



## Job Specification

**Position Title:** SENIOR SCIENCE ADVISOR  
**Job Code:** AMAPCEO - Resources Plan Mgt, 20PRP  
**Job ID:** 35745

### Purpose of Position:

To identify, lead and coordinate the science needs and activities of MNR's Far North planning initiative to support land use planning and policy development for Ontario's Far North. To ensure FNPI is based on sound science and that appropriate scientific based strategies are planned and implemented. To provide scientific knowledge and expertise to any/all aspects of the FNPI and to ensure the effective integration of science and policy.

### Duties/Responsibilities:

As the science specialist for MNR's Far North planning initiative, the position will: 1) Research, analyze, identify and determine the science needs to support land use planning and policy development for the Far North. 2) Examine the existing body of science available in order to identify gaps and devise ways and means to obtain or develop, knowledge to complete the scientific foundation of the FNPI. 3) Leverage existing science, research and information collection regarding Far North boreal ecosystems, climate change, for application to the Ontario initiative, by working with other levels of government, academia and outside agencies to develop and implement strategies and processes to increase the timely capture of critical scientific data and share findings. 4) Present to the FNPI team, scientific knowledge, analyzes, findings and conclusions for consideration in the formulation and implementation of Far North plans and policy. 5) Serve on a variety of internal and external committees and working groups, both as scientific expert and to represent the FNPI/MNR position. 6) Engage and consult with and to stakeholders/partners in the process of identifying potential impacts of plans on Far North boreal ecosystems and developing strategies to address. 7) Conduct scientific studies and reviews of scientific literature, prepare position and briefing papers, including the identification of best practices and options to minimize the impact of boreal ecosystems from a scientific perspective/approach. Write scientific articles for publication in professional journals and make presentation at scientific conferences. 8) In concert with the Information management Coordinator, ensure the branch has access to a current repository of scientific knowledge and facilitate knowledge transfer. 9) Act a primary liaison with resource management program staff in own and other ministries (e.g. Environment/Energy), as well as the broader scientific community, working on researching/interested in boreal ecosystems and related projects to ensure currency of knowledge and information sharing. 10) Provide comprehensive scientific expertise and advice to the FNPI, ministry and stakeholders, ensuring complex, sophisticated data is understandable to the layperson.

### Knowledge:

Position requires advanced knowledge in one or more natural resource management disciplines (e.g. water management, fisheries management, forest management, wildlife management, parks and protected areas management; preferably with knowledge of the Far North and boreal ecosystems) in order to lead and coordinate the development, implementation and updating of a strategic plan for the incorporation of science into the FNPI's land use planning and policy development. Position requires a solid understanding of the science associated with a variety of disciplines (e.g. boreal ecosystems, fisheries, wildlife, water, forest, wetlands management), and the impacts of climate change on natural assets that comprise these disciplines. Position requires a strong working knowledge of strategic planning tools and techniques. Position requires extensive knowledge of various legislation and policies that guide natural resource management and influence decisions respecting the completion and delivery of scientific based advice; as well as knowledge of the First Nation's experience with respect to the Far North boreal ecosystems. Position requires leadership skills in a team environment, in order to design, develop, implement and/or facilitate and follow through to completion complex projects. Excellent consultation, negotiation, facilitation, consensus building, presentation and oral and written communication skills are necessary to provide advice and direction to project teams, represent the ministry on provincial and national committees and to stakeholders, make presentations to a variety of audiences, prepare scientific/technical reports and training materials and to advise and brief senior ministry management. Position requires strategic and analytical skills to contribute to and evaluate strategies, policies, plans and proposals related to the FNPI. Position requires a good understanding of MNR policy formulation and decision making systems and processes. Sound grasp of scientific computer technology applications for collection and analysis of data.

**Judgement:**

Work is performed under the general direction of the Manager, Far North Planning and in accordance with scientific principles and the mandate of the FNPI. Judgment is exercised in developing, implementing and maintaining a strategic plan for research, collection and analysis of a variety of scientific and technical information and data (e.g. re boreal ecosystems, Far North natural resources and their management) for use in land use planning and policy development activities, acting as liaison/consulting expert FNPI scientific representative with internal and external colleagues, clients, First Nations, partners, stakeholders, the scientific and academic communities to create partnerships for information sharing and knowledge transfer; providing advice and making recommendations respecting policy options association with adaptation strategies required to manage the impacts of proposed FNPI plans and policies; ensuring advice is founded on solid science and identifying gaps in science that need to be addressed prior to planning/policy decisions.

**Accountability - Programs:**

The position is accountable for ensuring that scientific information/data, knowledge, tools, services, policies, strategies and advice are consistent with GO, MNR and FNPI strategic goals and objectives as well as established scientific principles and methods; and for ensuring FNPI science needs have been considered and addressed in land use planning and policy development with respect to the Far North.

**Accountability - Impact of Errors:**

Incorrect decisions and/or recommendations may have widespread and highly visible effects on MNR/FNPI decisions, partners and stakeholders. Flawed scientific analysis of the FNPI impact on, e.g. the Far Northern boreal ecosystems could lead to decisions/actions which damage or fail to protect the natural resources of Ontario's far north.

**Contact - Internal:**

The position maintains regular contact with colleagues in programs throughout the ministry to exchange scientific information and advice. The position works closely with colleagues in other ministries, particularly MOE, MNDM, Energy and Infrastructure, Tourism, MTO and MEDT on scientific issues pertinent to the FNPI. The position provides scientific briefings and technical advice to senior management as required.

**Contact - External:**

Regular contact with senior staff in the private sector, non-government organizations, academia, provincial/territorial government agencies, federal government, the scientific community and First Nations' organizations, to exchange information and provide professional advice with respect to a variety of issues associated with science germane to the Far North.