The Science Panel met August 23-25, 2017 at the NPRB offices in Anchorage, AK. The meeting was attended by panel members: Milo Adkison, Carin Ashjian, Courtney Carothers, Stew Grant, Melissa Haltuch, Brad Harris, Tuula Hollmen, Lloyd Lowry, Matt Reimer, Chris Siddon, Leandra Sousa, Suzann Speckman, Diana Stram and Tom Weingartner. Carin Ashjian and Phil Mundy attended Monday only. David Hill joined the meeting on Tuesday. Matt Reimer and Suzann Speckman were absent on Thursday. Panel members Colleen Duncan and Polly Wheeler were absent for the entirety of the meeting. The meeting was staffed by Betsy Baker, Matt Baker, Danielle Dickson, Susan Dixon, Jo-Ann Mellish, and Brendan Smith.

1. Call to Order/Approve Agenda

Executive Director Betsy Baker welcomed the Panel and thanked them for their attendance and efforts. Science Panel Chair Chris Siddon asked the Science Panel and Staff to introduce themselves to the group. New members Brad Harris, Matt Reimer, Leandra Sousa, and Tom Weingartner were welcomed. Following introductions, there was a safety briefing. The agenda for the current meeting and the minutes for the prior meeting were approved. Susan Dixon reviewed travel claim protocols.

Betsy encouraged the new members to ask questions for context, and to have the existing members serve as mentors. Experienced members noted that the workload during proposal review should not be underestimated, and that correspondence with review partners is essential. It was also reiterated that while the Science Panel does not make the final decisions on funding, their review and input has significant influence.

2. Budget review

Betsy Baker presented the background for NPRB’s funding stream through the Environmental Improvement and Restoration Fund. Current projections show a declining return for the next few years. The substantial decrease in funds over the recent years due to low interest rates was described, as well as the additional effects of sequestration. The practicality of low interest rates is that the Board will have to decide on how remaining funding is allocated among programs in both the near and long term. In particular, the Long-Term Monitoring Program is up for renewal. Staff are also actively looking for ways to continue operating with a limited 15% administrative cap.

Anecdotal perceptions of the science funding climate were requested. Comments were similar from academic, private, state and federal representatives that funding was reduced overall without near-term
prospects for recovery. Reports ranged from loss of staff and departments to newly required creativity and diversity in their approaches to find support for funding science (e.g., new collaborations, leveraging multiple sources). The importance of stable funding through NPRB, whether the cycle alternates or not, was emphasized.

3. Graduate Student Research Awards

Informational materials on the GSRAs were provided in the electronic agenda, but not presented at the meeting. These included a summary of the 2017 GSRA decisions, and the updated timeline and RFP for the 2018 GSRA announcement (Attachment 3.1). In 2017, two Masters and four Doctoral students were funded from a total pool of 50 applicants. Information on prior awardees was provided through comments and a publication list (Attachment 3.2). New members in particular were encouraged to read the documents and talk to the Program Manager about procedure and questions.

4. Core Program

Jo-Ann Mellish provided a review of the 2017 RFP decisions (Attachment 4.1), metrics on active Core program projects, and an overview of general and category updates for the 2018 RFP (draft in Attachment 4.4). The Board selected 28 projects from 138 proposals, totaling $4.6 million in support. This included $100,000 in support from the Oil Spill Recovery Institute (OSRI). There were concerns expressed by the Panel on the marked discrepancies between the actual amounts of funding compared to the published target amounts in a number of categories, as well as a conscious decision to not fund studies pertaining exclusively to one geographic region (Arctic). It was stressed by multiple panel members that the RFP needs to reflect as closely as possible the Board funding patterns. Otherwise, it is disrespectful of the time authors, peer reviewers, and science panel members invest in the process. This could affect external peer reviewers’ willingness to assist in the process. If there are LMEs or categories that are intended to be funded at a lower level, that should be clearly reflected in the RFP.

In reviewing the 2018 RFP draft, the Panel was tasked with considering where habitat as a general topic of interest should be placed, reviewing the particular issues listed as interest bullets, and editing potential focus sections. Habitat was historically included in the RFP as a separate category, but currently included in the 2018 draft under both general topic headings and particular interest bullets. It was decided that habitat warranted specific inclusion as general topics of interest in three sections: Oceanography & Productivity, Fishes & Invertebrates, and Marine Birds & Marine Mammals sections. Support was reiterated for the move of Cooperative Research with Industry to an approach rather than a separate category, in efforts to enhance the scope of projects and funding amount that would be available for this type of work.

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The Panel worked in small groups to refine the bullets under the items of particular interest in each general category from the total number submitted online (e.g., approximately 10) to 5 for Board consideration. The revised bulleted lists were reviewed and approved by the Panel as a whole.

The proposed focus section topics included Aleutian Island Cod (unfunded from 2017), Bogoslof Island, and Interdisciplinary Studies. The Science Panel noted that they felt the proposals received in response to the cod issue in 2017 were responsive to the topic description as written. Presenting it again in the 2018 RFP would appear too prescriptive and suggest an unfair process in 2017 at the detriment to NPRB’s reputation. The Science Panel would have been more comfortable if the highly ranked proposal under the 2017 call (Tier E) had been funded and the section then re-worked for any subsequent call.
Bogoslof Island Ecosystems was considered an interesting topic, but there were some concerns about safety, and potentially the time scale that might be required for a successful study. The Board had tasked staff with preparing a focus section version of the proposed new category of Multispecies and Interdisciplinary Ecosystem Studies. The Panel provided constructive feedback on the structure of this potential new category, including a name change to Interdisciplinary Studies. Both a full category and streamlined Focus Section option were completed. The Panel reiterated their prior endorsement in fall 2016 and spring 2017 of inclusion of this type of research as a permanent category in all Core Program RFPs.

Several updates to the 2018 Science Panel review process were presented (Attachment 4.5). Both procedural and technical updates were provided to address increasing numbers of proposals and subsequent reviewer fatigue, efficiency of meeting agendas, and facilitating pre-meeting collaboration among reviewers.

5. Partnerships in the Core program

Matt Baker provided the background for funding partnership development with the Core program. The goal is to increase funds to support the mission of NPRB while balancing NPRB ownership of the process and ensuring means to offset any additional administrative burden. Partners have expressed interest in partnerships with NPRB to access NPRB’s broad pool of investigators and to leverage its respected and comprehensive proposal review process. Input was requested from the Science Panel on the revised proposed timeline, the types of organizations that would be appropriate to partner with, and how to define the appropriate level of engagement.

It was noted that the existing OSRI agreement works very well and the revised agreement (Attachment 5.2) was intended to reflect the actuality of the process. The Science Panel noted that partners should contribute some administrative overhead to cover the NPRB staff time required to facilitate the partnerships. There was concern that if OSRI does not currently incur costs with their agreement that there would be a change in this protocol with additional partners. The timeline intentionally delays sharing of proposal information with potential partners until after the Science Panel meeting to limit external influence on decisions. In general, the Panel noted that any new partners should cover the increased administrative load with any new partners. It was suggested that partner funds could be accepted for general categories rather than specific proposal selections. There were concerns that a service would be provided for free to outside organizations with limited return benefit.

6. Communications and Outreach

Brendan Smith provided an overview of the outreach proposal process that was implemented for the 2017 RFP. This was the first year for the standardized outreach selections and the optional companion outreach proposals, with a strong response from the research community. The Science Panel, especially new members, were highly engaged throughout the outreach discussion.

Updates for the 2018 funding cycle were presented. Most notably, the 2018 Core RFP will not include an outreach section. The standard option selections will be removed, including the coastal community requirement. Moving forward, the previously duplicative community and stakeholder engagement sections have been reworked into a single engagement strategy section. There will be a separate call for a 2018 Outreach RFP. Only funded Core projects will be able to submit proposals, with a due date at the end of July. All funded Core projects, whether or not they receive funding for an outreach component,
will be required to have a team member attend scientific communication training (approximately one day attached to the AMSS).

Staff presented the proposal of a board member to increase the proposal cap from $15,000 to $20,000 along with increasing the total amount of the program potential to $125,000. These changes would allow for more proposals to be considered for funding. Approximately $45,000 would be shifted from Core research funding to cover the increase. This would be on par with the amount of funding that was previously included for the old standard outreach option required of research proposals. There was mixed support for the increase in funding. Some noted that the higher amount would help emphasize NPRB’s commitment to promoting outreach efforts. Others were concerned that an increase in funds would not significantly increase success of the new approach. However, it was also noted that one of the justifications for highlighting outreach as an expanded program was in response to an inability to evaluate outreach under the prior standard option approach.

The revised review process would take place in the fall meeting of the annual cycle, rather than overlapping with the spring meeting review of science proposals. The Panel appreciated the shift in timing to accommodate an already full spring schedule. An electronic system would be implemented to facilitate review, similar to the existing system for Core research proposals. It was suggested by staff that 3-4 SP members could volunteer to work with 3-4 members of the AP to be a review subcommittee, rather than tasking the full Panel. However, the Panel noted that they would prefer to have the review of the communications and outreach director combined with a group review at the fall meeting.

The new AMSS website was previewed for the Panel (Attachment 6.1). Highlights from the first Arctic IERP cruise, on R/V Sikuliaq, were presented, including social media statistics and the blog site (Attachment 6.2, 6.3).

7. Arctic Integrated Ecosystem Research Program

Danielle Dickson provided an update on research that has occurred in the first year of the Arctic IERP. The first cruise of the R/V Sikuliaq took place in June, led by a PI from UAF. This shift from the original proposal of May was in response to community concerns. The rapid sea ice retreat was of concern prior to their departure but in fact the PIs were pleased with the data collected. An observer from Little Diomede participated in the spring cruise. Approximately 45 hours of the trip was diverted to assist in search and rescue activities. Feedback from stakeholders to date has been positive.

The second cruise of the Arctic IERP, led by a NOAA/AFSC PI, began in August and will continue through early October. Two collaborators from Russia and two students from the Alaska Native Science and Engineering Program are participating.

The report provided by the UAF research team (Attachment 7.1) was received very well and the intention is for a similar format to be adopted by the NOAA research team. Both cruises are providing information via VHF for the local communities on a 6-hr schedule. To date they have not received any direct response or concern. Daily emails have also been provided and some useful communication between the scientists and subsistence users has occurred through this communication route.

Appendix A projects were funded separately from the Arctic IERP but invited to participate to maximize opportunities for collaboration and leveraging of resources. There are several projects that have integrated well already, and the potential for additional integration is enhanced by the availability of project data from the first season.
8. Gulf of Alaska Integrated Ecosystem Research Program

Danielle Dickson provided a brief background for the Gulf of Alaska Integrated Ecosystem Research Program for the new members of the Panel. The results of the program are being disseminated primarily through four special issues of Deep-Sea Research II, with the first issue completed and the second and third in progress. The fourth issue has not been initiated. The program will also be showcased at an organized session of the 2018 Ocean Sciences Conference. The program manager and PIs continue to communicate through monthly teleconferences. Matt Baker summarized the results of the 2017 synthesis workshop and some of the main findings of the program, with particular focus on how the data analysis, models, insights have informed stock assessment and led to a major improvement and revision of the Gulf of Alaska Ecosystems Consideration Chapter of the SAFE report.

9. Science Plan Update

Matt Baker reviewed the history of the Science Plan update, with a focus on the spring 2017 meetings and moving forward. There was an emphasis on distinguishing between short term decisions (e.g., RFP options, Strategic Planning) and larger scale interests (e.g., Science Plan). More specifically, what is defined in the Science Plan can differ from specific items or categories in the RFP for any given year. Once updated, the plan will not likely be revisited for another ten years.

Several sections were identified in the memo for a general review. Science Panel members were encouraged to review subject area sections as individuals or in small groups in accordance with expertise in particular areas. It was requested that revisions/comments on these sections be sent to Staff via email and incorporated into the existing language in the plan rather than reviewed in a full group discussion. There were also some specific assignments recommended for workgroups during the afternoon session (Attachment 9.7). Panel members were released to work on the editing task for the remainder of the day, resulting in an intensive and fruitful drafting session.

There are efforts to work more closely with partners such as the North Pacific Fisheries Management Council to track NPRB funded research and how it factors into management. This is underway on both a larger scale (e.g., NPFMC Science and Statistical Committee) and on a more detailed level (e.g., Bering Sea FEP). This will help move us forward to develop metrics of success.

Molly McCammon joined the meeting on Thursday morning to talk about AOOS and their relationship to NPRB. She emphasized the need to continue LTM funding through NPRB. Molly noted that a goal of AOOS was to help support the equipment installation phase for a mooring in every Alaskan LME. AOOS relies on other groups such as NPRB to fund the science related to the mooring. AOOS is currently working with the University of Alaska to support a mooring in the Gulf of Alaska that would allow for real-time data collection. NPRB is an AOOS partner for two long-term moorings, one in the Gulf of Alaska and the Chukchi Ecosystem mooring. She noted that AOOS would be very interested in equipment testing partnerships with NPRB in the future. It was emphasized that NPRB played a strong supporting role in building the data required to make UAF competitive for the recent National Science Foundation Long-Term Ecosystem Research funding.
10. Strategic Planning

Betsy Baker provided a history and rationale for the Strategic Planning activities, with a full description and timeline documented in the memo. The focus of the Science Panel discussion had three major components:

- scenarios for Core program categories
- scenarios for short-term funding of integrated ecosystem research
- recommendations for the Long-Term Monitoring Program

The Science Plan Working Group had been working on moving in the direction of funding fewer, larger Core program categories per year in order to maintain the possibility of funding a new IERP. In response to reduced interest and income, the Board temporarily suspended active planning for a new IERP at the spring 2017 meeting and tasked the WG to develop scenarios to consider within the Core program.

This directive was paired with category revisions under the larger Science Plan considerations. The categories proposed were shown as Option 1 & 2 in the staff memo prepared for this agenda item. The Science Panel did not endorse either option presented, but strongly supported moving to a five-category and three-approach structure. Categories would be: Oceanography & Lower Trophic Productivity, Fishes & Invertebrates, Marine Birds & Mammals, Human Dimensions, Interdisciplinary Studies. Cooperative Research with Industry, Technology Development, and Data Rescue should be integrated as approaches. The Focus Section should be eliminated. This structure could then be rotated, either in entirety or alternating category years. There was concern that alternating years had to be equitable (e.g., Fishes & Invertebrates should also cycle out). The need for consistency and predictability was emphasized over the decision between full RFP or category cycling. Overall, there was general support for funding fewer categories in the RFP to allow larger grants, due to the cost of research. Other ideas discussed here - and again under Other Matters - included eliminating deadlines and having a rolling review process, a pre-proposal to limit the number of proposals, and having a reverse deadline of only accepting a certain number of proposals per cycle. The number of GSRAs could be increased in any off-year for the Core RFP.

The Panel supported the concept of a workshop at AMSS to help generate ideas for future IERP topics. A two-hour session moderated by NPRB staff was suggested as a model, with an abstract submission required for interested parties. There would be a template provided for a short 5-10 minute presentation, including the targeted funding level of the research concept. This no-cost workshop would then be used to develop a longer, two-day event funded by NPRB to flesh out the details of several ideas for the Board.

The Panel recognized the wide-ranging utility of the Long-Term Monitoring programs and was strongly in favor of continued NPRB support.

11. Other Matters

Betsy Baker provided an update on preparations for the 2018 Alaska Marine Science Symposium. There was a significant loss of sponsor funds last year, but this year several sponsors have responded well to a new approach to the support letters that noted this loss of funding. Susan Dixon will be taking a larger role in the organization of the meeting. Brendan Smith had previewed the new AMSS website earlier in the meeting.
Staff provided very brief updates on their professional development activities.

The meeting schedule for 2018 was reviewed. The dates for the spring meeting are set at March 27-30, 2018, in Seattle. It was noted that the Panel prefers to spread a two-day meeting over three days to allow for travel, but it was requested that the meeting occur at the beginning or end of the week rather than the middle.

The Panel then revisited its discussion on how to reduce the number of proposals to the Core program equitably. There was consensus that the 2017 level of 138 proposals and potentially more proposals in the future is unsustainable from both a funding and logistic perspective. All were in agreement that there needs to be a functional way to reduce the number of proposals required for review in the given period of time.

Several options were discussed extensively for limiting the number of proposals in the near and longer term, by modifying protocol and/or RFP cycles. A vote was taken on each to determine support:

1. Shorten the open period for proposal submission (Yes: 9, No: 3)
2. Investigate logistics of a no-deadline format (Yes: 11, No: 0, Abstain: 1)
3. Alternate years of categories within the RFP (Yes: 7, No: 2, Abstain: 1)
   a. There was concern with this approach that Fishes & Invertebrates would not be rotated out on an equitable basis with the other four major categories.
4. Alternate years of a full RFP, all categories in each funding cycle (Yes: 7, No: 3, Abstain: 1)
   a. Advantages to this approach would include an extended review period.

A fifth option to deal with the near-term proposal numbers was to limit the number of proposals per person to one for each cycle. This discussion occurred with a subset of the Panel after the meeting and a vote was to be taken via email through the Chair; 4 members supported the idea, 1 was against it, 2 suggested the limit be set at two proposals per person, and the remainder of the SP did not respond. The Panel recommended that a one or more of these options should be adopted as soon as possible (e.g., upcoming cycle).

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