

Marine Spatial Planner

BNOS PROFILE

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Government of Canada's
Future Skills Program

ROLE OVERVIEW

Marine Spatial Planners play a key role in guiding the sustainable use of ocean space and resources through a coordinated, strategic approach. This role involves developing and maintaining marine spatial plans that balance ecological integrity with economic and social goals. The planner works across multiple sectors to ensure that marine activities are appropriately located and timed to minimize conflict and ensure long-term sustainability.

As a central contributor to the development of a sustainable blue economy, the Marine Spatial Planner collects and analyzes ecological and spatial data, engages with stakeholders, and integrates findings into comprehensive marine plans. These plans are dynamic and regularly updated, serving as frameworks to inform decision-making across government and industry. These plans are based on the technical instrument of Marine Spatial Planning (MSP), a long-term and strategic process used to organize and manage activities that occur in the ocean. This role focuses on the marine component of spatial management while interfacing with terrestrial/land use planners, rather than performing both roles simultaneously.

EDUCATION AND EXPERIENCE

A bachelor's degree in a relevant field (e.g., urban and community planning, marine science, environmental sciences, public policy, international development) is the minimum educational requirement. Depending on the position, a master's degree may also be required. A Registered Professional Planner (RPP) designation may be beneficial. It must be noted that the Registered Professional Planner designation is terrestrial focused. The Sustainable Blue Economy Professional (SBEP) designation offered by ECO Canada recognizes the unique legal, economic and environmental expertise required for marine planning that the RPP designation does not cover.

¹Note: While NOC 21202 is the closest available classification for the Marine Spatial Planner, this SBEP specialization is critical because it defines the unique marine-specific skills and legal contexts that differentiate MSP from terrestrial urban planning.

INDEX OF POTENTIAL TITLES

- Maritime Spatial Planner
- Marine Spatial Planning Specialist
- Marine Planning Specialist
- Marine and Land Use Planner
- Strategic Planning Specialist
- Marine Impact Assessor
- Marine Assessment Impact Specialist

NATIONAL OCCUPATIONAL CLASSIFICATION

21202 – Urban and land use planners¹

STRATA LEVEL

3B – Technical Specialist

RELATED CAREER PROFILE(S)

[Climate Change Planner](#)

[Environmental Planner](#)

[Land Use Planner](#)



TECHNICAL COMPETENCIES

MARINE GEOSPATIAL DATA ANALYSIS

Applied recognized tools and techniques to interpret and analyze data for the purposes of understanding trends, issues and opportunities to enable evidence-based marine planning practices.

- Designs data analysis studies to collect, compile, and analyze data to determine impacts of planning initiatives and activities.
- Integrates diverse spatial and non-spatial datasets (eg. Ecological, oceanographic, socio-economic, vessel traffic) using GIS and data-fitting techniques to model and visualize ocean-use scenarios.
- Prepares technical and research reports on observations, data, and impacts to inform strategic planning within the planning area.
- Assesses and evaluates data to generate insights that enable evidence-based decision-making processes.
- Seeks feedback from subject matter experts, Indigenous knowledge keepers, and/or technical specialists to confirm that data analysis outputs and reporting adequately address project objectives.

PLANNING PROCESS DESIGN & MANAGEMENT

Designs and facilitates the marine spatial planning process, including defining governance structures, timelines, and participatory mechanisms to advance participatory and transparent ocean planning practices.

- Participates in project strategy sessions and stakeholder consultations to guide the development initiatives that further planning processes and objectives.
- Leverages existing initiatives to inform the development of marine management programs and promote continuity across diverse activities.
- Defines scope, strategy, and objectives for the technical aspects of projects and programs to establish clear parameters and outcomes of spatial planning.
- Identifies new program ideas, partnerships, and frameworks to further community engagement in local planning initiatives.

PROJECT PLANNING AND INTEGRATION

Develops comprehensive plans to guide the execution, monitoring, and integration of area management with multi-sectoral activities and existing planning processes, ensuring alignment with project objectives.

- Applies marine spatial planning frameworks to assign roles, responsibilities, and timelines that guide the effective execution and monitoring of planning initiatives.
- Integrates area management strategies with ongoing planning processes to ensure continuity, regulatory compliance, and optimal use of resources across multiple sectors.
- Develops and maintains project documentation, including proposals, charters, and schedules, to coordinate implementation activities and ensure timely delivery of project milestones.
- Conducts regular updates of marine management plans to reflect evolving objectives and maintain the relevance and effectiveness of planning efforts.



TECHNICAL COMPETENCIES

CONFLICT RESOLUTIONS MANAGEMENT

Develops and maintains working relationships with all necessary stakeholders, while navigating and mediating conflict between ocean users, to integrate knowledge, align initiatives, and maximize participation in support marine spatial planning processes.

- Facilitates consensus building and mediates potential conflicts between competing ocean users and stakeholder interests.
- Designs and implements stakeholder engagement plans to secure buy-in and sustain momentum for marine spatial planning initiatives.
- Engages with governmental and non-governmental agencies to align initiatives and promote collaboration.
- Coordinates advisory groups and solicits input from diverse partners to ensure integrated, evidence-based marine spatial planning decisions.
- Prepares planning updates and briefing materials to inform stakeholder engagement approaches and support decision-making.
- Implements best practices for engagement to maximize participation and remove barriers in marine planning processes.
- Designs and implements planning processes that respect indigenous rights, treaties, and governance structures, facilitating co-development of marine plans in partnership with indigenous governments and communities.



COLLABORATION

Engages in professional collaborative efforts with internal and external actors, including sharing information and expertise, utilizing input from others, and recognizing others' contributions to work towards a common goal.

- Works with project teams and leadership to establish priorities and align initiatives with broader strategies that enable smooth implementation.
- Coordinates joint planning, research, and decision-making activities to leverage diverse perspectives with the purpose of improving the quality and impact of planning processes.
- Obtains both internal and external input into marine planning initiatives on an ongoing basis to foster open dialogue and support strategic decision-making.
- Works cooperatively with multiple stakeholders to foster open dialogue, demonstrating a willingness to consider all input into marine planning activities.
- Collaborates with colleagues across the organization to share knowledge and support departmental objectives to achieve integrated outcomes.

COMMUNICATION

Positively directs outcomes by delivering communication that results in a better understanding of goals and objectives and that capture interest, and gain support for immediate action.

- Communicates clearly in both oral and written formats to share information with diverse audiences to strengthen understanding, trust, and collaboration.
- Prepares and delivers strategic communications materials such as speaking notes, presentations, reports, and briefings to deliver impactful messaging to stakeholders.
- Collaborates with communications teams and subject matter experts to align content and maintain consistency in internal and external messaging.
- Demonstrates diplomacy in all communications to manage sensitive or confidential matters, maintaining professionalism and protecting organizational integrity.
- Shares planning priorities with leadership based on stakeholder input and accompanying research to support informed decision-making.

PROBLEM SOLVING

Identifies problems and potential trade-offs and uses logic, judgement, and evidence to evaluate alternative scenarios and recommend solutions to achieve a desired goal.

- Develops and applies spatial and non-spatial methods to explicitly communicate the socio-economic and ecological trade-offs of alternative planning scenarios.
- Assesses multiple pathways to compare the risks and benefits of various approaches, selecting the most effective solution.
- Integrates diverse and sometimes incomplete information to construct well-reasoned and comprehensive solutions as a means of addressing challenges.
- Simplifies complex technical or policy concepts to facilitate shared understanding and informed decision-making across a range of audiences.
- Evaluates competing priorities and resource constraints to effectively balance overlapping projects and deliver high-quality outcomes.
- Analyzes feedback and lessons learned from past initiatives to evaluate outcomes and refine future strategies for the purpose of fostering continuous improvement and adaptive planning.



ENVIRONMENTAL POLICY EVALUATION

Evaluates the role of existing environmental and ocean policies to inform sustainable practices and support adaptive policy development.

- Analyzes relevant proposals, legislation, and policies to ensure that initiatives align with organizational and regional needs.
- Integrates research on best practices with stakeholder input to assess the effectiveness of current policies and identify areas for improvement or reform.
- Monitors emerging policy developments to assess implications for ongoing projects to ensure alignment with broader mandates and priorities.
- Evaluates potential social, economic, and environmental impacts of various activities to develop context-based recommendations for regional planning and policy development.

REGULATORY COMPLIANCE

Adheres to specific regulations governing fisheries and oceans in Canada including the Oceans Act and the Fisheries Act, codes, and legislation within a defined jurisdiction to ensure the health and safety of others.

- Interprets and applies Canada's Oceans Act and other key federal/provincial legislation (eg. Fisheries Act, Canada Shipping Act, Species at Risk Act, etc) as the primary legal basis for developing compliant marine spatial plans. Analyzes applicable regulations and technical standards to ensure all project activities, documentation, and reporting are in full compliance with regulatory requirements.
- Provides oversight into marine habitat management activities to ensure monitoring is carried out in accordance with relevant environmental legislation.
- Consults with government agencies and regulatory bodies to secure necessary permits and enable lawful project implementation.
- Inform stakeholders of regulatory updates and best practices to ensure planning decisions are based on accurate, timely information.
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SITE ASSESSMENT

Analyses an area's marine ecosystem to understand the impacts of human activity to assist in determining appropriate use cases for an area's development and management.

- Conducts environmental, ecological, and socio-economic research and analysis to evaluate site conditions and inform sustainable marine planning decisions.
- Collaborates with technical, scientific, and Indigenous knowledge keepers to confirm site assessment roles and ensure culturally and evidence-informed spatial planning.
- Develops and uses geospatial tools and data systems to assess marine ecosystems and analyze human impacts to support decisions on appropriate site use and management.
- Integrates technical findings into reports, spatial diagrams, and planning materials to support marine and land management strategies and decision-making.
- Ability to apply skills in Geographic Information System (GIS) tools and marine data analysis methods to conduct studies, research, and insights on marine spatial plans.

ENVIRONMENTAL MONITORING

Monitors and reports on the changes to the environmental conditions of an area to determine the impacts of planned and ongoing projects.

- Oversees data collection and analysis to monitor site conditions and ecosystem characteristics to understand the impact of land and marine use decisions.
- Organizes, maintains, and analyzes environmental datasets to support long-term trend analysis and environmental reporting.
- Develops environmental monitoring reports to document findings and inform evidence-based, adaptive decision-making.
- Supports data governance and quality assurance activities to ensure reliability and transparency of environmental monitoring systems.
- Utilizes Geographic Information Systems (GIS) and methods to visualize observations and trends in marine space to manage ocean ecological integrity.