

Final Summary
North Pacific Research Board
NPRB Conference Room
Anchorage, AK
June 26-27, 2007

1. Call to Order/Approve Agenda

The Board convened at 9:05 a.m. on Tuesday, June 26, 2007. Present were Tylan Schrock (Chairman), David Benton, Nancy Bird, Michael Cerne, Dorothy Childers, Douglas DeMaster, John Gauvin, Leslie Holland-Bartels, Howard Horton, John Iani, Earl Krygier, Paul MacGregor, and Stephanie Madsen (Vice Chairman). Gerry Merrigan and Dennis Wiesenburg briefly were on teleconference to establish a quorum. Alexandra Curtis, Michele Eder, Pam Pope, and Robin Samuelsen were absent. Clarence Pautzke, Francis Wiese, Carolyn Rosner, and Nora Deans staffed the meeting. William Wiseman attended representing the National Science Foundation. Gary Matlock, NOAA NOS, attended the meeting on behalf of the Secretary of Commerce to view the process. Five Science Panel members attended to provide recommendations of the joint NPRB-NSF Science Panel: Dick Beamish, Michael Dagg, Dan Goodman (Chairman of the Ecosystem Modeling Committee), Tom Royer, and Pat Tester.

Introductions were made, the agenda was approved, and a safety briefing was given.

2. Overviews of NPRB-BSIERP and NSF-BEST Programs

Overviews of the Bering Sea Integrated Ecosystem Research Program (BSIERP) and Bering Ecosystem Study (BEST) and their respective histories of development were provided by Francis Wiese and William Wiseman. Clarence Pautzke reviewed the contents of the NPRB-NSF management plan of October 2006 that defined the relationships between NPRB and NSF and the processes for developing a joint research program. The Board then was informed about the review process and joint science panel process for developing recommendations on the two full proposals that had been submitted in response to the NPRB request for proposals.

3. Conflict of Interest Procedures

Board members reviewed their conflict of interest procedures. The Board had discussed this issue in April 2007 and concluded that each member would discuss their individual relationships with other organizations in the interest of full disclosure, but did not necessarily need to recuse themselves from voting. The Board also was briefed on conflict of interest procedures used by the North Pacific Fishery Management Council. The Board concluded that it was best to go around the table so that each person could talk about their affiliations with other organizations. Members were encouraged to announce before a vote whether they were going to recuse themselves during the actual vote so that other members had a better idea of how many members would be voting on a particular motion or amendment. The following members did not believe they needed to recuse themselves on any vote on the BSIERP program development: Madsen, Benton, Childers, Cerne, Bird, Iani, MacGregor, and Gauvin. The following members said they would recuse under certain conditions: Holland-Bartels for SEaBED, Schrock for education and outreach components, Krygier on the subsistence components of BTU, and Demaster and Horton on all votes.

The Board then discussed whether Demaster should be in the room for discussion because of the inclusion of so many principal investigators from the Alaska Fisheries Science Center and other NOAA components on the BTU proposal. The Board concluded that although it would be good for NOAA to

hear the debate since they will be involved one way or the other in either proposal, it could create a perception that NOAA had participated in the decision. To allay that concern, Demaster was asked to leave the room until after the Board had made its decision. As representatives of the Secretary of Commerce, Gary Matlock (NOS) and Pete Hagen (NMFS) remained as witnesses to the procedures used by the Board, but did not participate in the debate or decision. The Board noted that these special procedures were not precedence setting for decision-making on regular requests for proposals.

4. BSIERP Proposal Descriptions and Technical Reviews (Closed)

This session was closed to the public because the Board was being apprised of technical and science panel reviews of the BTU and SEaBED proposals. For each of the two full proposals, an overview of the components was given, followed by a summary of five anonymous external technical reviews, and the joint science panel's overall evaluation and comments on specific components. The Board then was presented with the composite BSIERP program developed by the joint NPRB-NSF science panel and the rationale for each component. The composite program was structured mainly on the basis of BTU proposal, though various gaps were identified that needed to be addressed to achieve a robust integrated ecosystem research program. These gaps included remote sensing, role of jellyfish in the ecosystem, epibenthos, and continuous recording of environmental and biological variables between stations.

5. BEST Proposal Descriptions and Technical Reviews (Closed)

William Wiseman of NSF provided an overview of the BEST proposals received by NSF and the ones that NSF may recommend for funding. He stressed that the recommendations were not firm commitments and could not be divulged to the public until all individual contracts with principal investigators had been completed.

6. BSIERP-BEST Program Development (Closed and then opened)

The Board received an overview of the budget and anticipated cash flows premised on the funding requirements of the two full proposals over the next six years. The BSIERP is a substantial commitment in funds of \$14 million, but still can be accommodated within the anticipated budget of the Board.

The Board briefly continued the closed session to discuss the individual components of both proposals and confidential technical reviews and to seek clarifications from the science panel members. They also considered how the program would fit together with NSF-recommended components which at the time of the meeting were considered confidential information. After all clarifications were obtained, the Board opened the session to make formal decisions on adopting a comprehensive program, drawing on components of each proposal as appropriate.

(Session Open)

A **main motion** was made based mainly on the science panel recommendations using BTU as a backbone for the overall integrated program, but with the following revisions and clarifications by ecosystem component (in all cases, the applicants were required to address science panel and review comments as appropriate):

Zooplankton/Lower Trophic Level

Ichthyoplankton surveys: Fund at requested \$1,068,052, but enhance scope of work by adding arrowtooth flounder, and link to pollock and cod distribution studies and coordinate with BEST research.

Seasonal bioenergetics: Increase funding to \$250,000 from \$170,100 requested to add arrowtooth flounder studies and some environmentally dependent metabolic rate studies.

Biophysical moorings: Fund at requested \$732,259, but add measurements of photosynthetically active radiation and state clearly that no additional support would be offered for moorings in regular RFPs during the duration of this first BSIERP.

Trophic Interactions

Fish, birds, and mammals. Fund at requested \$286,913, but provide more details that identify past efforts and justify what is new here.

Top predator hotspot persistence. Matching funds only. Same scope of work.

Fish

The Board accepted seven of the eight fish components proposed for BTU: pollock tagging was deleted because it appeared to be an add-on to work already being done. Arrowtooth flounder was added to pollock and Pacific cod as a focal species in all seven fish components, which were funded and revised as follows:

Acoustic survey: Same scope of work. Fund at requested \$154,499.

Surface trawl survey: No NPRB funds required. This is supported with matching funds from NOAA

Surface trawl survey acoustics: Same scope of work. Fund at requested \$425,731.

Bottom trawl survey: No NPRB funds required. This is supported with matching funds from NOAA.

Pollock and cod distribution: Fund at requested \$332,313, but revise scope of work to incorporate data from current project 620 and more directly link to environmental change and recruitment through lipid dynamics analysis and crucial first winter conditions.

Functional foraging response: Same scope of work. Fund at requested \$258,260.

Forage distribution and ocean conditions: Fund at requested \$567,123, but identify actual species of forage fish and add smaller scale process studies to complement broad scale studies.

Marine Mammals

Whale broad-scale distribution: Reduce funding from \$513,251 to \$300,000, and do visual surveys, but do not deploy acoustic sensors.

Whale fine-scale distribution: Do not fund. Substitute patch dynamics study as indicated below.

Patch Dynamics Study: Incorporate SEaBED patch dynamics study by UBC and USGS for \$2.3 million, focused on fur seals and walrus. Use seabird telemetry by BTU on Pribilofs and develop fur seal and prey field components. Develop full equivalent study with same patch work around Bogoslof and develop walrus-benthos patch study around St. Lawrence. Revised integrated statement of work for a complete patch dynamics study, including how it will integrate with the rest of BSIERP needs to come back to Board for approval. If collaboration between BTU and SEaBED researchers is not possible, then the

proposal needs to come back to the Board to develop an alternative strategy, possibly embedding it in the 2008 RFP.

Fur seal telemetry: Do not fund. Instead, incorporate telemetry in patch dynamics study by SEaBED.

Fur seal colony-based studies: Approved same scope of work proposed by Alaska Fisheries Science Center.

Killer whale telemetry: Do not fund.

Seabirds

Seabird telemetry: Remove common murre and fund at \$600,000, a reduction from the \$623,215 requested.

Seabird broad-scale distribution: Fund fully at \$550,438, but drop adult bird collections unless proper justification and design are provided to the staff. The budget would be adjusted accordingly. (An amendment was made, but failed (0-4 excom, 3-1 other), to require any justification to collect seabirds to come back to the Board for final decision.)

Seabird colony-based: Reduce funding from \$377,224 request to \$350,000, by deleting isotope work. However, add banding on Pribilofs and perhaps St. Mathew and Bogoslof.

Local and Traditional Knowledge

Fund a combination of BTU and SEaBED components for a total for \$1,000,000, with revised statements of work to be developed by the applicants working as a coordinated team and submitted to the Board for approval. The two BTU elements would include ethnographic interviews of elders combined with cognitive anthropology and cultural modeling to develop an alternative conceptual model of the ecosystem in native terms, and subsistence adaptation modeling based on subsistence harvest surveys and retrospective studies of such harvests over the past 10-20 years. The SEaBED elements would include interviews of subsistence users and community workshops in three communities. The list of communities must be justified and science panel and technical reviewer comments must be addressed.

Socio-economics

The Board did not fund the BTU requests to do cost-earnings surveys or collect any new data on the commercial fisheries, however it did direct that human impacts on the ecosystem be incorporated in the ecosystem models. It was also pointed out that economics should be retained in the models and that these may in the first instance identify further data collection needs that the Board and the NPFMC may address.

Ecosystem Modeling

The Board did not approve funding for the eight BTU modeling components as submitted, but did set aside \$2.5 million for modeling contingent on the Ecosystem Modeling Committee re-evaluating model needs and recommending how to proceed. Preliminary guidance including how to proceed with retrospective studies should be provided within six months and a more comprehensive plan should be developed within one year. Human impacts on the ecosystem should be kept in the model and modelers should be requested to identify data needs to assess those impacts. It would be up to the NPRB and North Pacific Fishery Management Council ultimately to determine the direction of those data collections.

Arrowtooth flounder should be included as a focal species in the model to address the hypotheses about their almost unlimited population growth as hypothesized in the BTU proposal.

Project and Data Management

The Board set aside \$1.4 million for these two components. It directed its staff to consider effective options for managing the program, including hiring new staff. The Board directed that data management stay within the BTU program, but that staff should carefully consider how best to be involved.

Education and Outreach

The Board set aside \$100,000 for education and outreach, delinked it from the BTU proposal (which had two elements: community involvement and dissemination of information to communities), and directed staff to develop the program further while creating synergies by linking with the NSF education and outreach program for BEST.

Gaps in Research

The Board followed up on the science panel recommendation regarding potential gaps in the overall program: remote sensing, role of jellyfish in the ecosystem, continuous data recording between stations, and studies of epi-benthos, and noted that if after the PI meeting these were still identified as gaps it would consider committing the unspent BSIERP funds to these gaps potentially as part of the 2008 RFP.

Total Funding

Total BSIERP funding would be capped at \$14 million and the difference between this cap and the total projects funded above (\$13,175,588) could be used to fill the identified gaps in the 2008 RFP or to help support the marine mammal patch study explained above. In September 2007, the Board will determine how to allocate remaining funds which could range from \$600,000 up to \$800,000, and may be used to fill gaps identified above.

The **main motion passed unanimously** with David Benton, Nancy Bird, Dorothy Childers, John Gauvin, Earl Krygier, Paul MacGregor, Stephanie Madsen, and Tylan Schrock voting in the affirmative.

[Note: A table describing funded BSIERP components is available at the Board office in Anchorage (907-644-6700) and on its website at http://www.nprb.org/research/BSIERP/bsierp_intro.htm.]

7. **Other Matters**

Board members expressed concern that the requirement of the BSIERP RFP for multidisciplinary teams may have resulted in less competition in development of proposals, as witnessed in the few pre-proposals and full proposals received. They expressed a strong desire to ensure that this does not happen again, especially in regard to the GOAIERP. The process for developing proposals needs to be fully competitive and well-thought out. Possibly the Board will need to rethink its process in favor of a more focused and directed RFP for the GOAIERP. Having the same PI on two or more proposals is acceptable. The Board will consider thoroughly the lessons learned from the BSIERP when proceeding with development of the GOAIERP.

Before adjourning, the Board presented a plaque to Stephanie Madsen in recognition of her contributions as a Board member and vice chairman. Her position on the Board will end in mid-August when her term on the North Pacific Fishery Management Council ends and she is no longer the Council Chairman.