

Draft Summary
North Pacific Research Board
Science Panel Meeting
Alaska Fisheries Science Center
Seattle, Washington
March 13-15, 2006

The Science Panel met on March 13-15, 2006 at the Alaska Fisheries Science Center in Seattle, Washington. The meeting was chaired by Rich Marasco and the following other members were in attendance: Vera Alexander, Shannon Atkinson (by phone on Monday afternoon), Dick Beamish (starting Tuesday morning), Jim Berner, Michael Dagg, Anne Hollowed, John Piatt, Andre Punt, Tom Royer, Pat Tester, David Witherell and Doug Woodby. Mary Pete (UAF Kuskokwim Campus) and Michael Simpkins (U.S. Marine Mammal Commission) attended as prospective panel members, still to be confirmed at the NPRB March 29-31 meeting). The meeting was staffed by Clarence Pautzke, Carl Schoch, and Francis Wiese.

1. Call to Order and Approve Agenda

A new member, Andre Punt of the University of Washington, was introduced to the panel. Also introduced were Mary Pete and Michael Simpkins, as prospective panel members still to be confirmed at the coming March meeting of NPRB.

2. Budget Overview

Clarence Pautzke presented an overview of the NPRB budget. The only comments of the panel at this time were that the Board may need to develop criteria on which to base apportionment of funds among the three large marine ecosystems off Alaska.

3. Implementation Activities in 2006

Francis Wiese and Carl Schoch presented the current status in the development of Implementation Plans for Integrated Ecosystem Research Programs (IERP) for the Bering Sea and the Gulf of Alaska, respectively. The Panel also received an update on activities of the Ecosystem Modeling Committee.

Bering Sea IERP. For the Bering Sea, prior suggestions on key components of an Implementation Plan were available from the Bering Sea Interagency Working Group, as well as from a workshop held in January in Anchorage, in which around 40 scientists participated. The key messages from these two efforts were surprisingly consistent, namely the need for: (1) a scientific steering committee to help focus the research topics for the IERP; (2) a detailed gap analysis, (3) public input on the Implementation Plan prior to launching the 2007 RFP, and (4) pre-proposals given the effort needed to design and review such a large program, also giving the NPRB the opportunity to combine teams and efforts at an early stage and thus ensure a program consistent with the visions of the Board.

The Science Panel reviewed these past efforts and suggestions. They agreed on the added value of having an independent scientific steering committee of 5-6 individuals plus 3 Science Panel members, a mechanism for public input into the Implementation Plan and the need for a focused RFP. They also decided, given the size of the full proposals that will be submitted, that an extended timeline (beyond March 2007) should be considered.

Regarding the issue of whether pre-proposals should be requested, the Science Panel questioned the need for that step rather than just moving directly ahead with requesting full proposals this fall. The panel

noted that a pre-proposal process would allow for refocusing and refinement of eventual proposals, but writing and then processing pre-proposals would require extra time and effort that might better be spent on full proposals. In addition, if pre-proposal length is severely restricted in page length to say 1-2 pages, they will not be much more than the summary pages that are received now in response to the annual RFPs. Also, if there will only be a limited number of teams submitting proposals in the first place, the pre-proposal step may be an unnecessary waste of time. One way of estimating how many full proposals might come in, would be to request letters of intent from the scientific community. Requesting letters of intent might help to level the playing field and let everyone know what is expected in the full proposals.

In the end, the panel decided against the use of pre-proposals, but noted that in their absence the RFP will have to be carefully crafted to ensure that the Board receives proposals that are fully responsive to its IERPs. Proposals will need to be focused and integrated. A 20-page limit should be considered on full proposals, and ship time should be built into the proposals.

Regarding the issue of whether the Board should provide funding for proposal writing, the panel responded that most organizations and institutions have resources to support proposal writing and that the Board did not need to. Funding of proposal writing should only be offered if it is needed to work up data on past collections that would help enhance a proposal.

Finally, the panel was asked to provide some initial feedback on some of the topical areas for a BSIERP proposed during the January workshop. Although this was not an indepth discussion, several panel members liked the idea of focusing on temperature related processes and mentioned the need to 'build climate forcing into management decisions'. Mike Dagg, Vera Alexander, and John Piatt volunteered to be the Science Panel subcommittee for the BSIERP.

The panel concluded its discussion on how to gather meritorious proposals by noting that the RFP will need to be well written and definitive in terms of the types of research that are needed to carry out the intent of the IERP. It has to be widely broadcasted so that all interested parties have a chance to respond. There was some discussion of using a workshop to inform the scientific community about the requirements of the RFP, but panel members expressed the opinion that such a workshop will take time and it might even bias the eventual RFP because only certain groups will have the funding or time necessary to attend such a workshop.

Ecosystem Modeling Committee. Discussion on the Ecosystem Modeling Committee focused on the interactions between the EMC, the modeling proposals that will get funded this year, and the modeling components of the future IERP. The panel felt that at the very least, the EMC should establish the design criteria for any models used in the IERP prior to the launching of the 2007 RFP. It was also mentioned that models that are developed could be linked to the ecosystem indicators and that there is a need to focus on modeling components from zooplankton upwards to ensure a link to management. Models also need to include economic and social levels, and fishing processes to the extent possible. The committee needs to consider model validation, calibration, and robustness.

Gulf of Alaska IERP. For the Gulf of Alaska, the panel was briefed on implementation issues related to the four components of the Large Marine Ecosystem Program: the IERP, conventional research projects, graduate research fellowships (GRF), and local and traditional knowledge (LTK). There was limited discussion on the conventional research projects, GRF, and the LTK. The principal issues on development of the IERP pertained to the request for proposals including: proposal process, central hypothesis, geographical scope, biological scope, and timeline. The Science Panel already had considered whether to call for pre-proposals when discussing the Bering Sea IERP (see above). The panel noted that research themes for the Gulf of Alaska could be derived not only from the NPRB science

plan, but also from other research programs such as GEM and GLOBEC. As with the Bering Sea IERP, the RFP for the GOA IERP will need to be well written and focused and require integrated proposals.

The remaining issues of a central hypothesis, geographical scope, biological scope, and timeline were not discussed and will be deferred to the Steering Committee. It was suggested that the Steering Committee should consist of 5-6 individuals plus 3 members of the Science Panel. In response to this, Anne Hollowed, Tom Royer, and Doug Woodby volunteered to be the Science Panel subcommittee for the GOA-IERP and 5-6 independent members will be sought to attend the initial meeting of the Steering Committee in early May.

4. Alaska Ocean Observing System

The panel received an update on the development of the Alaska Ocean Observing System (AOOS) and further enhancements to the Alaska Marine Information System. This was an informational item and no actions were taken.

5. 2006 Request for Proposals – Review Proposals

The panel reviewed 122 proposals that responded to the 2006 RFP (4 of 126 received were rejected earlier as non-responsive and not processed further). Each panel member did a primary or secondary review of about 8-9 proposals, which included considering anonymous technical reviews and developing a summary recommendation on whether the proposal should be funded. The two members presented their findings to the full Panel which then proceeded to develop funding recommendations for consideration of the Board. Science Panel conflict of interest procedures were reviewed and followed during the meeting.

Again this year, the Panel concluded that there were many high quality, competitive proposals, and wanted to fund more than was allowed by the funding targets listed in the RFP. As with last year, to fit more proposals under the funding ceiling, the Panel reduced the funding of some proposals from the amounts requested, and also created a second tier of high quality proposals that deserve consideration if the Board chooses to fund at higher levels than the \$5.15 million indicated in the RFP. Overall, the panel recommended 39 proposals for funding totaling \$5,352,339, and another 12 tier 2 proposals totaling roughly \$2.8 million. The panel's considerations of the various sections of the RFP are presented below. This summary will be accompanied by a spreadsheet showing the proposals identified for tiers 1 and 2, and a document which summarizes the panel comments on each of the 122 proposals.

Bering Sea integrated ecosystem research program (RFP Section 1): The panel recommended funding eight proposals for \$1.251 million, thus exceeding the target of \$1.2 million for that section. The panel noted that the applicants for proposal #13, a modeling study on the response of lower trophic level production to climate change, would need to do a better literature review than represented in the proposal, would need a critical evaluation of the models and validation, and would need to confer with the NPRB's Bering Sea ecosystem modeling committee before commencing work. The panel reduced the proposed budget of proposal #15 to \$200,000 or \$100,000 per year for two years to demonstrate that the model will be successful in describing the response of the Bering Sea circulation-ice-ecosystem to forcing by climate and the adjacent North Pacific and Arctic Oceans. The panel believes this may be an overly ambitious project as written. The applicants need to resubmit a revised statement of work for review by the panel and also confer with the ecosystem modeling committee.

Ocean monitoring (section 2a): The panel recommended two proposals (#18 and 24) for \$317,880, exceeding the section target of \$300,000. The panel moved proposal #23 from this section to seabird section 2.f.ii because it was more relevant to the determination of demographic parameters and survival rates.

Lower trophic level productivity (section 2b): The panel recommended two proposals for \$358,773, exceeding the section target of \$300,000. For proposal #26, rather than approving the full \$404,057 requested, the panel only approved \$100,000 to ensure that Jeff Napp (Alaska Fisheries Science Center) would be able to participate in a related NSF BEST-funded project in 2007. If the proposal to NSF by Hopcroft and Strom is not funded, then the \$100,000 should not be expended and will be available to the 2007 RFP.

Fish Habitat (section 2c): The panel recommended three proposals totaling \$553,100, slightly exceeding the \$550,000 section target. The panel reduced the funding for proposal #36 to the target amount of \$150,000 for the intended habitat mapping technology workshop, noting that this level of funding would be very adequate for such a workshop and the resulting synthesis and reports.

Fish and Invertebrates (section 2d): The panel recommended funding nine proposals for \$1,457,348, exceeding the section target of \$1,150,000. This was a very competitive section and the panel recommended another \$1.4 million in tier 2 proposals. The panel noted that tier 2 proposal #42 on migration patterns of Pacific halibut in the southeast Bering Sea was an excellent study, but the IPHC should fund it. Proposal #49, on the diet and ecology of skates in the GOA, was reduced in funding to \$150,000 and requested to focus on analyzing stomach sample contents and not do the stable isotope analysis. Proposal #51, which would analyze fall, winter, and spring predation of key groundfish species, was reduced to \$150,000 from the \$155,335 requested. Proposal #53 was reduced from \$209,755 to \$75,000 with the panel recommending that the applicants focus solely on the conventional end-point polymerase chain reaction (PCR) in assessing Hematodinium disease loads in Tanner crab populations.

Marine Mammals (section 2e): The panel recommended funding seven proposals for \$685,322, thus exceeding the section target of \$600,000. The panel recommends that three proposals, #79-81 focused on walrus research in the Bering and Chukchi seas, be requested to come back with a combined statement of work for a total of \$300,000. The panel believes that NPRB should support this field research which is part of a larger program to assess walrus distributions and habits in northern seas, but that the total request of over half a million dollars was excessive when compared to the marine mammal section target of \$600,000.

Seabirds (section 2f): The panel recommended two seabird proposals (#23 and 97) totaling \$263,994, a reduction from the \$300,000 section target.

Humans (section 2g): The panel recommended two proposals (#101 and 102) totaling \$90,000, exceeding the section target of \$50,000.

OSRI-NPRB Collaboration on Forage Fish (section 3): The panel adopted the recommendation of a subcommittee of the two science panels for the OSRI and NPRB to fund proposal #103 on the seasonal distribution, habitat use, and energy density of forage fish in the nearshore ecosystem of Prince William Sound. The panel recommended increasing the funding for that project from the \$59,906 requested, to \$150,000 for two years to better study seasonal changes in energy content of the forage species and to examine day-night effects. The applicants must submit a revised statement of work for the 2-year study. The science panel did not recommend funding any other proposals under this collaborative section because they received poor technical and science panel member reviews.

Pilot Project for Community-based Observation System (section 4a): The panel recommended funding proposal #108 for a Bering Sea community-based ocean monitoring program by Michael Smolen of the World Wildlife Fund. The panel considered that proposal the best of the four submitted to this research priority.

LTK Studies Related to other RFP Priorities (section 4b): The panel thought proposals #110 (paralytic shellfish poisoning) and #111 (subsistence harvests of rockfish) were equally meritorious and that the Board should choose between the two, with funding not to exceed the section target of \$150,000.

Contaminants (section 5): The panel recommended no tier 1 proposals for funding in the contaminants category, but did recommend tier 2 funding for proposal #117 regarding trace metal contamination in North Pacific seabirds.

6. Schedule Next Meeting

The panel identified August 29-31, 2006 for their next meeting. It will start at 9 a.m. on August 29th and be held in Anchorage.