



SUMMARY
North Pacific Research Board – Science Panel Meeting
August 25-28, 2015

The Science Panel met August 25-28, 2015, at the NPRB offices in downtown Anchorage. The meeting was chaired by Tom Royer, and attended by the following panel members: Milo Adkison, Vera Alexander, Jim Berner, Courtney Carothers, Stew Grant, Tuula Hollmen, Patricia Livingston, Lloyd Lowry, Phil Mundy, Chris Siddon, Suzann Speckman, Pat Tester and David Witherell. Melissa Haltuch and Polly Wheeler joined by phone. Carin Ashjian joined the meeting on Wednesday. The meeting was staffed by Matthew Baker, Danielle Dickson, Susan Dixon, Denby Lloyd, Jo-Ann Mellish, and Brendan Smith.

1. Call to Order and Approve Agenda

The new Science Panel member, Melissa Haltuch, was introduced. A safety briefing was provided. The meeting agenda was approved.

2. Budget Review

Denby Lloyd reviewed the status of the future earnings of the EIRF, including the projected impact of low interest rates for several years. This will result in the gradual decrease in NPRB's annual budget. However, the current surplus of funds will need to be spent in a timely fashion to be in accordance with the five-year funding cycle. It was noted that the Board added \$1 million to the 2015 annual RFP program during the spring meeting, in part to offset this surplus.

3. Arctic Program

Danielle Dickson presented the framework for the overall Arctic Program as a background to the pre-proposal review. This included the integrated nature of the program, a review of the partners and existing projects, and the request for pre-proposals that was released in the spring of 2015. A detailed list of the partners, the pre-proposals received and the review process are found in the agenda item as well as Attachments 3.1-3.9. A total of 79 pre-proposals that included participation by 74 different groups was received, requesting a total of \$64.8 million.

Partners to join the meeting in person were Robert Suydam and Louis Brzuzy from the North Slope Borough/Shell Baseline Studies Program, and Dee Williams and Rick Raymond from the Bureau of Ocean Energy Management. Visitors signed confidentiality agreements and were invited to participate in the discussion. They were particularly encouraged to provide their input on how to build the larger program and link the proposals under review. Comments on how the research proposed would either enhance or potentially duplicate work within their respective groups were specifically requested.

The Science Panel discussed their approach to review of the pre-proposals, recognizing that this process differed from the standard annual program review of stand-alone projects. It was noted that the Science Panel wished to encourage the Board to steer away from a mix and match model for the overall program as much as is feasible, as proposers tend to form more successful collaborative groups organically. In

addition, it was decided that the individual reviews by the Science Panel should not be returned to the proposers, rather that the Primary Science Panel reviewer would construct a summary review, with assistance from the secondary Science Panel reviewer, that would be more useful for the Board evaluation process and as constructive feedback for the proposers. Several members of the Science Panel expressed a desire to have time to review proposals outside of their specific assignments, in order to more accurately assess their merit and ability to integrate into a larger program. It was requested that reviews of full proposals be due a minimum of one week prior to the spring meeting to allow for any supplemental reviews prior to the discussion.

Danielle provided an overview of large and notable projects prior to the individual pre-proposal review, to highlight some of those investigators that made preliminary linkages. It was also noted that investigators invited for full proposals should not be held to the details outlined in the pre-proposals, but rather should have the flexibility to change funding requests, collaborations, or study design as necessary to submit the best proposal possible. It was also considered whether or not mandatory attendance at all PI meetings and the annual AMSS had unnecessarily inflated the budgets of some larger projects. The Science Panel did agree that they strongly supported the involvement of team members at all levels (PI through graduate student) when possible, but perhaps it was not necessary to have the entire team present at all times, leaving the choice of attendees to the PIs. It was noted that the annual meetings were an integral component of maintaining interaction and cohesiveness among the group.

Denby Lloyd described the staff visit in July to the National Science Foundation (NSF) to encourage a formal partnership with the program. There is continued hesitation on the part of NSF, and advice from the Science Panel was requested on how to encourage this partnership. The Science Panel discussed that previous experience with NSF suggested that it was standard for a significant time and effort to precede joint efforts (e.g., GLOBEC), and that this was not unexpected.

Primary and secondary Science Panel reviewers summarized their evaluation of each pre-proposal and tier rankings were assigned by consensus of the panel. Given the added level of complexity to the pre-proposal stage of an integrated program, each pre-proposal was given three rankings. The initial ranking was based on the standard Tier system used for the annual program (Tiers 1-3), as an evaluation of the science presented. The second and third levels of evaluation included relevance to the integrated program (low, medium, high) and recommendations to the Board on full proposal invitation (invite, do not invite). It was noted that there were several pre-proposals that were highly-ranked based on the science, however their relevance or ease of integration was low, which might result in a do not invite recommendation. There was some discussion as to whether the summary paragraphs should encourage highly ranked proposals that were not invited to submit full proposals to consider the 2016 annual program RFP.

4. Graduate Student Research Awards

Jo-Ann Mellish reviewed the 2015 GSRA awardees and outlined the application and success statistics in comparison to the previous five years of the program. The outstanding features of the 2015 cycle were the number of highly ranked students and the Board decision to fund 3 MS and 6 PhD students rather than the standard of 6 total awards. Awards were distributed by August rather than September to account for early semester starts at some institutions.

Updates for the 2016 program were outlined, including revised Science Panel review guidelines. The 2016 applications will only be rated on student ability and scholarly merit. Community involvement and stakeholder relevance will be evaluated by the Advisory Panel. The submission system will be a streamlined version of the annual program online process to be launched this year.

5. NPRB Internal Systems: Data & Metadata Management and IT

Matthew Baker introduced the suite of NPRB systems that are currently being updated. This includes server upgrades, data management, and online submission systems. The online submission system was demonstrated, with a brief showcase of the integrated pages and forms. The downloaded program has been replaced with an online approach to eliminate issues with administrator rights. Functionality has been added to integrate defined compliance issues for document limits and formatting, as well as to allow staff to directly edit the system information. The new system will notify proposers of missing elements prior to final submission. The system will be duplicated with some minor changes for the Arctic program.

Currently we require metadata and data to be submitted with final project reports. The large repository of information in the NPRB archives is not easily accessible, therefore we are moving towards updating our archiving protocols. Axiom will be taking over data management and storage, developing online research tools, and archiving metadata. Rob Bochenek of Axiom joined the meeting to demonstrate the research workspace, data hosting and visualization.

6. Science Plan Update

Matthew Baker detailed the current plan and timeline for the Science Plan revision progress. The revision will be streamlined to inform about our tools and practices, remove outdated information, and update information as relevant for each research theme. The drafting group will include Science Panel members for input on specific issues. An initial working group meeting was held in July, and a second meeting will be scheduled for early September. A draft revision of the plan is scheduled for the spring of 2016. A final draft will be provided to the Board for review in the fall of 2016.

There have been preliminary discussions with NRC to provide an external review, with a final deliverable of a 10-page report. No commitment has been made to this avenue of review. The utility of a high-level external review versus a less formal review approach was discussed by the Science Panel. The Science Panel noted that an NRC-type review would likely require significant time and expense to complete. Members indicated that they would be willing to identify recognized experts capable of conducting a review of a draft Science Plan update.

The Science Panel agreed that the revised Science Plan should focus more on defining the functional elements of NPRB's processes and procedures, and much less on descriptions of Alaska's marine ecosystems.

7. Annual Program

Jo-Ann Mellish presented a brief overview of the 105 proposals received in response to the 2015 annual program RFP, including their final tier ranking and funding status. A brief summary of the 33 projects selected for funding and their status was presented, with 24 of the new projects fully executed and active. Two projects were selected for co-funding by OSRI, and 7 projects had potential to participate with the larger Arctic program. The distribution of funding by Large Marine Ecosystem (LME) and research theme was compared to the prior five years for background leading to the development of the 2016 RFP. The 49 currently active projects in addition to the new 2015 projects were summarized by starting year and funding. A full list of active projects will be provided to the Science Panel at the spring 2016 meeting. The revised semi-annual progress report format was implemented with the recent July 31 deadline. The majority of reports were received in the new format and there was positive feedback from the PIs.

The Science Panel revisited the Tier ranking criteria (1a, 1b, 2, 3). There was consensus that a modification was necessary to help delineate the excellent and very good proposals from the truly

outstanding proposals. It was suggested that the particularly large number of Tier 1 proposals last year might have been a result of not only a large number of scientifically meritorious projects, but a tendency to initially rank proposals high and thereby requiring justification for moving them down the scale.

The proposed modification would maintain the base tier rankings and review scale (1=very good, 2=good, 3=poor). However, rather than splitting Tier 1 into 1a and 1b, members agreed to introduce a “Tier O” for outstanding. Science Panel reviewers are recommended to begin proposal reviews assuming a Tier 2 status, and justify moving them up into a Tier 1 or down into a Tier 3 (do not fund). Science Panel members should have their recommended Tier designations in mind prior to the meeting and discussion, with thoughtful use of the labels of poor, good, very good and excellent during the initial review process. The final designation of Tier 1-3 will still be reached by group consensus. Discussions of Tier 3 projects should be minimized. At the conclusion of the Tier 1-3 rankings, a second round of dedicated review time will label those projects deemed truly outstanding as Tier O. These designations should be used sparingly and be considered the highest funding recommendation of the Science Panel to the Board.

The fundamentals of the ranking system will not be impacted, however it is hoped that this slight revision will aid the Science Panel in providing more descriptive and decisive rankings to the Board. The revised ranking system will be presented to the Board during the discussion of the Annual Program.

8. 2016 Request for proposals

Matthew Baker provided a general overview of how the annual program RFP is developed, with the supporting documents and input areas from stakeholders and other agencies. The category target funding was described as well as the cyclical nature of some themes. There was discussion among the Science Panel about the number of categories and the amount of each cap. It was decided that it was more important to maintain a small amount of funding in each category versus a full zero out to increase the amount of funding in the large year. It was noted by several members that the small amount was important to retain the interest of the community and there can be proposals that do fit in under a lower funding request. There was concern over the potential addition of new themes and subthemes, given the forecasted decrease in the total amount of funds available.

The draft RFP document was template from the 2015 RFP. The front page table of the RFP outlining the distribution of funding over past years by theme and LME was deemed better suited for internal metrics and background information on the website. Proposers are more likely to have interest specifically in the amount available in the current and upcoming years rather than historical funding distributions.

The Science Panel worked together through the theme listings to arrive at the draft noted below in Table 1. A major introduction was theme 1.g. Integrated Research. This specific section was designed to facilitate broader projects that are not easily delimited by the original categories put forth in the 2005 Science Plan. The cap for these integrated proposals would be variable and based on the number of major themes (1.a. through 1.f.) integrated. Proposers would be requested to identify the proportion of the project that falls into each category. For this first year, the minimum contribution required to include another category would be 33%. The maximum number of categories that could be integrated is therefore capped at three. The annual program manager, Jo-Ann Mellish, would work with potential Science Panel reviewers prior to assignments to ensure that any proposals under the integrated research theme would have adequate coverage. The Science Panel indicated that they would be willing to add a third reviewer as

necessary. There would be explicit language provided in the 2016 RFP directions as to how these proposals should be structured and how they will be reviewed.

The focus section topics proposed to the Board included anomalous warming in the North Pacific Ocean, sea level rise, and early marine life history of Pacific salmon. Specific issues of interest under each theme are noted in the updated draft RFP to be presented to the Board. Themes in a low cycle year had a reduced number of issues put forth reflecting the reduced funding available (e.g., marine mammals).

Table 1. Draft planned distribution of funds in 2016 and 2017.

	2016 Cycle	2017 Cycle
1. General Research Priorities on Ecosystem Components	\$3,100,000	\$3,100,000
a. Oceanography and Lower Trophic Level Productivity	\$ 200,000	\$ 500,000
b. Fish and Invertebrates (\$500,000 proposal cap)	\$1,300,000	\$1,200,000
c. Marine Mammals	\$200,000	\$800,000
d. Seabirds	\$500,000	\$100,000
e. Human Dimensions	\$600,000	\$400,000
f. Other Prominent Issues	\$300,000	\$100,000
g. Integrated Research	*	*
2. Community Involvement	\$150,000	\$150,000
3. Cooperative Research with Industry	\$300,000	\$300,000
4. Technology Development	\$300,000	\$300,000
5. Data Rescue	\$100,000	\$100,000
6. Focus Section	\$600,000	\$600,000
TOTAL	\$4,550,000	\$4,550,000

The Science Panel was dispersed into groups to work on specific text and narrative for categories 1a.- 1.e. One member from each section reviewed the changes they made to each section for the larger group. There was a discussion about the terminology for the Seabird section, with the proposal to rename the section to Marine Birds. The title Seabird was retained, with specific language added at the beginning of the section to define the species of interest. In the same spirit, the definition of zooplankton was modified to include micro-, meso-, and macro-zooplankton. The narratives for the remaining categories (2-6) were prepared by the group as a whole.

The concept of reducing the number of categories rather than increasing them was revisited, and it was decided that the best opportunity to make a large-scale change would be in concert with the final revision of the updated Science Plan. It was noted that the limited likelihood of another IERP in the new future provides support for a more ecosystem-driven option in the smaller annual RFP. There was strong support for condensing categories in future RFPs. Smaller categories could be absorbed as sub-themes, with redistribution of funds between historically under-subscribed (cooperative research) and over-subscribed categories (technology development).

9. Communications and Outreach Report

Brendan Smith introduced a draft communications strategy to be presented to the Board in September. The Board will be invited to form a Communications Working Group to provide guidance on the Strategic Communications Plan. Updates were provided on the potential to engage a third-party for evaluation of our metrics of outreach. The NPRB website is also undergoing a revision, to streamline the number of pages, provide more accessible information, and to provide consistency in online branding. The number of pages will be streamlined and populated with more accessible information. The target for launch of the redesigned website is December 2015.

Communications and outreach highlights were presented, including the number of website user sessions, an update on the number of complete Project Synopses, AMSS planning, and the 2016 Calendar design.

Tom Van Pelt joined the meeting to showcase the newly completed Bering Sea Magazine. A hard copy was distributed to the Science Panel and the potential sites for further distribution was discussed.

10. Gulf of Alaska Integrated Ecosystem Research Program

Danielle Dickson provided an update on the April 2015 GOAIERP meeting that brought together the PIs of the project. In addition to project presentations, there were breakout meetings to facilitate further integration. At the end of the meeting, the group worked to defined ecosystem metrics for stock assessments. Highlights of the meeting and notable data findings are noted in the Agenda Item text. The special edition Deep Sea Research articles will be available directly on the NPRB website.

11. Other Matters

Denby Lloyd presented the projections for Science and Advisory Panel term rotations for consideration. The Science Panel decided that any necessary adjustments to individual term lengths to prevent unduly large turnover of panel membership in any one year could be handled on an internal *ad hoc* basis rather than a formal restructuring of panel term lengths or rotation schedules.

The upcoming meeting schedule was discussed, with the spring meeting to be held in Seattle, WA, the week of March 28-April 1, 2016. The fall meeting is scheduled for the week of August 22, 2016, in Anchorage.

The Science Panel were reminded that the dates of the 2016 AMSS would be shifted one week later, in order to avoid the Martin Luther King holiday.

The meeting was adjourned Friday, at 11:45 am.