



Pacific North Coast Integrated Management Area (PNCIMA) Initiative

Valued Socio-Economic and Cultural Ecosystem Components (VSECs) Workshop

Workshop Summary

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Delta Vancouver Airport Hotel
Richmond, BC

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Summary

Workshop Background

The PNCIMA initiative is a collaborative planning process that will develop an Integrated Ocean Management Plan by December 2012. The plan will reflect a balanced approach to oceans management, with objectives for respecting the economic, social, and ecological health of the region. The plan is intended to: a) set a broad context for management in the area and identify priorities, b) facilitate coordination of management planning processes, and c) inform other marine planning initiatives.

The concept and use of Valued Components is increasingly being used in a wide range of resource and environmental management applications. Valued Components describe attributes or components of the natural and human environments for which there is public or professional concern. In the context of Pacific North Coast Integrated Management Area (PNCIMA) planning, they are elements of the area that humans view as significant or valuable. Valued Components may be ecological, socio-economic, or cultural in nature.

The PNCIMA initiative is currently considering using Valued Components in order to generate understanding between various parties, develop strategic plans, and establish a monitoring framework.

To date, significant scientific work has been conducted by DFO, the Province of BC, collaborative projects like the BC Marine Conservation Analysis, and others to develop and apply methods for the identification of ecological Valued Components (Valued Ecosystem Components, or VECs). A workshop exploring the potential application of these different methods for the identification of VECs in PNCIMA was held on November 30, 2011.

As a complement to the methods available for identifying VECs, DFO is seeking to establish methods for the identification of socio-economic and cultural Valued Components, hereafter referred to as Valued Socio-Economic Components, or VSECs. Methodologies that can identify VSECs according to clear criteria are of particular interest, as these are key features of the approach to the identification of ecological VECs as well. The focus of this workshop will be on *how* to identify VSECs. The actual identification and application of these VSECs will be the focus of future work.

A workshop to explore methods for identifying and selecting VSECs, and to consider information available to inform the development of VSECs for PNCIMA was held by Fisheries and Oceans Canada on February 14, 2012 in Richmond BC. The focus of the day was on "how" to work with VSECs, rather than identifying specific VSECs for PNCIMA. Approximately 50 people attended the workshop, including members and alternates of the Integrated Oceans Advisory Committee, social scientists, stakeholders, First Nations representatives, and provincial and federal government managers and planners.

The workshop objectives were to:

1. Build shared understanding of the concept of VSECs and how they have been applied to marine planning initiatives elsewhere.
2. Explore how VSECs can best be applied within PNCIMA.
3. Review different methods of identifying VSECs.
4. Review draft criteria for refining and synthesizing socio-economic and cultural VSECs.
5. Identify information that may be relevant to inform a list of potential VSECs for PNCIMA.

Discussions at the workshop were informed both by a draft report produced by Uma Consulting, *Methods for Identifying and Selecting Valued Social and Economic Components of Marine Ecosystems*, and by case studies of various planning and research initiatives that have used VSECs (or equivalents), as shared by five workshop panellists. Panellists were asked to speak to why VSECs or equivalents were used in their projects, how they were applied, and the added value that they brought to the process. In addition, panellists also shared insights regarding the value that VSECs might bring to the PNCIMA context.

Key Discussion Points

Applying VSECs in Marine Planning Initiatives

While the specific term VSEC hasn't been used broadly, businesses, governments, communities, environmental non-governmental organizations (ENGOs), and academics are collectively turning their attention to equivalent concepts (i.e. "important things" and "things that matter") for the purpose of building improved understanding. Within the context of Integrated Oceans Management, VSECs have been used in numerous ways to help generate understanding between groups about different values.

Identifying VSECs for PNCIMA

Key considerations/recommendations for choosing a method to identify VSECs include:

- Defining the decision making context (i.e. purpose) for VSECs in the PNCIMA context,
- Drawing on a balance of existing information, expert input, and stakeholder input,
- Incorporating a mechanism to track how values and impacts change over time,
- Choosing VSECs that are appealing or iconic for communities,
- Involving a wide range of stakeholders at the table, to ensure a wide range of socio-economic and cultural components are considered,
- Involving stakeholders early in the process and engaging them appropriately,
- Being clear with language and terminology, and working to define concepts around value,
- Identifying a means of incorporating qualitative values (e.g. cultural/spiritual) that are harder to measure, and
- Developing a mechanism to accommodate and adapt to changes in values over time.

Selecting and Informing VSECs for PNCIMA

Workshop participants spent time in smaller groups to identify potential criteria to identify a “long list” of potential VSECs for PNCIMA. It was recognized that criteria need to be broad enough to reflect PNCIMA’s holistic approach, and that it is also important to give consideration to “immeasurables” (especially cultural values). Draft criteria for selecting VSECs were grouped into categories including the following: practicality, support/acceptance, scale, comparability, risk/urgency, economic, decision making linkages, and communication.

A preliminary listing of key documents to refer to in developing a “long list” of VSECs for PNCIMA was developed at the workshop, and is included in Appendix 2.

Challenges to be Aware of in Moving Forward

- Methods for identifying VSECs are poorly documented in almost all case studies uncovered by the consultants.
- Economic and socio-economic components are more often used; cultural components are virtually absent, more thought will be required towards these elements within the PNCIMA context.
- Use of VSECs for risk assessment purposes is limited and requires more discussion.
- Further work is required on methods for identifying VSECs for spatial planning or marine planning purposes.
- Balancing funding or resource limitations with the importance of comprehensiveness is critical.
- Continuity of resources (both money and people) over time can be a real challenge.

Part 1 – Introduction and Background

PNCIMA Planning and Valued Social-Economic Components

Presentation by Neil Davis, Fisheries and Oceans Canada

PNCIMA Initiative Overview

The PNCIMA initiative is a collaborative planning process that will develop an Integrated Ocean Management Plan by December 2012. The plan will reflect a balanced approach to oceans management, with objectives for respecting the economic, social, and ecological health of the region. The plan is intended to: a) set a strategic direction and context for management in the area and identify priorities, b) facilitate coordination of management planning processes, and c) inform other marine planning initiatives.

PNCIMA Plan Outline

The Integrated Oceans Management Plan for PNCIMA will include:

1. Ecosystem-based management principles, goals and objectives;
2. Identification of valued ecosystem components and valued social-economic and cultural components, and prioritisation of these components for further attention;
3. Coordination of management processes, including advancement of marine protected area network planning; and
4. Provisions for implementation and adaptive management.

Progress to Date

The following key aspects of developing the plan are either underway or have been completed:

- Background research reports and analyses completed.
- Engagement strategy and Integrated Oceans Advisory Committee (IOAC) established.
- Draft ecosystem-based management (EBM) principles and goals completed. Draft EBM objectives are nearing completion.
- Socio-Economic and Cultural Overview and Assessment (SECOA) report nearing completion.
- Potential list of valued ecosystem components drafted (following a companion workshop on Valued Ecosystem Components in November, 2011).

Defining Valued Social-Economic and Cultural Ecosystem Components (VSECs)

VSECS describe attributes or components of the natural and human environments that are important for social, economic, or cultural reasons (e.g. boat launches and public wharves, historic shipwrecks, areas of high wind suitable for energy generation).

In the context of an Integrated Oceans Management Plan for PNCIMA, VSECs will potentially serve several functions:

1. To express more tangible things of particular significance or importance under each plan objective, helping to build understanding of “what matters”.
2. To specify the things for which strategies are developed within the plan. In this way, VSECs can be conceived of as a “bridge from objectives to strategies”.
3. To identify indicators to monitor progress towards achieving the broader objectives within the plan.
4. To serve as the base units for subsequent risk assessment (DFO is still exploring the merit of this function for VSECs).
5. To serve as information inputs to related processes such as marine protected area (MPA) network planning.

VSECs are a complement to valued ecosystem components (VECs) that describe attributes or components of the natural environment that are important for ecological reasons (e.g. kelp forests which provide habitat for many species, herring as a forage species). VECs refer to things that are important for ecological reasons.

Work to Date on VSECs for PNCIMA

To help ensure appropriate identification and use of VSECs, DFO commissioned background research on how VSECs have been identified and used elsewhere. Consultants Andrew Day and Josie Osborne, with Uuma Consulting Ltd., were asked to:

1. Explore how VSECs have been defined and applied elsewhere;
2. Scope what methods can be used to identify and select VSECs; and
3. Make general recommendations about methods for identifying and selecting VSECs for PNCIMA.

The consultants submitted a draft report of their research to date, *Methods for Identifying and Selecting Valued Social and Economic Components of Marine Ecosystems*, which was circulated to workshop participants in advance of the workshop. This workshop is the opportunity to make more specific recommendations on how to identify and select VSECs for PNCIMA.

Part 2 – Learning from Experience: Applying VSECs in Marine Planning Initiatives

Valued Social and Economic Components of Marine Ecosystems

Presentation by Andrew Day, Uuma Consulting Ltd.

The Report

In December, 2011, Uuma Consulting was contracted by Fisheries and Oceans Canada to provide DFO and its partners with an overview of different VSEC applications, methods that could be used to identify and select VSECs, and specific considerations that should be taken into account in their application. The culmination of this work is the report, *Methods for Identifying and Selecting Valued Social and Economic Components of Marine Ecosystems*. The scope of the report includes fields of application of VSECs, and examples of VSEC applications most relevant to Integrated Oceans Management (IOM) generally, and to PNCIMA in particular, through review of a limited number of papers and generation of several case studies.

A couple key challenges emerged in the development of the report:

- Methods for identifying VSECs are poorly documented in almost all case studies identified;
- Economic and socio-economic components are more often used; cultural components are virtually absent, and therefore not included in the scope of the consultants' report.

Defining and Understanding Valued Ecosystem Components

VSECs are defined as elements of social-ecological systems that humans view as significant or valuable. There are three types of valued ecosystem components, outlined in Table 1. Table 2 outlines examples of more specific VSECs.

Table 1: Types of VSECs

Type	Focus	Term	Example
1	Ecological	VEC	Eel grass
2	Ecological benefit to humans	VSEC	Eel grass is important because it provides habitat
3	Social, economic, or cultural	VSEC	Access to a dock or marina

Table 2: Examples of Valued Social-Economic and Cultural Ecosystem Components

Examples of VSECs	
1) Access to financial capital <ul style="list-style-type: none"> • Lending policies • Interest rates 	2) Food production <ul style="list-style-type: none"> • Ability to gather or get local, fresh food • Meet export market demand
3) Access to employment and trained labour force <ul style="list-style-type: none"> • Youth entering profession • Proximity to trained labour force near production 	4) Recreational opportunities <ul style="list-style-type: none"> • Expectation of positive experience • Access to areas
5) Adequate infrastructure <ul style="list-style-type: none"> • Energy supply • Boat launches, ports etc. • Water supply 	6) Cultural values supporting good, stable relationships <ul style="list-style-type: none"> • Respect • Dignity • Discipline • Communication
7) Stable regulatory environment <ul style="list-style-type: none"> • Streamlined processes • Up to date regulations • Secure tenure 	8. Physical and emotional health <ul style="list-style-type: none"> • Safe and productive working/living conditions • Fitness and relaxation • Effective health care

Applying Valued Social-Economic Components: Why Use VSECs?

VSECs are part of a growing recognition of the need to improve the way we balance social, cultural, economic and ecological values. While the specific term VSEC hasn't been used broadly, businesses, governments, communities, ENGOs, and academics are collectively turning their attention to equivalent concepts (i.e. "important things" and "things that matter") for the purpose of building improved understanding of the work they undertake. Specifically, VSECs help to:

- Provide a common language on complex issues;
- Improve relationships between stakeholders;
- Provide opportunities for finding solutions or mitigating impacts;
- Reach more balanced, transparent decisions; and
- Bridge high level concepts (e.g. objectives, goals) and management applications (e.g. assessments, spatial plans, monitoring).

VSECs have been used in numerous ways to help generate understanding between groups about different values. Table 3, below, illustrates some of these applications.

Table 3: Applications of VSECs

Application	Details	Example
Environmental Impact Assessments	<ul style="list-style-type: none"> • Original application of VSECs • Mining, energy projects, transportation projects etc • Used to scope environmental and social assessments • Used to select indicators for monitoring 	<ul style="list-style-type: none"> • Bruce Power Nuclear Plant, Ontario
Assessing Decision Consequences	<ul style="list-style-type: none"> • Evaluating management alternatives or decision • BC Hydro structured decision making 	<ul style="list-style-type: none"> • North Atlantic herring fishery where effects of eight management options against 6 VECs were evaluated • BC Hydro structured decision making
Monitoring, Reporting, Ecosystem Assessment	<ul style="list-style-type: none"> • VSECs used as endpoints for assessments; linked with indicators • VSECs used in State of Environment reporting as link between lay and scientific perceptions of the environment 	<ul style="list-style-type: none"> • Puget Sound Partnership
Strategic and Community Plans	<ul style="list-style-type: none"> • Strategic planning provides a familiar context • Five stages: 1) establish mission and vision; 2) scan trends, issues and "SWOTS"; 3) set priorities/tar; 4) targets; 5) strategies • Official Community Plans 	<ul style="list-style-type: none"> • PNCIMA
Integrated Ocean Management (IOM)	<ul style="list-style-type: none"> • Goals, objectives • VECs and VSECs not explicitly used in IOM, but social, cultural and economic values are implicitly acknowledged in marine strategic planning 	<ul style="list-style-type: none"> • Beaufort Sea IOM Plan • Eastern Scotian Shelf IOM Plan • Massachusetts • Gulf of Maine
Marine Spatial Planning and Marine Protected Areas	<ul style="list-style-type: none"> • VECs and VSECs not typically used, but: • Identification and use of ecological and socioeconomic values that can be mapped is a core element 	<ul style="list-style-type: none"> • PNCIMA map atlas • BC Marine Conservation Analysis

Research Observations

- 1) Further attention is needed regarding methods for identifying cultural values, and social or economic values that are not easily quantified.
- 2) Use of VSECs for risk assessment purposes requires more discussion.
- 3) Further work is required on methods for identifying VSECs for spatial planning or marine protected areas planning purposes.
- 4) Balancing funding or resource limitations with the importance of comprehensiveness is critical.

Research Summary

- 1) VSECs provide an opportunity to build understanding and bring social and economic considerations more comprehensively and transparently into Integrated Oceans Management.
- 2) It is important to select VSECs as well as VECs in order to present a whole system perspective.
- 3) Understanding the inter-related ecological, social, and economic consequences of decision and plans will become more important as increased pressures create difficult trade offs between multiple objectives. VSECs are one means of informing these decisions.

Discussion Highlights

The time needed to identify and select VSECs varies across regions and application modes, requiring anywhere from 2 months to 2 years to complete. Generally, developing models and setting up opportunities for stakeholder engagement takes quite a lot of time. Given the shorter timeline that the PNCIMA initiative is on, careful consideration will be required in selecting a method(s) for identifying VSECs.

Two key considerations in choosing a method to identify VSECs include 1) incorporating a mechanism to track how values and impacts change over time, and 2) choosing VSECs that are appealing or iconic for communities.

There are many examples, on the ecological side, of processes that have sought to holistically capture the “full system” in a preliminary list of valued ecosystem components, and subsequently narrowed the list down to the most applicable and relevant elements for that particular planning process. The Eastern Scotian Shelf IOM Planning process broke the valued components into particular elements that comprise systems, and then translated these into related indicators and objectives. It is useful to take this comprehensive “systems approach” because it requires you to go through each element, ensuring that key pieces are not missed.

To date, this hasn't been a typical approach used for identifying VSECs. One example where this was attempted is with the Puget Sound Partnership. While they didn't use a system model, they did identify over 700 indicators, which were ultimately narrowed down to 13. The Arctic Social Indicators project is another example of where this more rigorous approach was applied.

Panel Discussion: Applying Socio-Economic and Cultural Valued Ecosystem Components

A discussion was held with invited panellists to encourage workshop participants to explore how VSECs have been applied elsewhere, the strengths and weaknesses of various applications, and the values that VSECs can bring to planning initiatives, through case studies shared by panellists.

Panel members:

Leah Malkinson	Province of BC
Cal Wenghofer	Fisheries and Oceans Canada
Simon Routh	Inuvialuit Regional Corporation
Krista Royle	Parks Canada
Grant Murray	Vancouver Island University

Panel Facilitator: Ellen Frisch

To begin the discussion, panellists were invited to “tell a story” of how they have used VSECs in their work, addressing the questions below, through exchange and dialogue in open forum with other workshop participants. Their “stories” unfold in the section that follows.

1. What was the intention of planning process?
2. Who was involved? What was your role?
3. Why did you choose to use VSECs? How do you define a VEC?
4. Can you tell us more about how VSECs were utilized/applied in your project?
5. What decisions or processes did VSECs inform?
6. Given what we've heard so far, what value could VSECs have in the PNCIMA context?
7. How can VSECs be the most useful for a PNCIMA plan?

Exploring a Cumulative Effects Assessment and Management Framework for Natural Resource Decision-Making in BC

Leah Malkinson, Province of BC

The Province of BC recognizes that in order to manage the cumulative effects of multiple resource activities on the land base, it is important to define a common set of social, economic and environmental values (and associated components and indicators), monitor their condition, and ensure they are consistently assessed and considered in decision-making across the natural resource sector. Accordingly, the Province is in the early stages of considering a ‘values framework’ that includes the identification of values and associated components, indicators and benchmarks, to enable consistency in both the identification and assessment of valued components in decision-making. Still in the early stages of this initiative, the Province is working to identify draft VSECs (and VECs), which may be tested in pilot applications to decision-making at different scales:

1. **Single use authorizations** (e.g. resource permit, license, tenure);
2. **Projects** (e.g. mine, clean energy development, with multiple authorizations); and
3. **Strategic decisions** (e.g. land use objectives or management targets; multiple authorizations for a geographic area)

The project envisions the development of a GIS based query tool that will maintain up to date information on the spatial distribution and condition of selected valued components. This information would be readily available to stakeholders and the general public, and used to support cumulative effects assessment of proposed activities.

Leah's role in this project is as Project Manager. Given that the project is still in the early stages, comments concerning this project relate more to current thinking as they move forward, rather than lessons learned.

The Beaufort Sea Integrated Ocean Management Plan

Cal Wenghofer, Fisheries and Oceans Canada

The intention of the Beaufort project was to develop an IOM Plan for the Beaufort Sea and to work with other planning processes in the region to provide better tools and information to decision makers.

The process was not built from scratch, as several integrated processes were already underway or completed in the region. From a legislative perspective, integrated management started in early 2000 with the introduction of the Oceans Act (1996).

The Beaufort IOM Plan was built on a co-management model, which is a part of every day work in the North. The Beaufort planning process involved all levels of government, aboriginal organizations, academics, NGOs, etc. Working groups were built into an operating governance structure.

The Beaufort IOM is an objective based plan, stemming from an approach that many other initiatives in the region were using at the same time (e.g. Mackenzie Gas project). The objectives developed for the plan point to valued components. A key issue that influenced the development of the plan was the balance between strategic and operational objectives and strategies.

Valued components were used in developing the Beaufort IOM because they wanted a holistic planning process that had achievable and measurable objectives and indicators. They are currently being used to develop detailed workplans for implementation the Beaufort Sea IOM Plan and in other planning/ decision-making processes in the region.

The Inuvialuit Indicators Project and the Beaufort IOM Plan

Simon Routh, Inuvialuit Regional Corporation

Inuvialuit Regional Corporation (IRC) is a land-claim organization with overall responsibility for managing the affairs of the Inuvialuit Final Agreement (the Western Arctic Claims Settlement). The Inuvialuit Final Agreement, which was settled in 1984, contains a requirement for co-management as well as a requirement for monitoring and evaluation, and forms the regulatory context of the work undertaken by IRC.

Though the Inuvialuit Settlement Region is geographically large, it is home to a relatively small population, with roughly six thousand inhabitants distributed between six communities. The scales that need to be addressed in IRC's work are accordingly smaller than those associated with PNCIMA.

The work of IRC in the area of VSECs is guided by the need for good baseline information for monitoring and evaluating impacts on valued ecosystem components and a common, consistent framework for decision making within and across different projects.

The Inuvialuit Indicators Project, which was supported initially by a planning budget associated with the Mackenzie Gas Project, began as an objective-based process. Instead of using the term "VSEC", the project uses the terms "valued components", which are used interchangeably to some extent with "objectives". Valued components/objectives come into play for the IRC when trying to assess the key pieces that need to be in place to achieve the objectives and what state or critical thresholds need to be met or maintained. This system guides IRC's socio-economic and cultural policies and positions in processes ranging from Integrated Ocean Management (e.g. Beaufort IOM Plan), to Environmental Impact Assessments, to Cooperation and Benefits Agreements. The project establishes a common valued socio-economic and cultural components framework and baseline from which all parties in the region can work.

VSECs have proved particularly useful to IRC in looking at the comprehensive benefits agreement related to oil and gas development. The valued components framework enabled IRC to submit recommendations on specific objectives that they wanted to have met, key indicators, baseline data needed, etc. With this foundation, they were able to discuss reasonable level of benefits in the region, and didn't have to undertake significant volumes of work after the fact, as the framework was already in place. From the proponent's perspective, this was greatly appreciated because it simplified the process. Acceptance of Inuvialuit objectives has been increased by virtue of having the framework in place.

One challenge IRC has encountered in working with valued components has been in finding an appropriate balance between having what is the best means of assessing the condition of a VSEC with what is feasible from an on-going and/or long-term monitoring perspective.

Parks Canada: Applying VSECs in National Marine Conservation Area (NMCA) Planning

Krista Royle, Parks Canada

Parks Canada is one of three federal departments with the authority to establish Marine Protected Areas. Parks Canada is responsible for establishing National Marine Conservation Areas (NMCAs) under the National Marine Conservation Act, which recognizes that healthy marine ecosystems are critical for maintaining biological diversity and are fundamental to the social, cultural and economic well being of Canadians. The mandate of NMCAs is to 1) protect the marine environment and 2) provide for ecologically sustainable use of the marine resources.

There are multiple steps associated with establishing an NMCA:

1. Identify and select candidate areas;
2. Assess feasibility;
3. Negotiate agreement;
4. Develop interim management & zoning plan;
5. Establishment

VSECs have been used by Parks Canada to inform the development of zoning plans and other management tools for NMCAs. Krista's comments as a panellist relate specifically to her work in developing an interim zoning plan for the Gwaii Haanas NMCA.

The Gwaii Haanas NMCA was long standing project that took over 20 years to come into effect. The intention of the project was to develop an interim zoning plan, involving the Council of Haida Nation, Fisheries and Oceans Canada, Transport Canada, the Province of BC, and industry (commercial fisheries, sport fishing), as well as the NMCA Science Network. The choice to use VSECs within this project came back to Parks Canada's mandate, which is to balance protection with ecologically sustainable use. In working with VSECs, Parks Canada sought to minimize conflict and maximize social and cultural objectives. They also wanted to incorporate industry values to ensure support for the interim zoning plan.

When Parks Canada began interim zoning for Gwaii Haanas, they convened a science network which provided independent advice relating to science and social science considerations. Recommendations from the Pacific Coast NMCA Science Network were reviewed by the Gwaii Haanas Project Team and used to inform data collection, guide mapping, and assist in forming the approach used to identify areas of high biophysical diversity. The NMCA Science Network developed and recommended 8 biophysical operating principles and 6 socio-economic and cultural operating principles. Examples of socio-economic and cultural operating principles include: 1) maximize socio-economic and cultural benefits, and 2) minimize impacts on marine users.

In order to determine whether these objectives were being met, Parks Canada gathered spatial data from 14 commercial fisheries active in the Gwaii Haanas area, information important to the Haida First Nation, and recreational activity data, and then produced maps showing the spatial distribution of activities.

For Parks Canada, key benefits of identifying these valued components include:

- Being able to develop an interim zoning plan that had limited impact on the footprint on commercial fishing/existing uses.
- Employing cultural data sets to ensure that Haida Nation values were considered.

For others undertaking a similar process, Parks Canada recommends:

- Involving a wide range of stakeholders at the table, to ensure a wide range of socio-economic and cultural values are considered.
- Involving stakeholders early in the process and engaging them comprehensively.
- Incorporating local ecological knowledge from the fishing industry (would be very helpful with zoning).

Vancouver Island University: Researching Values in Marine Activities

Grant Murray, Vancouver Island University

Unlike others on the panel, Grant Murray's work, through Vancouver Island University, does not pertain to a particular planning process; rather, his work focuses on values and impacts of marine activity on values. To date, he has been involved in two kinds of projects:

1. Historical reconstructions that examine how socio- ecological systems have changed over time and addressed factors that influence change in systems. (Newfoundland, New Jersey).
2. The social impacts of change in fisheries, aquaculture, and marine protected areas.

These projects haven't used the term VSEC specifically; instead they looked at broad elements of systems. The values they looked at weren't always related to "things", rather, they looked at "held values" or desired states and qualities (e.g. fish vs. the act of fishing vs. the sense of financial security that fishing creates).

In Grant's work, using valued components enabled his research team to look at trends that had caused a change in values and how impactful they were (e.g. health and safety regulations impacting fishing; understanding the relationship between values and behaviour; identifying future research needs etc.)

Key recommendations emerging from this research include:

- Build in local knowledge; make community part of the team.
- Be clear with language and terminology. Work to define concepts around value.
- Recognize that it is hard to articulate value sometimes (e.g. why is fishing important?) There are often multiple values, some of which may even be conflicting.

Discussion Highlights:

Terminology

Across the various case studies shared by panellists, it was clear that different processes and projects use different terminology to convey the concept of “things of concern” or “things of importance”. Workshop participants were encouraged to use the term “VSEC” as a “handle” to access and discuss the concept.

Scale/Balance

In attempting to balance resource use versus conservation in the PNCIMA IOM Plan, it will be important to consider different uses across departmental mandates. Within the Plan itself, we can develop a range of goals and objectives to express this balance. While there may be particular areas within the Plan that lean in one direction, we will seek balance on the whole. The scale of PNCIMA and the integrated approach of the initiative will also help to create this balance.

Adaptive Mechanisms

Many of the workshop panellists agreed that developing a mechanism to accommodate and adapt to changes in values over time is a key consideration in working with VSECs.

The Beaufort Plan was designed to be an iterative process from start to finish, and values and strategies changed throughout the 6 year planning process. With the plan now approved, they have adopted a 3 year review process, which will later transition to a review every 5 years. Currently, they are looking to have their performance management process signed off. If this is done well and indicators are approved, they expect be able to adapt as values change over time.

Parks Canada incorporates adaptive management as a key principle in NMCA planning, recognizing that there is still much to be learned about ecosystems, and that there needs to be room in plans to adapt as we learn more. Parks Canada has a 5 year review process that involves public consultation. Management plans are adapted based on current issues, concerns and opportunities that are identified in these reviews.

Inuvialuit Regional Corporation also recommends having a system built in for ensuring that VSECs are validated on an ongoing basis. Such a system should offer backups if primary sources of measuring a value become unavailable.

It is worth noting that while values change over time, the rate of change will differ, depending on the issue being considered. Typically, core values or “held values” (e.g. spiritual well being) don’t change as fast as “assigned” values (e.g. certain species of fish).

Prioritizing Across Competing Interests

It was recognized that there is potential for conflict when prioritizing VSECs across competing interests. The Beaufort IOM Plan was consensus based, with multiple opportunities for stakeholder input. In terms of prioritizing, they adopted the approach that the people who lived in the area were the focus of the plan, and it is their values that are reflected in the plan. It is important to note that there were fewer stakeholders

in this region than in the PNCIMA region. Building and maintaining relationships with stakeholders was critical in the Beaufort to reaching consensus.

Once a list of valued components was generated for the Beaufort (through community engagement), it was thinned down based on themes. The original “long list” was kept, and the planning team continues to revisit it.

In the case of Inuvialuit Regional Corporation’s work, they have handled the balancing of interests challenge by borrowing from the tools and methodologies of impact assessments. To do this effectively, they recommend looking at the magnitude and duration of impact. For example, if an impact is deemed undesirable, but of limited duration, consider where there are ways to mitigate an impact to allow the process to go ahead in a way that reduces the impact to an acceptable level for its duration.

In terms of identifying VSECs, the Province is looking at a core set of values to screen things through, with three priorities: 1) a coarse set of indicators, 2) where legal direction for management of values has already been identified, and 3) specific components that support treaty recognized rights.

Incorporating Qualitative Values

Incorporating values that are harder to quantify or measure (e.g. cultural/spiritual) is an important and essential challenge when working with VSECs. There was discussion around the importance of recognizing cultural values of First Nations as well as those of non-First Nations, and the need to give a voice to the “underlying values” as well as the economic ones. Concern was expressed that existing government frameworks are not often set up to incorporate these values. The different projects profiled on the workshop panel offered several strategies in navigating these challenges:

1. Look for proxy measures that are more quantifiable (e.g. for the value of fishing opportunities for children into the future, look at average age, costs of licences, how licences get transferred etc.)
2. Look for data on these values used in other planning processes
3. Use other planning/assessment tools to address the qualitative values (e.g. Parks Canada used the socio-economic impact assessment to address qualitative factors that couldn’t be made spatial).
4. The PNCIMA Initiative may need to reach a common understanding of what culture is.

Identifying Who Should Be Involved

Determining who should be involved in identifying VSECs and to what extent is a considerable challenge. Parks Canada’s approach for interim management plans is to develop a consultation plan, which includes different stages for raising awareness:

1. Identify the different stakeholders (government agencies, public etc.),
2. Identify the level of engagement that stakeholders will be brought in at (e.g. partnership, collaborating, etc.),
3. Work with communities to identify issues and opportunities, and
4. Return to community with “near final” version of interim management plan for comment to feed into final product.

Part 3 – Identifying and Selecting VSECs for PNCIMA

Methods for Identifying and Selecting Socio-Economic and Cultural VECs

Presentations by Andrew Day, Uuma Consulting Ltd., and Neil Davis, DFO

The report, “*Methods for Identifying and Selecting Valued Social and Economic Components of Marine Ecosystems*” (2012), outlines three main steps to identifying VSECs (see Figure 1). First, VSECs or issues of concern are identified and a preliminary list is drafted. It may be reviewed and/or amended for clarity, completeness or duplication. Second, the preliminary list is ranked. Third, specific selection criteria are applied to the ranked list of preliminary VSECs to develop a final list for use in assessments, analyses and planning. The final set of VSECs becomes the key area of communication with the public and stakeholders and informs subsequent applications.

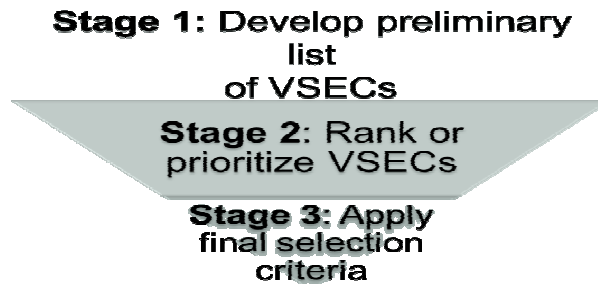


Figure 1 – Steps for Identifying VSECs

In the first and second stages of identifying and selecting VSECs, a number of approaches can be used that are not mutually exclusive. These include using system modeling, quantitative models, expert opinion, and stakeholder engagement strategies. The particular combination of approaches used for each stage of VSEC determination results in the overall methodology applied in a particular management endeavour. Typically, in the final stage of selection, the prioritized list of VSECs is reviewed by the managers or practitioners within the specific context of use to ensure that they are practical, directly applicable, measurable, and/or have data associated with them. Although resource limitations may prevent a longer list of VSECs from being used, eliciting the whole list is worthwhile as it provides communication points for managers and allows managers to add new VSECs later without going back to experts and/or stakeholders.

Although the report outlines a set of methods that can be taken in a staged approach to selecting VSECs, it does not recommend using any of them alone. The most successful applications of VSECs occur when systems models, expert opinion, strategic reviews, and the public/stakeholders are combined. The selection of methods obviously

depends primarily on resources and time available, but VSECs are so crucial to many aspects of IOM – not the least of which is building understanding – that it is important to give them appropriate attention.

Fisheries and Oceans has developed the following criteria to help guide the decision on which methods to select for identifying VSECs:

1. relevant and applicable to large scale PNCIMA planning (versus methods tailored to more local level planning)
2. preferably spatially explicit (this criterion is being revisited for reasons of feasibility)
3. efficient with regards to time and resource requirements
4. draw effectively on existing information
5. allow for input from diverse interested parties
6. enable integration of different info types

Timing will also factor significantly in determining which method(s) for identifying VSECs are selected and the extent to which they are utilized. The PNCIMA timeline is tight, with approximately three months available (March – May, 2012) to identify and confirm VSECs.

To move forward with Stage 3 of identifying VSECs, it is necessary to develop selection criteria. While there is not a lot of documentation in the literature on VSECs, some draft criteria to consider for narrowing down a long list of VSECs might include the following:

Importance	How important is the VSEC to stakeholders, decision makers, scientists etc?
Presentation	Is the VSEC clear and appealing?
Other	Is there available information for monitoring this VSEC? Is the information at the right scale? How specific is the VSEC? Is it comparable within other planning processes?

Panel Discussion: Methods for Identifying Socio-Economic and Cultural VECs for PNCIMA

Workshop panelists were asked to speak to the following questions:

1. Reflecting on what worked well and what challenges you encountered, what initial comments do you have regarding what is important when selecting a method(s) to identify VSECs?
2. What should DFO be aware of as we plan to undertake this exercise?

In response, panelists shared the following comments and recommendations:

- It is very important to define the decision-making context for VSECs, as it is fundamental to considerations relating to scope and scale. For example, if the intention of this process is to build agreement with PNCIMA stakeholders, then this will influence which method is selected.

- Drawing on all methods to varying degrees is valuable, as it provides a more well rounded view of the world.
- Extensive consultation can be very expensive in terms of time and money.
- Public/stakeholder consultation is very valuable; however, you can prioritize where it is most valuable and draw on other methods to make it as useful as possible. For example, you can rely more strongly on expert consultation when it comes to economic components, and interact at a community level for social and cultural components.
- Develop a solid framework for VSECs by looking at existing documents, existing processes, expert consultations and consultations with key stakeholders and then take the framework out for public review and consultation. Stakeholders will be able to provide more input to a draft list, rather than a blank slate. Use public consultation for validation.
- The more that you can involve people, the higher level of buy in you get to the results.
- It is important to engage people early in the process to build trust.
- Continuity of resources (both money and people) can be a real challenge.
- It is important to allow for an iterative process. Timelines may need to be moved or adapted.
- Developing a common vocabulary/terminology is important.
- It is valuable to have VSECs that can carry across different planning processes, as well as link to specific objectives in one process.

Recommendations for Selecting a Method to Identify VSECs for PNCIMA

Building on initial comments and recommendations of the panelists (above), workshop participants divided into breakout groups to identify important considerations and advice to feed into a process for identifying VSECs, recognizing the constraints of time and limited financial resources that Fisheries and Oceans has available to direct to this component of the PNCIMA initiative. The following list represents a consolidation of the top three suggestions shared in plenary by breakout groups, for DFO's consideration:

- Be clear on the **purpose** from the start - why are we doing it?
- **Scale** is an issue. How is it going to be possible to have consistency in VSECs across the entire PNCIMA region? There will need to be different VSECs for different scales, or the range of VSECs must cover different scales.
- The methodology adopted should reflect a combination of all three approaches (**hybrid**/middle ground). Details of what to include from each method, and to what extent still need to be determined.
- **Tap into structures and systems** that are already in place, for efficiency;
- Community **engagement** and support is important; community input can be used for validation; methods need to be as inclusive as possible, given limitations.
- Provide experts and communities with a **draft list** of VSECs, rather than a blank slate.
- Define what constitutes an expert (adopt a broad definition);
- The process should be **iterative** across all three methods.

- Incorporate an adaptive **review mechanism**, to account for changes in values over time.
- Some VSECs are not going to be **spatially explicit**. How will these be incorporated?

Criteria and Information for Selecting VSECs for PNCIMA

VSEC Selection Criteria

Workshop participants were asked to consider what criteria should be used by DFO to select and refine a long list of VSECs for PNCIMA. Looking at the draft list of criteria shared by Andrew Day (page 15), it was recognized that criteria need to be broad enough to reflect PNCIMA's holistic approach, and that it is also important to give consideration to "immeasurables" (especially cultural values). It was suggested that criteria should reflect both "what we love *and* what we need".

Workshop participants divided into breakout groups for further discussion, and the collective ideas were grouped into the following categories or themes to be considered as possible criteria for selecting PNCIMA VSECs:

Practicality	Support/Equity/Acceptance
<ul style="list-style-type: none"> • Timely/little latency • Accessibility of information • Operational (is it real?) • Tangible • Simple (able to advance metric) • Measurable • Sustainable/likely to be around in future • Achievable/feasibility • Cost • Relevance • Metrics – are the VSECs good proxies for multiple elements (indicators) 	<ul style="list-style-type: none"> • Supported by community (and experts/academia) • "Resonance" (i.e. does this list reflect the values I hold, as a community member?) • Where is the public? • Where are First Nations? • Equity – how will including or excluding this VSEC affect different stakeholders? • Justice • Acceptability and common ground for buy-in • Balance for different sectors • Quality of life • Indicators for multiple sectors • Inclusive
Scale	Comparability/Used Elsewhere
<ul style="list-style-type: none"> • Relevant to PNCIMA scale (LOMA) • Dealing with different issues at different scales (local/regional/national) • Relevance at local scale • Diversity of scales of interest 	<ul style="list-style-type: none"> • Global indicators of VSECS (of quality of life) • Builds on other processes outside region (e.g. Norway) • Can it feed into other planning processes? • Compatibility and consistency with other processes

	<ul style="list-style-type: none"> • Amenable to comparison by qualitative studies
Risk/Urgency	Economic
<ul style="list-style-type: none"> • Prioritize VSECs most impacted by activities at greatest risk • Ability to identify risk • Importance because of urgency/temporal necessity 	<ul style="list-style-type: none"> • Economic sustainability • Economic value • Cost-benefit analysis (feasible for?) • Regional interests should not be the only concern. National interests and VSECs should be considered at the same time. (e.g. marine/port shipping facilities create transportation capacities that support socio-economic development inland)
Decision Making Linkages	Communication
<ul style="list-style-type: none"> • Linked to a policy requirement • Importance to a sequence • Can support decision making in multiple applications • Lines up with other priorities • Can be linked to other policy actions • Is it in line with EBM principles? 	<ul style="list-style-type: none"> • Understandable • Stable • Transparent • Appealing • What does it mean? • Is it too subjective?
Overarching Guidance	Miscellaneous
<ul style="list-style-type: none"> • “Reflect agreed upon objectives” contradicts “comparability” • Initial list should have limited criteria. Criteria should come in when prioritizing • Type 2 and type 3 distinctions • Need representative balance of importance (i.e. to decision making; stakeholders) • Clearly related to marine environment and scope of integrated oceans management. • Balanced criteria – inclusive • Cover more global themes (e.g. human health) in multiple themes (see Andrew’s themes) • Intensity of values • Breadth of value (# of people that share) • Balance between intensity and breadth 	<ul style="list-style-type: none"> • Spatially explicit? • VECs must be broad enough in scope to consider ‘upstream’ beneficiaries of marine activity. • Criteria should be neutral (i.e. not value laden)

Informing the Development of VSECs

Workshop participants were asked to consider existing documents, plans, and reports that may already outline values, objectives, strategies, or elements of importance within the PNCIMA region. A listing of these documents can be found in Appendix 2.

Generally, there was agreement that there is a broad range of information and data sets available to help inform the development of VSECs for PNCIMA, and that the data quality and format will vary considerably across sectors.

The first step in working with available information should be to review what already exists and to identify data gaps. Engagement with stakeholders should follow this review, in order to vet the list and gather further information.

Workshop Summary and Next Steps

Several key themes emerged from discussions throughout the day. DFO attempted to summarize these key elements at the conclusion of the workshop:

Challenges

- There are many challenges associated with the identification and selection of VSECs. The workshop helped to identify what VSECs are useful for, and highlighted what we can and can't do with them.
- Cultural values are important for both First Nations and non-First Nations. Reflecting the non-quantifiable, cultural components of VSECs will be a challenge, as this aspect is not well documented in the literature, nor is there much understanding of whether and how these components can be applied at the PNCIMA scale. More thought is needed towards capturing and representing cultural elements for PNCIMA.

Applying VSECs/Utility

- VSECs (or their near equivalents) have been valuable elsewhere in terms of coordinating information about things that are important, and making this information available to other planning or decision making processes. One example given of this was the comprehensive benefits agreement negotiations between the Inuvialuit and the oil and gas sector, where previous work to identify VSECs enabled a more efficient and informed negotiation. VSECs were also been valuable in minimizing impact on areas of importance for commercial fisheries in Gwaii Haanas.

Methods for Identifying

- Prior to finalizing a specific method to identify VSECs for PNCIMA, DFO needs to be clear about how they will be used and applied.
- Identification of VSECs can be done in a proactive way to help decision making by bringing together information so that it is available to others in other contexts.
- Being clear on common vocabulary for terms used in the context of VSECs is important.

- There seems to be broad support for the idea of DFO doing some work to draft a list of the VSECs that people can respond to, based on existing information. Public engagement on VSECs will be more effective if they are provided with something tangible to respond to that reflects some of the values that have already been shared through PNCIMA and other initiatives.
- Condensing a long list of VSECs to a shortlist will be a particular challenge. Grouping peoples' inputs under broader themes is one approach to doing this. Using proxies of the longer list is another approach that has been used successfully elsewhere.
- It makes sense for DFO to employ a method similar to the one currently being used to identify VECs for PNCIMA (i.e. identify a long list of potential VECs, invite input on the long list from stakeholders, consult with experts, and take a refined list back for final consultation).

Summary of Next Steps

- DFO to consolidate everything shared at the workshop, and generate a summary report to be shared with all workshop participants.
- DFO to review existing forms of information that can feed into the process of identifying potential VSECs.
- Workshop participants to send additional information sources that outline values for specific sectors to Neil Davis or Sheila Creighton by **March 15, 2012**.
- Workshop participants to communicate with their sectors that this work will be happening over the next few months and to flag that DFO will likely be in touch to solicit feedback from sectors through PNCIMA IOAC representatives.
- DFO to define a method for identifying VSECs, based on what was heard at the workshop, and on Uma's research. Proposed methodology to be written up along with a draft list of VSECs for review and feedback.
- Next PNCIMA IOAC Meeting: March 21, 2012, in Richmond, BC. VSECs discussion will be furthered at this meeting.
- MPA Network Planning Workshop: March 22, 2012, in Richmond, BC.

Appendix 1: Panellist Biographies

Leah Malkinson (Province of BC)

Leah is a Senior Resource Planning Specialist, in the Resource Management Objectives Branch, with the BC Ministry of Forests, Lands and Natural Resource Operations (MFLMRO). She is currently working as Co-Project Manager for Cumulative Effects Assessment and Management Framework project, being jointly led by MFLNRO and the Ministry of Environment.

Grant Murray (Vancouver Island University)

As the Director of the Institute for Coastal Research, and the Canada Research Chair in Coastal Resource Management, Grant has over fifteen years experience in interdisciplinary social-ecological research, working with coastal communities and resource users in Canada, United States, and Mexico, and more recently in Nigeria, Tanzania and Ghana. Most projects he has been involved with have been community based initiatives.

Simon Routh (Inuvialuit Regional Corporation)

A Technical Advisor to Inuvialuit Regional Corporation, Simon's has been responsible over the past five years for developing a socio-economic indicator-based monitoring system to assist IRC in measuring the impacts of resource development on its beneficiaries, as well as to assess the effectiveness of government and corporate programs and measures.

Krista Royle (Parks Canada)

An Ecosystem Data Specialist with Parks Canada, Krista has been involved with the technical elements of formulating and leading conservation planning projects which support the establishment of new terrestrial and marine protected areas.

Cal Wenghofer (Fisheries and Oceans Canada)

As the Area Ocean's Program Manager for DFO, from 2004-2009, Cal worked in Inuvik, overseeing the development of the Beaufort Integrated Ocean Management Plan. He now works at DFO's national headquarters in Ottawa, as the Arctic Manager for the Oceans Program.

Appendix 2: Information Sources for Identifying VSECs

Document Title/Record	Contact for Further Details
Federal Documents	
DFO MPAs (SGaann Kinghlas Bowie Seamount, Hecate Strait)	
Scott Islands Benefits Valuation	Environment Canada
Existing PNCIMA Documents	
Subregional Advisory Forum notes	
SECOA workshop notes	
SECOA	
Provincial Documents	
Central and North Coast LRMP adjacent to the PNCIMA Area	
MaPP	
Central Coast LRMP EBM Objectives	Leah Malkinson
Johnstone Strait Limits of Acceptable Change	Leah Malkinson
Provincial Administrative Data	
Provincial Coastal Plans	
Provincial Marine Use Plans	
First Nations Reports/Plans	
Haida Marine Traditional Knowledge Study	Russ Jones
First Nations Marine Plans	
Haida Gwaii Marine Use Planning Process	
Haida Gwaii Baseline Assessments	Leah Malkinson (?)
First Nations Mapping	
PNCIMA Communities	
Local Ecological Knowledge	Jackie Booth
Mt. Waddington Survey Values	Claire Havens (Environment Canada)
Community Economic Strategy on Haida Gwaii	Leah Malkinson
"Marine Economy and the Regional District of Mt. Waddington in BC" (2011 Report)	Al Huddleston or Neil Davis
Port Hardy OCP (and others)	Online
LGL consulting – marine values in north coast (BC oil and gas commission)	Bob Bocking
ENGO Documents	
BCMCA Atlas and Website	online
PACMARA EBM Roadmap	
PACMARA – Marine Ecosystem Based Management Knowledge Gaps Study	
West Coast Aquatic	
Living Oceans Society	
David Suzuki Foundation Marine Ecosystem Services	
T. Buck Suzuki Fisheries Mapping	

Sustainable Marine Fisheries and Community Alliance (SMFCA) reports	Sustainable Marine Fisheries and Community Alliance (SMFCA) reports
Other Reports	
Study for Approval of KMLNG Terminal (Moffatt and Nichol)	
Dale et al: An Overview of Key Conservative, Recreation and Cultural Heritage Values in British Columbia's Marine Environment	
"Structured Decision Making for Ecosystem Based Management" (M. Espinosa-Romero, K. Chan, T. McDaniels, and D. Dalmer)	
"Marine Ecosystem Based Management Knowledge Gaps Study" (J Booth & Associates, for PacMARA, 2009)	
Gillasson reports et. al.	
Miscellaneous	
Social media (geotagged)	
BC Bureau of stats	
2011 Census (recently reported)	
Integrated Fisheries Management Planning Processes – for both data and links to communities	
West Coast Vancouver Island Socio-Ecological Assessment	
Environment Assessment Office website – projects for review, studies/reports	
NCEAA (Canadian Environmental Assessment Act?)	
Jackie booth report?	
International examples for example criteria: UK marine planning process; Norwegian marine planning process; Natural capital approaches (e.g., Earth Economics)	

Appendix 2: Workshop Participants

Last Name	First Name	Company
Abram	Jim	Strathcona Regional District
Antcliffe	Bonnie	Fisheries and Oceans Canada
Bernhardt	Joey	University of British Columbia
Bodtker	Karin	BC Marine Conservation Analysis
Brown	Stephen	Chamber of Shipping of BC
Burns	Matt	Naikun Wind Energy
Campbell	Colin	Sierra Club BC
Coleman	Heather	PacMARA
Creighton	Sheila	Fisheries and Oceans Canada
Davis	Neil	Fisheries and Oceans Canada
Day	Andrew	Uuma Consulting Ltd
Diggon	Steve	Coastal First Nations
Evanson	Melissa	Fisheries and Oceans Canada
Gale	Rupert	Sport Fish Advisory Board
Haggan	Nigel	University of British Columbia
Hamer	Lorena	Herring Conservation and Research Society
Havens	Claire	Environment Canada
Heath	Nick	Outdoor Recreation Council of BC
Hotte	Ngaio	UBC Fisheries Centre
Huddlestan	Al	Regional District of Mount Waddington
James	Michelle	Underwater Harvesters Association
Jessen	Sabine	Canadian Parks and Wilderness Society
Johnson	Kim	Shell Canada
Klain	Sarah	Institute for Resources, Environment and Sustainability, UBC BC Ministry of Forests, Lands and Natural Resources Operations
Lidstone	Allan	Operations
Loveless	Evan	BC Wilderness Tourism Association BC Ministry of Forests, Lands and Natural Resources Operations
Malkinson	Leah	Operations
Martone	Rebecca	Fisheries and Oceans Canada
Mayer	Andrew	Prince Rupert Port Authority
Mclsaac	Jim	Commercial Fisheries Caucus
Molnar	Michelle	David Suzuki Foundation
Murray	Grant	Vancouver Island University
Nelson	Phill	Council of Marine Carriers
Nobels	Des	Skeena Queen Charlotte Regional District
Patterson	Michele	Vancouver Island University
Perron	Danielle	Fisheries and Oceans Canada
Rankin	Colin	C. Rankin & Associates
Reid	Bruce	Fisheries and Oceans Canada

Routh	Simon A	Inuvialuit Regional Corporation
Royle	Krista	Parks Canada
Sheppard	Victoria	Fisheries and Oceans Canada BC Ministry of Forests, Lands and Natural Resources Operations
Short	Charlie	
Stadel	Angela	Environment Canada
Stein	Kaity	International Ship-Owners Alliance of Canada
Thomson	Alan	Recreational Canoeing Association of BC
Wakelin	Amy	Fisheries and Oceans Canada
Wallace	Scott	David Suzuki Foundation
Wenghofer	Calvyn	Fisheries and Oceans Canada
Wright	Kim	Living Oceans Society

Appendix 3: Workshop Agenda

PNCIMA Socio-Economic and Cultural Valued Ecosystem Components Workshop Draft Agenda

February 14, 2012 8:30am – 4:30pm

Delta Vancouver Airport Hotel

3500 Cessna Drive, Richmond, BC

Part 1 – Introduction and Background		
Time	Agenda Item	Objective
8:30am	Plenary Introduction <ul style="list-style-type: none"> Welcome and introductions Housekeeping Agenda Review 	<ul style="list-style-type: none"> Clarify objectives for the day.
8:45am	Background and Context (Presentation by Neil Davis, DFO) <ul style="list-style-type: none"> Introduction to PNCIMA Initiative Work to date <i>Q & A to follow</i>	<ul style="list-style-type: none"> Build familiarity with intent and current direction of PNCIMA. Demonstrate how VSECs connect to PNCIMA workplan.
Part 2 – Learning from Experience: Applying VSECs in Marine Planning Initiatives		
9:05am	Examples of How Socio-Economic and Cultural Valued Ecosystem Components Have Been Applied in Resource and Ocean Management (Andrew Day, Uuma Consulting Ltd.) <i>Q & A to follow</i>	<ul style="list-style-type: none"> Build understanding of types of VSECs, their utility, and how they can be applied.
9:40am	Panel Discussion: Applying Socio-Economic and Cultural Valued Ecosystem Components Workshop participants will explore how VSECs have been applied elsewhere, the strengths and weaknesses of various applications, and the values that VSECs can bring to planning initiatives, through case studies shared by panellists.	<ul style="list-style-type: none"> Build understanding of how VSECs can be applied and their associated utility. Identify lessons learned in applying VSECs to planning initiatives through others experiences.
10:30am – Break		
10:45am	Audience and Panel Discussion: How can VSECs be the most useful for a PNCIMA Plan?	<ul style="list-style-type: none"> Identify potential utility of VSECs in the PNCIMA context.
12:00 – Lunch		
Part 3 – Identifying and Selecting VSECs for PNCIMA		

1:00pm	<p>Methods for Identifying and Selecting Socio-Economic and Cultural VECs (Presentations by Andrew Day, Uuma Consulting Ltd., and Neil Davis, DFO) Overview of:</p> <ul style="list-style-type: none"> • Methods to Identify VSECs • Parameters around methods for identifying/selecting VSECs for PNCIMA • Criteria for selecting/prioritizing VSECs for PNCIMA <p>Q&A to follow</p>	<ul style="list-style-type: none"> • Build understanding around the range of methods for identifying VSECs and the strengths and weaknesses of each method. • Initiate discussion on methods being considered for application in PNCIMA context.
1:30pm	<p>Discussion: Methods for Identifying Socio-Economic and Cultural VECs for PNCIMA</p>	<ul style="list-style-type: none"> • In depth discussion of the various approaches for identifying VSECs to highlight key issues and considerations for identifying VSECs for PNCIMA.
2:45pm – Break		
3:00pm	<p>Break Out Discussions: Criteria and Information for Selecting VSECs for PNCIMA <i>Individual tables, with one panellist at each table will discuss the topics below:</i></p> <ol style="list-style-type: none"> 1. Criteria for selecting/refining VSECs <ul style="list-style-type: none"> • Review of draft criteria • What other types of criteria should be considered? 2. Information Available from your Sector, Community, Organization on VSECs 	<ul style="list-style-type: none"> • Develop understanding of the considerations that need to be factored into selecting and prioritizing VSECs. • Identify potential additional criteria for selecting VSECs for PNCIMA. • Identify information relevant to the identification of VSECs for PNCIMA.
3:45pm	<p>Overview of Breakout Group Discussions Summary of themes covered in smaller groups</p>	<ul style="list-style-type: none"> • Collect and confirm key themes and interests.
4:00pm	<p>Workshop Summary and Next Steps</p> <ul style="list-style-type: none"> • How workshop feedback will be used • Next steps in PNCIMA initiative • Next IOAC meeting dates & theme 	
4:30pm	Adjourn	