enforcement. Enforcement personnel are armed and are frequently called upon to exercise their activities in hostile, confrontational situations.

In response to the increasing emphasis which the government is placing on creating and maintaining partnerships with stakeholders in the administration of regulations, the Department has embarked upon a series of legislative reforms that will shift the emphasis from reactive enforcement to the concept of sharing of the stewardship responsibility for the resource with all participants in the fisheries. This change in the Department's operating philosophy will have a profound effect on the Department's clients and stakeholders, as the policies governing this resource directly affect people's jobs, communities and their way of life.

Canadian Coast Guard units across the country provide a high level of service in response to the Department's fish management and scientific activities, as well as in response to the identified needs of the commercial, marine, offshore and pleasure craft industries. These services include managing the system of navigational aids, vessel traffic management and marine search and rescue activities. Because of Canada's high dependency on water-borne commerce the decisions taken by the Coast Guard have considerable economic impact on regional employment and economics. Too stringent standards, regulations or tariffs can reduce the movement of ships to Canadian ports in view of the increased competitive relationship of the United States ports, or adversely affect the economic viability of Canadian shipping, transportation and marine industries.

At a time when climate change, rapidly expanding economic activity, and many other critical factors are affecting the habitat of renewable/non-renewable fishery resources; when the ongoing depletion of fish stocks, the opening of northern and arctic waters to international marine activity, with increased risks of environmental pollution, the Department of Fisheries and Oceans is called upon to provide federal leadership in the science of the oceans, the source of so much of Canada's socio-economic capital and the well-being of so many communities. A concerted scientific effort is

required to increase our understanding of ocean science.

Within this context, the Assistant Deputy Minister, Science and Oceans (the ADM), is accountable for establishing DFO's ocean science research agenda, for providing departmental and horizontal leadership in the biological, oceanographic and physical sciences which provide the knowledge base for all DFO and federal activities, and for providing authoritative advice to the Deputy Minister, Minister and Cabinet on issues affecting the health of the oceans and the viability of their fisheries. The ADM, by creating a comprehensive scientific research agenda, will ensure the integration and cost-effective management of all departmental ocean science activities.

The ADM provides the Department's focal point for scientific advice and guidance on the health of the oceans. The ADM is accountable for guiding the Department's roles and activities in the Health of the Oceans initiative (HOTO), which includes: establishing a national system of Marine Protected Areas (MPAs); the designation, within a federal/provincial/territorial network, of six new MPAs under the *Oceans Act*; the provision of scientific advice related to marine protection; the creation of four new virtual Oceans Centres of Expertise, and enhanced capacity to respond to oil spills in the Arctic Ocean. The ADM faces critical challenges in linking the Integrated Oceans Management assessment tools with those of the *Canadian Environmental Assessment Act* (CEAA), and ensuring that the ecosystem health, conservation and habitat protection requirements of fish are reflected in the development and implementation of Integrated Management Plans and MPAs. This role also involves the development of research and operational tools to support the Coast Guard in its response to oil spills in the Arctic and other sensitive areas, and for the scientific assessment of and provision of advice on potential environmental impacts and ecological risks associated with other high-priority ocean activities under the Oceans Action Plan.

The ADM is responsible for providing leadership to the Science Renewal initiative, which is designed both as a proactive strategic response to the Department's critical demographic challenges, and to promote a scientific culture that fosters awareness of policy relevance, multidisciplinary approaches, team work, integration, and partnering within the Science Program. The ADM, by leading the development of an integrated policy and science capacity and culture within DFO through Science Renewal, will ensure the Department's science base is aligned with the knowledge requirements of policy and decision-makers today while anticipating future science-based issues. Through this strategy, and through the provision of functional direction to Regional Science programs (with emphasis on the ocean science components of their respective programs) the ADM will provide a strengthened capacity of the Science Program to provide sound evidence-based support to the development of policies and programs.

The ADM directs the development and implementation of a comprehensive research program to support the federal government's responsibilities for managing its oceans. By leading and coordinating DFO's scientific activities with Canadian and international research networks, the

ADM provides authoritative knowledge and evidence which will enhance Canada's capacity for understanding, conserving and protecting marine aquatic habitat. In addition, the ADM plans and directs the cost-effective management of the department's responsibilities for environmental assessments, and its responsibilities for protecting fish habitat under the *Fisheries Act*.

DFO is the lead agency across the federal government with respect to the biological and physical and oceanographic sciences. As the senior scientific authority within the Department, the ADM provides authoritative advice, options and recommendations to the Associate Deputy Minister, the Deputy Minister and Minister. And, because initiatives such as the Northern Strategy, the Health of the Oceans, and the Oceans Action Plan all have significant horizontal components (involving Environment Canada, Transport Canada, Parks Canada, Indian and Northern Affairs, DND, etc.), the ADM is called upon to provide federal scientific leadership by coordinating all federal ocean science activities, and advising other Ministers on present and emerging environmental and aquatic ecosystem threats, in collaboration with these departments through the Interdepartmental Committee on Oceans and through a variety of other ADM-level fora.

The ADM provides a senior level of scientific oversight and due diligence to ensure the quality, integrity and objectivity of the ocean science research and of the scientific advice provided to the Minister, the Department, industry, and the international research community. At the same time, to leverage scarce resources, the ADM coordinates research initiatives at the national level to ensure the cost effective management, scientific content, quality and direction of the scientific research contracted for in support of national initiatives. The ADM is called upon to identify opportunities, and develop and implement strategies and initiatives to promote the creation of partnerships with universities and the private sector through cost-sharing agreements.

The ADM is responsible for ensuring that scientific information of high international standards is available to the government of Canada for use in developing policies, regulations and legislation regarding the oceans and aquatic life and their effective conservation, and to other government departments, private industry and the public for use in planning and carrying out aquatic activities. This requires the incumbent to develop and implement strategies and initiatives to direct and support scientific activities regionally and nationally that will enhance the performance, promotion and assistance of research in the conservation, increase and use of aquatic and marine renewable resources if all Regions and on the biological productivity of the aquatic environment in order to improve the management and sustained economic utilization of these resources in a way that reflects Canadian concerns for the quality of the environment.

The ADM directs the development and management of fishery, oceanographic and hydrographic research and operation programs in three oceans, and the effective management of research institutes. The ADM leads the acquisition and communication of scientific information to describe and understand climate and processes of the ocean, their influence on fish stocks and their

interaction with the atmosphere, to describe and quantify marine environmental parameters relevant to marine engineering, transportation and other activities and to assist coastal and offshore development. The incumbent is also responsible for developing and refining methodologies and technologies necessary to carry out the Department's scientific role and to transfer the relevant technology to Canadian industry to develop the private sector's capability.

The ADM is called upon to provide government-wide leadership in the management of ocean-related science and technology in the federal government. This involves the ADM representing the interests and concerns of the Department with respect to gathering intelligence, facilitating the collaboration and exchange of intelligence and providing direction for addressing the key issues related to the management of S&T. The incumbent identifies major ocean-related themes in S&T, ensuring that they support the government's corporate agenda for the management of S&T in the federal public service. The ADM provides this leadership through committees such as the ADM's S&T Network, the ADM Committee on S&T (under the 5 NR MOU on S&T) and the ADM Northern S7T Committee, and represents DFO on a variety of subcommittees and work groups (e.g. Climate, Biotechnology) with respect to ocean sciences.

The ADM plays a senior representational role across government and internationally. For example, the ADM contributes a senior level of scientific advice to the Fisheries Resource Conservation Council (FRCC) on the Atlantic coast. The FRCC advises on and coordinates science priorities through its formal mandate and interaction between the ADM and the Chair and members of the Council. In the Pacific Region, the newly established Pacific Fisheries Resource Conservation Council (PFRCC) also provides the Minister and the department with advice on conservation of Pacific salmon, much of which is science-related. In addition, because the aquaculture industry has proven to have major impact on wild ocean stocks and their habitats, the ADM ensures scientific advice and support to the newly established Aquaculture Commissioner. The ADM's scientific advice to the Minister, Deputy Minister, Assistant Deputy Ministers and officials of other agencies contributes to the ongoing refinement of Canada's national fisheries, ocean science and hydrography objectives, and the development of Canadian positions in negotiations and agreements with other nations.

As the Department's senior spokesperson for scientific matters, the ADM is in frequent contact with senior representatives of other federal departments and agencies to represent the Department's interests and concerns with respect to co-operative initiatives, national ocean science directions, university support, and the scientific foundations for economic development and resource management. The ADM works with representatives of foreign governments to negotiate research agreements, scientific exchanges, research training programs, and with senior officials and elected representatives of provincial governments to develop research partnerships. The ADM represents the interests and concerns of the Department with Members of Parliament, national research and survey programs, fishers' association representatives, and senior industry representatives.

As part of DFO's senior management team, the ADM is a member of the Departmental Management Committee, which reviews and adjusts program operations. Based on identified research priorities, the ADM contributes to the formulation of strategic departmental policies, priorities and practices.

DIMENSIONS – to be confirmed

Staff:	180 Full Time Equivalents
Salaries and	
O&M:	\$ 20 Million
Functional:	1459 FTEs and \$141.2 Million program budget.

SPECIFIC ACCOUNTABILITIES

1. Provides corporate leadership for the efficient and effective integration of the Department's oceans and science activities; develops DFO's oceans and science research strategy and multi-year agenda to ensure the quality, relevance and timeliness of scientific information and advice.
2. Provides federal scientific leadership for all initiatives affecting the health of the oceans and the sustainable management of renewable/non-renewable resources.
3. As the Department's chief scientific authority, advises the Minister, Deputy Minister and senior departmental managers on critical issues affecting national and regional fisheries, the conduct of ocean-related research, and hydrographic survey programs; investigates the need for and designs new research activities in response to emerging issues such as climate change and increased economic activity in the Arctic.
4. Provides functional direction and senior-level guidance to the Regional Directors of Science, with particular emphasis on those elements of their programs affecting the health of the oceans, marine habitat, and ocean ecosystems.
5. Identifies the scientific and hydrographic priorities for the Department and provides scientific advice with respect to the Department's maritime fisheries management, conservation and protection programs, including the Oceans Strategy for Canada.
6. Provides federal oceans and science leadership in all federal initiatives (including the Oceans Action Plan, and Health of the Oceans) related to the management and protection of oceans resources, and for federal, F/P/T and international scientific co-ordination and co-

operation under the *Oceans Act* and Canada's international commitments for integrated bi/multi-lateral oceans management.

7. Leads the development of a sound national knowledge base for fisheries, biological and ocean processes, marine ecology and hydrography, to serve as the basis for DFO's formulation of policy and the management of regional, national and/or international ocean science issues.
8. Participates in the overall management of the Department as a member of the Executive Management Committee, develops Cabinet strategies for the advancement of ocean science in response to emerging environmental issues.
9. Ensures the development, coordination and implementation of programs in fisheries and ocean science and hydrography with respect to the development and transfer of technology; the extension of research activities to the university community; the acquisition and dissemination of fisheries and ocean sciences related data and information, including the development of a national information service, and the participation of the Department in international fisheries and ocean sciences activities of direct interest to Canada.
10. Ensures the development and implementation of Programs designed to further the government's Oceans agenda.
11. Represents Canada in a variety of international organizations with respect to marine research and ocean science issues.
12. Leads the management of ocean-related S&T within the federal government.

CERTIFICATION

The foregoing is an accurate and comprehensive statement of the duties and responsibilities assigned to this position.

Incumbent

Date

Signature

Deputy Minister

Date

Signature

