

Position Description

Fisheries and Oceans

Position Title:	Director General, Science Strategies and Integration
Position Number:	31032
Department:	Fisheries and Oceans
Sector:	Science
Classification:	EX-03
Supervisor's Title:	Assistant Deputy Minister, Science
Location:	Ottawa
Date:	February 19, 2009

General Accountability:

Accountable for developing strategies for implementing the long-term Science change agenda, '*A Framework for the Future*'. Organizes, develops and directs the management of national integrated scientific research program strategies consistent with governmental and departmental priorities. Plays a key role in articulating the Science Sector's vision and strategic priorities, provides the planning direction, processes and tools required to achieve these strategic priorities, and monitors, evaluates and reports on progress. Leads the development of the Department's corporate science plans and associated business plans, and their management. Develops, implements and manages performance indicators and performance measurement systems for the Department's scientific community. Directs the management and resolution of a wide variety of horizontal policy and management files and issues related to DFO's scientific community and the Sector. Leads the development of a sectoral risk management framework and attendant accountability structures and protocols. Provides leadership in the implementation of the Federal Science and Technology Strategy for DFO and works collaboratively with other science-based departments and agencies (SBDAs) in its implementation government-wide. Develops and maintains networks with SBDAs, academia, industry, unions, non-governmental organizations and other levels of government in order to develop innovative policies, collaborations and S&T management practices. Provides direction and leadership with respect to the Science Sector's outreach function to promote and publicize the work and the capabilities of the Science Sector. Provides comprehensive executive services to the Sector. Represents DFO at a wide variety of interdepartmental, intergovernmental, and conferences and seminars.

Organizational Structure:

This is one of three senior positions reporting to the ADM, Science. The others are the DG, Ecosystem Science, and the DG, Oceans Science - Canadian Hydrographic Service. The ADM is also responsible for the scientific programs conducted in the regions through the functional supervision of six regional Directors of Science.

Reporting to the DG, Science Strategies and Integration, are the following positions:

Director, Strategic Business Management (Staff of X):

Responsible for developing and delivering management strategies with respect to financial and human resources, labour relations, equipment and other assets, the At-Sea Science Program, and other operational policies and guidelines on behalf of the Science Sector.

Director, Science Policy and Strategy (Staff of X):

Responsible for developing and implementing strategic plans, providing policy analysis and horizontal policy coordination, coordinating domestic and international collaboration initiatives, providing support for the management of Intellectual property, developing and maintaining networks with other science-based departments and agencies, academia, industry and non-governmental organizations, and providing secretariat support of the Science Management Board, Science Advisory Council and the National Science Directors Committee.

Director, Science Reporting and Outreach (Staff of X):

Responsible for outreach to Sector stakeholders and clients, knowledge dissemination, environmental scanning, performance management and reporting, risk management and business planning.

Management and Projects Officer:

Responsible for office management and special projects.

Nature and Scope:

Fisheries and Oceans Canada, (DFO) is the lead federal government department responsible for developing and implementing policies and programs in support of Canada's economic, ecological and scientific interests in oceans and inland waters. This mandate includes responsibility for the conservation and sustainable use of Canada's fisheries resources while continuing to provide safe, effective and environmentally sound marine services that are responsive to the needs of Canadians in a global economy. Including those who serve in the fleet, at each of the six regional offices and at headquarters in Ottawa, Fisheries and Oceans Canada employs approximately 10,000 people across the country.

DFO is a national and international leader in marine safety and in the management of oceans and freshwater resources. Departmental activities and presence on Canadian waters help to ensure the safe movement of people and goods. As a sustainable development department, DFO integrates environment, economic and social perspectives to ensure Canada's oceans and freshwater resources benefit this generation and those to come. The Department's guiding legislation includes the *Oceans Act*, which charges the Minister with leading oceans management and providing coast guard and hydrographical services on behalf of the Government of Canada, and the *Fisheries Act*, which confers responsibility to the Minister for the management of fisheries, habitat and aquaculture.

The Department is also one of the three responsible authorities under the *Species at Risk Act*.

Through science-policy integration, and in collaboration with other levels of government, academia, industry, and non-governmental organizations, the Science program supports the achievement of DFO's outcomes and government-wide priorities by providing an understanding of Canada's waters, and the factors that influence the sustainable development of living and non-living aquatic resources. DFO is aligning its Science program with emerging priorities, while continuing to provide scientific advice on long-standing mandated responsibilities. This necessitates a more innovative and adaptive approach to the way science is performed, and the collaborative partnerships that are established. It also has implications for the delivery of scientific advice, services and products to clients and stakeholders.

In this regard, DFO has renewed its Science program to enhance delivery of scientific information, advice and services in support of better policy development and decision-making and improved service to Canadians. Implementing the *Science Framework for the Future* contributes to the increased scope and depth of scientific activities, builds a national capacity for aquatic science, ensure transparency and credibility of scientific advice, and contributes to scientific innovation and commercialization of technology. It focuses on stability for long-term public good monitoring and data management, while maximizing flexibility in the areas of scientific research, advice, services and products to respond to evolving departmental and federal government priorities. Implementation of a renewed Science program is supported by the realignment of the Science budget, including strategic investments to better address the highest priorities.

The full implementation of the Framework will result in an adaptive organization that is strategic and responsive to the needs of clients and stakeholders, and is better aligned with strategic priorities and outcomes of the Government of Canada. Science delivery systems will be modernized and human and financial resources will be used more effectively and efficiently. DFO Science will reflect the expertise, multi-disciplinary skills, and technological advances required to address new and emerging departmental and federal challenges. The Science change agenda includes two major initiatives: strategic and operational planning and program re-engineering and realignment. Long-term strategic and multi-year operational planning is carried out in collaboration with clients and partners, and is based on the ongoing risk assessment of priorities needing science support. Strategic and operational planning is supported through national enabling strategies, including strategies for human resources, funding, partnering, Science vessels and equipment acquisition and maintenance. A Science Management Board, headed by the Deputy Minister, provides strategic direction for aligning scientific capacity with governmental and departmental priorities and available resources.

The Director General, Science Strategies and Integration, plays a critical role in support of the Science Management Board and in the achievement of the objectives set by the Board. The DG is accountable for assessing the implications of the overall science change agenda and for developing both general and more specific strategic plans,

including business plans. The strategic planning process is a consultative effort involving all parts of the Department's scientific community, clients, stakeholders and external advisors and requiring considerable internal and external negotiations to ensure that the science change agenda and strategic plans emanating from this have the support and commitment of the Department's various scientific communities and interests and also those of its internal and external clientele. One of the principal means of acquiring external advice on these strategies and plans is the Science Advisory Council, which is composed of members of academia, industry and non-governmental organizations. The DG SSI is responsible for managing Council meetings, and provides secretariat and logistical support for their work on behalf of the ADM.

The strategic plans for which the DG is accountable, involve science efficiency, effectiveness, affordability and risk assessments and change management; HR planning and the management and renewal of science workforce; collaborative science arrangements, financial requirements and support; and priority identification and response. The strategies articulate both broad directions and the impact of these on specific departmental science organizations, such as the level of support and integration with respect to individual laboratories, vessels and research programs, both regional and national. As well, he/she develops broad operational resource allocations and utilization plans for the various departmental science communities, who in turn base their own operational plans on this.

To facilitate this process, the DG plays a critical role in the National Science Directors Committee (NSDC) composed of all headquarters and regional science directors. NSDC is charged with assessing the requirements of the change agenda and its implementation directions, as well as the broad development of the departmental scientific plans and proposals. The DG is instrumental in developing the agenda for meetings, and provides information and advice on science policy and management issues. The discussions and decisions of this committee guide the DG in the development of the departmental scientific strategic and business plans and the overall directions of the Science change agenda.

As part of implementing the Science Framework for the Future, the DG is also accountable for conducting analysis of existing policies germane to science in the Department and assessing their continuing viability in line with the goals of science renewal. Policies that do not support the science change agenda or are otherwise outdated must be reviewed and either updated or redesigned in broad consultation with the NSDC and other scientific managers and clientele, as well as with interests outside of the Department.

The DG leads the development of both overall and specific strategies for meeting the goals set in the Framework for the Future, and provides advice, proposals and action plans within this context. He/she also provides the ADM, Science, the Science Management Board and DMC with regular updates on progress being made, obstacles to progress, and recommendations on how to overcome these. The DG is expected to understand and be responsive to corporate requirements and proactive in the development of strategies and associated policies that support excellence in the Science Sector..

Similarly, he/she must have a complete understanding of broad government priorities that involve the Department and rely on scientific advice and information, and more specific departmental priorities, policy, and program changes, and maintain close and cooperative contacts with other departmental organizations such as Fisheries & Aquaculture Management, Oceans, Habitat & Species-at-Risk Management, Policy and the Canadian Coast Guard, to respond to their needs for scientific advice, services and products and negotiate client service requirements.

A major responsibility of the DG is to develop and implement a system of performance management with regard to the Framework for the Future, in collaboration with Science managers and its clients and stakeholders. The challenge, in this regard, is to find common criteria with which all can agree that also represent accurate and fair indicators of the extent of scientific results. These criteria must also be able to withstand scrutiny by Central Agencies, Parliament and others as representing realistic and defensible performance measures.

The DG also plays a key role in articulating the Science Sector's vision and strategic priorities, and provides the planning direction, processes and tools required to achieve these strategic priorities. Setting strategic priorities is imperative in guiding the planning activities of the Sector. Working within the framework of the strategic priorities, the incumbent directs the tools, guidance and support required to ensure the development of multi-year Sector business or operational plans, linked to the departmental and governmental planning and reporting processes.

More specifically, the DG leads the development and articulation of the Sector's Strategic Outcomes and Program Activity Architecture (PAA), Performance Framework and Governance Structure in compliance with TBS Management, Resources and Results Structure (MRRS) Policy; providing input into the Report on Plans and Priorities (RPP) and the Departmental Performance Report (DPR); developing, implementing and promoting exemplary management practices as defined in the Management Accountability Framework (MAF); and developing the Sector's Corporate Risk Profile (CRP) to identify Strategic Risks to the successful achievement of the Strategic Outcomes and Program Activities as defined in the PAA and ensuring that the Department has appropriate mitigation strategies and practices in place to successfully achieve its outcomes.

The DG provides a corporate focus, in collaboration with the Regions and other corporate sectors of the department, to foster Sector-wide, integrated planning approaches that connect planning activities and processes with DFO and GoC priorities. The incumbent leads the development of a risk management framework and attendant accountability structures and protocols that link the Sector's integrated corporate planning process to the strategic outcomes of the Sector and the Department and that embody a coherent risk management strategy.

The DG provides strategic leadership in the development and implementation of this risk management framework through the strategic alignment and optimal allocation of the Sector's resources in short-, medium- and long-run terms, in the formulation of effective responses to related issues in such areas as vessel acquisition, replacement, use and disposal,

and in the management of alternative agreements for asset use and disposition within departmental, governmental and policy objectives.

The DG also manages the development of approaches and processes to monitor, evaluate and report on progress in meeting strategic objectives and operational goals, and the development, implementation and reporting for program evaluations. He/she ensures the establishment of performance measurement frameworks to ensure the development of performance metrics linked to the program activity architecture and strategic review processes.

In addition, the DG is accountable 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. In this respect, he/she leads the establishment of processes to identify, analyze, assess and prioritize the issues facing the Sector, issues, as well as a planning process to address them in an orderly and systematic manner. The incumbent is responsible for developing and implementing the mechanisms that will ensure the budgeting, allocation and adjustment of human and financial resources to facilitate the implementation of the sector's innovative management regime. The DG must ensure that the program plans are consistent with the overall business and corporate plans of the Department.

Moreover, the DG is responsible for developing the analytic mechanisms and instruments to identify and address issues which cover the broad spectrum of the Department's activities. This requires the incumbent to develop and implement strategies and initiatives to advance the integration and harmonization of Sector activities in the areas of policy development, resource management, industry services, international, market analysis, and the corporate services. This involves the incumbent in issues related to product and processing technology innovation and marketing initiatives, international business development relations.

Another important role played by the DG is the provision of direction with respect to the implementation of the Federal Science and Technology Strategy for the Department. He/she directs the strategic economic and statistical analysis regarding S&T, the management of intellectual property, technology transfer and S&T commercialization approaches to meet the desired outcomes of the S&T Strategy. The incumbent also leads collaborative efforts with other SBDAs to find innovative policies, strategies and management practices. This requires the development and maintenance of external networks which include unions, academia, industry, non-governmental organizations and other levels of government. The DG provides strategic advice to sector management, senior departmental management and the Minister on the establishment of scientific collaborations, domestically and internationally to enhance the achievement of scientific knowledge and technology for Canadians.

Additionally, the DG provides direction and leadership with respect to the management of the Science Sector's outreach function to promote and publicize the work and the capabilities of the Science Sector, including the development and implementation of a Science Outreach Strategy. He/she directs the delivery of a broad range of outreach and communications activities and products, and oversees the provision of functional outreach direction to the regions. The DG establishes a managerial framework for the

internal promotion of science, and directs the development and implementation of a knowledge transfer strategy and associated work plan. He/she manages the identification of, and the development of effective responses with regard to, issues, events, initiatives, programs and policies requiring outreach support, and directs the determination and pursuit of opportunities for communicating the Sector's results to a variety of internal and external audiences. The incumbent is responsible, as well, for the coordination of the preparation and delivery of briefings on critical issues, for the development and implementation of internal communications strategies, and for the provision of advice and support to Sector management regarding outreach.

The DG is also accountable for assessing and coordinating a variety of science-oriented files and issues horizontally across the Department with both the scientific community and their clients. This involves close collaboration with the regions and departmental headquarters. This accountability also involves the incumbent in the establishment of strong linkages to the Department's policy functions as the horizontal issues that emerge often have strong policy implications.

Furthermore, the DG is responsible for the development of the science portion of various reports to central agencies and to Parliament. This impacts on the Department's scientific community and its management, on departmental clients, clients in other departments who rely on departmental scientific research, advice, and information, and on central agencies' understanding and appreciation of the Department's scientific goals and consequent resource needs. This function is critical for a mutual exchange of information and requirements, and the overall health and future direction of the Department's scientific endeavours.

The DG provides comprehensive executive services to the Sector including the coordination of Sector input to program reviews, the preparation of Memoranda to Cabinet, Treasury Board Submissions and major contract proposals. The incumbent is also responsible for ensuring that the appropriate mechanisms are in place and working efficiently and effectively for the preparation of replies to ministerial correspondence, ministerial and departmental briefing materials.

The DG advises the ADM, Science, the Deputy Minister, and when required, the Minister on matters of scientific management in the Department. The work requires the DG to develop and maintain an extensive network of senior level internal and external contacts, and foster mutually supportive and cooperative relationships. He/she represents the Department at a wide variety of interdepartmental and intergovernmental meetings with respect to modern science management principles and practices in different jurisdictions, both public and private, and with departmental clients and stakeholders with respect to how the Department manages its science programs and the support of these to the Department's decision-making process.

Dimensions:

Staff:

Salary and Operating Budget:

Specific Accountabilities:

1. Assesses the goals and directions of the Science Change Agenda and develops strategies and plans regarding organizational models, management challenges and change management, risk assessments and risk management, HR strategies and plans for the Science community, and the capacity of the organization to identify and respond to governmental and departmental priorities.
2. Leads the development of both overall and specific strategies for meeting the goals set in the *Framework for the Future*, and provides advice, proposals and action plans to the ADM, Science, the Science Management Board and DMC.
3. Assesses current departmental policies related to science management and their continuing relevance in light of the Science Change Agenda, consults with internal and external clients and stakeholders, and recommends and advises on policy changes and adjustments.
4. Develops the Department's strategic integrated science plans in line with priorities and changes to policies and programs involving the fostering and maintenance of a wide range of departmental organizations and interests, and makes authoritative recommendations to the ADM, Science, respecting acceptance of the plan.
5. Provides operational plan overviews to the various departmental regional and national scientific organizations for the development of their own specific plans, maintains a watching brief over their progress in this area, and provides assistance and advice.
6. Develops, implements, and directs comprehensive national performance indicators for the measurement of scientific progress in the Department, and directs the corporate management of a performance management program encompassing all aspects of the Department's scientific community.
7. Oversees the corporate management and resolution of a wide variety of horizontal files involving the linkages and interrelationship of scientific advice and information with the departmental decision-making and policy processes.
8. Directs the development at the corporate level of the science portion of the Department's reports to central agencies and Parliament and liaises with officials of central agencies to exchange information and represent the interests of the Department with respect to its scientific contributions and resource needs.
9. Advises the ADM, Science, the Deputy Minister, and the Minister, as required, on matters of scientific management in the Department.
10. Develops the agenda for National Science Directors Committee meetings, and provides information and advice on science management issues.
11. Plays a key role in articulating the Science Sector's vision and strategic priorities, and provides the planning direction, processes and tools required to achieve these

- strategic priorities, including the Sector's Strategic Outcomes and PAA, Performance Framework and Governance Structure, the MRRS, input to the RPP and DPR, MAF implementation, and the CRP.
12. Provides a corporate focus, in collaboration with the Regions, to foster Sector-wide, integrated planning approaches that connect planning activities and processes with DFO and GoC priorities.
 13. Leads the development of a risk management framework and attendant accountability structures and protocols that link the Sector's integrated corporate planning process to the strategic outcomes of the Sector and the Department and that embody a coherent risk management strategy.
 14. Manages the development of approaches and processes to monitor, evaluate and report on progress in meeting strategic objectives and operational goals, and the development, implementation and reporting for program evaluations.
 15. Directs 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.
 16. Leads the establishment of processes to identify, analyze, assess and prioritize the issues facing the Sector, as well as a planning process to address them in an orderly and systematic manner.
 17. Manages Science Advisory Council meetings, and provides secretariat and logistical support for their work on behalf of the ADM.
 18. Provides direction with respect to the implementation of the Federal Science and Technology Strategy for the Department, including strategic economic and statistical analysis regarding S&T, management of intellectual property, technology transfer and S&T commercialization.
 19. Provides strategic advice to sector management, senior departmental management and the Minister on the establishment of scientific collaborations, domestically and internationally to enhance the achievement of scientific knowledge and technology for Canadians.
 20. Provides high level direction and leadership with respect to the management of the Science Sector's outreach function to promote and publicize the work and the capabilities of the Science Sector.
 21. Assesses and coordinates a variety of science-oriented files and issues horizontally across the Department with both the scientific community and their clients, and manages the development of the science portion of various reports to central agencies and to Parliament.
 22. Provides comprehensive executive services to the Sector, including the coordination of Sector input to program reviews, and the coordination and preparation of Memoranda to Cabinet, Treasury Board Submissions, ministerial correspondence, ministerial and departmental briefing materials, and major contract proposals.

23. Represents the Department at a wide variety of interdepartmental, intergovernmental, and conferences and seminars as either the chair or participant on science management issues and the mandate of the Department in these areas.
24. Exercises direct management control over the subordinate organizations and sets their objectives and priorities and performance expectations, and exercises functional guidance from a corporate perspective and as part of the Department's Science change agenda over the Department's scientific community and its resources.

Certification:

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

Incumbent

Date

Signature

Manager

Date

Signature

Senior Official

Date

Signature