

**Department of Fisheries and Oceans**  
**Science Management Board**

**Meeting Minutes**

January 23, 2006

**The Science Management Board**

The Science Management Board (SMB) is responsible for identifying science-related issues of importance to the achievement of the mandated objectives of the Department, selecting and assessing departmental and government-wide priorities needing science support, and providing strategic direction on the work planning of DFO Science.

The second meeting of the SMB was held in Ottawa on January 23, 2006.

**Members of the SMB at the meeting**

Deputy Minister (chair) – Larry Murray  
ADM, Fisheries and Aquaculture Management – David Bevan  
ADM, Oceans and Habitat Management – Richard Wex (for Sue Kirby)  
ADM, Science – Wendy Watson-Wright  
Regional Director General, East – Jean-Guy Beaudoin  
Regional Director General, West – Paul Sprout  
Chair, Science Advisory Council – Dr. Arthur Collin  
Senior DFO Research Scientist – Dr. Richard Beamish  
Senior DFO Research Scientist – Dr. Ken Lee

**Also present at the meeting**

***For Science Sector***

Serge Labonté  
Kim Darling  
Helen Joseph  
Karen Davison

***For Sussex Circle***

Jim Mitchell (Discussion Leader)  
Nigel Chippindale (Reporter)

**Opening Remarks**

The Deputy Minister opened the second meeting of the Science Management Board. He remarked on the high quality of discussion at the previous meeting, particularly in the areas of human resources and ecosystem science, two major items on the agenda at this second session. (The meeting agenda is attached as Annex A).

Dr. Ken Lee, from the Bedford Institute of Oceanography, was welcomed as a new Board member.

The minutes of the previous meeting were adopted.

## **1. Human Resource Issues**

Wendy Watson-Wright outlined key elements for consideration in the development of a more comprehensive human resources strategy for the Science Sector. The challenge is to meet the requirements of the Expenditure Reduction Committee (ERC) while providing flexibility to recruit new science staff. The draft strategy represents part of the Sector's response to the need for renewal of science capacity that was one of the highest priorities identified by the SMB at its first meeting. A key component of an overall strategy will be shifting \$20 million to rebalance the salary to O&M ratio from 70:30 to 60:40 to provide more resources to support the work of scientists. The aim is to rebuild the Strategic Science Fund (SSF) to meet high priority needs and opportunities.

With respect to the staffing element, the plan is to staff one person for every three vacancies and redirect the salary savings to O&M. Any staffing actions funded from B-based resources will require a sunset strategy to ensure staff remain determinate.

The Science Sector Staffing Review Committee, chaired by the ADM Science, will approve all HR plans and ensure that their terms are met.

Three specific financial challenges affecting the strategy are:

- ERC reductions;
- regional funding pressures; and
- the vessel shortfall.

The vessel shortfall has had to come from A-base funding, significantly reducing the Science Program's flexibility in meeting science priorities. A departmental strategy has been developed to obtain relief funding to address the shortfall.

### ***Discussion***

Key points included: the importance of implementing ERC commitments and cutting back on low priority expenditures and redirecting resources to emerging areas; attrition alone will meet the ERC reductions; the need for new skill sets that meet the new and changing demands of DFO Science (ecosystem science, aquaculture, international governance); ratio of RES staff to non-RES; and strategic partnerships with industry and academia (like the NSERC network for aquatic invasive species) will help build DFO capacity.

It was agreed that the strategy needs to include both short-term, tactical measures and long-term actions that consider existing skill sets (expertise and training) and anticipate the necessary staff complement for the next 5-10 years. The HR strategy should outline the mix of entry level and mid-career scientists needed to support the Department's and other Government of Canada's priorities for scientific advice.

In the future, scientists will find themselves working in an environment that:

- embraces the ecosystem approach;
- employs a risk management approach; and
- is entrepreneurial, cooperative, and interdisciplinary.

The Scientist Emeritus program may provide an opportunity for mentoring. DFO should reconsider the NSERC Visiting Scientist fellowships for post-doctoral students. To attract the best people, DFO needs to improve its profile as an employer. The Government's commitment to increased spending on science may provide an opportunity to leverage additional financial support. Where the science being done is no longer a DFO priority or fits with the mandate of another agency, consideration should be given to relocating the program.

***ACTION: Science Sector to develop HR Strategy, addressing both short-term tactical measures and long-term needs that are based on DFO and Government of Canada priorities and aligned with future Science program requirements.***

## **2. Core Science Functions**

Paul Sprout introduced the topic with a brief presentation. Distinguishing between “core” and “non-core” activities could reduce the Science Program's flexibility in determining the relative importance of various activities because it has been directly tied to resourcing. “Core” has come to imply stable and long-term funding for specific programs rather than a flexible, responsive approach to complex and emerging issues. Maintaining the continuity and integrity of the monitoring and data management programs is critical.

### ***Discussion***

The discussion focused on whether the concept of “core/non-core” science was useful. Various views were suggested including: core science could be seen as science done by DFO without cost to industry while non-core science may be charged back to industry. Non-core science is science outside or marginal to DFO's mandate and core science is simply DFO science. It was agreed that the issue should be recast and focus on assessing science priorities based on what needs to be done for the department and its clients. “Core/non-core” terminology is no longer useful and DFO Science should focus on looking forward to set new long-term priorities, not backward to what may previously have been called “core”.

***ACTION: Science Sector to organize a workshop (that includes key scientists, university research community, and departmental officials) to help refine future directions, identify emerging science-based issues, and inform the development of the ecosystem science approach and strategic research plan.***

## **3. Presentation: COOGER**

Ken Lee presented an overview of the Centre for Off-Shore Oil and Gas Environmental Research (COOGER).

As a virtual centre of expertise with no fixed complement of scientists, COOGER can call on a wide range of specialists as required for a given project. COOGER works with industry to develop joint projects that ensure environmental soundness and provide greater certainty about how industry can comply with environmental regulations. By coordinating expertise and infrastructure, COOGER can achieve important R&D synergies and promote collaboration between government agencies, industry, and the academic sector.

COOGER works by means of partnerships, not contracts. As such, procuring research funds is an important function. A-base funding provides resources for leveraging additional funds from industry so that the department is working with industry to address common concerns.

Key functions of the Director include leveraging resources, mentoring scientists, and securing funding from other sources. COOGER will only develop joint agreements with industry associations, not individual companies.

### ***Discussion***

It was noted that the COOGER model is best suited to an industry with significant money for development and where DFO has a strong regulatory role. Norway has successfully used this model for habitat and the fishing industry.

***ACTION: Board members appreciated the presentation and indicated that similar presentations on subjects of interest to the SMB should be included at future meetings wherever possible.***

## **4. Ecosystem Science**

Serge Labonté presented the draft, “A New Ecosystem Science Framework in Support of Ecosystem-based Management” in response to the SMB’s direction from its first meeting.

The proposed ecosystem approach was developed to support the integrated management of human activities in aquatic ecosystems. To be effective, Science must integrate existing knowledge about ecosystem relationship and dynamics and the effects of human activities on them, assess the aspects that are most important to that ecosystem, and interpret the trends and patterns in ways that apply to risk assessment and management of other human activities.

Discussions with senior DFO managers were undertaken in December 2005. Overall, the approach is widely supported but additional explanation and consultations on the specifics of implementation are required. Further consultations will be undertaken with DFO Science staff, client sectors, and external stakeholders.

With respect to the HR strategy, it was proposed that a portion of the relief funding be devoted to recruiting scientists that specialize in ecosystem research.

### ***Discussion***

It was agreed that an ecosystem science approach is necessary and consistent with global trends; all members agreed that the draft Ecosystem Science Framework was “on the right track.” The SMB approved the implementation strategy as outlined in the presentation:

- finalize the framework in consultation with DFO sectors and regions (Science, FAM, OHM, Policy)
- identify needs for science advice from other sectors for 2006-07
- develop a five-year strategic Research Plan based on the framework
- strategically align human and financial resources (*investment strategy*) to support the implementation of the framework
- relief funding for ecosystem monitoring and research is essential
- develop *engagement strategy* for DFO Science, client sectors, and stakeholders

With respect to the framework, it was agreed that a simple, easily understood introduction to the ecosystem approach is necessary. The ecosystem science approach needs to be made explicit and provide a clear sense of where DFO is going, including how obstacles will be addressed. The “vision” needs to be clearly and concretely presented and show why it is the right thing to do. It was agreed that examples would be helpful. The Strait of Georgia, Placentia Bay, the Gulf of St. Lawrence, and Northumberland Strait were proposed. Given that this is a significant

change for the department that requires an interdisciplinary, team approach, strong communications and a phased implementation strategy are essential. Strategic communication and engagement, starting with a clear vision, is a key requirement if the ecosystem approach is to be widely understood and accepted.

***ACTION: prepare a “two-pager” explaining the basic concept and significance of the ecosystem approach with relevant examples from the East and West coasts and continue work initiated under the Ecosystem Science Framework.***

## **5. Public Good, Private Benefit**

Arthur Collin introduced the topic with a brief survey of how the Government of Canada has defined science as a “public good” in various sectors. The overview indicated that government science capacity has, historically, been developed to serve a wide range of broad government objectives and Canadian interests. It was posited that political approval of public expenditures, even where private benefits accrue, makes the resulting capacity a public good.

### ***Discussion***

The discussion included: varying use of user-pay regimes within industry sectors and user groups; ability of industry to contribute to DFO Science needs; resource barriers between user groups; inconsistent application of “private benefit” test.

***ACTION: SMB recommends identifying the issue for discussion at the DFO Departmental Management Committee or Policy Committee table.***

## **Conclusions**

In closing, the Chair noted the value of the SMB discussion and indicated a further meeting may be required before summer, dependent on developments in the interim. Careful attention will be paid to developing the next meeting agenda and a lunchtime presentation should be a standing item.

Annex A: Agenda

**DFO Science Management Board**

January 23, 2006, Deputy Minister Boardroom

Chair: Larry Murray, Deputy Minister

Discussion Leader: Jim Mitchell, Sussex Circle

**08:30 Opening Remarks – Larry Murray**

*Review of issues from first meeting, plans for today*

**09:00 Science HR Strategy**

*Presentation by Wendy Watson-Wright*

*General discussion*

**10:30 Break**

**10:45 Core Science Functions**

*Opening presentation by Paul Sprout*

*General Discussion*

**12:00 Working Lunch**

*The COOGER approach to science planning – Ken Lee*

**13:00 Ecosystem Science**

*Opening presentation by Serge Labonté*

*General Discussion*

**14:30 Break**

**14:45 Science and Public Good/Private Benefit Issues**

*Opening presentation by Arthur Collin*

*General Discussion*

**15:45 Meeting wrap-up – Larry Murray**

**16:00 Close of meeting**