FINAL

Synthesis Report

NSERC Canadian Fisheries Research Network

2nd Annual General Meeting

St. John's, Newfoundland

December 6-8, 2011

Canadian Fisheries Research Network

Réseau canadien de recherche sur la pêche

Executive Summary

The Canadian Fisheries Research Network descended upon the East coast for its second Annual General Meeting, held in St. John's, Newfoundland on December 6-8, 2011. The meeting brought together around 90 people, including fishing industry representatives, academic researchers, graduate students and post-doctoral fellows, government scientists, and members of the Board of Directors and Independent Scientific Advisory Panel. There was a noticeable sense of collaboration, openness and camaraderie that had grown among participants since the first annual meeting. The students and post-doctoral fellows in attendance made a strong impression as well.

The meeting opened with a keynote address from Poul Degnbol, Head of Advisory Programme for the International Council for the Exploration of the Sea (ICES) in Denmark. Panel discussions and opportunities for questions and comments were interspersed throughout the day. Individual caucus sessions were held for industry, government, academia, and students and post-doctoral fellows, which served as a good ice-breaker early on. These groups discussed how to make the Network greater than the sum of its parts, and issues and ideas including co-construction, collaboration and the interdisciplinary nature of the Network. Several common themes emerged from the caucus sessions. These included:

- Communications: the need for more and better communications within the Network especially regarding research results, using the right language for the audience, and overcoming the challenges of different cultures, modes of operating, languages, geography, and disciplines.
- Integration: the need to achieve greater integration of the Network's different research initiatives and among disciplines (*e.g.,* integration of projects, partners/sectors, students, natural and social scientists, stock status and economic management strategy, multiple users (integrated management)).
- Experience of students: the need to provide students with more practical experience (*e.g.,* students to go out on boats with fish harvesters, attend DFO stock assessment and advisory meetings).
- Engagement of management and policy: the need to increase the involvement of fisheries policy and management officials and provincial governments in the Network.
- Leveraging: the need to use the research and relationships of the Network to leverage resources for additional research initiatives.

A lively and informative poster session was held at the end of the day, which was a clear highlight of the AGM. The poster session was a significant opportunity to share information about the projects and research of the Network both among AGM participants and with a broader audience, as the session was open to the public. The variety of posters included project overviews and updates, student research, partner profiles and displays, and relevant

research on fisheries topics by those with links to the Network. Feedback indicated a strong desire for poster sessions of this sort to feature at future meetings.

The second day of the meeting began with a panel response to the poster session, followed by mixed-sector small group discussions on issues and opportunities arising from the poster session. A number of suggestions were made to enhance the poster session for next time, such as clarifying and emphasizing how the research is linked to industry and government, and having industry collaborators stand next to the posters with the students to contribute to spectrum of discussion. Next, a stimulating panel discussion was held on how the Network can best impact policy and management. New and emerging initiatives in the Network were then presented, including: 1) application for funding from the Social Sciences and Humanities Research Council of Canada (SSHRC) to enhance the social science capacity of the Network, 2) a planned workshop on the impacts of terrestrial activities on coastal fisheries health and productivity, and 3) a planned workshop on energy use in Canadian capture fisheries. In the evening, a spectacular reception was hosted by the Fish, Food and Allied Workers (FFAW) at their local office, with seafood fare and live music.

On the final day of the meeting, a briefing on the Canadian Healthy Oceans Network (CHONe) was made by Paul Snelgrove, CHONe Director. This led to a discussion of ways in which we could increase links with other networks and initiatives. The afternoon was devoted to individual project meetings, during which several students gave presentations on their research progress to their team.

The top priority identified at the meeting was the importance of communications and the need for more and better communications in the Network. Other key issues included enhancing our social science capacity and student training.

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1. Introduction

The second Annual General Meeting (AGM) of the Canadian Fisheries Research Network (CFRN or the "Network") was held on December 6-8, 2011 in St. John's, Newfoundland. The proceedings of this meeting are summarized herein. All participant questions, responses, comments and discussions have been paraphrased.

The meeting brought together approximately 90 people, including 26 fishing industry representatives , 16 academic researchers, 25 graduate students and post-doctoral fellows, 13 government scientists, two members of an Independent Scientific Advisory Panel, and eight others (*e.g.,* Board members). A list of participants is provided in Appendix A.

The theme of the AGM was "A Network that is greater than the sum of its parts". The program included formal presentations, panel sessions, plenary discussion, break-out group discussions, and a poster session. A copy of the agenda can be found in Appendix B.

2. Plenary Session Day 1

2.1 Introduction and Context

Opening remarks were provided by Jean-Jacques Maguire (Chair of the Board of Directors), Rob Stephenson (Network Principal Investigator), and Susan Thompson (Network Manager). Rob Stephenson gave an overview of the history, context and evolution of the Network.

2.2 Keynote Address and Panel Response

The AGM opened with a keynote address from Poul Degnbol, Head of Advisory Programme for the International Council for the Exploration of the Sea (ICES) in Denmark (slideshow in Appendix C). Mr. Degnbol presented a view of a roadmap for how to advance fisheries management. A panel consisting of Tom Nudds (University of Guelph), Wilf Luedke (Fisheries and Oceans Canada (DFO)) and Christian Brun (Maritime Fishermen's Union (MFU)) responded to the presentation by providing their perspectives on the current state of fisheries management in Canada and how to move forward.

It was noted that the framework presented by Mr. Degnbol is very similar to that which emerged from the 2004 Atlantic Fisheries Policy Review, as well as the premises and analyses of some local fisheries organizations. Christian Brun urged the Network to review the current state of fisheries management and where the gaps are based on the 2004 framework (Atlantic Fisheries Policy Review). He emphasized the need for clear indicators that are relevant to fish harvesters and include socio-economic (viability) considerations.

Tom Nudds reflected on the potential for science to have a better and different role in fisheries management. Science should be viewed not as a stand-alone entity or product, but rather as a

process of learning and evidence-based decision-making in which all sectors are engaged. This will lead to progress through participatory co-management and adaptive management.

An inherent tension exists between industry (risk prone) and government (risk averse). Government tends to focus on high-level policy issues with devolution of decision-making, monitoring and compliance to the local level. Wilf Luedke cautioned that this trend may incur costs for fish harvesters. For policy to work at the local level, local fisheries scientists should work with fish harvesters and explore and understand the data and technology together. This will enable us to manage at a finer scale in the future than we have in the past, and elevate the comfort level of senior fisheries managers.

Following the panel response, the floor was opened to questions and comments from the audience. There was discussion around the following points:

- The broad array of "stakeholders" driving the management process (not just commercial fisheries stakeholders but also recreational fisheries interests, for example), which calls for a shift toward integrated management.
- The role of politics in fisheries management.
- Long-term vision for fisheries nestled in short-term economic interests.
- Fishing-dependent individuals/communities/associated organizations vs. large companies/industries:
    - Profits (definition or meaning of)
    - Concern over application of sustainability framework to industries that are not dependent on local stocks and fisheries.
- Multi-use marine spatial sharing/planning.
- Information and data collection:
    - A requirement for access to the resource?
    - Research updates and results must flow back to fish harvesters and communities.
- Role and responsibility of science:
    - Science is a process that involves both pushing for institutional change, and being pulled by the change as driven by other forces. Challenge is how to anticipate where the demand is going to be in the future. This Network is an important new "box" where industry and science are working together and can anticipate where the demand is greater, thereby pulling the system forward.
    - There are situations where the science / state of the knowledge has led or contributed to failure (by over-representing the certainty of scientific results and

what would be the outcome of certain decisions). Greater transparency and acceptance of uncertainty in science is needed.

- Breaking down silos – NSERC-SSHRC, science-social science – advances will occur in overlapping areas of research between these distinct disciplines. NSERC allows some (up to 30%) of the CFRN budget to be applied to social science research, and the intent is to use it fully.

2.3 Caucus Sessions

Individual caucus sessions were held for industry, government, academia, and students/post-doctoral fellows, which served as a good ice-breaker early on. These groups discussed how to make the Network greater than the sum of its parts, and issues and ideas including co-construction, collaboration and the interdisciplinary nature of the Network. The groups were asked to report back on the key points and issues identified (Table 1). This was followed by an opportunity for open discussion and comments.

Several common themes emerged from the caucus sessions. These included:

- Communications: the need for more and better communications within the Network especially regarding research results, using the right language for the audience, and overcoming the challenges of different cultures, modes of operating, languages, geography, and disciplines.
- Integration: the need to achieve greater integration of the Network's different research initiatives and among disciplines (*e.g.,* integration of projects, partners/sectors, students, natural and social scientists, stock status and economic management strategy, multiple users (integrated management)).
- Experience of students: the need to provide students with more practical experience (*e.g.,* students to go out on boats with fish harvesters, attend DFO stock assessment and advisory meetings).
- Engagement of management and policy: the need to increase the involvement of fisheries policy and management officials and provincial governments in the Network.
- Leveraging: the need to use the research and relationships of the Network to leverage resources for additional research initiatives.

Table 1 Report Back on Key Points / Issues from Caucus Sessions, and Audience Comment

Industry	Students and Post-Doctoral Fellows (summary in Appendix D)	Academia	Government (summary in Appendix E)
1. Communication: needs improvement. Information exchanges are needed between scientists and harvesters, and at the right level. Context, purpose and relevance of data collection need to be understood by harvesters. Use best language for intended audience. 2. Greater integration of: • Projects • Natural and social scientists • Stock status and economic management strategy • Multiple users (integrated management) 3. Use of information: what happens to information once it reaches Ottawa? How much of it is used? What is their interpretation of the science? How does it influence decisions? 4. How can we protect our communities during the current licence policy review? 5. Network model: seems to be effective and could be used to expand. It is wise to focus on the "parts" first to ensure they are in place and working before expanding.	1. Jobs: uncertainty about job opportunities for interdisciplinary work. We do not fit into a specific box. Our work involves a team approach based on cooperation with industry and government. 2. Training: we are not trained to interact with industry and government. Suggestion to organize a workshop to be able to speak the same language. 3. Tools: what do we want to have in our toolbox as young scientists? i. Knowledge of all of the skills available in the Network (inventory of who is doing what). ii. Training to communicate with different audiences (*e.g.,* student rep on different caucuses). iii. Hands-on experience with industry (*e.g.,* students to go out on boats with fish harvesters). 4. Communication: Student Communication Network – an annual meeting for students where they can share and present their work and ideas.	1. Communication / Lessons Learned: we need to seek mechanisms to share successes among the different groups and guard against pitfalls. This includes overcoming challenges of language, geography, interdisciplinarity, and ways of operating. 2. Commitment: we need to make the Network work. 3. Leveraging: if we can make the Network work, there is a real potential to bring the three sectors together to leverage support and make advances.	1. People's experience has generally been positive with the first year of the Network. We are finding ourselves as advisors rather than leaders of projects. Short-term nature of projects means we need to think outside the box in terms of databases, etc. 2. Leveraging: how can we leverage the work that is being done by academia and industry? 3. Engagement: lack of involvement of policy and fisheries management sectors to date. Support for DFO involvement in some projects is weak. 4. Funding: could some of the DFO Companion Program funds be earmarked to augment projects that are in need? Could they be used for travel to Project Steering Committee meetings? *Note:* DFO Companion Program is part of DFO's financial contribution to the Network. Purpose is to facilitate DFO Science engagement in the Network.

Industry	Students and Post-Doctoral Fellows (summary in Appendix D)	Academia	Government (summary in Appendix E)
6. Student experience: ensure students get out on the water with fish harvesters and that they have connections to other labs and projects. 7. Use of technology: technology for data collection must be useful, user-friendly, and multi-purpose. **Audience comment:** • Issue of language in communication in the Network. • Recognize biases in the room within sectors and use this Network to get beyond the biases. Focus on solution-oriented exercises and act now. • Who best to bring in and add to the Network, at the project level and more generally at the Network level?	**Audience comment:** • Students are encouraged to consider a career in industry (in addition to academia and government). • NSERC and provincial "Mitacs" internships, which offer research and training programs in partnership with companies, government and academia. • Invitation from Patty King for students to contact her to get out on a boat or sit down and talk with a fisherman. • Students want to attend DFO meetings. DFO peer-review processes are open to the public. Schedule is compiled nationally and is available on the Canadian Science Advisory Secretariat (CSAS) website: http://www.dfo-mpo.gc.ca/csas-sccs. Students to work through DFO contacts on their project teams to become involved.	**Audience comment:** • Concern about limited amount of socio-economic considerations in Network projects. • Academics must remain unbiased and independent, while working and maintaining good relations with industry representatives who hold diverse views, all of which are legitimate. This approach to research needs to be perceived as legitimate and productive among doubters within the academic community.	5. Capacity: Provincial capacity is important and can complement DFO Science capacity. 6. Engagement: NGOs should perhaps be engaged more in the Network. **Audience comment:** • How to appropriately engage DFO Policy in the Network? • DFO is undergoing major cuts. How to get fisheries on the government agenda?

2.4 Network Communications and Branding

Susan Thompson recounted the request for proposals process that the Network held for its website and logo design and development contract. Over 25 proposals were received from firms all across Canada. The proposals were evaluated by a CFRN Website Working Group and technical staff at the University of New Brunswick based on technical content, cost, work plan and schedule, experience of the company and staff, and references. The contract was eventually awarded to Pondstone Communications Inc., an Ottawa-based firm. The members of the Website Working Group were acknowledged for their efforts: Lyne Morisette, Marc Allain, Nellie Baker Stevens, Rob Stephenson, Stacey Paul and Susan Thompson. It was noted that, during discussions of the Website Working Group, it was suggested that the word "capture" be dropped from our Network name to make it less cumbersome.

A presentation on the Network logo, website design, and online conferencing tool was made by Duane Kennedy, president and founder of Pondstone Communications.

Logo

Two different logos were designed by Pondstone Communications in consultation with the Website Working Group. An online vote was organized for Network members to select their preferred logo. The voting continued throughout the AGM and the results were announced on the final day. Over 100 people voted, with the winning logo receiving 68% of the votes. The logo contains images of a fish, people joining hands, and a person casting a net.

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Web Conferencing

The Network now has access to a web conferencing tool called the "BigBlueButton". This conferencing tool will be used to facilitate and enhance communications within the Network. People can organize and participate in project and Network meetings by telephone or computer. The system can handle up to 60 participants at a time. All sessions are recorded and archived in an online library. Contact Susan Thompson to set up an online meeting.

Website

The website was designed in consultation with the Website Working Group and Project Leaders. The website will contain a public area and two "members-only" areas: a community space for sharing information across projects within the Network, and a project space where each of the 13 projects in the Network will be able to share information amongst their team members specifically. Development is underway and will be followed by user testing and launch in 2012.

Following the presentation, the floor was opened to questions and comments from the audience. There was discussion around the following points:

- Request for a searchable member database to be housed on the website.
- Capacity issue with respect to updating and maintaining the website (Network Manager and Project Leaders are already overloaded).
- Project Steering Committees are encouraged to discuss how they want to use or personalize their project-specific space on the website.
- Projects will have the option of limiting information to team members or sharing it with Network members or the public through a feature on the project "notice boards".
- Language issue – all to monitor website to ensure language used is appropriate and bring any issues to the attention of the Network Manager.
- Website stats will be tracked by Google Analytics.
- Show NSERC logo on public webpage at a minimum.

2.5 Poster Session

A lively and informative poster session was held at the end of the day, and it was a clear highlight of the AGM. The poster session was a significant opportunity to share information about the projects and research of the Network with participants, as well as a broader audience from the local area. Posters related to project overviews and updates, student research, partner profiles and displays, and relevant research on fisheries topics by those with links to the Network. In viewing the posters, members were asked to think about what the imperatives of the Network are, how we can deepen our collaboration, and where the gaps are in the research. The posters remained on display for most of the AGM. Participants were very enthusiastic about the poster session and asked that similar sessions be incorporated into future meetings. We thank the Marine Institute at the Memorial University of Newfoundland (MUN), Patty King, Stacey Paul and other Network members for their organizational assistance with the poster session.

Posters by CFRN students on their research in the Network were evaluated by a committee of representatives from industry, academia and government, with a prize for best student poster as judged by the committee. In addition, a "people's choice" award was determined by public ballot. The voting continued throughout the AGM and the results were announced on the final day. The winner of the Best Student Poster as judged by the committee was Gujdon Sigurdsson, a University of New Brunswick (Saint John) student in the Lobster Node. The People's Choice award went to Kate Barley, a student at MUN researching closed areas.

The Poster Evaluation Committee thanked all of the students for their impressive efforts and concluded that the poster session should be a formal part of future meetings. They recognized that clearer guidelines for the posters, including intended audience, are needed going forward.

Members of the committee provided individual feedback to students verbally and in writing on a poster evaluation sheet, and requested input from the students on their experience with the process and committee.

3. Plenary Session Day 2

3.1 Panel Response to Poster Session

The second day of the meeting began with a panel response to the poster session. The panellists were Dan Edwards (United Fishermen and Allied Workers' Union (UFAWU)), Barb Neis (MUN), Ashleen Benson (Simon Fraser University (SFU)) and Bernard Sainte-Marie (DFO). They were asked to discuss what we can draw from the poster session, how we can deepen the collaboration across sectors, disciplines and projects, and whether there are some obvious imperatives, connections, overlaps, or opportunities that have been missed.

All of the panellists spoke very positively of the poster session. From an industry perspective, Dan Edwards saw the poster session as a way to try to bridge the language and communication gap that exists between science, government and industry. It builds a framework upon which the broader discussion of the Network can occur. Barb Neis made observations around the lobster research, industry-engaged research, and crossing disciplinary boundaries. She suggested that the Fishermen and Scientists Research Society (FSRS) make a presentation to the Network on their experience in engaging fish harvesters in research. She recommended co-supervision of students for crossing disciplinary boundaries and ensuring the ethical use of harvester knowledge in science.

Ashleen Benson commented on the science-policy interface and scale of science. The degree and requirement for interdisciplinarity will likely depend on the level of research question. She also suggested that the idea that science and industry are separate is outdated. We are co-constructors of information for management.

For future poster sessions, Bernard Sainte-Marie raised the need to clarify the intended audience of the posters and include more information on how industry is involved in the projects. He emphasized the value of enticing DFO management and policy representatives to future sessions to learn about the work of the Network. From a technical perspective, he noted some links and information exchanges that could be made between topics on freshwater, marine, fish, and invertebrate issues (*e.g.,* compare approach and use of models in Turgeon and Greenwood research).

Following the panel response, the floor was opened to questions and comments from the audience on the poster session and the issues that the panellists raised. There was discussion around the following points:

- Suggestions for poster session next year:
    - Have two posters sessions – one scientific/technical and another that relates the research to the day-to-day life of fish harvesters.
    - Industry to do their own posters (especially those that are moving ahead with major scientific projects of their own).
    - Industry collaborators to stand next to the posters with the students to contribute to spectrum of discussion.
    - Students to give three-minute presentations/speed talks in plenary (before poster session), with some guidance on what is important to highlight.
- Role of social science in science-policy interface.
- In order for the Network to be successful, we must have industry participation at all levels, and have a common language and understanding.
- This larger network is finally opening doors to allow industry to collaborate more with academia. Fish harvesters enjoy collaborating with the students, and being involved with training the scientists of the future.

3.2 Break-out Group Discussion: Issues and Opportunities arising from Poster Session

Participants were divided into six groups of approximately 12-15 people to further discuss issues and opportunities arising from the poster session. Each group was comprised of industry, academic and government representatives. They were given an hour for discussion, following which a rapporteur from each group reported back on key points and issues identified (Table 2) (group summaries in Appendix F).

Specific suggestions related to the posters included:

- Have a more detailed set of guidelines and criteria for the posters (to address issues of consistency, audience, language, etc.).
- Circulate a guide with abstracts and titles before the AGM.
- Provide access to posters on the website (as PDFs) before and/or after the AGM.
- Use project names, not numbers.
- Organize by project with one poster giving context and background.
- Invert the pyramid: what is more relevant should come first on the poster.
- More evidence of industry input and connection to management on posters. Specify collaborations and benefits with link to industry, communities, management and policy.
- Give information about, and links to, other related research.
- Have a single poster for the Network promoting its key objectives.

Table 2 Synthesis Report from Mixed-Sector Group Discussions on Issues and Opportunities Arising from Poster Session

1) What can we draw from the poster session?	2) How can we deepen the collaboration across sectors, disciplines and projects?	3) Are there some obvious imperatives, connections, overlaps, or opportunities that have been missed?
• Communication is critical to the Network. • Make information accessible to different audiences (language, context). • Roadmap for each fishery should be part of the information to collect and communicate through the Network (*i.e.,* where we are now, where we want to go (vision), how to get there, translate into questions, put on website). • Industry posters were appreciated and encouraged. • How to recognize urgent issues from the information and format of the poster session? • Judging should occur over a few days to have adequate time to determine winner of poster session. • Student-to-student interaction is inhibited by the poster session as they have to stand beside their posters. An alternate function to allow students to mingle could be useful.	• Continue to find ways for industry to contribute beyond identification of the research questions. • Maintain good and regular communication with each other. • Hold a workshop for students on how to communicate with industry and government. • Speak with industry partners at the beginning/preliminary stages of a project to create relevant research for industry/government. • Every identifiable group involved in the Network needs to be openly stating their needs, big issues and what they hope to achieve in the Network. • Regular scheduled Big Blue Button conferences should be held within nodes (suggest six times per year). • Posters and presentations should be vetted by project partners before the AGM.	• More clarity on background and interests of all partners and how everyone is connected. • Relate research and findings back to original industry questions. • Industry and students to co-present. • Collaborate with other nodes within Network to maximize outputs, use the best tools to address questions, and avoid answering duplicate questions (while ensuring that regional-based questions are still addressed). • Website could be used best for a public/private interface. • Need a visual display (poster) that shows how every project fits in the context of policy. • Increase involvement of key decision-makers (managers). • Suggestion for next year's keynote to be a retired Regional Director General (RDG). • Bring a message of hope. Re-shaping the way we do fisheries science is an exciting development and we should work to build affection among stakeholders/public.

Following the reports from each group, the floor was opened to additional comments. Many of the points and suggestions covered during the panel discussion and break-out group discussion were re-emphasized. There was a suggestion to hold a workshop on how to communicate scientific results to industry (*e.g.,* explanation of how models were created and how they work, interpretation and communication of results and graphs).

3.3 Toward Network Impact on Policy and Management

A stimulating panel discussion was held on how the Network can best impact policy and management. The panellists were Dave Gillis (DFO), Marc Allain (Network Facilitator and Research Associate) and George Rose (MUN).

Dave Gillis stated that the Network can have an impact through its products, people (HQP), and engagement with current policy-makers and managers. He discussed the approaches of aligning the Network with existing policy development processes, directions and management practices vs. viewing the Network as an opportunity to formulate policy discussion. He suggested we aim to be as clear and strategic as possible in defining the nature of engagement we would like to have with policy and management in the Network.

Marc Allain provided an industry perspective and began by reviewing fisheries policy in the Canadian context and some of its challenges. He highlighted the experience of the independent owner-operator through a retrospective synopsis of events leading to the launch of the Atlantic Fisheries Policy Review (AFPR) and resultant Policy to Preserve the Independence of the Inshore Fleet in Canada's Atlantic Fisheries (PIIFCAF). He then discussed what the Network can do and the expectations of industry around the Network and policy.

George Rose proposed the three "I's" for influencing policy: Interest – Informing policy is difficult; how to get scientists and students interested in this research? Involvement – As academics doing research to inform policy, we need: i) to be more involved in the field of policy management in which we are working, ii) to be more involved with the media to communicate science messages, and iii) studies of how policy really works in practice. Integration – We need to work with other sectors while maintaining our professional credibility.

It was also noted that some students in the Network do not have an understanding or appreciation for where they fit into the bigger picture and process that the Network is undertaking. We need to foster this appreciation in our students, instill in them that change is possible, and give them the tools and means to achieve it.

Following the panel discussion, the floor was opened to questions and comments from the audience. There was discussion around the following points:

- Considerations for meaningful and effective policy development:
    - Accountability, openness and transparency

  - Stakeholder engagement
  - Input from people with social and economic perspectives.
  - Understanding of policy context and landscape in Canada, and the differences between regional and national policies (based on different histories).
  - Clarity and agreement on objective(s), values and process (high priority for the Network).
- Need to work on the tools and mechanisms to inform policies and identify urgent questions relevant to policy development.
- Suggestion to explore how other nations have dealt with policy development recently (*e.g.,* United States, Korea and Australia).
- The Network can influence policy in two ways through: 1) examining what policies exist and what works (*e.g.,* through Project 1.1), and 2) preparing stakeholders to be able to properly engage in policy discussions with the knowledge gained through the Network.

3.4 New and Emerging Initiatives in the Network

Three new and emerging initiatives in the Network were presented, following which there was an opportunity for focus group discussions on the initiatives.

3.4.1 Strategic Energy Meeting

Peter Tyedmers of Dalhousie University introduced the topic of strategies to reduce energy dependence and greenhouse gas emissions from fisheries (slideshow in Appendix G). A strategic workshop involving industry, academia and government will be held this year to share ideas and experiences regarding energy use in Canadian capture fisheries, with a focus on the following objectives: 1) to determine the current state of knowledge regarding energy use in Canadian capture fisheries, 2) to identify priorities for research related to energy use in Canadian fisheries in general, and 3) to consider ways in which the Network can uniquely address these issues. The floor was opened to questions and feedback from the audience. There was discussion around the following points:

- Good opportunity for the Network to fill a gap and play a role in the future of policy development in Canada with respect to energy. Suggested aspects to explore:
  - Unintended consequences of management and policy on fleets.
  - Social mechanisms (organizational and management) within fleets for fuel solutions. Examine direct and indirect ways that fuel efficiency could be improved in a fleet, including eco-labelling and carbon footprint labelling.
- Other provinces have been engaged in a variety of related initiatives. We need to understand what research has already been done and what is happening elsewhere, and build on that and collaborate effectively so as not to duplicate efforts.

3.4.2 SSHRC Application

Melanie Wiber of the University of New Brunswick and Project 1.1 Steering Committee gave a presentation on the development of an application in pursuit of additional funding from the Social Sciences and Humanities Research Council of Canada (SSHRC) to enhance the social science capacity of the Network. The funding could be used to enhance the research being done in Project 1.1, or to link social scientists with the natural science projects in the Network to answer social science questions generated by those projects (*i.e.,* science to policy follow-up). The floor was then opened to questions and feedback from the audience, with discussion around the following points:

- Amount of SSHRC funding available and how it would be allocated (*i.e.,* would it be all for social science, or divided with natural science and engineering as is the case with our NSERC funding).
- The manner in which social science information flows into the decision-making process at DFO. Social science capacity in DFO is limited and the main option for integrating social science information going forward is through collaborations (with academics, provincial governments, networks like ours).
- Use of SSHRC funding to strengthen communication in the Network (*e.g.,* develop a guide on how to create a poster that is good for different audiences, train students to interact with industry and government).
- Interest in exploring socio-economic aspects of seal-cod issue (Project 3.2 - marine mammals and fisheries) and discussing how to enhance capacity in order to be able to do so.

3.4.3 Terrestrial Impacts Workshop

The CFRN and the Canadian Rivers Institute are partnering to hold a national workshop in 2012 on the impacts of terrestrial activities (including aquaculture) on coastal fisheries health and productivity (overview in Appendix H). The workshop involving industry, academia and government will be organized around the research themes of *sediments*, *nutrients* and *contaminants*, with a focus on the following objectives: 1) to share information about relevant work on this topic among participants, 2) to undertake a gap analysis on existing research, and 3) to discuss financial leveraging for research needed to help address the gaps identified. The floor was opened to questions and feedback from the audience, with discussion around the following points:

- Coastal CURA ("Community University Research Alliance") has several relevant projects (*e.g.,* Malpeque Bay First Nations, Bear River First Nations).
- Expressions of interest from the Ontario Commercial Fisheries Association (OCFA), PEI Shellfish Association.

- Relevant people, projects and initiatives: Coasts Under Stress, Canada's Three Oceans project, Washington State Watershed Analysis (done by treaty tribes), DFO Moncton - spatial data/planning work and stressors on coastal regions.
- Suggestion for a workshop on climate change and fisheries.

3.5 Evening Reception

A spectacular evening reception was hosted by the Fish, Food and Allied Workers (FFAW) at their local office in St. John's, with seafood fare and live music. We are grateful to the FFAW for their generosity and for giving us such a warm welcome to their province.

4. Plenary Session Day 3

4.1 Increasing links with other networks and initiatives

On the final day of the AGM, a briefing on the Canadian Healthy Oceans Network (CHONe) was made by Paul Snelgrove, CHONe Director (slideshow in Appendix I). CHONe is an NSERC strategic network focused on biodiversity science for the sustainability of Canada's three oceans. Research projects in CHONe are organized around three themes – biodiversity, ecosystem function, and connectivity – with outputs for science and policy. The presentation led to a discussion of ways in which we could increase links with other networks and initiatives. Points and issues raised included:

- We focus on generating research products to inform policy and decision-making frameworks. How can the research be more informed by policy and management frameworks?
- National ocean policy priorities – timeline for policy priorities is often very disconnected from timelines for science.
- Common aspects of CHONe and CFRN – how to appropriately impact policy; the importance of aquatic health and productivity; overlapping research areas (biodiversity, connectivity, etc.). Differences around involvement of industry partners and social scientists.
- Suggestions to link CFRN, CHONe, and the Northumberland Strait Environmental Monitoring Partnership (NorSt-EMP) and improve circulation of information between these networks. A sub-group representing each of the networks could be formed and they could hold a strategic meeting in 2013 or 2014.
- Suggestion for an inter-network workshop on the role of science in policy (including the other NSERC-funded networks, *i.e.,* create "a network of networks"). Also issue of student training at science-policy interface.
- Feature other networks in our communications materials to increase links and mutual benefits.

4.2 Independent Scientific Advisory Panel Report

The two members of the Independent Scientific Advisory Panel who were in attendance at the AGM, Rosemary Ommer (University of Victoria) and Michael Sinclair (DFO), offered some initial comments on the progress of the Network and opinions on future Network activities. They will provide a full report to the Board of Directors.

The Panel members noted the need to find a balance between showcasing the science of the Network and having strategic discussions at the AGM. They felt the poster session was a positive event and seemed to indicate that people are interacting and working effectively together with a sense of camaraderie and openness. They observed that students and post-doctoral fellows have made good progress in a short time period. The significant challenges they see for the Network include: slow start-up for several projects, attention to social science interactions in a systematic manner (suggestion of co-supervision of all students in projects), and communication of results to industry.

The Panel offered opinions and suggestions for various future activities, such as how to engage the fishing industry ("at the wharf"), the use of structured decision-making tools for identifying socio-economic needs and tradeoffs, ideas for student involvement with industry, policy-oceans management interactions with DFO, and the format of future AGMs.

4.3 Plenary Wrap-up and Closing Remarks

Rob Stephenson and Marc Allain made closing remarks, and asked participants for feedback on the AGM. Several participants came forward with comments, including on the notion of how and when to involve managers in our meetings, and how to clarify the link between the research of the Network and policy. It was observed that there has been a quantitative jump in the way in which we all engage over the past year, and that the partnership are taking ownership of the Network. We have some challenges around the complexity of linking our various elements and groups (as it relates to communication, and linking natural and social science), as well as our capacity to run and organize a Network as large and intricate as ours.

Individual project planning and development meetings were held in the afternoon. Several students gave presentations on their research progress during the project meetings.