

PLACE-BASED PLANNING & MANAGEMENT

Marine spatial planning (MSP) is the modern term for describing a place-based approach to management that mirrors our traditional management systems. First Nations family and clan relationships hold strong connections to place, and specific locations had primary purposes like seaweed picking or salmon fishing. This old way offers new solutions to achieving sustainable management of our marine environment by providing a means to implement ecosystem-based management and decision-making.

Similar to land use planning, spatial planning in the marine environment allocates different places to specific uses. In current literature, MSP is described as “a public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social objectives that are usually specified through a political process.”

Management objectives can range in geographic scale from coastal community to First Nations area to the entire Pacific North Coast Integrated Management Area and larger. How different activities interact and impact one another in a specific area and how those activities affect the surrounding environment are considered in MSP. MSP recognizes that certain uses are not compatible with other uses and that some activities negatively impact sensitive marine habitats, and therefore require separation. In this way, MSP can facilitate efficient and sustainable use of marine areas.

- Similar to land use planning, conservancies can be designated to protect ecological function and to foster First Nations traditional uses.

- Seafood fishing and gathering areas can be designated for traditional use to ensure present and future food security.

- Incompatible uses such as aquaculture sites and transportation corridors can be restricted to spatially distinct areas to reduce potential conflicts.



FIRST NATIONS PARTICIPATING IN PNCIMA MARINE USE PLANNING

Each of the Nations is working with government and stakeholders to implement their integrated land use plan for their territorial land. Similar to marine use planning, the land use plans follow the principles of EBM. EBM in the marine environment is informed by and will compliment each Nation's land use plan.

Central Coast First Nations

- Wuikinuxv
- Heiltsuk
- Kitasoo/Xai'Xais
- Nuxalk

North Coast First Nations

- Metlakatla
- Gitga'at
- Haisla
- Kitselas
- Kitsumkalum
- Gitxaala

Haida Gwaii

- Haida (Council of the Haida Nation with support of Skidegate and Massett)



SUPPORTING DOCUMENTS

The information in this publication is primarily based on ... :

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Ehler, C and F Douvère. 2009. Marine Spatial Planning: A Step-by-Step Approach towards Ecosystem-based Management. Intergovernmental Oceanographic Commission and Man and the Biosphere Programme.
IOC Manual and Guides No. xx, IOC AM Dossier No. x. Paris: UNESCO.
Pre-publication copy available for download at:
http://www.unesco-ioc-marinesp.be/msp_guide.

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The ocean is an integral part of our coastal First Nations culture, society and economy. Yet over the last century and increasingly over recent decades, the growing intensity and diversity of marine activities and uses are stressing marine ecosystems and affecting our communities.

Existing, new and emerging marine industries and activities are competing for coastal and ocean space, producing varying levels of impacts that may infringe on other users and increase the potential for conflicts. As concerns are raised about cumulative impacts and overlapping areas of incompatible uses, recognition is growing that the current sector-by-sector approach to marine resource management is not working. A more integrated and comprehensive approach is needed to effectively manage all activities and uses in a way that ensures ecosystem health and the well-being of coastal communities.

SECTOR-BY-SECTOR MANAGEMENT IS NOT WORKING

Current management of the marine environment is segregated sector-by-sector even within government agencies. For example, Fisheries and Oceans Canada (DFO) has different departments managing commercial shellfish fisheries, commercial finfish fisheries, and within that, different groups responsible for different species. Transport Canada regulates transportation and shipping activities along the coast. The provincial government issues aquaculture tenures with some overlapping jurisdiction with DFO. This segregated approach to management cannot adequately consider cumulative impacts, cross sector impacts or local issues and interests.



GETTING STARTED

As demands on ocean space and use increase, the potential for conflicts between users increase, as does the potential for lasting negative impacts on the environment. Marine spatial planning is a key ecosystem-based management tool that can be used to ensure the ocean around us, and thus our communities, are healthy and resilient.

Who uses the ocean around us?

Marine spatial planning begins with understanding what is occurring within an area of the ocean. When do activities occur? How intense are those activities? Who is involved?

What are the potential effects of marine uses on people and place?

Past, present and potential future marine activities impact the marine environment and the people who live within them. The effects can be positive or negative for any given ecological or cultural value. Understanding these impacts and their importance to ecosystems, human well-being and economies can help Nations make better management decisions.

Are ocean uses compatible with one another?

Determining whether different uses are able to exist in the same space without conflict is an important step in MSP. Activities that are highly incompatible are likely to result in conflict if they occur in the same place, and thus it may be best to spatially separate these uses.

First Nations traditional fisheries can be significantly impacted by commercial fisheries that are often more technologically advanced, and one way to resolve this conflict is to designate areas where commercial fisheries cannot occur.

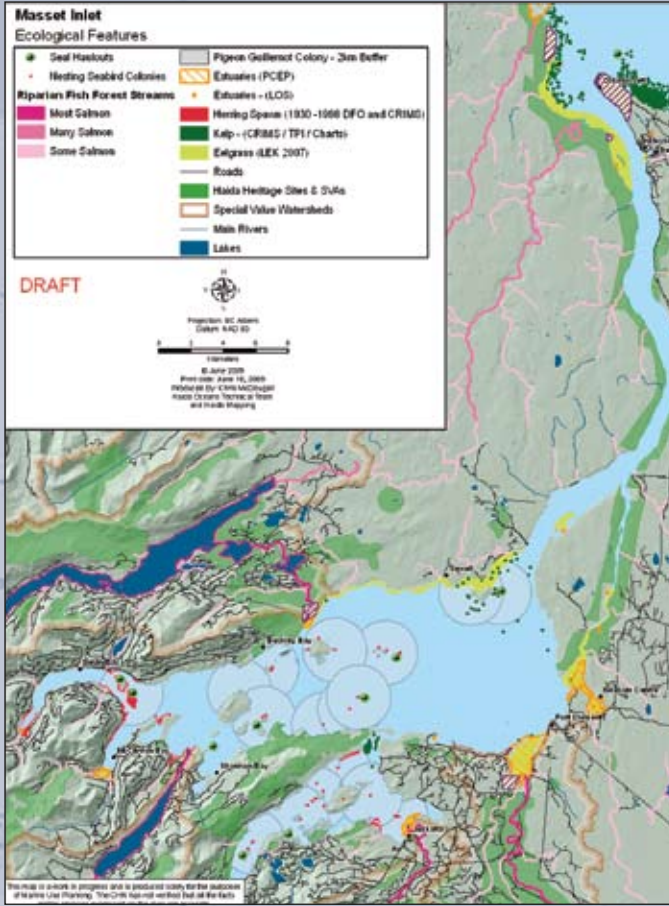
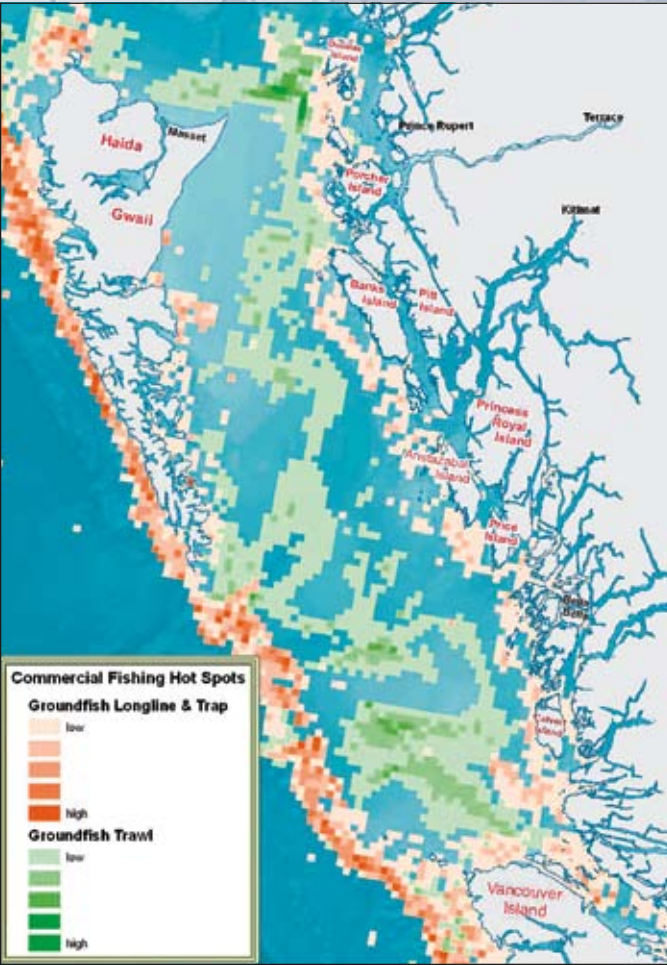
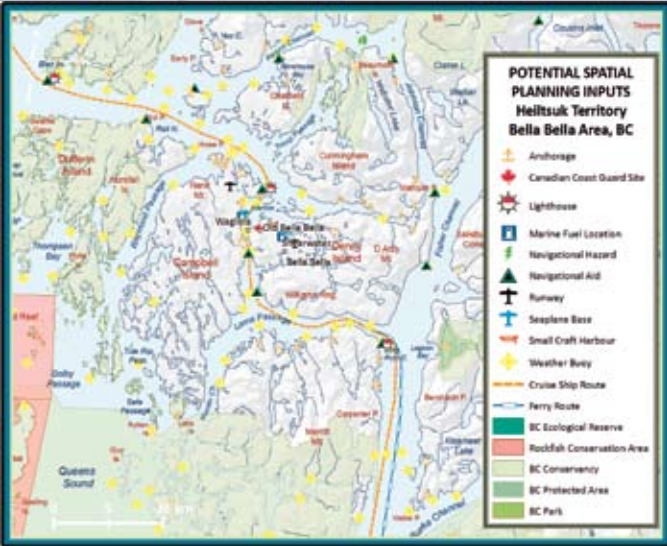
What do we want our ocean and communities to look like in the future?

Most importantly, communities need to talk about their vision for the future. Defining each community's ecological, social and economic vision and values underlying planning discussions and decision-making is critical to successful application of MSP. Management decisions about which activities and values to promote in spatial planning will be influenced by each community's values.



Understanding where human uses and ecological features exist is an important first step in marine spatial planning. The series of maps below provide examples of the type of information inputs that are useful for marine spatial planning:

- (a) existing infrastructure (Central Coast);
- (b) important ecological features (Masset Inlet, Haida Gwaii);
- (c) concentration of effort for the ground fisheries (PNCIMA); and
- (d) concentration of effort for the dive fisheries (PNCIMA).



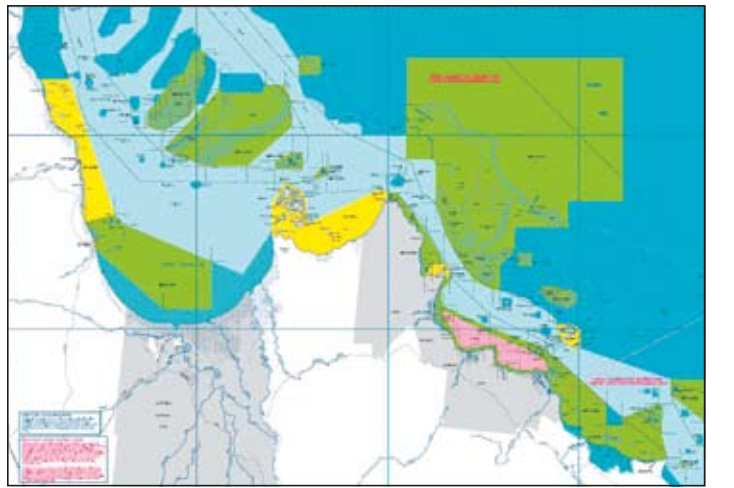
ZONING MARINE AREAS

Once we have an understanding of the current condition of the marine uses in an area, and a vision for our marine territory, zones can be created to help achieve that future condition. Done properly, zoning can help balance our desires for marine environmental and cultural protection and restoration with sustainable economic development.

Each zone is characterized by a set of goals and/or objectives that form the basis for deciding what activities are permissible within that zone. For example, the objective of a particular zone could be to secure First Nations access to marine resources for traditional purposes. Activities that threaten access to, or abundance of, marine resources would be restricted in that zone. A further example may be where a community is interested in encouraging specific business developments in an area. This could be supported by specific area designations for particular commercial uses, like shellfish aquaculture, and restricting uses that have potential negative impacts on that economic value. Specific activities can be restricted in various ways, from no access at any time of year, to seasonal access restrictions. Developing goals and/or objectives for each zone type is an essential step to ensuring that community values and interests are reflected in the spatial planning process.

The following zoning approach was used for the far northern section of the Great Barrier Reef Marine Park. A similar approach could be adapted for our traditional territories, with the specific number and type of zones based on community marine planning discussions.

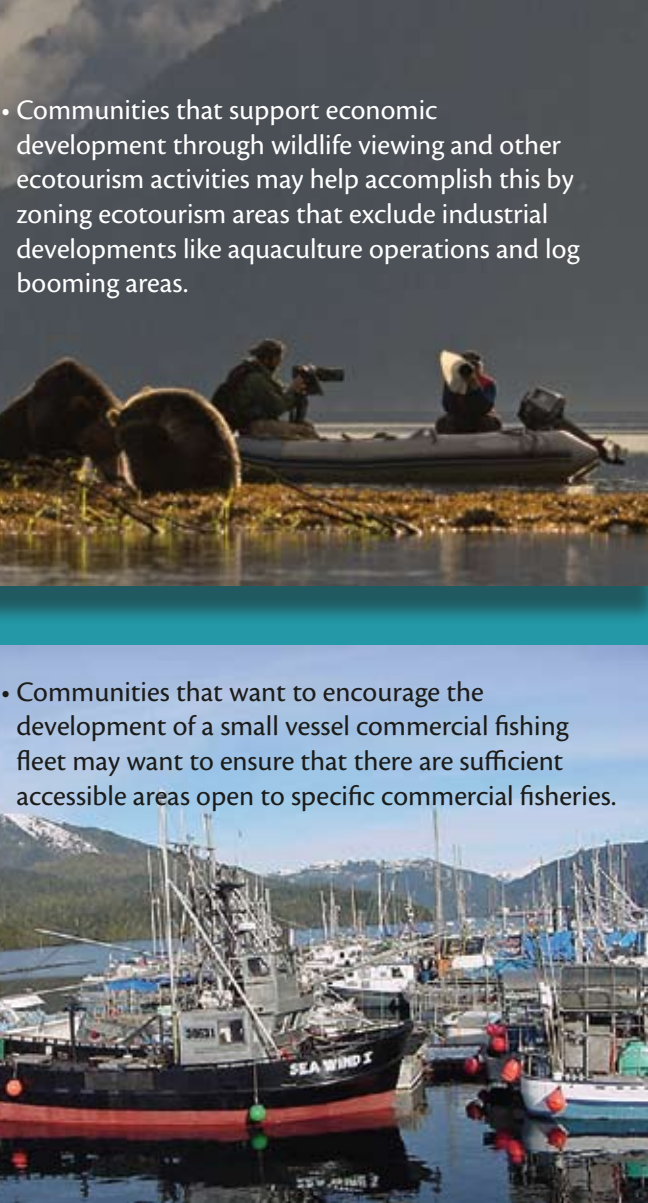
Once zone types are drafted, the next step of the zoning process is to designate where specific zones will occur, resulting in a marine spatial plan for each nation's traditional territory.



Example of Activity Matrix from the Great Barrier Reef

- Communities that support economic development through wildlife viewing and other ecotourism activities may help accomplish this by zoning ecotourism areas that exclude industrial developments like aquaculture operations and log booming areas.

- Communities that want to encourage the development of a small vessel commercial fishing fleet may want to ensure that there are sufficient accessible areas open to specific commercial fisheries.



Types of Zones and Compatible Uses for Great Barrier Reef	General Use Zone	Habitat Protection Zone	Conservation Park Zone	Buffer Zone	National Park Zone	Preservation Zone
Boating, Diving	Yes	Yes	Yes	Yes	Yes	No
Collecting (e.g. bêche-de-met, shells, coral, aquarium fish)	Permit	Permit	No	No	No	No
Line Fishing	Yes	Yes	Yes	No	No	No
Mesh Netting	Yes	Yes	No	No	No	No
Bait Netting	Yes	Yes	Yes	Yes	No	No
Trolling (for pelagic species)	Yes	Yes	Yes	Yes	No	No
Spearfishing	Yes	Yes	No	No	No	No
Pole and Line Tuna Fishing	Permit	Permit	No	No	No	No
Trawling	Yes	No	No	No	No	No
Traditional Fishing and Collecting	Yes	Yes	Yes	Yes	Yes	No
Traditional Hunting	Permit	Permit	Permit	Permit	Permit	No
Cruise Ships	Yes	Permit	Permit	Permit	Permit	No
General Shipping (other than shipping area)	Yes	No	No	No	No	No
Crayfishing	Yes	Yes	No	No	No	No
Mariculture	Permit	Permit	No	No	No	No

INFORMED BY TRADITIONAL KNOWLEDGE

Creating the 'right' zones in the 'right' places requires good information. Fortunately a wealth of knowledge exists around marine use planning tables and in each community that can help inform the spatial component of the marine use plan. The marine traditional knowledge (TK) studies underway in each community will provide key information for marine spatial planning, in addition to community-based socio-economic studies and community needs studies that are taking place.

Marine TK studies will identify areas that are ecologically and culturally important, as well as areas important for traditional fishing, hunting and gathering. For participating communities, the community needs study will help calculate how much of each species is needed to ensure food security today and into the future. Results of these studies will help us decide where zones with the primary objective of ensuring traditional use and access should be located and how large those areas should be.

The socio-economic study will show which commercial activities are happening in each traditional territory, provide information on employment and value generated in different economic sectors, and highlight those industries that are likely to shape the coast in the future. Community-based socio-economic information will also support the identification of community goals, objectives and strategies around economic development. Marine spatial planning can help promote activities and uses in an area that are compatible with First Nations values and interests, while limiting those that are less compatible.

HEALTHY OCEANS, COMMUNITIES & ECONOMIES

Marine spatial planning and management will help First Nations communities protect marine areas and resources for today and the future, enabling us to integrate our traditional, cultural, ecological and economic values into planning and decision-making.

Based on these values and an understanding of potential impacts of different marine activities, we can develop spatial zoning plans that specify what activities can occur within our traditional territory and where those activities are permissible. Zoning can help ensure that space and resources are set aside for a variety of uses, creating a diversified and more sustainable community and economy.

Marine spatial plans developed and implemented with community interests and capacity-building in mind will be locally-supported and attractive to investment from both inside and outside the community. Engagement of those outside our communities, and particularly of neighbouring coastal communities and users of marine areas and resources within our traditional territories, will also help to build a broad base of support for our marine planning and management initiatives.

Most importantly, marine plans must be implemented, monitored and adapted to ensure that we are meeting our goals and objectives. Careful planning for both the well-being of the ocean and coastal communities is a means to achieving sustainable wealth for our communities – implementing our marine plans will help achieve wealth in terms of culture, environment and economy.

