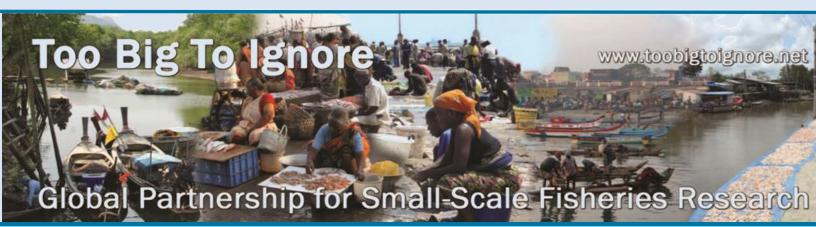
Too Big To Ignore Research Report

Number R-01/2016



The Future of Marine Conservation: Local and Global Perspectives Workshop

Thursday, March 12, 2015 St. John's, Newfoundland - Canada

toobigtoignore.net	RESEARCH		
		POLICY	
			MOBILIZATION



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List of Acronyms

- AOI Area of Interest
- CNLCOM The Canada Newfoundland and Labrador Committee on Oceans Management
- **CPAWS Canadian Parks and Wilderness Society**
- DFA Department of Fisheries and Aquaculture
- DFO Department of Fisheries and Oceans
- EBSAs Ecologically or Biologically Significant Marine Areas
- ESRI Environmental Systems Research Institute
- FFAW Fish Food & Allied Workers Union
- GIS Geographic Information System
- GLORES Global Ocean Refuge System
- IUU fishing Illegal, Unregulated, and Unreported fishing
- MCI Marine Conservation Institute
- MPA Marine Protected Area
- MUN Memorial University of Newfoundland
- ROCOM The Regional Oversight Committee on Oceans Management
- S.M.A.R.T. Objectives Specific, Measurable, Achievable, Realistic and Time-phased Objectives
- U.N. United Nations

Executive Summary

On March 12th, 2015, Memorial University hosted 'The Future of Marine Conservation: Local and Global Perspective' workshop. The workshop offered an opportunity to share lessons from various marine conservation and stewardship efforts, including marine protected areas (MPAs), both in the province of Newfoundland and Labrador and globally. It was also a chance to learn about the Global Ocean Refuge System (GLORES), a new strategic initiative of Marine Conservation Institute (MCI), which is a U.S.-based conservation organization that aims to advance ocean protection worldwide.

The event was organized and facilitated by **Dr. Ratana Chuenpagdee** of the Too Big To Ignore project (www.toobigtoignore.net), Department of Geography, Memorial University of Newfoundland, **Dr. Rodolphe Devillers** of the Marine Geomatics Research Lab (www.marinegis.com), Department of Geography, Memorial University of Newfoundland, **Dr. Evan Edinger**, Departments of Geography and Biology, Memorial University of Newfoundland, and **Dr. Lance Morgan**, President of Marine Conservation Institute.

The morning session of the workshop was primarily focused on experiences from Newfoundland and Labrador related to the implementation of conservation and stewardship efforts, including MPAs. The session consisted of presentations from local NGOs, academic groups, government agencies, and the fisheries union. The afternoon session of the workshop specifically addressed the GLORES initiative developed by Marine Conservation Institute that was designed to catalyze strong protection for at least 20% of the ecosystems in each marine biogeographic region of the world's oceans by the year 2030. The participants were introduced to the concepts and perspectives of the GLORES initiative and were then given the opportunity to address natural science and social science elements of the initiative. The participants were also encouraged to discuss and provide insights on the 'Global Ocean Refuge Criteria' model.

Discussion Highlights and Key Recommendations that Emerged from the Workshop

Goals and objectives. When setting up an MPA, the goals and objectives need to be defined as precisely as possible. It is important to determine who sets the objectives, the 'levels' of the objectives (i.e. S.M.A.R.T objectives), why certain objectives are chosen, and whether the right stakeholders are involved.

Challenges for establishing MPAs. The main problems for establishing MPAs include slow progress, *ad hoc* implementation, protection that misses targets, protected areas that are too small, and legislative hurdles.

Stakeholder engagement. When planning an MPA, the interests of local stakeholders need to be taken into account. It is necessary to be flexible in integrating other user groups willing to participate and to be able to evolve and (re)evaluate the design of the proposed area. Successful implementation of MPAs requires a joint effort and synergy between local, sub-national, and federal agencies.

Social dimension. The social dimension is a critical element in implementing MPAs. Effective management may not be achieved if appropriate community engagement is not established.

Systematic conservation planning. Protective measures often protect unique features, but fail to provide comprehensive protection. Identification of protected areas should be based on diversity, sensitivity, representativity of ecoregions, and adequacy.

Adaptive management. This approach enables those involved in the implementation and management of an MPA to reflect on past, present, and future dynamic issues and to have the ability to adapt and apply new management strategies that are beneficial to the MPA.

GLORES. The goal of this initiative is to protect all ecosystem types in each global region by the year 2030. GLORES aims to create marine refuges for resilience, reduce the risk of mass extinction from overfishing, drilling, mining, climate change, and acidification, and become a marine life insurance policy.

The 'Global Ocean Refuge Criteria'. This model could be improved by putting more focus on addressing management issues, decision-making processes, community engagement and adaptive management. The model should include additional criteria including connectivity, (primary) productivity, the vulnerability of the ecosystem, species, and life history of species. It could also be beneficial to establish a separate ranking system for connected MPAs as a whole and allow a post-implementation evaluation.

Agenda

Schedule Time	Topic & Activity	
Morning Session	Marine Conservation in Newfoundland: Experience and Reflections	
9:00 - 9:15 9:15 - 9:45	Welcome and introductions Short presentations by CPAWS, DFA, DFO, FFAW, and MUN	
9:45 – 10:00 10:00	Questions and discussion Break	
10:15 – 11:45	Roundtable discussion	
11:45 – 13:00	Lunch	
Afternoon Session	Advancing Marine Conservation with GLORES	
13:00 - 13:30	Setting the Stage for GLORES (Presented by Lance Morgan)	
13:30 - 13:45	Questions and discussion	
13:45 – 14:00	Residual MPAs (Presented by Rodolphe Devillers)	
14:00 - 14:15	Questions and discussion	
14:15 – 14:45	Breakouts / Small group discussion # 1	
14:45 – 15:15	Report back and summary	
15:15 – 15:45	Breakouts / Small group discussion # 2	
15:45	Break	
16:00 - 16:30	Report back and summary	
Closing Session	Ways Forward	
16:30 - 17:00	Roundtable discussion	

Morning Session

The session consisted of short presentations and discussions about the experiences from Newfoundland and Labrador related to the implementation of conservation and stewardship efforts, including MPAs. Roundtable discussions focused on how to successfully address various demands, concerns and expectations in marine conservation planning. The participants also talked about the possibilities of building partnerships within the province that could help achieve sustainable conservation and stewardship practices.

1. PRESENTATIONS

1.1. Newfoundland and Labrador: Experience and Reflections

a) Canadian Parks and Wilderness Society (CPAWS); Tanya Edwards and Suzanne Dooley

- CPAWS' mission is to promote the establishment of marine and terrestrial conservation and protected areas in Canada
- They developed a national marine campaign, 'Dare to be deep', to protect at least 10% of Canadian oceans by 2020
- Their main goal is to make MPAs larger and more efficient by focusing on grassroots level groups, the involvement of local stakeholders, and environmental education

b) Department of Fisheries and Aquaculture (DFA); Nicole Hynes

- DFA is part of a new regional oversight committee on the ocean and coastal management that is led by the federal government and in which MPA planning is a priority
- The DFA is leading the Newfoundland and Labrador provincial strategy for coastal management
- The strategy highlights the need to bring stakeholders together to coordinate activities related to marine conservation and sustainable use
- The provincial Department of Environment and Conservation is the lead within the province for development of parks and ecological reserves which may have coastal components

c) Department of Fisheries and Oceans (DFO) - Oceans Division Initiatives and Priorities; Dawn Mercer

- DFO collaborates with other organizations with shared research needs and interests:
 - The Regional Oversight Committee on Oceans Management (ROCOM) is a senior executive level forum for provincial and federal government agencies
 - The Canada Newfoundland and Labrador Committee on Oceans Management (CNLCOM) is an intergovernmental agency that assists is coordinating actions and policy in Newfoundland and Labrador
- The DFO is involved in an MPA program, which is an ongoing process that includes the development of network strategies
- Besides those areas that are already protected (i.e., Eastport and Gilbert Bay) the MPA program has identified five priority areas in the province to be given certain levels of protection
- The Laurentian Channel is an AOI a potential MPA due to its high biological diversity and ecosystem structure
- One of the goals of the MPA program is to draft a plan that will be included in the Ocean Act
- The DFO identified three priority issues, shared with the DFA:
 - Aquatic invasive species
 - o Competing needs and interests
 - o MPA network
- Other DFO initiatives include:
 - A coral and sponge conservation strategy for eastern Canada
 - Ecological risk assessments of sensitive benthic habitat
 - o Large ocean management areas

d) Fish Food & Allied Workers Union (FFAW); Bill Broderick

- The FFAW has been involved in collective bargaining for the last 45 years
- They represent 10,000 harvesters, including offshore to small skiffs harvesters
- This also includes around 800 harvesters who participate in scientific data collection
- Some of the challenges they are facing related to MPAs include:
 - Fishers in the Gilbert Bay MPA have been prohibited to fish in periods that are usually good for them

 The Eastport MPA has been deemed by some as a failed MPA, although those who wanted this MPA agree that it is actually doing what they intended it to

e) Geography Department, MUN; Dr. Evan Edinger

- Title: 'What should an MPA network for Atlantic Canada look like?'
- MPAs should protect the oceans as a whole, and should not only be set in order to enhance fisheries
- Two important elements of conservation value are diversity and representativity
- Most of the progress on MPAs is *ad hoc*
- There is a need for systematic conservation planning since protective measures often protect unique features, but are not providing comprehensive protection
- Identification of protected areas should be based on diversity, sensitivity, representativity of ecoregions, and adequacy
- Current closures are often made only on the edge of important areas to reduce the negative impact on fisheries
- Voluntary closures often occur in areas that humans do not use anyway
- The main problems occurring with the creation of MPAs in the Atlantic are:
 - Slow progress and *ad hoc* implementation
 - Protection that misses targets
 - Protected areas are too small
 - Legislative hurdles

1.2. Marine Conservation Institute; Dr. Lance Morgan

- <u>MPAtlas</u> is an instrument that will provide a better depiction of MPAs and marine conservation efforts worldwide
- The project intends to track MPAs at a global level
- There are currently around 11,333 MPAs, which includes areas with different designations from 137 countries
- MPAs captured by MPAtlas cover around 2.12 % of global ocean; from that portion, only 0.94% of global oceans are protected under no-take reserve categories

- One example of an MPA's performance is California's new MPA network, the development of which included a high level of interaction between various stakeholders
- "How to integrate top-down into bottom-up projects and initiatives?" remains a critical question

2. ROUNDTABLE DISCUSSION

Main issues:

- 1) "How can we successfully address various demands, concerns, and expectations in marine conservation planning?"
- 2) "What are some opportunities and key challenges in implementing conservation and stewardship programs, including MPA?"

Q1: What do we understand by a 'no take' zone within the concept of MPA?

The Oceans MPA Act regulates what needs to be protected and which activities are allowed to take place. Scientists first need to identify suitable areas and then a consultation process takes place, which includes all stakeholders that use this resource.

There is quite a lot of frustration about the Laurentian Channel because oil exploration is permitted to take place, but fishing is not. However, MPAs are about protecting marine life and fisheries have a more direct impact on marine life in comparison to oil exploration.

Q2: California MPA network is composed of small but successful MPAs. Are they an exception to California or could it be applied in other areas?

The Californian MPAs are small areas that are embedded in a network where species can move from one area to the next. Fishers and tourism-related unions were actively included in the project, however, there was some criticism that some of these unions were not 'true' unions, but instead interest groups. Groups representing fishers, including commercial fishers, were much more involved during the entire process than other users because they recognized the important role that an MPA network will have on their fisheries. Overall, the participation of users was high and the process relied heavily on the use of geographic tools (e.g., GIS). During the planning process, the users were presented with maps and other supporting material that guided the consultation process. The entire process took about fifteen years, which inevitably brought up the question: "Are we moving fast enough?"

While the Laurentian Channel represents a large-scale project, the California network represents a sample of small-scale protected areas. Furthermore, the Gilbert Bay and Eastport MPAs represent two other small-scale projects for marine protection where the communities involved have taken on an active part by supporting the proposal and explicitly asking for the protection of these two areas. Relevant aspects that are worth taking into account, besides the interest of locals, include the necessity to evolve and (re)evaluate the design of the proposed area and the ability to be flexible in integrating user groups that are willing to participate.

Q3: Are MPAs being developed ad hoc?

The *ad hoc* creation of MPAs was questioned, arguing that perhaps there is a need for a more quantitative and systematic approach within the MPA definition. In the case of Newfoundland and Labrador, DFO has mainly favoured the quantitative and more consultative approach. In the case of California, there was no quantitative target; instead, only connectivity and the necessity to adequately represent targets were discussed.

Q4: How to know if connectivity is attained without quantitative data?

In the case of Newfoundland and Labrador, the network strategies are not taken on solely by the DFO, but in partnership with various stakeholders and different DFO departments. If the facts and findings are only represented as numbers, this might be a challenge for stakeholders who are unfamiliar with this sort of data to understand what is presented. The direct consequence would be an increasing sense of exclusion and an increased likelihood of participant dropout. Additionally, the changing parameters could cause confusion in certain situations. For example, stakeholders might feel there is a breach of trust if targets for protection increase (i.e. increase from 10% to 15%) without consultation.

Q5: How should MPA effectiveness be measured?

When deciding on alternative ways to measure MPA effectiveness, it is necessary to focus on the scale of the MPA being assessed. Important attributes to look at are time, scale, and the target. It is necessary to be very specific when setting up the goals and objectives and to define them as precisely as possible. It is important to determine who sets the objectives, why, and whether the right stakeholders are involved. Other critical factors include the 'levels' of the objectives that are negotiated (e.g. S.M.A.R.T objectives). This is especially important if no baseline information exists.

There is a need for an adaptive management approach that enables those involved to reflect on how to deal with change and what is needed in order to pursue the adaptation. Recognizing the necessity for adaptive measures is crucial once challenges are identified, always keeping in mind the initial purpose of the MPA. One adaptive measure could be to address livelihood issues by reducing docking fees. Another alternative could come with different compensation measures once MPAs are in place.

Q6: What are some opportunities and key challenges in implementing conservation and stewardship programs, including MPA?

Implementation requires a joint effort and synergy between local, sub-national, and federal agencies. It is critical to identify the key governmental stakeholders and see them as strategic allies.

The establishment of MPAs can become quite challenging when trying to integrate alternative points of views and knowledge. For instance, the way and the extent to which fishers become involved in research, especially in data analysis, could be argued to be ineffective. It seems that they are only partially involved in the knowledge generation, merely being consulted about the results obtained. An example was provided about the Eastport MPA and Gilbert Bay MPA, where the DFO went back to the communities after the data analysis was completed to see if the results made sense.

Afternoon Session

Advancing Marine Conservation with GLORES

This session began with presentations by Dr. Lance Morgan and Dr. Rodolphe Devillers to introduce the GLORES initiative. The presentations were followed by two working group exercises, which were each followed by wider discussions. This session was presented as an opportunity to:

- Familiarize participants with the concepts and perspective of the GLORES initiative
- Gain insights from the participants about GLORES, addressing both natural and social science elements of the initiative
- Discuss the definition of criteria for MPAs that meet GLORES status

3. PRESENTATIONS

3.1. 'GLORES: a novel approach to catalyze MPAs'

Presented by: Dr. Lance Morgan

The Global Ocean Refuge System (GLORES, pronounced glôrees) is an initiative of the Marine Conservation Institute designed to catalyze strong protection for at least 20% of the ecosystems in each marine biogeographic region of the world's oceans by the year 2030. It is a strategic science, based on ways to safeguard marine ecosystems that will enable humans to recover marine life for current and future generations.

In order to help advance the implementation of the initiative, the Marine Conservation Institute is working to define the criteria for MPAs that meet GLORES status, and to link GLORES to the existing MPA efforts globally.

The following questions were used to guide the intervention:

- 1. What does an MPA network designed for resilience look like?
- 2. How to design and assemble a network?
- 3. What to include?

There is no single definition of an MPA. Instead, there are multiple designations. One of the most novel categories in GLORES designation is, for instance, 'MPA shark sanctuaries', which can be defined as a 'single species objective MPA'. It is important

to clarify certain aspects of an MPA network implementation at the beginning of the process. These include the implications of being part of a network, the size and spacing of the MPAs, and the potential permanence effects of their presence. Unfortunately, these aspects are very seldom addressed within the MPAs timeline.

3.2. 'Reinventing Residual Reserves in the Sea: are we favouring ease of establishment instead of need of conservation?'

Presented by: Dr. Rodolphe Devillers

Assessing and understanding of MPA effectiveness is very important in marine conservation research. Local interest must be reflected in the initiatives proposed by provincial or regional bodies or else they may be thwarted at a higher governance level.

An important aspect was the 'reinvention' of residual reserves in the sea, demonstrated by favouring the ease of MPA establishment over the need for conservation. It is critical to negotiate between the quantity and quality of the reserves being implemented. No-take, enforced, and old MPAs seem to be more successful than others that do not have these features. In the case of the Laurentian Channel area, the original idea was slowly reshaped and the MPA that will be implemented is very different from the original area identified by experts in consultations. When addressing residual MPAs, an important issue becomes the growing number of MPAs in the world *versus* the real protection of the environments they are supposed to protect.

The problems related to residual MPAs are, among others:

- Biodiversity in need of protection is not actually protected and continues to decline
- False sense of security about conservation management
- Rising of the feeling of 'reserve fatigue'
- They place the burden of real protection on other measures that vary in security and effectiveness

3.3. 'What is GLORES?'

Presented by Dr. Lance Morgan

Most MPAs are not well enforced and have weak protection with increasing events of IUU fishing. As such, marine life faces threats that can be stopped at MPA boundaries and those that cannot.

What is wrong with MPAs?

- They are not in the right place
- They lack strong legal protection
- They need better management and/or enforcement
- There is not enough of them

One of the main goals of GLORES is to catalyze a strong agenda to protect every ecosystem type in every region by the year 2030. GLORES aims to:

- a) Create marine refuge for resilience,
- b) Reduce the risk of mass extinction from overfishing, drilling, mining, climate change, and acidification, and
- c) Become a marine life insurance policy.

GLORES approach is based on two pillars:

- Geography of marine life (i.e., biogeography). In this case, most of the work has been done using ESRI (GIS software), which allows the three-dimensional visualization with the addition of the water column. This approach enables:
 - o Representation of all ecosystems around the world
 - \circ $\,$ MPAs to be set at the appropriate size to host viable populations
 - \circ $\;$ Enough MPAs to maintain connectivity and portfolio resilience
 - Facilitation of connectivity, since it increases resilience
- 2) Human behaviour. Like in the case of most cities around the world, there are 'living' (i.e., building, housing, sanitation) standards that can easily be translated into 'MPA standards'. In that sense, GLORES has targeted 'prestige and money' as powerful incentives when attracting program supporters. GLORES envisions a system that incentivizes countries to develop MPAs and in doing so, GLORES partners will grant awards (e.g., "Global Ocean Refuge Award") for the best MPA.

How does GLORES work?

- Marine scientists determine the criteria that MPAs need to accomplish
- Governments propose their existing and new MPAs for GLORES's consideration
- GLORES partners make a final decision

The criteria set to grant 'Global Ocean Refuge' status that fosters ecological and human dimensions includes:

- Highest conservation priority is given to ecosystems or species
- System-survival to main threats (e.g., oceans acidification and warming)
- Quality of governance, which has been identified as the most significant challenge to be performed
- Equity to local people

4. GROUP SESSIONS

4.1. Exercise 1

This was a participatory session during which the audience was divided into six working-groups that were assigned different activities. Illustrative diagrams were provided for the participants as supporting material (See Appendix I). The graph included two sections: the 'ecosystem bubble' (left part of the big diagram) and the 'management bubble' (right part of the big diagram). Guiding questions for the group discussions included: "Where does the threat to the MPAs come from?", "How do we evaluate the value of a species?", and "How do you give value to different species?".

Below are some of the ideas expressed during the general discussion, which took place before the participants engaged in the individual group discussions:

1. Effective community management. The article by Bennett and Dearden (2014)¹, used as a reference for this exercise, proposes variables for the evaluation of

¹Bennett, N.J. and Dearden, P. 2014. From measuring outcomes to providing inputs: Governance, management, and local development for more effective marine protected areas. Marine Policy. 50, 96–110. DOI: dx.doi.org/10.1016/j.marpol.2014.05.005

conservation. The authors argue for measuring effectiveness and propose the following indicators to achieve this: management, governance, and local development. However, this model does not assess the social dimension, which can lead to claims that no effective management will be achieved if no effective community engagement is implemented.

2. Management aspects. Some argued that more boxes can be added to the 'management' category and that the implementation aspects may include multiple governance level assessment and evaluation (i.e., a multi-scale assessment strategy). The inclusion of national specific attributes to better represent a local scenario is also important. In addition, the global assessment criteria may not exactly match national criteria (e.g., the definition of EBSA criteria from the U.N. and by the Canadian typology does not match).

The contributions from the individual working groups' discussion are summarized below:

Group 1

- Suggested the following adjustment to the existing model:
 - The boxes from the diagram could be added to the 'Implemented/Implementable' area and may include a 'cross-scale'; evaluation to integrate the varied dimensions of implementation
 - There are not enough boxes to address management issues
 - Using Bennett and Dearden's article (2014) as a reference to create a box for conservation evaluation
 - Add an "AND/OR" box for the community involvement section

Group 2

- Focused on community engagement and adaptive management. They suggested the following adjustment to the existing model:
 - Community engagement is an important topic and, together with public reception, is related to the 'transparency' attribute
 - Add 'adaptive management' criteria
 - The model has criteria for pre-implementation evaluation but is missing postimplementation evaluation criteria
 - The 'ranking system' was not as conclusive and useful as it should be

Group 3

- Suggested the following adjustment to the existing model:
 - It is quite hard to rank ecosystems because each situation is context dependent
 - Connectivity is an extremely important aspect, especially when addressing large-scale issues (e.g., climate change)
 - If the model circulates around 'incentive-based rationale', it may also include some potential economic sacrifices in order to increase biodiversity (e.g., less or no oil extraction)
 - In assessing this aspect, it would help to ask: "How much would you give up to get the gold criteria?"

Group 4

- Focused primarily on how to apply the framework to different types of MPAs.
 They suggested the following adjustment to the existing model:
 - Adding the two new variables: connectivity and (primary) productivity
 - Establishing a separate ranking for connected MPAs as a whole
 - Adding a box about low impact gear type (e.g., cod pots) that would better represent the contribution of some sectors to the shared conservation goal

Group 5

- Focused primarily on biodiversity aspects. They suggested the following adjustment to the model:
 - 'Missing boxes' should include: 'vulnerability of the ecosystem', 'species', 'life history of the species', and 'connectivity between species'
 - Size is not as important for ranking. Instead, more attention should be allocated to connectivity
 - The 'management' aspect is missing. The adaptive management component is a way to face change
 - When an MPA is rewarded with a 'gold medal' it is also important to have strategies ready that will ensure that the 'good job' is maintained

Group 6

- Used the example of the 'Eastport MPA' as an example for the ranking exercise.
 They suggested the following adjustment to the model:
 - The model needs more boxes on aspects like 'decision making', 'stakeholder engagements', and 'engagement processes'
 - It is difficult to envision an assessment of old established MPAs vs. new MPAs
 - Within the 'management' section, a framework to evaluate management and its effect on the community is needed. A 'community engagement' aspect should be included and by doing so, ongoing commitment to community engagement and participation can be addressed
 - Negotiation with consensus-building and a strong social-based framework must be taken into account
 - The ranking exercise is more important regarding species-based approaches but is not as relevant for social approaches

Discussion

Most participants agreed that the task of ranking was difficult. Some suggested that an annual report card could be used to assess MPA performance over a period of time. The results of the annual report could support the existence of the MPA, as well as update 'penalization' for missing targets. A common criticism addressed was the lack of a 'social box'. There was also concern that the program would give 'gold status' to actions, 'which will take place', but that have not been accomplished. Status should be conferred to accomplishments, rather than aspirations.

4.2. Exercise 2

The second part of the group work session included a general discussion and reflection from the participants about "what type of MPA are we talking about?"

The different criteria to evaluate the MPA were allocated in order to evaluate their performance and set the 'gold', 'silver', and 'bronze' status. Additionally, MPAs could also be awarded prices based on how much the MPA allocates to 'no-take' and 'no-use' areas within its boundaries.

The interaction between different types of fisheries and MPAs was also discussed. For example, the appropriateness of using tracking devices to monitor the movement of industrial and artisanal vessels within MPA boundaries was raised. Participants went

on to discuss if types of fishing should be differentiated in terms of use in an MPA; for example, if subsistence fishing should be allowed within MPAs, regardless of if they use destructive fishing methods (such as cyanide). This then becomes a more complex issue that would certainly need additional dimensions to be evaluated. Furthermore, 'catch-and-release' fishing was discussed as a form of fishing that should be treated differently from recreational fishing since they have different levels of impact on the marine environment, with the former less harmful than the latter. All of the risks, short-term and long-term, must be considered.

Finally, distinctions should be made between non-fishing activities (e.g., pipelines and cables, shipping), which also have different impacts on the marine environment, some of which produce a great deal of stress on the marine environment.

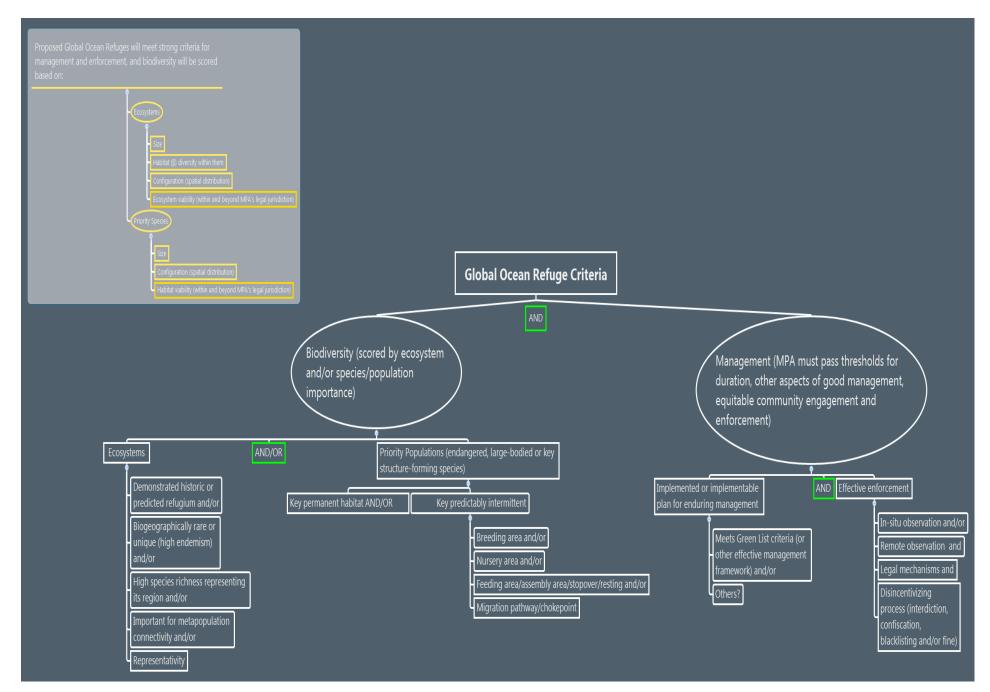
Discussion

This discussion was centered on one main question: "what does gold medal mean in terms of ecosystem and in terms of management?" We need to think critically in order to assess human activities that are explicitly threatening the marine environment. In that regard, the 'gold' status should be evaluated with reference to the set objectives.

Another important aspect mentioned in this exercise was the list, which by itself includes only negative and threatening activities mainly linked to the presence of human communities on the site. In that sense, it was said that it would be unfair to disqualify areas for gold status on the sole argument of hosting or presenting intrinsic 'human features'.

An opportune comparison came by making analogies between land and marine parks. The question: "why do we accept some practices in the sea but not on land?" was raised. This goes back to the previous reflection about 'general standards', with the goal of creating only one set of standards for conservation sites. It will remain important to pay attention to the local context, ethics, flexibility, and to the precautionary management principle as a relevant issue to support decisions. In all of the cases, it would be necessary to confront the MPA objectives with the actual MPA performance as the best way to evaluate success.

Appendix I - GLORES Criteria for Global Ocean Refuges: A mind map



	Name	Affiliation
1	Melissa Abbott	DFO
2	Sam Andrews	The Hobo Scientist
3	Maria Jose Barragan-Paladines	MUN
4	David Bishop	MUN
5	Bill Broderick	FFAW
6	Erin Carruthers	FFAW
7	Ratana Chuenpagdee	MUN
8	Geoff Coughlan	MI
9	Dylan Cunning	MUN
10	Rodolphe Devillers	MUN
11	Daniela Diz	WWF
12	Suzanne Dooley	CPAWS
13	Evan Edinger	MUN
14	Tanya Edwards	CPAWS
15	Randal Greene	MUN
16	Nicole Hynes	DFA
17	Vesna Kerezi	MUN
18	Vince Lecours	MUN
19	Mirella Leis	MUN
20	Sara Lewis	DFO
21	Kathy MacPherson	MUN
22	Dawn Mercer	DFO
23	Greg Moore	ACAP
24	Lance Morgan	Marine Conservation Institute
25	Corey Morris	DFO
26	Barbara Neves	MUN
27	Emilie Novaczek	MUN
28	Kim Olson	Rural Secretariat, NL Government
29	Sheldon Peddle	ACAP
30	Laura Pilgrim	DFO
31	Olivier Randin	MUN
32	Victoria Rogers	MUN
33	Sherrylynn Rowe	MI
34	Katie Schleit	Ecology Action Centre
35	Blair Thorne	DFO
36	Vonda Wareham	DFO
37	Margaret Warren	DFO
38	Joe Wroblewski	MUN

Appendix II – List of Participants

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toobigtoignore.net	RESEARCH		
		POLICY	
			MOBILIZATION