

Summary
North Pacific Research Board
Science Panel Meeting
Anchorage, AK
August 14-16, 2012

The Science Panel met on August 14-16, 2012, at NPRB in Anchorage, Alaska. The meeting was chaired by Tom Royer and the following other members were in attendance: Vera Alexander, Stew Grant, Tuula Hollmen, Cheryl Rosa, Chris Siddon, Pat Tester, Polly Wheeler, Bill Wilson, and David Witherell. Absent: Carin Ashjian, Dick Beamish, Jim Berner, Don Bowen, Pat Livingston, Seth Macinko and Andre Punt. The meeting was staffed by Crystal Benson-Carlough, Nora Deans, Danielle Dickson, Carrie Eischens, Cynthia Suchman, Tom Van Pelt and Francis Wiese (via Skype).

Call to Order and Approve Agenda

New Science Panel member Christopher Siddon was introduced to the Science Panel. Panel members present and staff introduced themselves as well. The agenda and schedule of individual Science Panel members was reviewed and the agenda approved with the discussions on long-term monitoring and the Arctic being moved to earlier in the schedule. Staff gave a safety briefing in case of emergencies. Science Panel members were asked to review the new Conflict of Interest policy and sign a statement indicating that they had read, understood and agreed to abide by the new policy.

Long-term Monitoring

Staff gave a report on the Board's discussion of this topic at their May 2012 meeting and the re-establishment of the long-term monitoring (LTM) working group which met via teleconference on May 30, 2012. Report highlights included the Board's agreement that an LTM strategy was desired and the endorsement of the definition as suggested by the working group. The Board also agreed that \$400,000 per year was an appropriate investment in LTM activities, which would now be solicited separately from the regular annual Request for Proposals (RFP).

The Science Panel's reaction to the Board's LTM commitment of \$400,000 per year for this activity was very positive. In discussing the duration of LTM projects funded by the Board, the Science Panel agreed that five-year funding durations were reasonable for these types of research activities and noted that projects should not be halted during the review process for renewal. This could be accomplished with a review initiated in the fourth year.

Questions were raised as to whether the LTM RFP solicitation would occur on an annual basis or whether all of the funds would be committed for five years with the initial LTM RFP. This could be determined possibly during the first funding cycle.

The Science Panel then discussed aspects of an LTM RFP process and was unclear on how specific the initial LTM RFP should be. The SP believed that it would be best to fund multiple projects, perhaps with a cap of \$100,000 per project/year, with joint funding from interested federal or state agency or university partners. Collaborative (consortium) proposals would therefore be required. The Science Panel noted that care must be taken to avoid addressing missions that should be undertaken by federal or state agencies (e.g. fish census or sea level measurements). The issue of geographical constraints such as Arctic, Bering Sea and Gulf of Alaska basin coverage or whether all LTM projects could be in a single region was not agreed upon. This consideration might not be resolved until the proposal process begins.

The ultimate objective is to enable the prediction of temporal and spatial changes in the marine environment in the NPRB Large Marine Ecosystems (LMEs). The panel agreed that the LTM RFP

should request the sampling of multiple trophic levels, however it will be up to the proposers to determine the trophic levels required to address the problem at hand.

The Science Panel reached a strong consensus that a pre-proposal process will be necessary. The initial short response (approximately three-pages) to the LTM RFP should include the goals of the sampling program that address NPRB resources and a list of collaborators. These collaborators should agree to writing the full proposal if the pre-proposal is accepted and provide letters of support. The pre-proposal process would allow scientists to explore the LTM funding process without an excessive commitment of time to proposal preparation. A tentative schedule would include a six-week period for pre-proposals, followed by about a four-and-a half month period for the development of full proposals. It was suggested that, in the interim period, NPRB continue to consider proposals that might contain some aspects of long term monitoring on an ad hoc basis in the annual RFP (as it has done in the past).

GOA Integrated Ecosystem Research Program

Staff gave an update on the Gulf of Alaska Project. The Alaska Fisheries Science Center was able to secure Cobb replacement funds that allowed the upper trophic level component of the project to complete an unplanned survey during 2012. This has added another year of sampling to some (but not all) aspects of the project. The team was successful in sampling larval arrowtooth flounder, rockfish, and young-of-the-year (YOY) pollock at sampling locations offshore during the Southeast Alaska summer cruise this year, and the western Gulf of Alaska cruise is ongoing until the end of August. The PIs are blogging during the field season and their progress can be monitored on the Gulf of Alaska Project website: <http://blog.goaierp.nprb.org/>.

The data management team, AOOS-Axiom, has been responsive to the needs of the PIs and participates in monthly GABI and PI conference calls. The Science Panel Chair, Tom Royer, listened to a PI call on 14 Aug. and was impressed with the interactions of the data managers with the PIs. They have developed a workspace for the project that enables secure data sharing among the Gulf of Alaska Project PIs and it is already in use. A data delivery schedule document has been established by the GABI to keep all PIs informed about the status of datasets and to facilitate planning for integrated analyses.

Francis Wiese and Danielle Dickson attended an in-person meeting of the modeling team in Seattle in June. The modeling effort is progressing as expected. Both of the tools tested for running offline simulations of the ROMS model (DisMELS and Ichthyop 3.1) are producing good results.

The GABI is planning a 2013 field season planning meeting that will take place in Anchorage in late November. During that meeting lead PIs will coordinate plans for survey design and logistics.

Bering Sea Integrated Ecosystem Research Program

Staff gave an update on the Bering Sea Project, noting that the first Bering Sea Project special issue is complete, with 24 articles available online http://bsierp.nprb.org/results/publications.html#special_issues. Science Panel members will be provided with a hard copy of the special issue. A fully searchable and printable PDF version of the entire issue is also available in the Bering Sea Project publication library, thanks to shared financial support by NSF, ARCUS, and NPRB. Work on a second special issue is under way, and a third Bering Sea Project special issue, with a submission deadline in December 2012, has been announced. This issue would have an anticipated publication date in early 2014. In addition to special issue manuscripts, a broad range of initial results from the Bering Sea Project are already being published elsewhere in the literature—the project’s online publication library now contains 66 papers or books (including the first special issue papers).

To maximize communication of project results to other audiences, short “Headline” summaries of project results are being prepared by the NPRB Communication and Outreach Director and program staff with material provided by both NPRB- and NSF-funded researchers. Science Advisory Board members are helping to shape the prototype and refine the process. This material will provide a large part of the content for the “magazine” envisioned as a final Bering Sea Project summary/synthesis product.

Staff provided a brief data management update to the Panel, noting that the BEST-BSIERP Bering Sea Project data management team, based at the Earth Observing Laboratory in Boulder, Colorado, has been busy accepting new datasets, dealing with existing and new metadata records, and building a new ‘digital object identification’ (DOI) system into the database. The database currently has 65 BSIERP datasets and 263 BEST datasets, all accessible at a single, unified portal.

The Bering Sea Project update concluded with a productive discussion about close-out planning. Now that the Bering Sea Project is well into its synthesis phase, it is time to plan for the final steps of the program to achieve remaining scientific, programmatic and communication goals. The project’s Science Advisory Board, NPRB and NSF program managers, and communication and outreach staff have been working together to develop a cohesive plan that serves as the reference and guiding document for the remainder of the Project. The draft close-out plan was presented to the Panel during the meeting. The Panel endorsed the general outlines and objectives of the close-out plan; concern expressed by the Panel related to planning for a “BSIERP 2” and/or for continuation projects that would bridge the time between closure of BSIERP 1 and the startup of a potential BSIERP 2. Staff clarified that a BSIERP 2 is still present in the long-range planning for NPRB but that it will of course be dependent upon availability of funds, partnerships with other funding entities, and priorities set by the Board. The Panel’s support for seeking ways to maintain the momentum, partnerships, relationships, etc., established during BSIERP will be relayed to the AP and the Board.

Education and Outreach Report

The Communications and Outreach Director presented a review of Education and Outreach activities since last August. The Panel once again commended her for the wonderful job she and staff has done of bringing the science to a wide range of audiences.

Social Science Working Group

Science Panel member Polly Wheeler (co-chair of the Social Science Working Group [SSWG]) provided background and gave a report on the activities of the SSWG, noting that this group has been working through the spring and summer to formulate research priorities for the Social Science Focus section of the current 2013 RFP. Details of those research priorities were discussed within the overall draft RFP discussion. Beyond the 2013 RFP, there is a need for a longer-term strategy, which could include the commission of white papers on the state of social science in the north and how to integrate social and natural sciences. This would then feed into NPRB’s long-range strategy for supporting social science research. Wheeler described the next steps for the SSWG to continue their work on the long-range goals, followed by brief discussion on this topic. It was noted that in an attempt to ensure maximum communication between the Panels and Board members, Polly Wheeler and Dorothy Childers (co-chairs) are both planning to join the Advisory Panel meeting during their activity on this topic, and Wheeler is planning to join Childers during this topic discussion at the Board meeting.

Budget Review

The Executive Director reviewed the budget numbers for the NPRB with the Science Panel and confirmed that a 2013 RFP for \$4M was budgeted. Science Panel members asked clarifying questions

and specifically asked about budgeting for LTM, any Arctic research partnership, and possible future Bering Sea “2.” Given the current low interest rates, Dr. Suchman advised caution in setting a time frame for IERPs beyond the next few years, but also demonstrated that in the medium term, there are sufficient funds for research beyond the annual RFP.

The Science Panel discussed the funding and staff effort required to organize the Alaska Marine Science Symposium and voiced their strong support for this meeting. The panel indicated that this meeting was very important and a legacy of the NPRB and that funding for this meeting, in its current form, should be a NPRB financial priority. The panel also recognized the large amount of staff time invested in the AMSS and suggested that they would support an additional staff hire to lead the organization of the symposium if needed.

Summary of Previously Funded Projects

Staff gave a status report regarding the 29 competed projects totaling \$4.18M that were approved or conditionally approved for funding by the Board at their May 2012 meeting. Applicants of the six conditionally approved projects were asked to address all issues raised by the Science Panel and technical reviewers prior to receiving final project approval. All projects addressed these comments satisfactorily and received final approval.

Staff also reviewed the concordance between Science Panel recommendations and Board decisions since 2002. Since that time, the Board has funded 304 projects, 92.6% of which have been ranked as Tier 1 or Tier 2 by the Science Panel. Just over 7% of projects funded by the Board have been rated as Tier 3 by the Science Panel. It was noted and appreciated that the Board has not funded any Tier 3 proposals since 2008.

Information was also presented that summarized all previously funded projects in terms of institutional, marine ecosystem, and research theme distribution. Staff also noted that the rate of data and metadata submissions is improving, thanks in part to the collaboration with USGS data experts, and that data and metadata records are being made available through the NPRB website. Publications from NPRB funded projects also continue to be tracked with a total of 298 known publications and another 78 in press.

2013 Request for Proposals

At their May 2012 meeting, the Board determined that they would continue with the cyclical approach for the 2013-2014 RFPs. Topics and funding amounts for the 2013 and 2014 RFPs were discussed and established by the Board so that the Science Panel could move forward efficiently with creation of the 2013 RFP at their August meeting. These topics and funding amounts were presented to the Science Panel. Panel members asked clarifying questions regarding how the funding amounts came about and whether these numbers were based on historical funding levels.

Staff presented the panel with an updated table showing the amount of funds offered, requested and awarded by research theme for RFPs since 2006. This table also included data on the number of Tier 1 and Tier 2 proposals recommended to the Board each year (by category) to give a clearer view of whether underfunded categories were the result of poor-quality proposals being received. The Science Panel supported the idea that a summarized version of this table should be made available to the public on the NPRB website.

Based on their analysis of this table, the SP suggested that the Board should consider Technology Development as the topic for the 2014 focus section given the popularity of this category with both proposal applicants and the Board. (The Board routinely overspends in this category).

Staff then reviewed the documents used for developing 2013 RFP research priorities. Research priorities identified by the Alaska Department of Fish & Game, the Aleutian Islands King Crab Research Foundation, the Aleutian Islands Marine Research Plan, the Alaska Ocean Observing System, the Bureau of Ocean Energy Management, the Bering Sea Fisheries Research Foundation, North Pacific Fishery Management Council, the US Geological Survey, and the NPRB Science Plan were all considered. In addition, overlap with current projects funded by NPRB was considered when drafting the initial RFP document. Information gathered through science meetings, published literature, the public online RFP input form, past NPRB RFPs, as well as results from previously funded NPRB projects were also taken into account.

As noted above in the LTM section, the Panel felt that until the Board had an established process for funding long-term monitoring outside of the regular RFP, the Board should consider proposals that might contain some aspects of long-term monitoring on an ad hoc basis in the annual RFP (as it has done in the past).

Regarding the small grants category in the draft RFP, the Science Panel felt this was a very good idea but that it needed to be developed further before launching. Panel members indicated that we would need to be very specific in the directions to the proposers. Concluding their discussion on this topic the SP recommends that the Board establish a working group to further develop this idea and work with staff to scope implementation of a new process. The SP also noted that the emphasis should be on “capacity building” and not on funding small monitoring projects in perpetuity. Polly Wheeler, Pat Tester and Vera Alexander volunteered to represent the SP in the working group.

The Science Panel discussed all science sections of the draft RFP presented by staff. Changes were made to sections as appropriate during these discussions, resulting in the current draft of the RFP. The Science Panel did not make any adjustments to the target funding amounts for individual categories that were determined by the Board in May 2012.

Staff noted that talks had been ongoing with Jim Kendall and Dee Williams of BOEM exploring synergies between the two organizations. It was noted that once the RFP is defined it would be fruitful to look at areas where the RFP could link to BOEM studies. SP members thought there were some interesting opportunities presented, but also recommended a cautious approach when forming new partnerships with mission-driven agencies. Science Panel members were asked to email suggestions for linkages with BOEM when making final comments on the SP version of the RFP.

Staff presented the “boilerplate” of the RFP to the panel and highlighted significant changes from the previous year. A discussion on stakeholder engagement was deferred until this topic was discussed later in the meeting (see “Other matters” below).

Arctic

Phase I: Pacific Marine Arctic Regional Synthesis (PacMARS)

The PacMARS team, led by Drs. Jacqueline Grebmeier and Lee Cooper of the University of Maryland Center for Environmental Science, was awarded funding for the Arctic Synthesis that represents Phase I of NPRB’s Arctic Program. The lead PIs responded positively to the concerns of the Science Panel that were voiced during the review process and staff is confident that the issues have been addressed. The lead PIs have agreed to participate in monthly conference calls with the NPRB Program Manager and Science Director.

We have invited several individuals representing institutions that hold data relevant to the study to sit on the project's Advisory Committee and we are in the process of finalizing committee membership and organizing a meeting schedule. We plan to hold quarterly meetings with the Advisory Committee to coincide with the quarterly progress reports that we expect from the PacMARS PIs.

Phase II

Staff gave an overview of NPRB's plans to develop a coordinated Arctic research program and an update on conversations that have occurred with potential partner organizations since the spring meeting, including the National Science Foundation (NSF), the Interagency Arctic Research Policy Committee (IARPC), the Bureau of Ocean Energy Management (BOEM), the North Slope Science Initiative (NSSI), the North Slope Borough-Shell Baseline Studies Program, and others. The panel had questions for staff regarding the possibility of international collaboration. The panel was asked to provide comments on the draft plan, which will be presented to the Board in September.

Strategic Planning

The Executive Director outlined the framework and overview for a new strategic plan to be conducted over the next two years. A working group of Board members with a representative from each of the panels would be leading this effort. Dave Witherell volunteered to represent the Science Panel on this working group. There is intent to hold a workshop or a retreat, possibly in association with the Alaska Marine Science Symposium in January, to discuss future strategy for the Board. The desire is to have a strategic plan completed within two years.

The full Science Panel will have an opportunity to provide input into a revised Science Plan. The panel discussed several options regarding what form the revised Science Plan would take; these included a full rewrite of the plan, an addendum to the current plan updating the priorities, or something in between. Science Panel members stated a rewrite of the Science Plan was necessary given that the 2005 Plan was written in an era when funding for marine research was more easily obtained. A more realistic approach is needed in the coming years and that needs to be reflected in the revised Science Plan. New topics that also were not pressing research priorities at the time of the initial Science Plan also need to be incorporated, such as climate change and ocean acidification. The panel recommended that the Science Plan should be rewritten (version 2.0) and should include all relevant background information for context. In addition, an executive summary could be pulled out of the full plan to highlight the major updates and changes.

Staff suggested that teams or subcommittees should be established for each of the "Research Priority" sections of the current Science Plan to update the specific priorities listed. It was noted that outside input would be beneficial and panel members were asked to suggest three (non-NPRB) individuals from their subject area that could be invited to participate in the various subcommittee teams and to forward those names via email to Cynthia Suchman.

Panel members also suggested that a retrospective analysis of what NPRB has accomplished to date might also be in order – what were the goals, what has been funded and what progress has been made in achieving those goals. The impact of NPRB research also needs to be assessed. Staff noted that the Foundational Years document was a first step towards that analysis but did not directly look at the impacts of the research funded on management. The Committee of Visitors also encouraged some method of evaluating the impact of funded projects and suggested tracking funded PIs across future years, recognizing that impacts of the work may not take shape for decades and it may be difficult to recognize the impacts of the Board's efforts. Panel members noted that it might also be helpful to highlight success stories by identifying some of the NPRB projects that have had a direct effect on fisheries management. Staff for the North Pacific Fishery Management Council might assist NPRB staff in producing an

assessment of NPRB research impacts on fishery management. Libby Logerwell at AFSC was also suggested as a good resource for this type of endeavor. Panel members also discussed placing the responsibility of identifying management outcomes on the PIs by incorporating a section on “Expected Management Outcomes” in the final report template and/or the synopsis template.

Graduate Student Research Awards

Staff updated the panel on the Board’s May 2012 decisions regarding the winners of the six 2012 Graduate Student Research Awards. Panel members were pleased to see the awards given to the six applicants recommended by the Science Panel in April.

Staff also provided an update on the re-convened GSRA working group, which was given the charge of exploring ways to expand the GSRA program given the large number of highly qualified applicants. The working group is pursuing two avenues for expansion:

- 1) Looking for partnering organizations that would provide additional funding for the program while maintaining the current NPRB process;
- 2) Working with other regional funding programs to co-fund awards. Details of how this would operate in terms of joint review process and timing of award cycle would need to be worked out with any interested organizations.

With respect to option 1, Science panel members suggested that the various AMSS sponsors (or at least those that don’t already have scholarship programs of their own) be approached as partnering organizations.

The panel also discussed whether partnering organizations might want to define a specific area of interest based in their organization’s mission. This has been a discussion topic for the working group and the panel suggested that perhaps that should depend on how much funding the partnering organization is willing to provide.

It was also suggested that if organizations were not willing to contribute significant amounts for a full award that perhaps smaller awards (\$5000) could be awarded to some of the lower-ranked “runner-up” type applicants.

In trying to entice partnering organizations, the message to the industry (fishing and others) is that there is a large pool of talent to draw from in terms of future marine scientists.

Other matters

a. Science Panel membership

Staff reviewed the current list of science panel members’ terms and clarified that the new policy of two consecutive four-year terms was in place.

The panel also discussed whether SP members should be limited in the number of proposals they can submit to NPRB during their term. The interest here was in avoiding conflicts of interest as much as possible and not losing the SP member as a panel reviewer of proposals in their area of expertise. If this is a consideration then this expectation should be included in future calls for nominations for new panel members. There was concern that a policy restricting submission of proposals could limit the pool of applicants for new Science Panel members. The consensus of the panel was that they would rather not

see a hard and fast on the number of proposals that can be submitted by a panel member during a term but that submission history or information on intent to submit would be reasonable factors to consider when selecting new members.

Given the larger than usual number of panel members unable to attend this meeting in person, the group also briefly discussed the impact of non-attendance on the function of the panel. While it was felt that the meeting was impacted by the absence of seven panel members, those present also acknowledged that things come up and some absences can not be helped or avoided. It was recommended that attendance be tracked and considered when considering re-appointing members for a second term on the panel.

b. Alaska Marine Science Symposium

Staff updated the panel on plans for the 2013 Alaska Marine Science Symposium to take place January 21-25, 2013 at the Hotel Captain Cook, with poster sessions to be held at the Egan Center. New this year is an attempt to “go green” meaning that only those who register before December 3 and request a printed abstract book will receive one with their registration packet.

With respect to other events associated with the AMSS, panel members noted the productive discussion between panel members and Board members at the “NPRB Open House” event held in January 2012. It was suggested that the social event being planned for NPRB at the coming AMSS include a formal discussion session for the panels and Board.

c. Stakeholder Engagement

Staff reported on the Advisory Panel’s desire to see more stakeholder engagement during proposal development and suggested language to add to the draft RFP boilerplate. The Science Panel was concerned that the text was too broadly written and felt strongly that a formal requirement for a stakeholder engagement section should be tabled for now until the Stakeholder Engagement working group has had a chance to carefully consider what the policy will require of proposers and how it may impact the proposal development and review process. The panel also indicated that they would like to have some joint discussions on this topic with the Advisory Panel and suggested that the Stakeholder Engagement working group have Science Panel representation. Polly Wheeler and Vera Alexander volunteered to participate in the Stakeholder Engagement working group.

d. Meeting Schedule for 2013

The panel confirmed meeting dates for the spring 2013 meeting. This meeting to review proposals to the 2013 RFP will be held in **Seattle, WA, April 17-19, 2013**. Staff indicated that panel members should plan for a full three-day meeting (thus traveling on the 16th and 20th).

Dates for the August 2013 meeting were discussed and the panel agreed to meet either the week of August 12th or 19th. It was the desire of the panel to push the meeting to the week of the 19th if it allows enough time between the SP and AP/Board meetings. Once the Board has established their fall 2013 meeting dates the SP will confirm their August 2013 meeting dates over email.

e. Chair debrief on Spring Board meeting

At the request of panel members, Tom Royer provided feedback on how the Board uses the Science Panel’s summary recommendations regarding individual proposals when making their funding decisions. Royer noted the importance of the panel summary paragraphs being consistent such that the description of the project and its pros/cons match the final Tier rating given by the panel. Cheryl Rosa and Stew Grant,

who also represented the SP at the spring Board meeting, stated that things went very smoothly with very few conflicts. Stew suggested that all SP members should rotate through a spring Board meeting to get a better sense of how their input is used.

The meeting was adjourned at 4pm(ish) on August 16th