

***BC Conservation Lands Forum Conservation Planning
Tools Committee (CPTC) – Framework Subcommittee and
Pacific Marine Analysis and Research Association
(PacMARA)***
*with significant funding contribution by Geoconnections, Natural
Resources Canada*

Expert Workshop Meeting Notes

***Marine Expert Workshop
November 29, 2005
Vancouver, BC***

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January 2006

Marine Expert Workshop Agenda

Outcomes

General Outcomes - CPTC

1. There was agreement that the CPTC will not address the marine realm except for areas of interface between the marine realm and terrestrial and freshwater realms. DFO already has a process underway to assess the biodiversity in the marine realm as part of their Ecosystem Overview Assessment (EOA) within the Pacific North Coast Integrated Management Area (PNCIMA) planning process as a key component of delivering Canada's Ocean Action Plan.
2. There was suggestion that the CPTC should seek to be invited to participate in delivery of the DFO Ocean Action Plan process.

General Outcomes - PacMARA

3. PacMARA was encouraged to continue facilitating similar discussions about collaborative science and research.
4. PacMARA will explore further funding opportunities for both facilitation and collaborative development of products through NRCAN-Geoconnections.
5. PacMARA will continue post-workshop, to liaise with marine expert workshop delegates on developing conceptual frameworks, specifically:
 - How do the current assessment frameworks (i.e. DFO, CPTC) and analysis tools/projects fit together and/or complement each other within the context of larger marine planning initiatives (i.e. PNCIMA, Canada-BC Oceans MOU and subagreements) on the Pacific Coast? What else is going on and how does it fit in?
 - How do we expand participation and working relationships amongst various interests (agency, NGO, First Nations [traditional use], communities [local knowledge])?
 - What are some of the key opportunities and next steps? e.g. would we benefit from a comprehensive /ongoing compendium of projects/tools/analyses/data; collaboration of specific projects/tools; process of peer review to ensure acceptable and credible results?
 - How to move forward on central issues like data cooperation amongst agencies and NGOs

Marine Expert Workshop Agenda

Table of Contents

OUTCOMES	2
1. BACKGROUND	4
1.1 CPTC PERSPECTIVE	4
1.2 PACMARA PERSPECTIVE	5
2. MEETING SUMMARY	6
2.1.1 DFO's approach to Ecosystem Overview Assessment (EOA)	6
2.1.2 Overview of BC Conservation Lands Forum CPTC Framework Subcommittee's approach to biodiversity status assessment.....	6
2.2 REVIEW AND SHARING OF SPATIAL ANALYSIS AND CONSERVATION PLANNING TOOLS.....	7
2.2.1 LOS/CIT Conservation Utility Analysis (CUA)	7
2.2.2 TNC/NCC Nearshore Analysis	7
2.2.3 Threats to Marine Biodiversity	7
2.2.4 GeoConnections Support for Marine Analysis Initiatives	8
2.2.5 DFO's approach to Ecologically and Biologically Significant Areas (EBSAs)	8
2.2.6 UBC Marine Intensity of Human Use Mapping/Analysis.....	8
2.2.7 MMRU Marine Classification Tool	9
2.2.8 Summary of supporting assessment projects/tools currently underway or under development.	9
2.3 BREAK-OUT SESSIONS	9
2.3.1 Group 1: CPTC Break-out Session	9
2.3.2 Group 2: PacMARA Break-out Session	10
2.3.3 Breakout summaries.....	12
2.4 NEXT STEPS	12
3. APPENDICES	14
3.1 FINAL MARINE WORKSHOP AGENDA	14
3.2 ATTENDEES	17

Marine Expert Workshop Agenda

1. *Background*

1.1 CPTC Perspective

In October 2004, the provincial government created the B.C. Trust for Public Lands to support biodiversity conservation in British Columbia. The sole delivery agent for the Trust is the B.C. Conservation Lands Forum, a five-year partnership between the provincial government and conservation organizations. The Forum was established to coordinate priority setting, identify shared interest and opportunities, and arrange partnerships to support improved conservation planning and more efficient private land acquisitions and management of private lands for biodiversity conservation. The provincial government contributed \$8 million to the Trust with the expectation that non-provincial government organizations would contribute matching dollars resulting in a \$32 million conservation investment in the province in five years. The five non-government conservation organizations on the Forum are: Ducks Unlimited Canada, The Land Conservancy of B.C., Nature Conservancy of Canada, Pacific Salmon Foundation, and The Nature Trust of British Columbia. Government members on the forum are: Environment Canada, Ministry of Environment, Habitat Conservation Trust Fund, and the Union of B.C. Municipalities.

The B.C. Conservation Lands Forum established a Conservation Planning Tools Committee (CPTC), whose members include both non-government and government organizations. This committee is an independent body, established under a five-year memorandum of understanding. Its role is to develop a comprehensive, science-based provincial biodiversity strategy to inform policy development and decision-making processes for both government and non-government organizations. To help determine the approach to the development of a biodiversity strategy, the CPTC set up a Framework Subcommittee.

This subcommittee developed a draft conceptual framework consisting of a five-phase approach to guide the development and implementation of a biodiversity strategy for BC. Input on the draft framework was received at an earlier expert workshop in October 2005. The preparation of two background documents: a report on the status of biodiversity in British Columbia and a report on the options for dealing with human impacts and the conservation of biodiversity are key next steps identified by the subcommittee. The subcommittee identified the need to hold an expert workshop for each of three ecological realms, terrestrial, freshwater and marine, to identify the best approach for describing the status in each realm and the available data.

During early development of the technical assessment in the marine realm, the subcommittee became aware of the Living Oceans Society's *Conservation Utility Analysis* and The Nature Conservancy/Nature Conservancy of Canada's *Nearshore Analysis*. The Pacific Marine Analysis and Research Association (PacMARA) requested that they partner with the CPTC for the workshop with a goal to review the current and planned marine biodiversity spatial analyses and/or conservation planning assessment projects (tools) available in BC and to identify how the tools can be used individually and together as an assessment "system" of the status of marine biodiversity and as a foundation of a conceptual framework to guide conservation planning in BC.

Given the number of initiatives underway within the marine realm and lead responsibility for delivery of integrated oceans management under the Department of Fisheries and Oceans (DFO), it was determined that the best use of participant's time would be to use the day to educate them on the various spatial analyses and tools that are currently being developed and to determine how they could best assist the CPTC in the marine realm.

Marine Expert Workshop Agenda

1.2 PacMARA Perspective

The Pacific Marine Analysis and Research Association (PacMARA) is an impartial and independent network of researchers and practitioners working together to share information, undertake high-quality research and analyses, and fill gaps in the knowledge of British Columbia's complex coastal and marine environment. Its community of interest currently includes about 100 individuals, drawn from government, First Nations, academia, and environmental non-government organizations.

PacMARA evolved from a series of workshops on ecosystem-based management in Northwest BC that identified the need for a more coordinated approach. The organization was registered as a non-profit society in BC in November 2004. A Board of Directors that includes both voting and non-voting (ex-officio) directors elected at an Annual General Meeting (AGM) guides activities.

Its purposes, as described in the PacMARA constitution, are:

- To undertake research and analysis initiatives that inform and support an ecosystem-based approach to coastal and marine planning, conservation and resource use in BC.
- To produce products that highlight, promote and communicate the results of the Association's research and analysis.
- To facilitate the development of cooperative and collaborative research and analysis initiatives between First Nations, provincial and federal governments, non-government organizations, academics, and community and commercial interests.
- To provide science-based services that use the Association's research and analysis to support marine planning, conservation and resource use in BC.

In early 2005, the Board members of PacMARA decided to convene a workshop that would bring BC marine experts together to do two things:

- a) Complete a technical review of the spatial analysis and modeling work conducted by the Living Oceans Society (LOS) for the North Coast, Central Coast and Queen Charlotte Basin, (The Conservation Utility Analysis - CUA). Version One of the CUA had originally been produced in 2003 for the BC Coast Information Team as part of Provincial Land and Resource Management Planning (LRMP's). This peer review of Version 1 has been a long-standing goal of many interested organizations, to broaden understanding and support of this body of work and develop next steps for an improved, more collaborate version; and
- b) Convene a meeting of BC's marine experts to review the current and planned marine biodiversity spatial analyses and/or conservation planning assessment projects (tools) available in BC and to identify how the tools can be used individually and together as an assessment "system" of the status of marine biodiversity and as a foundation of a conceptual framework to guide conservation planning in BC.

Because some members of the PacMARA Board of Directors are also involved in development of the CPTC, and its activities in development of a provincial biodiversity strategy, PacMARA was alerted to the possibility of a joint workshop where CPTC goals and PacMARA goals could be addressed in parallel, resources could be shared, and a broader range of marine experts and decision-makers might interact. The CPTC was also interested in a joint workshop as they were advised that PacMARA acts as a hub for a large network of marine expertise in BC, allowing an opportunity for the CPTC to describe their activities to members of this network and solicit discussion on how to address the marine realm in the Provincial Biodiversity Strategy.

Marine Expert Workshop Agenda

2. Meeting Summary

The day involved presentations of the marine biodiversity spatial analyses and/or conservation planning assessment projects/tools currently underway in the marine realm, followed by break out discussions on two themes. The power point presentations have been posted on an ftp site ([ftp.wwf.ca](ftp://www.wwf.ca); UserID: **MarineWorkshop** Password: **Gr33n**) and workshop participants have been provided with the appropriate information to access them on that site. Following are basic questions or comments raised after each presentation. (Note: presentation order is not consistent with the agenda due to shuffling as a result of some late arrivals.)

2.1 Setting the Context

2.1.1 DFO's approach to Ecosystem Overview Assessment (EOA)

Jack Mathias, Fisheries and Oceans Canada, presented DFO's approach to the Ecosystem Overview Assessment in the Pacific North Coast Integrated Management Area (PNCIMA). The Federal Oceans Action Plan (Phase 1) has two priorities (ocean health and integrated oceans management) whose common denominator is Ecosystem-based Management. Phase 1 involves \$28 million committed over two years. The Ecosystem Overview Assessment will result in a technical report providing partners and stakeholders with information on the status of marine and coastal ecosystems to support integrated management planning and decision-making.

Comments

- DFO has assigned DFO scientists as chapter leads to each section of the report. DFO intends to contract out work on impact activities, threats and stressors since this work is more "value-laden" and scientists are not as comfortable in this arena.
- Concern was raised about how and where other analyses and tools not created by DFO would fit in. DFO responded that DFO criteria for EBSAs do not include concepts like representation, pristineness, but this kind of information needs to be brought to the planning table.
- Why is offshore oil and gas (OOG) built into the framework when the current federal policy is no OOG (i.e. moratorium is still in place)? DFO responded that many different human activities on the oceans have no government policy associated with them (e.g. wind, tidal, current energy). As such, DFO believed we have to keep all of the possible human uses/activities on the radar and plan for their potential use/presence.
- Why was the Queen Charlotte Basin was chosen over the Georgia Basin as a pilot region for integrated management planning? DFO responded that this decision was made over 3-4 year ago. The most significant driver was the potential for OOG development.
- Why are there subunits within the larger planning area? The subunits are nested within the larger regional planning area and are needed to provide the flexibility to address issues at different scales. Some issues can only be addressed at a large scale, and others at much smaller scales. Also, in the case of First Nations, we have many groups interested in integrated marine use planning within their territorial claim areas. As such, we need to do planning at the scale of territorial claim areas, and then look to integrate these into a single plan for the entire plan area.

2.1.2 Overview of BC Conservation Lands Forum CPTC Framework Subcommittee's approach to biodiversity status assessment

Matt Austin of the CPTC presented on this topic. He noted at the beginning of the presentation that the question of whether or not the CPTC addresses the marine realm is still an open one and that DFO's active participation would be key to moving forward. He asked participants to consider whether the model currently being developed and applied to the terrestrial and freshwater realms was appropriate or useful for the marine realm.

Comments

- How will the analysis units (100,000 polygons) and degree of impact ratings assigned to them be used? The status report will be used as input to development of the biodiversity strategy. As such, for a place (polygon[s]) with a high score for irreplaceability and high impact score, we would expect the strategy to focus efforts there.

Marine Expert Workshop Agenda

- How much data is biased by sampling bias? This is most evident in the species distribution information, but we are planning a workshop in February to develop range maps, in collaboration with UBC, for a suite of species to overcome this issue.

2.2 Review and Sharing of Spatial Analysis and Conservation Planning Tools

2.2.1 LOS/CIT Conservation Utility Analysis (CUA)

Jeff Ardron, previously an analyst with the Living Oceans Society, but now a consultant, presented on this topic.

Comments

- Marine planning in BC is not about species richness, it is about species data-gaps. It's how to manage about what you don't know.
- How has human use been input to the model? Human use has not yet been an input to the model, but a new software program is currently in development (MarZone – the next version of Marxan) that will allow human use data to be integrated. In fact MarZone will be a significant step forward because it will support multiple zoning; for example, ranging from open fishing areas through to no-take reserves. The user will have the ability to input different conservation objectives for each zone, thus providing for a wider range of management options.
- You called this a comprehensive ecological analysis; what about the social and economic components? We need to keep these 3 streams separate and then explore how to fit them together as part of the planning process. This is the exciting part and MarZone should be helpful in this regard.

2.2.2 TNC/NCC Nearshore Analysis

Dave Nicolson, Nature Conservancy of Canada, presented on their Marine Ecoregional Planning, Nearshore Analysis.

Comments

- What is “cost” in the model? The model defines cost not in economic terms but in identifying the most efficient solutions (e.g. the least amount of area) to the problem of selecting a set of conservation areas that meet a suite of biodiversity targets. It can also identify areas that are selected up repeatedly in such sets, indicating areas of high “Conservation Utility.”
- MarZone, the next version of Marxan, will be a significant step forward because it will support multiple zoning; for example, ranging from open fishing areas through to no-take reserves. The user will have the ability to input different conservation objectives for each zone, thus providing for a wider range of management options.
- Concern that benthic landforms analysis has not been done in BC. Dave replied that Jeff Ardron has addressed some of this through development of his “benthic complexity” spatial data set.
- Objectives are built into the use of Marxan insofar that you decide how much of various things that you want. This could be seen as a social choice. Concern that this would have implications for people taking and applying results who weren't part of building the targets and decision rules. Dave replied that NCC deals with this by bringing in as many experts as possible to identify what is most important and what the targets should be. Another method is to set a range of targets and run the analysis multiple times, as was done by LOS in their conservation utility analysis using Marxan.
- Where did the objective to protect 30% of historic extent come from? Dave replied that this figure is both supported in the literature and is an NCC organizational directive.

2.2.3 Threats to Marine Biodiversity

Jacky Booth, of Jacqueline Booth & Associates presented an overview of work conducted on behalf of the Province of BC. This analysis was a strategic assessment; next steps involve doing a more thorough and detailed assessment of impacts and priorities.

Comments

Marine Expert Workshop Agenda

- Why was there no mention of risk in your analysis? Because this analysis looked at existing threats, not future ones.
- What are the next steps to identify risks? This project was intended only to identify where we need to focus our efforts. There are no next steps planned at this time.

2.2.4 GeoConnections Support for Marine Analysis Initiatives

Tony Turner from GeoConnections presented on this topic. Geoconnections is part of Natural Resources Canada, and is a national partnership initiative to build the Canadian Geospatial Data Infrastructure and make Canada's geographic data, applications and services available on the web. Geoconnections spent its first 5 years building tools; now they want to support decision-making.

Comments

- Concern was expressed regarding the vulnerability of the \$60 million promised to this initiative based on the current political situation.
- Concern was expressed regarding the quality of data since there is no formal peer review process for the data that enters the portals. Geoconnections response was that data quality is the responsibility of the data provider. Geoconnections is just the portal provider, linking the user community.
- Is Geoconnections not competing with organizations like Mapster and if so, why would a person go to GeoConnections if they already use Mapster? Geoconnections serves a different suite of purposes, with a focus on data sharing, removing barriers to access to data, and creating portals and user communities.
- What are the types of incentives for ENGOs to contribute and participate? Geoconnections can help provide groups the capacity to be linked to each other and have access to each other's data (e.g. user community).

2.2.5 DFO's approach to Ecologically and Biologically Significant Areas (EBSAs)

Cathryn Clark, Fisheries and Oceans Canada presented on DFO's approach to identifying EBSAs, a key input to the Ecosystem Overview Assessment and delivery of integrated oceans management planning.

Comments

- Concern was raised that there will be a bias to commercial species. Suggestion to include more common non-commercial species. DFO agreed that this was a weakness in the approach.
- Concern that there is also a bias in the quality of data since so much more is known about commercial species. DFO responded that there is a built in data quality ranking where experts are asked to rank their data on its level of quality, although they have not yet found a way to include this ranking in the analysis.
- How much is habitat being considered in this approach? This is still a work in progress; it's not clear how to draw the line between EBSA habitat and representation objectives or other agencies/mandates.
- When DFO does a Marxan analysis, will it limit the targets to address only EBSA criteria? DFO responded yes.
- Will you include First Nations TEK and LEK? Yes, we would like to use this information; it is one of our report recommendations.

2.2.6 UBC Marine Intensity of Human Use Mapping/Analysis

Natalie Ban from UBC Fisheries Centre's Project Seahorse presented on this topic.

Comments

- Are you buffering non-spatial impacts? Answer was no.
- Does every fishery count as a use? Yes.
- Does the groundfish trawl data distinguish between bottom trawling and mid-water trawling. Answer was no, we only have bottom-trawl data. We would like to be able to differentiate and include the variation in level of use.
- Concern was raised that it would be useful to see the analysis reflecting previously trawled areas to see if they are recovering and identify where impacts are shifting over time. Response was that the problem with

Marine Expert Workshop Agenda

integrated management approach and how data is collected currently is that it is not set up to inform the answers to questions being asked today; the data isn't available.

2.2.7 MMRU Marine Classification Tool

Ed Gregr from the University of BC Zoology Department presented a new classification tool he and his colleagues have developed in response to the decline of stellar sea lions in Alaska. The tool is for research, not management, and will enable improved spatial assessments using remote sensing data. The focus of the research to date has been Stellar seal lion critical habitat, species habitat relationships and seasonal oceanographic patterns.

2.2.8 Summary of supporting assessment projects/tools currently underway or under development.

Dave Nicolson representing PacMARA, showed the group a table he was producing that was capturing and documenting the full suite of assessment projects/tools currently underway or under development. Further information to flesh out this table will be discussed at breakout group II. It was requested that the table be circulated so that others could help fill in the gaps and also, if included, make sure their work was accurately represented.

Comments

- LUCO (province) did a similar project in 1995 that might be a helpful source.

2.3 Break-out Sessions

Two breakout sessions were organized to take place concurrently to focus more specifically on issues important to the CPTC and PacMARA.

2.3.1 Group 1: CPTC Break-out Session

The initial question for this breakout group was whether the Conservation Planning Tools Committee should address the marine realm. If there was time and if it was determined that the marine realm would be included, more detail on how technical components of the freshwater and terrestrial are being addressed could be presented to the marine expert group for their input. The question would be what we can learn from what other groups are doing and whether the marine realm could adopt their work or whether different analyses should be applied.

Lead by Matt Austin, this breakout group was attended by:
Sara-Jane Brocklehurst, CPTC
Greg MacMillan, Parks Canada
Joe Truscott, Province of BC Integrated Land Management Bureau
Dave Nicolson, NCC
Jamie Alley, Province of BC Ministry of Environment
Bruce Ward, Province of BC, Ministry of Environment
Jeff Ardron, consultant
Jennifer Lash, LOS
Scott Wallace, consultant
Natalie Ban, UBC Fisheries Centre

Remaining attendees participated in PacMARA's break-out session.

Question 1: Should the development of the biodiversity strategy include addressing the marine realm at this time?

Discussion

- It is a requirement of the Canadian Biodiversity Strategy but perhaps it is a different timeline.
- Concern that if the marine isn't covered it is a loss of potential funding and a lost opportunity

Marine Expert Workshop Agenda

- Concern that the timeline is too tight to complete a marine biodiversity status report; it will not be possible to do the same level of analysis for marine
- Hard to determine an answer to this question without clarity around status report and/or strategy objectives.
- Could a line possibly be drawn where there is overlap between activities e.g. whales affect salmon spawning?
- Could it be a collaborative effort through some of the MOUs that are being drawn up through DFO?
- What are the biodiversity threats (risks?) if we don't do this?
- Perhaps this should be a higher level discussion put to people drawing up the various MOUs.
- Don't do it if it is going to be another turf war, however if there is a willingness to pool resources for modeling then yes.
- Perhaps the marine component should be focused on getting people involved initially and invest time to develop interest.
- Since interest in a marine biodiversity strategy is both federal and provincial, you cannot take the process framework and apply it to marine.
- Do not invite DFO to be part of the CPTC but instead have DFO invite the CPTC to be part of their Ocean Action Plan with data sharing at the top of the list
- Perhaps could use PacMARA because of their neutral position
- If DFO addresses the marine realm, will the result meet biodiversity requirements since DFO won't try to fulfill all agencies' legal mandates
- Perhaps look to the Cooperative Research Centres in Australia www.crc.gov.au for a process approach to marine that has been successful
- Perhaps just collect and synthesize what DFO is doing
- Believe it is part of the CPTC mandate so the question is how?
- Perhaps add a section to the Freshwater and Terrestrial status reports on the interface of realms in order to handle the marine concern. For example, sea-lion haul-outs would get dealt with in the interface. Many layers can be added for this. Shorezone units are also part of the interface.

It was agreed by the group that an added section to Freshwater and Terrestrial status reports focused on the interface between realms would probably be the best way to address aspects of the marine realm but to avoid issues that result because of jurisdictional disputes and the current lack of involvement of/or engagement with DFO. It was also recognized that there might be a strong benefit to CPTC to seek an invitation to the DFO process.

The group briefly looked at the terrestrial model and discussed range maps. It was noted that the GARP tool and EMFA (Ecological Niche Factor Analysis) were both available online and likely achieving what is presently envisioned for the range maps.

2.3.2 Group 2: PacMARA Break-out Session

The objective of group 2 was to explore and build a conceptual basis for future cooperation/collaboration. The discussion in group 2 focused on identification of issues and barriers, and development of recommendations on opportunities and next steps.

Specific questions/topics to guide the discussion included:

- Should there be strong cooperation and collaboration amongst all players assessing marine ecosystems and biodiversity, and if so, do we need a conceptual basis/framework to do so?
- How do the current assessment frameworks (i.e. DFO, CPTC) and analysis tools/projects fit together and/or complement each other within the context of larger marine planning initiatives (i.e.

Marine Expert Workshop Agenda

PNCIMA, Canada-BC Oceans MOU and subagreements) on the Pacific Coast? What else is going on and how does it fit in?

- How do we expand participation and working relationships amongst various interests (agency, NGO, First Nations [traditional use], communities [local knowledge])?
- What are the some of key opportunities and next steps? e.g. would we benefit from a comprehensive /ongoing compendium of projects/tools/analyses/data; collaboration of specific projects/tools; process of peer review to ensure acceptable and credible results?
- How do we to move forward on central issues like data cooperation amongst agencies and NGOs.

Discussion:

Should there be strong cooperation and collaboration amongst all players assessing marine ecosystems and biodiversity, and if so, do we need a conceptual basis/framework

- There was general agreement on Question 1 from the room. Collaboration means learning, assisting with implementation, sharing results and practices, integration of information.
- Some suggested it was too early for talking about science/research collaboration; as we are about six months away form the Fed/Prov/TP agreements being finalized.
- Collaboration to what end? Depends on objectives, and whether its independent or advocacy
- Collaboration/cooperation is limited by will/mandate, but may be formalized in current process
- Lots of opportunities
- Need a venue to pull people together
- Need the institutional framework completed
- Need to minimize duplication
- Need to bring information to the table
- Need data sharing and ability to query databases
- Need to feed information into the planning process
- Need to validate/ vet and review work
- Its not about competing science
- Mechanisms include the tri-partite agreement, and potential for its expansion on the science/research side
- Need to look at the CIT example for what worked and what didn't
- Can ENGO's play in both places - (in the tent and out at the same time; science and advocacy)?
- Issue of trust - whoever pays dictates results of the science?
- Different approaches and viewpoints are healthy
- Data quality is essential
- Need to add a local approach to overall federal approach.
- Room for lots of roles, both advocacy and collaboration

While the other guidance questions were considered, the short time allotted to this session, due to weather constraints at the beginning and end of day, means PacMARA will continue to do post-workshop on them.

Marine Expert Workshop Agenda

2.3.3 Breakout summaries

Matt Austin and Rick Ellis each provided a brief summary of the outcome of the CPTC and PacMARA breakout sessions.

CPTC

It was determined in the first breakout group that instead of seeking to bring DFO into the CPTC process, we should instead look to see if the CPTC might be able to get involved in Oceans Action Plan process to make sure there is that link. The CPTC should still seek to address those areas of overlap between the terrestrial/freshwater/marine realms by adding a chapter to the status report specifically focused on overlaps between realms and similarly try to encourage DFO's process to do the same.

The land-sea interface is an important component that tends not to be considered adequately in either federal or provincial planning.

Pac MARA

Very useful and candid discussion. First Nations negotiations with the province and federal government about governance are ongoing and when finished will provide a hugely useful framework for more collaboration. Within this framework there will be those people who want to collaborate on science and share data. There are advocacy roles around planning and decision-making that are outside of the realm of science collaboration and these can and should be separated. It is recognized that there are different kinds of activities like planning that need to be informed by science and research. There will not always be sharing of all the data but it is important that for the data that is shared there is a need to ensure quality.

There was also strong agreement that this event was worth doing and PacMARA was encouraged to facilitate similar sessions in the future. There is lots of existing overlap and all are potential opportunities for collaborations (vs. just areas of risk for duplication).

2.4 Next Steps

CPTC:

The CPTC will be holding a meeting on December 7th where the results from the breakout session will be put forward for discussion. Recommendations will be made to include a new section in the status report (s) on realm interfaces to handle the marine component and for CPTC to seek involvement in DFO's process.

PacMARA:

PacMARA will continue to facilitate discussions around collaborative research and will be bringing the results of this workshop to its next Board meeting to discuss next steps, and possibilities around subsequent workshops

PacMARA will continue post-workshop activities on a mechanism for continued discussion around the questions that were not brought to conclusion at the workshop breakout due to time constraints imposed by the unexpected weather. These were:

- How do the current assessment frameworks (i.e. DFO, CPTC) and analysis tools/projects fit together and/or complement each other within the context of larger marine planning initiatives (i.e. PNCIMA, Canada-BC Oceans MOU and sub agreements) on the Pacific Coast? What else is going on and how does it fit in?
- How do we expand participation and working relationships amongst various interests (agency, NGO, First Nations [traditional use], communities [local knowledge])?

Marine Expert Workshop Agenda

- What are the some of key opportunities and next steps? e.g. would we benefit from a comprehensive /ongoing compendium of projects/tools/analyses/data; collaboration of specific projects/tools; process of peer review to ensure acceptable and credible results?
- How to move forward on central issues like data cooperation amongst agencies and NGOs?

Marine Expert Workshop Agenda

3. *Appendices*

3.1 *Final Marine Workshop Agenda*

November 29, 2005

Place: Delta Suites Hotel, 550 Hastings St. W., Vancouver

Time: 8:30 am – 4:30 pm

Purpose

To review the current and planned marine biodiversity spatial analyses and/or conservation planning assessment projects (tools) available in BC. Identify how the tools can be used individually and together as an assessment “system” of the status of marine biodiversity and as a foundation of a conceptual framework to guide conservation planning in BC.

Objectives

1. To create and support effective collegial working relationships among the various interests and projects engaged in the assessment of marine biodiversity. The desired relationship is inclusive of all interests and activities; respectful of differences; focused on common interests; and mutually beneficial through peer collaboration.
2. To review and share information about various marine biodiversity spatial assessment and conservation planning projects (tools) that are currently underway or planned.
3. To discuss how the current and planned activities can be combined to form the foundation for a systematic conservation analysis framework, whereby they form a complementary suite of conservation assessment and/or planning tools.
4. To determine next steps for technical development of tools.

Marine Expert Workshop Agenda

8:15 – 8:30 *Arrival and Refreshments*

8:30 Introductions, review of agenda, logistics
Review of purpose and objectives PacMARA President / facil
(Michele Patterson/Rick Ellis)

Presentations

Setting the Context

8:45 DFO's approach to Ecosystem Overview Assessment (EOA) Jack Mathias, DFO

9:15 Overview of BC Conservation Lands Forum CPTC Framework Subcommittee's approach to biodiversity status assessment. Matt Austin, CPTC, Framework Subcommittee

Review and Sharing of Spatial Analysis and Conservation Planning Assessments

9:45 LOS/CIT Conservation Utility Analysis (CUA) Jeff Ardron, LOS (consultant)

10:15 – 10:30 *Refreshments*

10:30: DFO's approach to Ecologically and Biologically Significant Areas (EBSAs) Cathryn Clark, DFO

11:00 TNC/NCC Nearshore Analysis Dave Nicolson, NCC

11:30 Threats to Marine Biodiversity Jacky Booth
• Overview of work conducted on behalf of the province Consultant

12:00 UBC Marine Intensity of Human Use Mapping/Analysis Natalie Ban, UBC

12:30 – 1:15 *Lunch*

1:15 Geoconnections support for marine analysis initiatives Tony Turner, Geoconnections

1:30 Summary of supporting assessment projects/tools currently underway or under development.
Dave Nicolson, PacMARA

Break-out Sessions: 2 Groups

1:45 Group 1: CPTC Break-out Session

Explore the CPTC's framework for analysis, assessment and reporting on the status of biodiversity. Discussion will be of a technical nature.

1:45 Group 2: PacMARA Break-out Session

Explore and build a conceptual basis for future cooperation/collaboration. Discussion in group 2 will focus on identification of issues and barriers and development of recommendations on opportunities and next steps.

Marine Expert Workshop Agenda

Specific questions/topics to guide the discussion include:

- Should there be strong cooperation and collaboration amongst all players assessing marine ecosystems and biodiversity, and if so, do we need a conceptual basis/framework to do so?
- How do the current assessment frameworks (i.e. DFO, CPTC) and analysis tools/projects fit together and/or complement each other within the context of larger marine planning initiatives (i.e. PNCIMA, Canada-BC Oceans MOU and subagreements) on the Pacific Coast? What else is going on and how does it fit in?
- How do we expand participation and working relationships amongst various interests (agency, NGO, First Nations [traditional use], communities [local knowledge])?
- What are the some of key opportunities and next steps?; e.g. would we benefit from a comprehensive /ongoing compendium of projects/tools/analyses/data; collaboration of specific projects/tools; process of peer review to ensure acceptable and credible results?
- How to move forward on central issues like data cooperation amongst agencies and NGOs?

3:00 Refreshments

4:00 Report out on Progress and Next Steps

4:30 Summary/Wrap-up

4:45 Meeting adjourned

Marine Expert Workshop Agenda

3.2 Attendees

Process Support	
Rick Ellis	Facilitator
Michele Patterson	WWF Canada/ PacMARA President
Kaaren Lewis	WWF/CPTC
Dave Nicolson	NCC/CPTC
Sara-Jane Brocklehurst	CPTC Coordinator

Experts	
Bill Wareham	David Suzuki Foundation
Bruce Ward	MOE
Cathryn Clarke	Fisheries and Oceans Canada
Chris Close	UBC Fisheries Centre - Sea Around Us Project
Doug Hrynyk	Parks Canada
Edward Gregr	UBC Zoology Department
Greg Kapala	Living Oceans Society
Greg Kehm	Ecotrust Canada
Greg MacMillan	Parks Canada
Jack Mathias	Department of Fisheries and Oceans
Jackie Alder	UBC Fisheries Centre - Sea Around Us Project
Jacky Booth	Jacqueline Booth and Associates
Jamie Alley	Province of BC Ministry of Environment
Jamie Kenyon	Canadian Wildlife Service
Jeff Ardron	Consultant/PacMARA Vice President
Jennifer Lash	Living Oceans Society
Joe Truscott	MOE-Integrated Land Management Bureau
Joy Hillier	Fisheries and Oceans Canada, North Coast
Ken Cripps	Coastal First Nations Turning Point Initiative
Kimberly Anthony	Environment Canada
Krista Munro	Living Oceans Society
Larry Greba	Coastal First Nations Turning Point Initiative
Louisa Wood	UBC Fisheries Centre - Sea Around Us Project
Mark Zacharias	Province of BC Integrated Land Management Bureau
Matt Austin	MOE/CPTC
Melody Farrell	Fisheries and Oceans Canada
Murray Manson	Fisheries and Oceans Canada
Natalie Ban	UBC Fisheries Centre - Project Seahorse
Sabine Jessen	CPAWS
Scott Wallace	Consultant (Blue Planet Research)
Steve Diggon	Fisheries and Oceans Canada
Tony Turner	NRCAN-Geoconnections