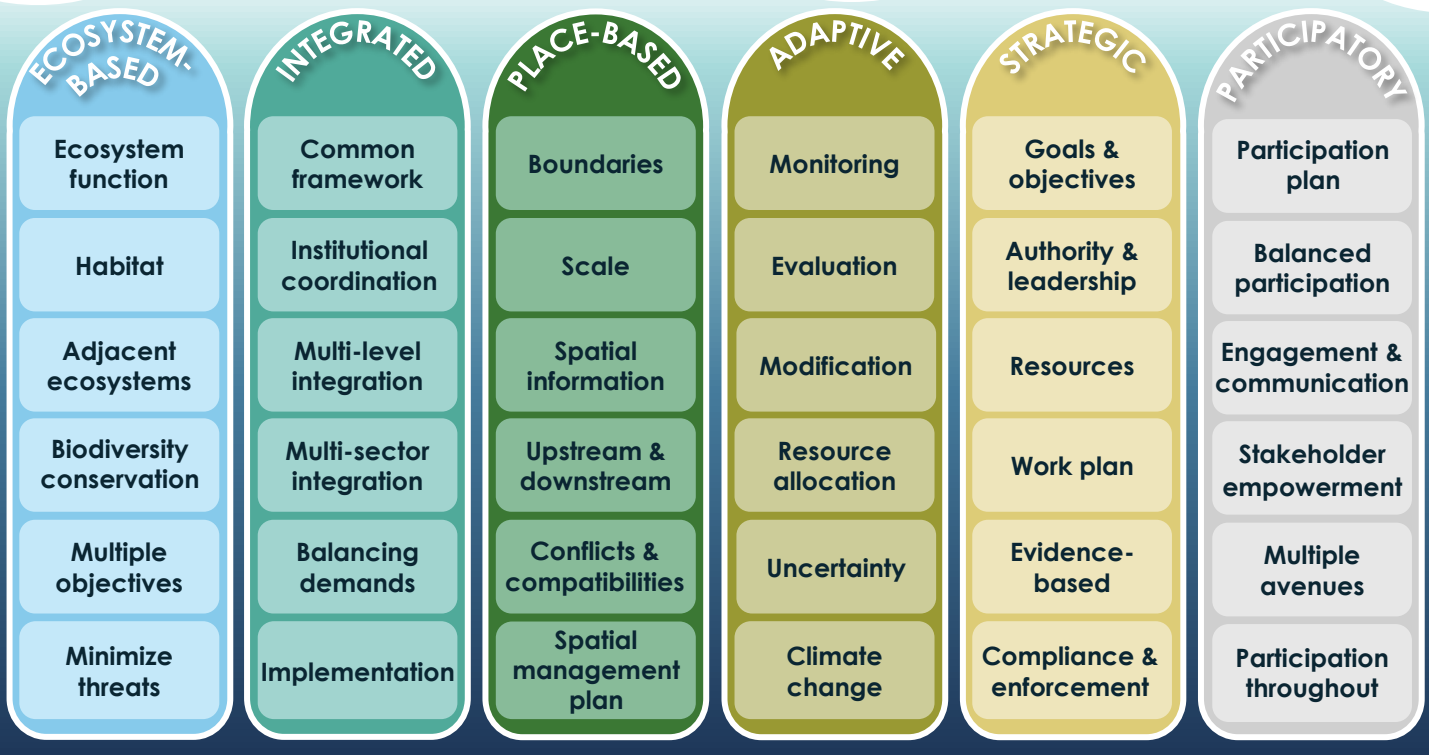
A tool to guide and assess marine spatial planning

The MSP Index is a flexible tool for assessing progress in MSP processes based on foundational MSP principles, including:

- **Ecosystem-based** – balancing ecological, economic, and social goals and objectives for sustainable development
- **Integrated** – coordinated across sectors and agencies, and among levels of government
- **Place-based** – rooted in spatial context, employing spatial and non-spatial management tools
- **Adaptive** – capable of learning and changing based on experience
- **Strategic** – focused on MSP in the long-term and achieving desired outcomes
- **Participatory** – stakeholders and rightsholder are actively involved in the process

The MSP Index assesses six features based on MSP best practices under each of these principles using a 0-to-3-point scoring guide. To achieve the maximum feature score (excellent), all components of the criteria statement must be present in an MSP initiative. An example of the MSP Index applied to two initiatives is provided on page 14. Terms underlined in criteria statements are defined in the Glossary at the end of this scoring guide.

More information on the MSP Index can be found at **www.mspindex.ca** and Reimer, J.M. et al. (2023). The MSP Index: A tool to guide and assess marine spatial planning. *npj Ocean Sustainability*, 2. **https://doi.org/10.1038/s44183-023-00022-w**



	Absent (0)	Minimal (1)	Good (2)	Excellent (3)
ECOSYSTEM FUNCTION	No recognized need for policies and/or management measures to maintain or restore ecological structure and function.	Recognized need for policies and/or management measures to maintain or restore ecological structure and function, possibly including biotic and abiotic ecosystem components, disturbance regimes, trophic interactions, and/or meta-population and/or community dynamics.	Policies and/or management measures identified to maintain or restore ecological structure and function, including biotic and abiotic ecosystem components, disturbance regimes, trophic interactions, and/or meta-population and community dynamics.	Policies and/or management measures implemented to maintain or restore ecological structure and function, including biotic and abiotic ecosystem components, disturbance regimes, trophic interactions, and meta-population and community dynamics.
HABITAT	No recognized need for policies and/or management measures to maintain or restore habitat.	Recognized need for policies and/or management measures to maintain or restore habitat quantity, quality, and/or diversity, possibly including habitat important for ecological processes, ecologically valuable species, and/or life history stages, habitat spatial arrangement, and/or relationships between habitat	Policies and/or management measures identified to maintain or restore habitat quantity, quality, and/or diversity, including habitat important for ecological processes, ecologically valuable species, and/or life history stages, habitat spatial arrangement, and/or relationships between habitats.	Policies and/or management measures implemented to maintain or restore habitat quantity, quality, and diversity, including habitat important for ecological processes, ecologically valuable species, and life history stages, habitat spatial arrangement, and relationships between habitats.
ADJACENT ECOSYSTEMS	No recognized need for policies and/or management measures to improve connections between ecosystems within the planning area and to the wider land-sea environments.	Recognized need for policies and/or management measures to maintain or improve connections between ecosystems within the planning area and to the wider land-sea environments, considering geomorphology, biogeography, and/or oceanography affecting the planning area.	Policies and/or management measures identified to maintain or improve connections between ecosystems within the planning area and to the wider land-sea environments, considering geomorphology, biogeography, and/or oceanography affecting the planning area.	Policies and/or management measures implemented to maintain or improve connections between ecosystems within the planning area and to the wider land-sea environments, considering geomorphology, biogeography, and/or oceanography affecting the planning area.

ECOSYSTEM-BASED

MSP INDEX

	Absent (0)	Minimal (1)	Good (2)	Excellent (3)
BIODIVERSITY CONSERVATION	No recognized need for policies and/or management measures to maintain or restore biodiversity.	Recognized need for policies and/or management measures to maintain or restore biodiversity, including native, threatened or endangered, and/or key species, their habitats, and/or ecological processes essential to biodiversity.	Policies and/or management measures identified to maintain or restore biodiversity, including native, threatened or endangered, and/or key species, their habitats, and/or ecological processes essential to biodiversity.	Policies and/or management measures implemented to maintain or restore biodiversity, including native, threatened or endangered, and key species, their habitats, and ecological processes essential to biodiversity.
MULTIPLE OBJECTIVES	No recognized need for policies and/or management measures to balance conservation and sustainable use of biodiversity.	Recognized need for policies and/or management measures to secure the delivery of multiple ecosystem services, including tangible and/or intangible services, to balance conservation and sustainable use of biodiversity.	Policies and/or management measures identified to secure the long-term delivery of multiple ecosystem services, possibly including tangible and intangible services, to balance conservation and sustainable use of biodiversity. Ecosystem services within the marine area will be identified and will inform management priorities.	Policies and/or management measures implemented to secure the long-term delivery of multiple ecosystem services, including tangible and intangible services, to balance conservation and sustainable use of biodiversity. Ecosystem services within the marine area are identified and inform management priorities.
MINIMIZE THREATS	No recognized need for policies and/or management measures to eliminate or minimize threats to species and ecosystems from human activities.	Recognized need for policies and/or management measures to eliminate or minimize threats to species and ecosystems from human activities, including identifying threats, managing ecosystems within their limits, spreading risk across the planning area, and/or addressing cumulative impacts.	Policies and/or management measures identified to eliminate or minimize threats to species and ecosystems from human activities, including identifying threats, managing ecosystems within their limits and defining those limits, spreading risk across the planning area, and/or addressing cumulative impacts.	Policies and/or management measures implemented to eliminate or minimize threats to species and ecosystems from human activities, including identifying threats, managing ecosystems within their limits, spreading risk across the planning area, and addressing cumulative impacts.

ECOSYSTEM-BASED

MSP INDEX

INTEGRATED

	Absent (0)	Minimal (1)	Good (2)	Excellent (3)
COMMON FRAMEWORK	No recognized need to establish a common framework for integration.	Recognized need to establish a common framework that integrates within and between rightsholders, stakeholders, governance, policy, legislation, and/or management.	Clear commitment to establishing a common framework that integrates within and between rightsholders, stakeholders, governance, policy, legislation, and management. The framework may clarify how integration addresses gaps in management.	A common framework that integrates within and between rightsholders, stakeholders, governance, policy, legislation, and existing management exists. The framework clarifies how integration addresses gaps in management.
INSTITUTIONAL COORDINATION	No recognized need for mechanisms to support institutional coordination.	Recognized need for mechanisms to support institutional coordination, possibly including defining and assigning responsibility for MSP tasks and their integration, coordination of institutional programs and/or policies within and affecting the planning area, and/or commitments across institutions for implementing integrated management plans.	Mechanisms identified to support institutional coordination, including defining and assigning responsibility for MSP tasks and their integration, coordination of institutional programs and/or policies within and affecting the planning area, and/or commitments across institutions for implementing integrated management plans.	Mechanisms implemented to support institutional coordination, including defining and assigning responsibility for MSP tasks and their integration, coordination of institutional programs and policies within and affecting the planning area, and commitments across institutions for implementing integrated management plans.
MULTI-LEVEL INTEGRATION	No recognized need for mechanisms for implementing vertical and horizontal integration of new or existing governance and/or management systems.	Recognized need for mechanisms for implementing vertical and/or horizontal integration of new and/or existing governance and/or management systems, possibly including integration of different knowledges.	Mechanisms identified for vertical and horizontal integration of new and existing governance and/or management systems, possibly including integration of different knowledges, toward whole system management in addition to individual sub-systems.	Mechanisms implemented for vertical and horizontal integration of new and existing governance and/or management systems, including integration of different knowledges, supporting whole system management in addition to individual sub-systems.

	Absent (0)	Minimal (1)	Good (2)	Excellent (3)
MULTI-SECTOR INTEGRATION	No recognized need to establish an integrated management plan across sectors.	Recognized need to establish an integrated management plan across sectors within and/or affecting the planning area that may include management measures, plans, and policies and/or communicate the expectation for integration.	Clear commitment to establishing an integrated management plan across sectors within and affecting the planning area that will include management measures, plans, and policies and communicate the expectation for integration.	An integrated management plan across sectors within and affecting the planning area is demonstrated and includes their management measures, plans, and policies and communicates the expectation for integration.
BALANCING DEMANDS	No recognized need for mechanisms to ensure demands for development and protection are balanced within the planning area.	Recognized need for mechanisms to balance demands for development and protection within the planning area, possibly including evaluating trade-offs among ecological, social, cultural, and economic objectives and activities, considering cumulative impacts of multiple activities, and/or fostering economic diversification in marine sectors.	Mechanisms identified to balance demands for development and protection within the planning area, including evaluating trade-offs among ecological, social, cultural, and economic objectives and activities at temporal, spatial, and/or governance scales, considering cumulative impacts of multiple activities, and/or fostering economic diversification in marine sectors.	Mechanisms implemented to balance demands for development and protection within the planning area, including evaluating trade-offs among ecological, social, cultural, and economic objectives and activities at temporal, spatial, and governance scales, considering cumulative impacts of multiple activities, and fostering economic diversification in marine sectors.
IMPLEMENTATION	No recognized need for mechanisms for adopting and implementing integrated management plans.	Recognized need for mechanisms for adopting and implementing integrated management plans and/or resources to support implementation of integrated management plans.	Mechanisms identified for adopting and implementing integrated management plans and/or resources are identified to support the increased costs (e.g., time, money, skills) of capacity, leadership, and tools for integration.	Mechanisms demonstrated for adopting and implementing integrated management plans and resources are available to support the increased costs (e.g., time, money, skills) of capacity, leadership, and tools for integration.

INTEGRATED

MSP INDEX

	Absent (0)	Minimal (1)	Good (2)	Excellent (3)
BOUNDARIES	No recognized need to establish boundaries.	Recognized need to establish boundaries for the planning area, possibly prior to initiating MSP, including geographical, administrative, and/or analytical boundaries at local, national, and transnational scales as needed.	Clear commitment to establishing boundaries for the planning area prior to initiating MSP, including geographical, administrative, and/or analytical boundaries at local, national, and transnational scales as needed.	Boundaries are demonstrated for the planning area prior to initiating MSP, including geographical, administrative, and analytical, boundaries at local, national, and transnational scales as needed.
SCALE	No recognized need to ensure MSP occurs at sufficient temporal and spatial scales.	Recognized need to ensure that MSP occurs at temporal and spatial scales sufficient to capture interactions between social, ecological, and/or oceanographic components of the planning area to support long-term objectives and/or goals.	Clear commitment to ensuring that MSP occurs at temporal and spatial scales sufficient to capture interactions between social, ecological, and oceanographic components of the planning area to support long-term objectives and/or goals.	MSP is demonstrated to occur at temporal and spatial scales sufficient to capture interactions between social, ecological, and oceanographic components of the planning area to support long-term objectives and goals.
SPATIAL INFORMATION	No recognized need to develop an inventory of spatial data.	Recognized need to develop an inventory of spatial data, including current and/or future trends in ecological, oceanographic, and human activity data derived from multiple sources.	Clear commitment to developing an inventory of spatial data, including current and future trends in ecological, oceanographic, and human activity data derived from scientific literature, expert opinion, government sources, local and/or traditional knowledge, and/or direct measurements.	An inventory of spatial data is demonstrated, including current and future trends in ecological, oceanographic, and human activity data derived from scientific literature, expert opinion, government sources, local and traditional knowledge, and/or direct measurements.

PLACE-BASED

MSP INDEX

	Absent (0)	Minimal (1)	Good (2)	Excellent (3)
UPSTREAM & DOWNSTREAM	No recognition of upstream (i.e., affecting the planning area) and/or downstream (i.e., affected by the planning area) human activities and pressures.	MSP generally recognizes upstream (i.e., affecting the planning area) and/or downstream (i.e., affected by the planning area) human activities and pressures.	MSP identifies specific upstream (i.e., affecting the planning area) and/or downstream (i.e., affected by the planning area) human activities and pressures.	MSP demonstrably incorporates specific upstream (i.e., affecting the planning area) and downstream (i.e., affected by the planning area) human activities and pressures in the spatial management plan.
CONFLICTS & COMPATIBILITIES	No recognized need to analyze spatial and temporal distributions and density of human activities to assess conflicts and compatibilities.	Recognized need to analyze spatial and temporal distributions and density of human activities to assess conflicts and compatibilities among existing uses, existing uses and the environment, and/or existing and future uses to inform the spatial management plan.	Clear commitment to analyzing spatial and temporal distributions and density of human activities to assess conflicts and compatibilities among existing uses, existing uses and the environment, and existing and future uses, possibly including a priori allocation of areas to future uses, to inform the spatial management plan.	Spatial and temporal distributions and density of human activities are demonstrably analyzed to assess conflicts and compatibilities among existing uses, existing uses and the environment, and existing and future uses, possibly including a priori allocation of areas to future uses, to inform the spatial management plan.
SPATIAL MANAGEMENT PLAN	No recognized need to develop a preferred spatial management plan.	Recognized need to develop a spatial management plan, identifying when, where, and how the goals and objectives of MSP will be met, that may be formally adopted. The plan may identify boundaries, funding, institutional arrangements, rules, incentives and disincentives, and/or management measures.	Clear commitment to developing a preferred spatial management plan, possibly from alternative scenarios, identifying when, where, and how the goals and objectives of MSP will be met, and possibly adopted through a formal process. The plan will identify boundaries, funding, institutional arrangements, rules, incentives and disincentives, and/or management measures.	A preferred spatial management plan is demonstrated, developed from alternative scenarios, identifying when, where, and how the goals and objectives of MSP will be met, and is adopted through a formal process. The plan identifies boundaries, funding, institutional arrangements, rules, incentives and disincentives, and management measures.

PLACE-BASED

MSP INDEX

	Absent (0)	Minimal (1)	Good (2)	Excellent (3)
MONITORING	No recognized need to monitor for management outcomes.	Recognized need to monitor, possibly through routine or systematic processes, for management outcomes. A baseline description of the initial state of the system may not exist and performance indicators may not be identified.	Clear commitments and/or one-time investments are made to allow routine and/or systematic monitoring for management outcomes, compared against a baseline description of the initial state of the system using qualitative and/or quantitative performance indicators.	Reliable investments are demonstrated to allow routine and systematic monitoring for management outcomes, compared against a baseline description of the initial state of the system using qualitative and/or quantitative performance indicators.
EVAULATION	No recognized need to establish an evaluation plan.	Recognized need to establish an evaluation plan for assessing efficacy and/or ability to achieve MSP objectives, possibly including procedures for regular analysis and interpretation of monitoring data to inform adaptation needs and/or for open and accessible reporting of evaluation findings.	Clear commitment to establishing an evaluation plan for assessing efficacy and ability to achieve MSP objectives, possibly measured against predetermined criteria, including procedures for regular analysis and interpretation of monitoring data to inform adaptation needs and/or for open and accessible reporting of evaluation findings.	An evaluation plan is demonstrated to assess efficacy and ability to achieve MSP objectives, measured against predetermined criteria, including procedures for regular analysis and interpretation of monitoring data to inform adaptation needs and for open and accessible reporting of evaluation findings.
MODIFICATION	No recognized need for mechanisms for modifying MSP goals, objectives, and/or management measures.	Recognized need for mechanisms for modifying MSP goals, objectives, and/or management measures based on monitoring and evaluation, MSP may be flexible enough to be modified in response to a changing ecosystem and/or governance conditions in the short- and/or long-term.	Mechanisms identified for modifying MSP goals, objectives, and/or management measures based on monitoring and evaluation. MSP and/or the spatial management plan are flexible enough to be modified in response to changing ecosystems and/or governance conditions in the short- and long-term.	Mechanisms demonstrated for modification of MSP goals, objectives, and/or management measures based on monitoring and evaluation. MSP and the spatial management plan are flexible enough to be modified in response to changing ecosystems and governance conditions in the short- and long-term.

ADAPTIVE

MSP INDEX

	Absent (0)	Minimal (1)	Good (2)	Excellent (3)
RESOURCE ALLOCATION	No recognized need for resource reallocation to enable adaptation.	Recognized need for resource reallocation to enable adaptation.	Mechanisms identified to enable resource reallocation away from ineffective management actions, possibly based on monitoring and evaluation, to alternatives and/or to assess lower cost management alternatives for adaptation.	Mechanisms demonstrated to enable resource reallocation away from ineffective management actions, based on monitoring and evaluation, to alternatives and to assess lower cost management alternatives for adaptation.
UNCERTAINTY	No recognized need for mechanisms to make decisions under uncertainty.	Recognized need for mechanisms to make decisions under uncertainty related to the environmental and/or socio-economic contexts of MSP, possibly including use of the precautionary approach and/or identifying missing information and/or applied research needs to reduce uncertainty for future iterations of MSP.	Mechanisms identified to make decisions under uncertainty related to the environmental and socio-economic contexts of MSP, possibly including use of the precautionary approach to overcome uncertainty and/or identifying missing information and applied research needs to reduce uncertainty for future iterations of MSP.	Mechanisms demonstrated to make decisions under uncertainty related to the environmental and socio-economic contexts of MSP, including use of the precautionary approach to overcome uncertainty and identifying missing information and applied research needs to reduce uncertainty for future iterations of MSP.
CLIMATE CHANGE	No recognized need for mechanisms to incorporate climate change in MSP.	Recognized need for mechanisms for incorporating climate change in MSP, possibly including recognition of climate change in MSP objectives, plans, and/or policies, climate-related risks, use of climate change scenarios to anticipate changes over time and space, and/or use of dynamic management.	Mechanisms identified for incorporating climate change in MSP, including recognition of climate change in MSP objectives, plans, and/or policies, climate-related risks, use of climate change scenarios to anticipate conflicts and changes in ecosystems, ecosystem services, and human activities over time and space, and/or use of dynamic management.	Mechanisms demonstrated for incorporating climate change in MSP, including recognition of climate change in MSP objectives, plans, and policies, analysis of climate-related risks, use of climate change scenarios to anticipate conflicts and changes in ecosystems, ecosystem services, and human activities over time and space, and possibly use of dynamic management.

ADAPTIVE

	Absent (0)	Minimal (1)	Good (2)	Excellent (3)
VISION, GOALS, & OBJECTIVES	No recognized need to establish goals, objectives, and guiding principles at the onset of MSP.	Recognized need to establish a vision, goals, SMART objectives, and guiding principles for MSP at the onset of MSP that are supported by decision-makers and stakeholders.	A clear commitment to establishing a vision, goals, SMART objectives, and guiding principles for MSP at the onset of MSP that are supported by decision-makers and stakeholders.	A vision, goals, SMART objectives, and enforceable guiding principles for MSP are demonstrated, established at the onset of MSP and supported by decision-makers and stakeholders. This may include a list of specific problems to be solved by MSP.
AUTHORITY & LEADERSHIP	No recognized need to establish authorities or MSP team to lead MSP.	Recognized need to establish authorities, political champions, a coordinating agency, and/or MSP team to lead MSP and/or the implementation of the spatial management plan.	Clear commitment to establishing authorities, political champions, a coordinating agency, and/or MSP team to lead MSP and the implementation of the spatial management plan, possibly prior to beginning MSP.	Authorities, political champions, a coordinating agency, and MSP team are established to lead MSP and the implementation of the spatial management plan, possibly prior to beginning MSP.
RESOURCES	No recognized need for mechanisms to ensure sustainable human, technical, and/or financial resources are available to develop and implement the current and/or future iterations of MSP.	Recognized need for mechanisms to ensure sustainable human, technical, and/or financial resources are available to develop and implement the current and/or future iterations of MSP.	Mechanisms identified to ensure sustainable human, technical, and/or financial resources are available to develop and implement the current and/or future iterations of MSP over the long-term, possibly including a financial plan for MSP costs, means to multiple and alternative financial resources, and/or identification of appropriately skilled staff.	Mechanisms are implemented to ensure sustainable human, technical, and financial resources are available to develop and implement the current and future iterations of MSP over the long-term, including a financial plan for MSP costs, means to multiple and alternative financial resources, and identification of appropriately skilled staff.

STRATEGIC

	Absent (0)	Minimal (1)	Good (2)	Excellent (3)
WORK PLAN	No recognized need to establish a work plan.	Recognized need to establish a work plan that identifies key work products and their interdependencies, assigns responsibility for outputs, identifies resources required to deliver outputs, sets a timeframe for initiating, completing, and revising MSP, and/or identifies potential risks in MSP and contingency measures.	Clear commitment to establishing a work plan that identifies key work products and their interdependencies, assigns responsibility for outputs, identifies resources for outputs, sets an iterative timeframe for initiating, completing, and revising MSP, and/or identifies potential risks and contingency measures or a work plan exists containing some requirements.	A work plan is demonstrated that identifies key work products and their interdependencies, assigns responsibility for outputs, identifies resources required to deliver outputs, sets an iterative timeframe for initiating, completing, and revising MSP, and identifies potential risks in MSP and contingency measures.
EVIDENCE-BASED	No clear intention to be evidence-based.	Clear intention to be evidence-based, using the best available natural and/or social science and/or different types of information relevant to the planning area.	Clear commitment to being evidence-based, possibly informed by a science advisory body or similar, using the best available natural and social science and/or different types of information relevant to the planning area and/or external environment	MSP is demonstrably evidence-based, informed by a science advisory body or similar, using the best available natural and social science and different types of information (e.g., scientific, Indigenous and local knowledge, and knowledge innovations and practices) relevant to the planning area and external environment.
COMPLIANCE & ENFORCEMENT	No recognized need to establish a plan and/or strategies for enforcement and compliance.	Recognized need to establish a plan and/or strategies that define authority and measures for enforcing the spatial management plan and achieving high compliance. Compliance may be defined, including which activities are subject to requirements of the spatial management plan and/or responses to non-compliance.	Clear commitment to establishing a plan and/or strategies that define authority and measures for enforcing the spatial management plan and achieving high compliance. Compliance is clearly defined, including which activities are subject to requirements of the spatial management plan and responses to non-compliance.	A plan and/or strategies are demonstrated that define authority and measures for enforcing the spatial management plan and achieving high compliance. Compliance is clearly defined, including which activities are subject to requirements of the spatial management plan and responses to non-compliance.

STRATEGIC

MSP INDEX

	Absent (0)	Minimal (1)	Good (2)	Excellent (3)
PARTICIPATION PLAN	No recognized need to establish a participation plan.	Recognized need to establish a participation plan that may indicate who, when, and how to involve stakeholders and rightsholders, that may be developed prior to beginning MSP, and/or may define the functions and objectives of participation, MSP authorities and participants, and/or the entitlement to participate.	Clear commitment to establishing a participation plan indicating who, when, and how to involve stakeholders and rightsholders, developed prior to beginning MSP, and/or will define the functions and objectives of participation, MSP authorities and participants, and the entitlement to participate.	A participation plan is demonstrated that indicates who, when, and how to involve stakeholders and rightsholders, was developed prior to beginning MSP, and defines the functions and objectives of participation, MSP authorities and participants, and the entitlement to participate, which may evolve over time as needed.
BALANCED PARTICIPATION	No recognition of a need for mechanisms to ensure that a final group of stakeholders and rightsholders is balanced and/or to anticipate and resolve conflicts.	Recognized need for mechanisms to ensure that the group of stakeholders and rightsholders is balanced, representing diverse interests, possibly with equal powers in advising and decision-making, and/or to anticipate and/or resolve conflicts, possibly in a transparent and equitable manner.	Mechanisms identified to ensure that the group of stakeholders and rightsholders is balanced, representing diverse interests, possibly with equal powers in advising and decision-making, and to anticipate and/or resolve conflicts in a transparent and equitable manner.	Mechanisms implemented to ensure that the group of stakeholders and rightsholders is balanced, representing diverse interests, with equal powers in advising and decision-making, and to anticipate and resolve conflicts in a transparent and equitable manner.
ENGAGEMENT COMMUNICATION	No recognized need for mechanisms to effectively engage and communicate with participants.	Recognized need for mechanisms to effectively engage and communicate with participants, including timely reporting and frequent contact, targeted and/or accessible communication, communication of evaluation and adaptation, designation of a lead communicator, and/or identification of resources.	Mechanisms implemented to effectively engage and communicate with participants, including timely reporting and frequent contact, targeted and accessible communication in multiple formats, communication of evaluation and adaptation processes, designation of a lead communicator, and identification of resources.	Mechanisms implemented to effectively engage and communicate with participants, including timely reporting and frequent contact, targeted and accessible communication in multiple formats, communication of evaluation and adaptation processes, designation of a lead communicator, and identification of resources.

PARTICIPATORY

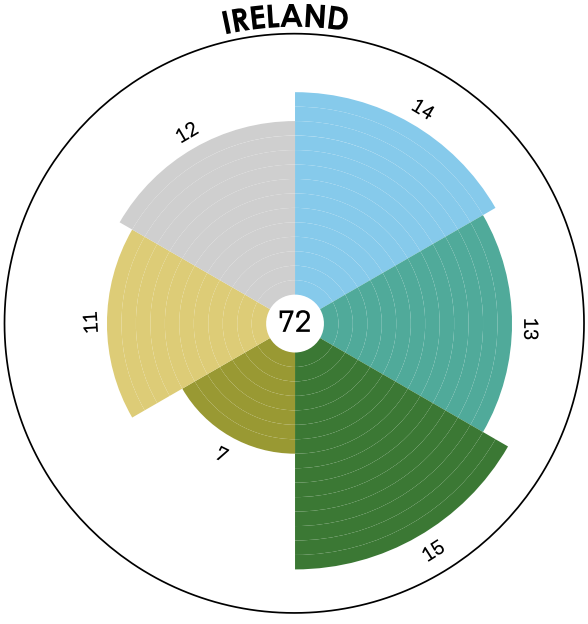
MSP INDEX

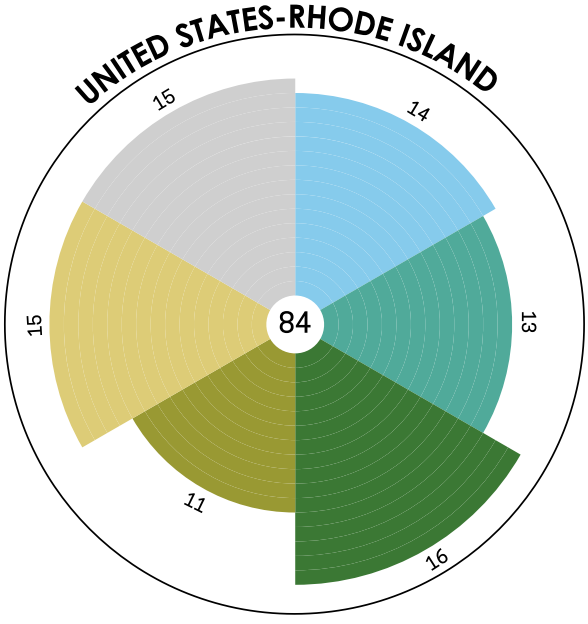
	Absent (0)	Minimal (1)	Good (2)	Excellent (3)
STAKEHOLDER EMPOWERMENT	No recognized need for ensuring stakeholders have the means, skills, and knowledge to participate in MSP.	Recognized need for mechanisms to ensure stakeholders have the means, skills, and knowledge to participate with a shared sense of purpose, values, and/or rules, including policies and/or protocols for promoting trust among stakeholders and in the process.	Mechanisms identified to ensure stakeholders have the means, skills, and knowledge to participate with a shared sense of purpose, values, and/or rules, including policies and/or protocols for promoting trust among stakeholders and in the process, and/or decentralizing management to the lowest level and/or enabling participation in governance.	Mechanisms implemented to ensure stakeholders have the means, skills, and knowledge to participate with a shared sense of purpose, values, and rules, including policies and/or protocols for promoting trust among stakeholders and in the process, and/or decentralizing management to the lowest level and/or enabling participation in governance.
MULTIPLE AVENUES	No recognized need for mechanisms ensuring stakeholders have multiple avenues for both vertical and horizontal participation.	Recognized need for mechanisms ensuring stakeholders have multiple avenues for both vertical (e.g., formal communications, consultation) and horizontal (e.g., dialogue, negotiation) participation.	Mechanisms identified to ensure stakeholders have multiple avenues for both vertical (e.g., formal communications, consultation) and horizontal (e.g., dialogue, negotiation) participation, possibly simultaneously.	Mechanisms exist to ensure stakeholders have multiple avenues for both vertical (e.g., formal communications, consultation) and horizontal (e.g., dialogue, negotiation) participation simultaneously.
PARTICIPATION THROUGHOUT	No recognized need for mechanisms to ensure participation occurs throughout MSP.	Recognized need for mechanisms to ensure participation occurs throughout MSP, including regular meetings defined for stakeholder involvement and/or opportunity to engage in aspects of decision-making, setting objectives, developing alternatives, and/or identifying a preferred spatial management plan.	Mechanisms identified to ensure participation occurs throughout MSP, including regular meetings defined for stakeholder involvement at each MSP stage and opportunity to engage in aspects of decision-making, setting objectives, developing alternatives, and/or identifying a preferred spatial management plan.	Mechanisms implemented to ensure participation occurs throughout MSP, including regular meetings defined for stakeholder involvement at each MSP stage and opportunity to engage in each aspect of decision-making, setting objectives, developing alternatives, and identifying a preferred spatial management plan.

PARTICIPATORY

REPORTING MSP INDEX SCORES

The MSP Index gauges progress within MSP initiatives based on their use of foundational principles, while also allowing for high-level comparison between diverse MSP initiatives, The below examples show MSP Index scores for a national policy-oriented plan (Ireland) and a state-level regulatory plan (Rhode Island).





Flower plots can be used to visualize MSP Index scores, where the radius of each wedge depicts the score per MSP principle. These plots provide a snapshot of MSP initiatives according to their use of key features. While the MSP Index as it's presented here is based on best practices, the principles and features may be adapted to suit local MSP contexts, as necessary.

The MSP Index is not an evaluation tool, as it does not assess MSP efficacy or outcomes, rather Index scores highlight successes and gaps that can inform MSP advancement. Index scores alone do not reflect the full context of MSP initiatives and should be accompanied by a descriptive narrative. The Index is most effective if employed by MSP practitioners and initiative experts.

For a complete description of the methods used to develop the MSP Index and more examples of its application, visit **www.mspindex.ca** and Reimer, J.M. et al. (2023). The MSP Index: A tool to guide and assess marine spatial planning. *npj Ocean Sustainability*, 2. **https://doi.org/10.1038/s44183-023-00022-w**

GLOSSARY

A priori - not based on a prior study or examination

Ecosystem services* – the benefits provided by ecosystems that contribute to making human life both possible and worth living

Horizontal integration – the integration across government agencies or management systems at a shared level, e.g., across federal departments with jurisdiction in the marine enviroment

Human activities – the range of activities and ocean uses occurring in marine and coastal environments, including those related to economic, social, cultural, and ecological pursuits, e.g., commercial uses, recreational uses, traditional uses, conservation uses

Indicator* – information based on measured data used to represent a particular attribute, characteristics, or property of a system, indicating how progress on achieving goals or objectives

Governance* – comprises the traditions, bodies and processes that determine how power is exercised, how citizens are given a voice and how decisions are made on issues of public concern

Management measures* – a specific action taken to achieve a management objective or outcome

Management outcomes* – an anticipated result of the implementation of a management measures, e.g., increased species diversity or increase income

Mechanisms – the range of procedures, strategies, and instruments used to advance goals, principles, objectives, actions, or deliverables

Modification – the action of changing, adapting, altering, or adjusting something, in the case of MSP, modifying components of MSP processes or management measures to ensure the process and outputs (e.g., plans) are adapted over time

Political champion – an individual or individuals engaged in politics or holding a political position who can advocate on behalf of a program, initiative, or product, e.g., championing MSP

Precautionary approach* – when there are threats of serious or irreversible environmental damage, a lack of scientific certainty shall not be a reason to postpone cost effective measures to prevent environmental degradation

Rightsholders – the individuals, groups, or organizations that have particular, often legal, entitlements in relation to specific duty-bearers (i.e., those with a particular obligation or responsibility to respect, promote, and realize human rights and to abstain from human rights violations)

SMART objectives* – objectives that are specific, measurable, achievable, relevant, and time-bound, may also include inclusive and equitable

Stakeholders* – the individuals, groups, or organizations that are (or will be) affected, involved, or interested (positively or negatively) by planning or management actions

Vertical integration – the integration across various levels of government and political systems, e.g., across local, regional, and national levels of government

* Indicates references based on UNESCO-IOC/European Commission. 2021. *MSPglobal International Guide on Marine/Maritime Spatial Planning*.Paris, UNESCO. (IOC Manuals and Guides no 89). See this resource for additional definitions relevant to the MSP Index.