

Summary
North Pacific Research Board
Science Panel Meeting
Anchorage, AK
August 15-17, 2011

The Science Panel met on August 15-17, 2011, at NPRB in Anchorage, Alaska. The meeting was chaired by Doug Woodby and the following other members were in attendance: Vera Alexander, Carin Ashjian (absent 15th), Dick Beamish, Jim Berner, Stew Grant, Tuula Hollmen, Pat Livingston (absent 17th), Cheryl Rosa, Tom Royer, Pat Tester (absent 15th), Bill Wilson, Seth Macinko, and David Witherell. Absent: Andre Punt and Don Bowen. The meeting was staffed by Cynthia Suchman, Francis Wiese, Carrie Eischens, Tom Van Pelt, Nora Deans, Danielle Dickson, and Crystal Benson-Carlough.

1. Call to Order and Approve Agenda

Staff introduced the three new staff members that have come onboard since the April Science Panel meeting. These are: Cynthia Suchman -Executive Director, Danielle Dickson - Program Manager GOA, and Crystal Benson-Carlough - Executive Assistant. The agenda and schedule of individual Science Panel members was reviewed and the agenda approved with the Graduate Student Research Awards moving to Tuesday morning. The draft Science Panel meeting summary from the April 2011 meeting was approved as final.

2. GOA Integrated Ecosystem Research Program

Staff gave an update on the Gulf of Alaska Project. This included an update on the development of a Program Management Plan, the hiring of Danielle Dickson as the new Program Manager for the Gulf of Alaska Project, the first round of progress reports received and the monthly schedule of PI and GABI calls that has been established by the team.

Staff also noted that the RFP for the Data Management Component of the program was released in late June and has a proposal deadline of August 22nd. A review panel consisting of three Science Panel members and three ad-hoc technical members will review proposals received. The three Science Panel members on the review panel are Bill Wilson, Tuula Hollmen, and Tom Royer. If any of these three members are in conflict with received proposals, staff will be asking for other SP volunteers for the review panel. The review panel is planning on meeting the week of Sept. 4th with the final date and time to be decided once proposals have been submitted and there is a better sense of the time requirement for proposal review.

The Science Panel discussed the level of oversight of the modeling component of the GOA IERP program. The Science Panel expressed concerns regarding how they would be assured that their and the EMC's concerns raised during the review are being addressed. Staff explained the tradeoffs of hiring a modeling manager for the GOA and having a fully formed Ecosystem Modeling Committee vs. using funds to bring in specialists as needed to support the modeling team. Currently Francis is monitoring the modeling team and has found them to be very much on top of things and responding to the concerns voiced by the Science Panel and earlier review by the EMC. Also, the applicants had submitted a revised statement of work addressing these concerns and those were being implemented. Science Panel chair, Doug Woodby suggested that it would be helpful to see how the Science Panel concerns were addressed in the revised statement of work and also recommended that Science Panel members attend the planned February GOA PI meeting to assess the current situation.

3. Bering Sea Integrated Ecosystem Research Program

Staff gave an update on the Bering Sea Project. This included an update on the special issues to be published in Deep Sea Research II; the first special issue is well under way, with 23 manuscripts in final review stages and a publication goal of January 2012. All papers in this first issue are building from the BEST-BSIERP program. The intent is to support special issues on an annual basis, so the second issue is aiming to have review-ready manuscripts submitted by December 2011, aiming for publication at the end of 2012. This second special issue will also serve as a home for papers emerging from the Bering Sea special session at the ESSAS meeting in May 2011.

Other updates included announcement of a special Bering Sea session at the Ocean Sciences meeting in Salt Lake February 2012, discussion of the new NSF synthesis projects, and progress being made by the new EOL data management team. A Science Panel member reminded staff to check into NODC linkages with the data management team, to ensure that there is a mechanism and a plan for relevant Bering Sea Project data to be ingested into the NODC <http://www.nodc.noaa.gov/>.

Staff also updated the Science Panel about progress in the Bering Sea Project “Road Map”, an online tool intended to (1) put the progress made so far (published or planned papers) in the framework of the Project hypotheses; (2) identify information gaps that need to be filled for hypotheses to be fully addressed, and (3) for each hypothesis, evaluate whether or not “synthesis” has been achieved, and if not, plan how to achieve it. Science Panel members provided generally positive feedback on Road Map efforts to date.

The “Science Advisory Group”, chaired by Seth Macinko, reviewed their draft report stemming from the group’s participation in the March 2011 PI meeting, with discussion by the panel members. Staff also provided an update on modeling components of the Bering Sea Project, and noted that a planned MSE workshop is expected to be held in Seattle before the end of 2011; Science Panel members will be kept informed about that workshop.

4. Proposal Review

The Science Panel received a report from the Proposal Review Process working group. This working group was established by the Board to address concerns raised by the Committee of Visitors regarding the review process and its transparency. Doug Woodby, as the Science Panel representative on this working group, presented the report to the SP.

The SP reviewed the report and spent time considering how to more clearly structure the Tier rating system used by the Science Panel when recommending proposals for funding to the Board. After much discussion the following Tier structure was formulated as the SP recommendation to the Board and working group.

Tier 1a and Tier 1b as described in the working group report with some minor modifications:

Proposals that are considered highly meritorious based on the combined peer and science panel reviews (based on the criteria outlined above) will be designated Tier 1 proposals. Highly meritorious will be defined as proposals that generally score an average of Very Good to Excellent and do not require any alterations to the proposed work to go forward (although suggestions for improvements may be made). The Science Panel may decide to go back over the Tier 1 list to determine if there are any scientific nuances amongst them that may be relevant to the Board when making their final funding decisions. Such criteria will be only science-based (i.e., not as it relates to the RFP category caps) and may include relative comparisons between highly ranked proposals such as: more technically robust, more

specifically on target with what the RFP was looking for, or more time sensitive in terms of increasing scientific knowledge base. Accordingly, proposals placed in this category may be separated into Tier 1a or Tier 1b.

In addition the Science Panel recommended a **Tier 1c** ranking which would be given to *proposals that have minor non-science related issues (i.e., budget or permitting issues) that once fixed would place the proposal in the Tier 1 category.*

A **Tier 2** ranking would be given to *proposals that are good scientifically but not exceptional. A **Tier 2 conditional** ranking would be given to proposal that had some minor science issues of a simple or straightforward nature, for example simple changes to sample size of study design, which would be detailed in the Science Panel summary. The Science Panel would clearly identify in the summary a list of changes that they deem critical to be addressed before recommending this for funding to the Board.*

Tier 3 would be as described by the working group: *Proposals that are found to have fatal flaws or those that are simply not competitive scientifically even with minor changes and should not be funded, are designated Tier 3 proposals. These will generally be proposals with some Poor and Fair ratings or those that are mixed, depending on the issues. Tier 3 proposals are those that require substantial revision to be competitive and thus they should not be funded.*

Also under the topic of proposal review, the Science Panel discussed their **Conflict of Interest (CoI) policy**. At their April meeting, the Board created a separate working group to consider a more comprehensive CoI policy for all panels and the Board itself. There is currently no Science Panel representative on this working group, thus Executive Director, Cynthia Suchman, presented the framework for a new CoI policy and how it would apply to the Science Panel.

Suchman noted that the current policy used by the Science Panel and the Board is less stringent than national standards and that the goal is to adopt national standards. The new framework outlines a process of education, proper disclosure, identification and recording of conflicts, and proper recusal from proposal review, discussion and ranking by the Science Panel.

There were divergent views within the Science Panel regarding the new CoI framework. The Panel was supportive of strengthening transparency and rigor to minimize perception of conflicts in the review process but there were also concerns that too stringent a conflict policy would hamper the ability of the group to best serve the Board. The Science Panel identified some categories of conflict that might be problematic if they triggered recusal. With respect to institutional conflicts, the SP questioned the level of institutional conflict – for example would conflicts be identified at the level of the overall institution or at the level of department within the institution. Adjunct or emeritus status qualifying as a conflict was also of concern. It was also noted that the “Collaborative” category of conflicts would be very problematic for the Science Panel given the small community of scientists within Alaska.

On the topic of recusal, the Science Panel questioned where the line was between disclosure and recusal and what degree of recusal (i.e., not allowed to vote, leave the room, not attend the meeting) was necessary for specific types of conflicts.

The Science Panel requested that representatives from the Science Panel be included in the working group to represent the Science Panels views and concerns. It was determined that Pat Livingston and Vera Alexander would be the Science Panel representatives to serve on or provide input to this group if acceptable to the Board.

5. Graduate Student Research Awards

At their April 2011 meeting, the Board created a Graduate Student Research Award (GSRA) working group to reassess certain aspects of the current GSRA program. These included, but were not limited to, the award amounts; giving preference to Alaska students when there are ties; accounting for overlap with other awards students are receiving; and using stakeholder relevance as a criterion.

Staff and Pat Tester, the Science Panel representative on the GSRA working group, presented a report from the group and asked for further Science Panel input. In general, the panel agreed with all of the working group's recommendations and specifically concurred with the working group's recommendation of increasing the number of awards to 6 per year and the award amount to \$25,000.

With respect to the working group's consideration of whether overlap with other awards should be an evaluation criterion when choosing awardees, the panel agreed with the working group that this should not be part of the review criteria. The Science Panel further stated that current and pending forms should therefore not be part of the application packet.

Regarding the possibility of shifting the timeline of the award process to allow more first year students to apply for the award, the Science Panel felt this shift was unnecessary. The panel did not agree with the premise for the suggested shift, stating that first year students would be preparing their application prior to even beginning their program. This would increase the likelihood that supervisors would be doing the majority of the application rather than the student, which is not the intention. It was further noted that the current schedule allows first year students time to submit applications to fund their second year of graduate studies or possibly even in time to fund summer field sampling at the end of their first year. Science Panel members further stated that the original intent of these awards was to boost students over the last part of their graduate degree when funding may be harder to come by. The panel felt that the current timing of the awards was adequate to meet the intent of the awards. The Science Panel also examined the idea of having a rolling application process throughout the year with applications reviewed and award decisions made twice a year, and decided against it. The panel did not think this type of process was necessary given the number of awards to be distributed and the increased work load it would add to the August meeting.

The Science Panel stated that they were not in support of preferential awards and stated that these GSRA awards were not set up to entice new students to a specific field but rather to support students who have already chosen their specialty. If it is the wish of the Board is to develop new scientists in a specific area of scientific study, in this case stock assessment, then another avenue should be perused – perhaps through support of interns at the undergraduate level.

6. Budget Review

Cynthia Suchman reviewed the current budget numbers for the NPRB with the Science Panel and recommended a \$4M RFP for 2012 as approved by the Board in their grant proposal. Suchman also indicated that the next grant (grant 5) had been received and those funds were now in place to fund 2012 projects. Funding projections for 2011-2019 were based on a 2.6% interest rate for 10-year Treasury Bills, indicating that the Board should be conservative in their spending until Treasury rates increase again.

7. Summary of Previously Funded Projects

Staff gave a status report regarding the 25 competed projects totaling \$3.55M that were approved or conditionally approved for funding by the Board at their April 2011 meeting. Applicants of the three

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 276 projects, 91.7% of which have been ranked as Tier 1 or Tier 2 by the Science Panel. Just over 8% 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 279 known publication and another 14 in press.

8. 2012 Request for Proposals

The 2012 RFP will be the second half of the cyclical two-year RFP approach implemented at the recommendation of the Science Panel by the Board in 2011. The intent of this approach was to ensure that sufficient funds were available within specific categories to properly address the research priorities described. It was also hoped that this approach would limit the number of proposals received and allow for larger-scale scientific questions to be addressed. As a result of the Board's approval of this approach, some research priorities are not present in the RFP every year and others are not funded at the same level every year.

The Science Panel discussed their impression of how successful this approach had been to date and also, as requested, how to address the lack of funded projects in the "Humans" category. To assist in this discussion, staff presented the panel with a table showing the amount of funds offered, requested and awarded by research theme for RFPs since 2006. The Science Panel requested that the number of Tier 1 and Tier 2 proposals recommended to the Board each year (by category) be added to this table to get a better view at whether underfunded categories were the result of poor quality proposals being received. Given the critical and very useful information summarized in this table, the Science Panel suggested the Board evaluate whether these tables should be made public with appropriate narrative to aid in the effort towards transparency.

Regarding the critical underfunding of proposals in the "Humans" category, one panel member felt that advertising, yet not awarding funding in this category lead to a credibility issue – especially in years with Tier 1 proposals recommended to the Board in this category.

Science Panel members noted that the cyclical approach did not seem to limit the number of proposals received in response to the RFP, yet other factors, such as the federal budget, may have obscured that effect. A more complete evaluation of the cyclical approach will be necessary prior to the 2013 RFP development.

Staff then reviewed the documents used for developing 2012 RFP research priorities. Research priorities identified by the North Pacific Fishery Management Council, NOAA Alaska Fisheries Science Center, NOAA Habitat Assessment Improvement Plan, NOAA National Ocean Service, U.S. Arctic Research Commission, U.S. Marine Mammal Commission, Alaska Department of Fish & Game, United States Coast Guard, the Oil Spill Recovery Institute, Prince William Sound Science Center, and the NPRB

Science Plan were all considered. In addition, overlap with current projects funded by the National Science Foundation, the Bureau of Ocean Energy Management, Regulation and Enforcement, the North Slope Science Initiative, Alaska Ocean Observing System, Exxon Valdez Oil Spill Trustee Council and the Arctic-Yukon-Kuskokwim Sustainable Salmon Initiative were 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 projects funded by NPRB in the past were also taken into account.

In addition to the above sources of RFP input, the SP had formed subgroups prior to the meeting to examine a specific section and make recommendations for any new topics. The Science Panel felt this was a good exercise and added to the RFP development process.

The Science Panel noted that there seemed to be a lack of input on research priorities from one of the major recipients – namely academics. The new public online RFP input form, scientific meetings published papers and recommendations by science panel members are ways in which this community provides indirect input, but there is currently no “strategic plan” from academics.

The Science Panel discussed all 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 the previous year for the 2012 RFP as part of the cyclical decision.

9. Arctic Planning

Staff gave an update on developments for Arctic planning. This included a report on the activities of the Arctic subgroup since last December and the current status of NPRB’s arctic plan. The Science panel reviewed a joint NSF-NPRB concept paper and the timeline for getting an Arctic program in the field.

Panel members recommended that it would be beneficial to let Julia Gourley, senior Arctic Official from the US State Department, know about this plan. It was also suggested that NPRB find out what Russian scientists have planned for the Arctic and attempt to coordinate with them as best possible during the upcoming PICES meeting in Russia. More locally, it will be important to engage the local communities and organizations, such as the North Slope Borough.

One panel member noted that the plan seemed to be Chukchi-centric and asked if that was intentional. Staff noted that the synthesis effort was Arctic wide, but that recent data collection by industry have been more focused on the Chukchi and that a broader Arctic plan for the Board may have to be restricted to the Chukchi or the Beaufort as they are quite different. It was noted that BP has previously done synthesis on data from the central Beaufort Sea that may be useful to consider.

10. Long-term Monitoring

At their April 2011 meeting, the Board created a long-term monitoring working group to consider how the Board should move forward with the development of a long-term monitoring program and address the comments raised by the Committee of Visitors (CoV) on this topic. Specifically, the group was asked to make recommendations in the form of a white paper that should include, but is not restricted to:

1. Hold one or two workshops dealing with this topic (just the Board and/or a larger select group).
2. Create a better definition of long-term monitoring (LTM) in the context of the NPRB.
3. Frame recommendations in context of current LTM efforts in Alaska,
4. Also address items **D2** and **R5** in the CoV taskforce report.

Tom Royer, Science Panel representative on the LTM working group, along with staff, presented the working groups report to the full Science Panel.

The panel agreed that there is a strong need for a long-term monitoring strategy for the Board and would like to see something implemented. Panel members discussed the length of a monitoring project that would be considered “long-term” and agreed that 5-years should be the minimum project length considered. Regarding the phrase “appropriate temporal scale” used in the working group’s definition of LTM, the panel discussed that this meant that measurements should be taken according to the variability in the data and temporal integration of the parameters being measured. In this way, it may be adequate to only sample higher trophic levels once a year or even every other year, but physical parameters would need observations at least 4 times per year to account for seasonal changes.

Regarding how much funding should be allocated to the funding of long-term monitoring projects, a suggestion was made to allocate 5-10% of the annual budget to these types of projects. The panel noted that it was important to compare the value of LTM projects to any of the other RFP research categories and noted that the Science Panel sees these types of projects commensurate with the Seabirds and Marine Mammals categories (i.e. around \$500K per year).

The Science Panel also recommended continuing the consortium approach and share funding of important LTM projects with other agencies and that this could be made a requirement within the LTM strategy. The panel felt it would be important to hear from NOAA to determine how much NOAA funding is going into LTM projects in Alaska vs. other regions of the US.

11. Other Matters

- a) Science panel membership – staff outlined the new draft policy on Science Panel membership that the Board will be considering at the upcoming Board meeting in September. This draft policy suggests a limit of two sequential three-year terms. While the Science Panel had no firm objections to this plan they were concerned with the annual rate of turnover this would result in. The panel felt that institutional knowledge would be lost if the science panel membership had a high rate of turnover each year. They suggested that it would be best if no more than 2 new Science Panel members changed each year. The panel asked staff to calculate the current rate of membership turnover to better gauge an acceptable level and to provide the Board with this number during their consideration of a new membership policy. Several of the new Science Panel members also noted that it would be more beneficial to have new members begin their terms prior to the August meeting as opposed to prior to the April meeting given the main duties of Science Panel members at the different meetings.

The science panel also discussed the currently empty social scientist seat on the panel. The panel felt strongly that this seat should be filled on a permanent basis and not in an ad-hoc fashion. Courtney Carothers from the University of Alaska Fairbanks and Charles Menzies from the University of British Columbia were suggested as possible candidates to fill this position. Staff indicated that a call for nominations will go out soon.

Staff also noted that several panel members had term end-dates of October 2011. These are: Vera Alexander, Jim Berner, Stew Grant, Pat Livingston, Tom Royer, Pat Tester, and Dave Witherell. These members should contact Cynthia to indicate if they would like to be reappointed to the Science Panel. Length of reappointment may be modified subsequent to any Board decision to change Science Panel membership policies in September.

- b) Defining Science Panel functions/relationships - The panel then addressed the issue of defining Science Panel functions and addressing the relationship between the SP and the AP and Board. Doug Woodby suggested that having more than one Science Panel member present at the April Board meeting to presenting proposals and reviews to the board would be helpful. Science Panel members also noted that they would like to see the feedback the Board wrote to PIs for proposals recommended by the SP but not funded. Staff indicated that this document will be made available shortly.
- c) Education and Outreach Report – Nora Deans presented a review of the Education and Outreach activities since April. The Panel once again commended Nora for the wonderful job she and staff has done of bringing the science to the public audience.
- d) Radioisotopes in the marine environment – earlier in the meeting the Science Panel discussed the evolving situation regarding the release of radionuclides into the North Pacific marine environment as a result of the 2011 earthquake. While the panel did not feel this topic warranted inclusion in the 2012 RFP given ongoing efforts by other institutions, the panel felt it was an important topic to monitor. Tom Royer volunteered to be the Science Panel member to continue monitoring this situation and bring updates to the panel as needed.
- e) 2012 AMSS – staff gave the panel an update on the planning for the upcoming Alaska Marine Science Symposium which will be held the week of January 16th 2012 in Anchorage.

Specifically, the panel was made aware of a planned evening social event on Tuesday, January 17th for all Board, panel members and staff.

Staff also requested input from the panel on a suggested Town Hall Meeting sponsored by NPRB for the purpose of engaging the scientific community with respect to research priorities for the annual RFP. The idea of providing an overview of the RFP proposal review process was also suggested. Panel members asked if this was to be a general question and answer session and discussed the pros and cons of having such an event. Staff indicated the purpose of the session would be to solicit RFP and explain RFP decision process. The Panel endorsed the idea of a town hall meeting to solicit RFP input.

Staff also noted that special evening sessions were still being considered as part of the AMSS program and encouraged panel members to send suggestions for special session topics to Crystal.

- f) Meeting schedule – The next Science Panel meeting is scheduled for April 10-12, 2012 in Monterey, California. Staff is still in the process of finalizing hotel and venue locations and will forward details to the panel as they become available. The panel tentatively scheduled their August 2012 meeting for August 14-16th in Anchorage starting at 1pm on the 14th with full meeting days on the 15th and 16th.

Science Panel suggests reducing the number of topics for upcoming meetings although which specific items to be cut was not indicated.