

Final Summary
North Pacific Research Board
NPRB Conference Room
Anchorage, AK
April 30 – May 1, 2008

1. Call to Order/Approve Agenda

The Board convened at 9:11 a.m. on Wednesday, April 30, 2008. Present were Tylan Schrock (Chairman), David Benton, Nancy Bird, Michael Cerne, Dorothy Childers, Douglas DeMaster, Leslie Holland-Bartels, Howard Horton, John Iani (by phone to establish quorum), Earl Krygier, Michele Longo-Eder, Steve Maclean, Paul MacGregor, Gerry Merrigan, Chris Oliver (first day) and Eric Olson (second day), Pam Pope, and Dennis Wiesenburg. Clarence Pautzke, Francis Wiese, Carrie Eischens, Tom Van Pelt (who was introduced to the Board at this meeting), and Carolyn Rosner staffed the meeting.

The agenda was approved after reversing the order of items #4 and 6 (BSIERP and long-term monitoring, respectively), and adding an agenda item under #7 about the need for a workshop on sleeper and salmon sharks. A safety briefing was given. Tylan Schrock chaired the meeting and elections were held at the end. David Benton was elected Chairman for a one-year term. Eric Olson was elected Vice Chairman for a one-year term.

It was announced that all Board members requiring Secretary of Commerce appointments had indeed been formally approved and would be able to participate in Board decisions at this meeting.

The Board approved the summary of the December 2007 Board meeting.

2. Proposal Review for 2008

Overview of current research funded by NPRB

Since 2002, NPRB has funded 172 regular projects (\$28.9M) and an additional 27 projects under the BSIERP (\$15.9M). The Board was provided with tables showing that a total of 65 agencies have been awarded funds by NPRB, with 20.3% and 19.59% of total funds being distributed to the University of Alaska Fairbanks and the Alaska Fisheries Science Center, respectively. Summary tables were provided to the Board showing how the 172 projects relate to the primary ecosystem priorities identified in the 2005 Science Plan. Ninety-eight funded projects (\$17.3M) have been completed, with metadata and data transfer completed for 28 and 23 projects, respectively. Some principal investigators did not respond to repeated requests for metadata or datasets, and principal investigators for two projects have indicated they will not provide data. This data and metadata provision issue was addressed by the Board as summarized following this summary of the proposal funding decision.

Overview of 2008 Request for Proposals and proposals received

The 2008 RFP was released on October 3, 2007 with \$4M targeted to fund marine research in the NPRB study area in 2008. Eighty-nine proposals were received by the November 30, 2007 deadline, requesting almost \$16M. NPRB staff developed a series of initial evaluation criteria to determine if proposals followed RFP guidelines and whether they were responsive to the chosen research priority. Staff rejected a total of four proposals: two based on non-compliance with the RFP guidelines and two because they were undoubtedly non-responsive to their RFP category. Nine others were identified as potentially non-responsive, and an ad-hoc committee of the Science Panel was formed to help evaluate their scientific responsiveness. This process resulted in five of the nine proposals being considered non-responsive to the RFP research priority chosen by the applicants. Thus, nine proposals were returned to the applicants without further processing. The remaining 80 proposals were sent out for anonymous technical review.

Science Panel recommendations

Science Panel Chairman Rich Marasco provided the panel's recommendations based on their meeting on April 15-17, 2008 in Seattle, Washington. Of the 80 viable proposals, the panel recommended 22 for Tier 1 funding, totaling \$4.086M. Another 21 proposals were recommended for Tier 2 funding (\$3.939M). Tier 2 proposals are scientifically meritorious, albeit lower priority than Tier 1 proposals, and could be considered for funding if the Board decides to exceed the 2008 funding ceiling of \$4M

Public comments

There were no public comments.

Develop funding recommendations for Secretarial approval

The Board reviewed its conflict of interest procedures and then proceeded to develop recommendations for funding to be submitted to the U.S. Secretary of Commerce for final approval.

A framework motion was made to adopt the tier 1 recommendations of the Science Panel, modified to delete proposals 1 (\$240,629), 26 (\$249,905), 35 (\$249,916), 45 (\$247,424), 58 (\$348,294); and add proposals 24 (\$249,914), 28 (\$242,346), 50 (\$114,832), 74 (\$74,989), 83 (\$121,420), and 81 (reduced from \$248,150 to \$150,000 based on partial weaknesses identified by the Science Panel). The intent would be to also adopt any conditions established by the Science Panel for the funded projects.

An amendment was made to add proposal 6 at \$225,000 to extend monitoring of the Seward Line through 2009. The amendment was tabled until the next day so that it would not be taken up with the suite of proposals that were more responsive to the 2008 RFP. Proposal 6 is more of a monitoring program and, as noted by the Science Panel, monitoring work was not part of the current RFP. The amendment to table passed with one objection.

An amendment was made to add proposal 17 regarding testing the localized depletion hypothesis that Steller lions foraging success is affected by local fishing effort. Discussion ensued on the need for an experimental design and whether a workshop should be held to engage the broader community to help with the design. A substitute motion to set aside \$30-40K for a workshop failed (excom 1-3; others 0-11, with Schrock recusing). A friendly amendment to host a workshop within the existing budget request failed. The overall amendment to add #17 failed (excom 4-0; others 4-7, with Schrock recusing).

An amendment was made to add proposal 19 regarding site fidelity for salmon sharks in Prince William Sound. It failed (excom 0-5; others 4-7).

An amendment was made to add proposal 20 regarding life histories of salmon and sleeper sharks in the Bering Sea. It failed (excom 0-3; others 3-7, with DeMaster recusing).

An amendment was made to add proposal 26 to evaluate echosign data in improving trawl survey biomass estimates for patchily-distributed rockfish. It passed with DeMaster recusing.

An amendment was made to add proposal 45 characterizing spawning behavior and response to barotraumas of Pacific cod using ultrasonic telemetry. It failed (excom 1-3; others 6-4, with Wiesenburg recusing).

An amendment was made to delete proposal 50 regarding Steller sea lions and achievement of a new carrying capacity. It failed (excom 1-4; others 8-3).

An amendment was made to add proposal 55 regarding body conditions of Marbled Murrelets. It passed with one objection.

Staff noted that indirect costs for proposal 74 concerning social and economic impacts on coastal communities were way above what is considered acceptable by the Board and written into the RFP provisions which have a restriction of 100%. The recommended funding accordingly was decreased from the requested \$74,989 to \$37,495 because the OSRI will fund half of the amount requested. The funding approval was made conditional on the recipient reducing the indirect costs to 100%.

An amendment was made to delete proposal 81 regarding humpback whale interactions with the fishing fleet in southeast Alaska. It failed (excom 1-4; others 4-6, with Wiesenburg recusing).

An amendment was made to delete proposal 83 concerning ambient noise in the Beaufort Sea. It was not seconded.

Thursday Morning:

An amendment was made to delete proposal 50 regarding Steller sea lions and achievement of a new carrying capacity, based on it not being ready for full funding and needing further development. It passed unanimously. An amendment was made to add proposal 17 regarding testing the prey depletion hypothesis for Steller sea lions. It passed unanimously with Schrock recusing.

Deleted:

An amendment was made to add proposal 14 concerning red king crab habitat in Norton Sound. It failed with one vote in favor.

The main framework motion on funding proposals to the 2008 RFP, as amended above, passed unanimously at 9:35 a.m., Thursday, May 1. As a result, the Board recommended 25 new projects for funding totaling \$4,126,726. The Board recommended the requested funding levels for 24 proposals and reduced funding for 1 proposal (81).

The Board applied the following stipulations, most of which were recommended by the Science Panel:

Funding Revisions and Stipulations

Proposal 17: Revise statement of work to address Science Panel and technical reviewer comments. Specifically, reviewers need more information on the fish removal plan and the need for a direct measure of prey abundance, and the permit issue needs to be clarified. It was also suggested that the project would benefit if a co-PI with a fisheries background was added to the study.

Proposal 24: Revise statement of work to address Science Panel and technical reviewer concerns. Specifically it is requested that the issue of identifying the boundaries of skate nursery areas be addressed and that the PIs consider and justify their use of an AUV over ROVs.

Proposal 28: Revise statement of work to address reviewer concerns regarding net design, limited duration of survey tows, ages of rockfish in the trawled areas vs. untrawled areas, methodology details and data integrations.

Proposal 68: Revise statement of work to address Science Panel and technical reviewer concerns. Specifically address the questions regarding mercury source and the request for a more detailed description of statistical analysis and data interpretation.

Proposal 79: Revise statement of work to address Science Panel and technical reviewer comments concerning the need for statistical evaluation of the side-by-side tows, an analysis of whether the alternative survey methods represent a significant improvement over the standard NMFS trawl survey and the addition of expertise from outside the management agencies to the planned workshop.

Proposal 81: Revise statement of work with a reduced budget of \$150,000. As per Board and Science Panel comments, the revised statement of work should focus on the fisherman-researchers cooperation and awareness and disentanglement responses, but should not include the acoustic deterrent component of the proposal.

Concerning shark proposals, of which four were submitted but not recommended for funding, the Board asked staff to review past RFPs and proposals received and form a working group to help focus the RFP further so that shark management issues can be supported with meritorious projects in the future. They asked that the shark topic be included in the 2009 draft RFP.

Seward Line Monitoring

After the Board completed consideration of the main proposal package as described above, it then returned to proposal 6, monitoring of the Seward Line. The Science Panel did not believe it was sufficiently responsive to the research priorities in the 2008 RFP. Therefore the Board did not fund the submitted proposal but took up this monitoring issue as a separate item. A motion was made to support analysis of the Seward Line data from June 2008 and the collection of new data in August 2008 and its analysis. The principal investigators already have sufficient funds for data collections in June 2008. The motion to fund the Seward Line as described above at \$225,000 passed unanimously.

Provision of Metadata and Data

The Board discussed the issue of principal investigators not being entirely responsive on providing metadata and data to the Board for projects funded by the Board. This discussion occurred after the above decisions on funding recommendations had been made.

A main motion was made and passed unanimously to instruct the executive director to not release funds for this year's 2008 RFP recommended projects until data issues were resolved from any earlier project(s) with NPRB, so that the principal investigator and associated institutions would not be on the list as delinquent. It was agreed that if a reasonable timeline was established for metadata and data delivery from earlier project(s), funds could be released, but if that timeline was not adhered to then payment of invoices for all projects the PI was associated with would stop until data and metadata were delivered. For principal investigators and institutions associated with proposals that were not recommended for funding, a notice will be sent to their respective institutions, with copy to principal investigators, that future funding would be jeopardized if data and metadata issues are not resolved. The staff will report progress back to the Board at the September 2008 meeting.

3. Budget Review

Audit Report

The Board received the KPMG audit report on expenditures in FY 2007 and asked that it be posted on the Board's website. There were no issues raised in the report.

Grants and Projections

The Board was provided with more accurate projections of the EIRF fund based on current and anticipated interest rates. The principle is about \$1.118 billion and a reasonable interest rate to use for projections is 4.2% and could be up to 4.25% next year because of a slight increase in rates. This year's revenue will be around \$46 million. These new projections exceed earlier ones given to the Board.

Budget for FY2010

The Board reviewed and approved unanimously a proposed budget for FY2010 for the \$8,649,696 of earnings on the EIRF.

4. Bering Sea Integrated Ecosystem Research Program

The Board received status reports on the Bering Sea Integrated Ecosystem Research Program partnership with the BEST program of NSF, including a review of the principal investigator meetings held in September 2007 and January 2008, an update on the various components of the overall program, development of the science advisory board, activities of the modeling team and its interactions with the ecosystem modeling committee, development of the Bogoslof patch dynamics component, program administration, education and outreach, summary of the Healy Cruise 0801, and a status report on development and ongoing activities of the Alaska Marine Information System. No actions were necessary or taken by the Board on this agenda item.

5. Gulf of Alaska Integrated Ecosystem Research Program

The Board received a review of their past considerations in developing an integrated ecosystem research program for the Gulf of Alaska since spring 2007, including the decision to postpone releasing a special request for proposals from fall 2007 to sometime in 2008. At the September 2007 Board meeting, the staff suggested using a modular approach for developing the integrated program. They would be process-oriented and could be competed openly, followed up by focal meetings like those done for the BSIERP patch dynamics and LTK components, which proved to be extremely valuable and productive. Such an approach would give control to the Board, ensure competition, leave space for creativity within defined modules, and prevent any group or institution from dominating. Such a modular approach could also deal with the issue of insufficient funding, depending on available partnerships, as well as ensure a high quality, comprehensive and integrated program comparative to BSIERP. Core modules could be identified to be funded together initially, with additional modules designed ahead of time to be added as more funding becomes available. The Board concluded its discussions in September 2007 by requesting the staff to further develop the modular approach for presentation at the April 2008 meeting.

Based on the above direction, staff went back through the IERP Plan Team meeting documents and workshops, consulted the most recent peer-reviewed literature on GOA issues, as well as presentations made at the most recent Alaska Marine Science Symposium, and consolidated the most relevant information from the 2008 SAFE Ecosystem Chapter, as well as from other

ongoing programs funded by NPRB, EVOS, NEP-GLOBEC, and federal and state agencies. Francis Wiese presented a detailed overview of a potential modular approach. It contained the following suggestions:

1. Process-oriented multi-disciplinary modules will be completed individually.
2. Give longer timeline than BSIERP for module teams to develop proposals as no field work is planned for 2009.
3. 2009 would be used for programmatic and logistic development, as well as to start retrospective analysis and modeling (depending on modular approach chosen).
4. Field seasons in 2010-2012 – will give a one year field overlap with BSIERP and thus a potential to determine downstream effects (depending on modular approach chosen, see presentation).

The Board thoroughly discussed the suggestions and through unanimous vote, requested staff to develop five examples for their review in September, along with a discussion of strengths and weaknesses of each. Staff also should be prepared to release a call for pre-proposals.

The Board also was informed that the *Exxon Valdez* Oil Spill Trustee Council had not agreed to pursue a partnership with the Board for a joint GOAIERP. The Council members did say, however, that the existing MOA between NPRB and EVOSTC allows for a collaborative working relationship and that this should be nurtured.

6. Long-term Monitoring

The Board has funded a variety of projects since 2002 that can be considered long-term monitoring projects. They span a variety of disciplines, from oceanography, plankton, fish, and marine mammals, to contaminants and coastal community monitoring. All have merit, but most are not part of a larger program (with the exception of moorings which are now funded under BSIERP) or long-term strategy, and thus have been funded mostly in one-year increments, and contributed in different degrees to management issues.

The purpose of this agenda item was to provide further discussion of what role the Board should play in supporting long-term monitoring, how to define such monitoring, and how much of the Board's limited fiscal resources should be dedicated to monitoring. A discussion paper was provided to the Board. It was developed by staff with input from a committee of Science Panel members. The goal is to develop a strategy for structuring a long-term monitoring component for the 2009 RFP.

Some of the issues that needed to be considered included:

1. Can we consider that special long-term monitoring needs in the Bering Sea are already addressed in the BSIERP?
2. Similarly, should any new long-term monitoring commitment in the Gulf of Alaska be required to be part of the GOA-IERP? Or should extra funds, in addition to the \$7M for the IERP, be set aside for monitoring? If the GOA-IERP is not launched this fall, but we request monitoring programs in the GOA in the 2009 RFP anyway, should we shorten

our commitment time to such projects to 3 rather than 5 years as proposed by the Science Panel?

3. Should we set aside say \$400k annually for monitoring projects in the AI and Arctic, based on the assumption that long-term monitoring for the BS and GOA will be part of the IERPs?

After lengthy discussion, the Board unanimously passed a motion as follows:

1. Regarding #1 above, the Board concurs that special long-term monitoring needs in the Bering Sea are already being addressed in the BSIERP.
2. Regarding #2, long-term monitoring in the GOA should be considered only under the IERP.
3. Regarding #3, the Board did not set aside \$400k annually because they had yet to determine their role in the Aleutians and Arctic Ocean.
4. The Board will assign a small workgroup of Board members to work with Rich Marasco, Science Panel Chair, and staff and report back at the September 2008 meeting.

The Board also received a status report on funding for the continuous plankton recorder consortium being organized by PICES. No action was taken.

7. Workshops and Symposiums

Cook Inlet Beluga Whale Panel

This was held at the 2008 Alaska Marine Science Symposium to develop research priorities for the 2009 RFP. No action was taken by the Board.

Electronic Monitoring Workshop on July 29-30, 2008

During the September 2007 meeting, the Board discussed joining with NPFMC to sponsor a workshop on electronic fisheries monitoring technology. Staff presented a status report on development of the workshop. The Board took no actions on this topic.

Workshop on habitat surveys in Bering Sea canyons

At their December 2007 meeting, the Board reviewed a letter from the NMFS Region regarding habitat surveys in Bering Sea Canyons. The Board approved planning of the workshop and this was simply a status report on planning for the workshop. The Board took no action other than to request the staff to work closely with NOAA on planning the workshop and to refer to any reports deriving from the NPRB-sponsored habitat mapping workshop.

Arctic baseline survey workshop

In April 2007, the Board identified \$60,000 to conduct a workshop to develop the desired sample design for a potential Arctic baseline survey. More recently, AOOS, ADEC and other agencies have expressed interest in holding a workshop to develop a comprehensive ocean monitoring plan for the Chukchi and Beaufort Seas in Alaska's Arctic and to further coordinate existing and

planned monitoring and assessment activities and promote data sharing. There is common agreement that any integrated sampling and research program should build upon past efforts in the Chukchi. Molly McCammon, AOOS executive director, provided a status report on developing the workshop. The results of the workshop will feed into the NPRB 2010 RFP. No actions were taken by the Board.

International Arctic fisheries management symposium

It has been recommended that NPRB support a symposium on managing arctic fisheries, possibly in the spring or fall of 2009 in Anchorage. This would entail coordinating with the North Pacific Fishery Management Council and other organizations such as the Institute of the North to develop an agenda and participants to address issues ranging from research needs to potential management approaches for arctic fisheries. After discussing a potential symposium, the Board set aside \$50,000 for the symposium. It established an ad hoc planning committee including David Benton, Eric Olson, Michele Eder, with CAPT Cerne as point of contact for the US Coast Guard. NPRB is involved because of the underlying science component required as a foundation for any management plan.

Alaska Marine Science Symposium

The Board was given a status report on the January 20-23, 2008 Alaska Marine Science Symposium. The 2008 event was the biggest AMSS to date with over 600 registered attendees. NPRB and Sea Grant sponsored oral and student presentation awards. Thirty-five students participated in these competitions including one undergraduate student, 23 Master's students and 11 Ph.D. students. Student poster winners were Joel Webb (Ph.D. – UAF) and Lisa Kamin (MS – UAF). Student oral presentation winners were Steffen Ooppel (Ph.D. – UAF), Cindy Tribuzio (Ph.D. – UAF), Diane Hass (MS – Moss Landing Marine Lab) and Katie Palof (MS – UAF). Each student award winner received \$250. The 2009 Alaska Marine Science Symposium will be held the week of January 19, 2009. No action was taken by the Board on this agenda item.

Shark Workshop

There is a need for a workshop or working group to determine what is known or not known about sleeper and salmon shark biology. Carrie Eischens will develop this initiative further and consider whether a workshop is actually needed or just development of a white paper by a group of experts. The goal will be to have the more focused and concise language in the 2009 RFP describing this research priority to elicit better proposals that address the needs of management for these species.

8. Other Matters

Presentation on project #639 – Steller sea lion policy analysis

Anne Hawkins presented a final report on NPRB project 639: *Extending Lessons from the Steller Sea Lion Controversy: Getting Ahead of the Northern Fur Seal Curve*. The goal of the study was to conduct an integrated assessment of law, policy, and science factors affecting Northern fur

seal management and compare this situation with the Steller sea lion management context to draw implications about which management strategies may be more effective for enhancing learning and minimizing litigation. Board members asked questions, but took no further action.

Graduate Student Research Awards

In September 2007, the Board approved the creation of the NPRB Graduate Student Research Awards, with up to five awards of \$20,000 each giving qualified masters and doctoral students the opportunity to address scientific, technological, and socio-economic issues relating to the research themes identified in the NPRB Science Plan of 2005. Thirty-seven applications were received, 19 from Ph.D. students and 18 from Masters level students. Based on the recommendations of an ad hoc committee of Science Panel members and staff, and their own review of the applications, the Board unanimously approved the following awards: Elizabeth Atwood (MS), Shannon O'Brien (MS), Mary Hunsicker (Ph.D.), Markus Janout (Ph.D.) and Rebecca Young (Ph.D.).

Alaska Ocean Observing System

Molly McCammon, Director of the Alaska Ocean Observing System, presented a status on the AOOS program.

Education, outreach and communication

Carolyn Rosner presented a status report on education and outreach on behalf of herself and Nora Deans.

Photo contest

The Board received over 200 photos to compete in the 2008 NPRB Photo contest, including 14 in the youth category. With advice from a panel of professional judges, the field was narrowed down to 10 adult and 3 youth finalists. The Board reviewed the 13 finalist photos submitted in response to its second annual photo contest. They then chose the top three which will receive monetary prizes (adult category: first prize - \$1200, 2nd - \$600, and 3rd - \$300; youth category: first prize - \$600, 2nd - \$400, and 3rd - \$200).

Long-term planning

The subject of this item was to consider if and when to move ahead with assessing the Board's science program to determine how our research is being used and whether to adjust our annual RFP's in content or format, or focus them on certain topics on a rotating basis, for example, seabirds one year and marine mammals another, rather than including the same general priorities every year. The Board instructed staff to develop a discussion paper for the September 2008 meeting and contact the Foraker Group to possibly help structure and guide the examination.

Research partnerships with industry

This agenda item concerned potentially developing a partnership with industry, particularly the oil and gas industry, for research in the Arctic. The industry representative was not available. The Board suggested that staff work with industry to develop this issue further, possibly in connection with the Arctic workshop.

Meeting funding requests

There were two requests for meeting funds. The Board approved \$15,000 for the fifth international conference on Marine Mammals of the Holarctic and \$5,000 for the Kachemak Bay Science Conference to be held in March 2009. The Board requested staff to post the last holarctic marine mammal report on the website.

Advisory Panel memberships

The Board delayed approving the 13th seat on the Advisory Panel which is reserved for someone from the North Slope region. More nominations will be gathered over the summer.

Supplemental request for squid biology funding

The Board received a request for additional funds for NPRB project 716 that had a goal of determining if acoustics could be used to survey squid populations over large distances and develop a picture of the patchiness. The principal investigator, John Horne at the University of Washington, requested funding augmentation of just over \$24,602 for additional analysis of extra samples of squid taken to study squid biology and life-history information. The Board discussed whether to provide extra funds, but in the end voted against a motion to do so because of the precedence it would set (excom 4-1; others 1-5). The Board believes that funding requests should come to the Board under the regular requests for proposals.

Science Panel note on research priorities for future requests for proposals

Science Panel Chairman Rich Marasco noted in the panel's report that if the Board has high priority research topics they would like to see further fleshed out, then they should let the Science Panel know before it drafts the annual RFP at its August meeting.

The Board adjourned at approximately 5:40 pm on Thursday, May 1, 2008.