

Summary
North Pacific Research Board
Science Panel Meeting
Waikoloa, HI
August 23-26, 2010

The Science Panel (SP) met August 23-26, 2010 at the Waikoloa Marriot Resort in Waikoloa Hawaii. The meeting was chaired by Doug Woodby, was and further attended by: Vera Alexander, Dick Beamish, Michael Dagg, Bob Gisiner, Stew Grant, Pat Livingston, Seth Macinko, Andre Punt, Tom Royer, Pat Tester, Bill Wilson and David Witherell. Clarence Pautzke, Francis Wiese, Carrie Eischens, and Tom Van Pelt staffed the meeting.

1. Call to Order/Approve Agenda

The chair opened the meeting by expressing appreciation to the Board for approving this meeting location. The chair then asked for any changes to the agenda. Staff noted that the teleconference with the Board was scheduled for 10am Wednesday (August 25). Panel members questioned whether the GOAIERP COV issues should be discussed before the marine mammal issues, since resolution of the COV issues might make the marine mammal questions moot. While considered a valid point, the agenda was kept as proposed given the scheduled arrangements for Cheryl Rosa and Samantha Simmons to join the meeting via teleconference for the marine mammal discussion. The agenda was approved with no changes.

2. Gulf of Alaska Integrated Ecosystem Research Program

Staff gave a status report on GOAIERP, including a summary of the first PI meeting held in Seattle in May. This meeting was attended by about 30 researchers and was summarized as a positive, collaborative and constructive meeting. Topics discussed at this meeting ranged from program and data management to sampling grid planning, field work coordination, and education and outreach. There was also a thorough discussion of the retrospective analysis components of the program and the SP was informed that Franz Mueter was appointed as the overall program leader for all retrospective analyses. Throughout the GOAIERP PI meeting, lessons learned from BSIERP were raised or inserted where appropriate, e.g. designation of a leadership group from within the PI community, formation of an agreed-upon program management plan, and considerations for a data management RFP.

Staff noted that there were two immediate issues pertaining to the GOAIERP program that were still outstanding: the question of a marine mammal component and the issues raised by the Committee of Visitors reviewing the NPRB.

Marine Mammal Component – Report from the Group of Experts

Staff summarized the GOAIERP marine mammal component developments since the April Science Panel meeting. This encompassed the Board's motion to remove the marine mammal component from the Upper Trophic Level (UTL) proposal as well as the formation of the Group of Experts (GOE), under the auspices of the Science Panel, to review and determine if a marine mammal component was necessary within the context of the currently funded program.

The terms of reference for the GOE were reviewed and the GOE (composed of Doug Woodby, Bill Wilson, Bob Gisiner, Cheryl Rosa, Andre Punt and Samantha Simmons; [Simmons and Rosa joined by phone]) gave their report to the full Science Panel. The final evaluation at the GOE's last meeting on August 9th (meeting summary attached as Appendix 1) was that "an additional marine mammal component is not necessary at this time." This evaluation considered the overall GOAIERP program and scientific questions, as well as written question-and-answer interactions with the UTL PIs. However, the GOE conclusions at the time were based on the assumption that the August 2, 2010 UTL response to questions posed by the GOE contained, on pages 5-27, a more detailed explanation of what was already funded within the retrospective component of the UTL proposal. After communication between the chair

of the GOE and Jamal Moss, lead PI for the UTL, it was discovered that this assumption was incorrect. The information provided on pages 5-27 of the response document in fact contains information on what the UTL would do if an additional \$300,000 were to be awarded to the UTL team.

As a result, the GOE and the full Science Panel agreed that they should re-evaluate the conclusions of the GOE given this new information. Science Panel members asked for clarification on the marine mammal work that is currently included within the funded UTL program. Staff noted that marine mammals are included in two aspects of the funded program: 1) the seabird and marine mammal observers on all cruises and 2) existing marine mammal datasets that are readily available will be included in the retrospective analysis.

In turn, GOE members then stated their position given the new information. They felt that with the overall focus of the GOAIERP program on young-of-the-year (YOY) recruitment, a marine mammal component is still not necessary. One GOE member stated that there is no evidence that marine mammals play a significant role in predating on YOY of the five focal fish species and no evidence to the contrary has been provided by the UTL group. Other GOE members noted that additional marine mammal work would not add to the understanding of the recruitment question. Thus the GOE's evaluation of the question "Is a marine mammal component necessary within the context of the currently funded GOAIERP program?" remained unchanged, with concurrence that a marine mammal component is not necessary.

Science Panel members not included in the GOE were then asked to consider the GOE's evaluation. With each SP member speaking to the issue, **there was unanimous support of the GOE's conclusion that no marine mammal component is necessary within the context of the currently funded GOAIERP program.** Science Panel members also noted their concern regarding this complicated issue and felt that this issue was not a good indication of how the GOAIERP program was going to evolve. The SP also concurred with the GOE that a gap analysis should be conducted after the first year to see if issues that are not discernable now should be addressed as the program progresses.

COV concerns

Staff summarized the history of the concerns of the Committee of Visitors (COV), stating that in their review of the NPRB programs, the COV has also been evaluating the IERPs. The COV review of the GOAIERP led them to write a letter of concern to the Board on July 1st, stating that in their opinion the program was fatally flawed and should be halted. The Board requested a more detailed review from the COV that identified specific issues, which was received on August 3rd. As per the process set in place by the Board on July 14th, this more detailed review by the COV now needed to be evaluated by the Science Panel with a recommendation to the Board on how best to proceed.

Before getting into the specific issues raised by the COV, SP members questioned whether they wanted to, or had to, respond to this level of scrutiny. Science Panel members also requested a review of the members and Terms of Reference of the COV, and asked how the group was formed. Staff noted that the COV was part of a Board-promoted process to review the entire NPRB program after 10 years of operation. The COV is composed of Lynda Shapiro (chair), Bill Peterson, Robin Anderson, Hal Batchelder, Eileen Hoffman, Bruce Leaman, and Jim Harvey. Staff indicated that the COV Terms of Reference include a statement about "...evaluating the individual projects and IERPs..." funded by the Board, and that the COV is not overstepping their bounds by raising these concerns. With this information, the Science Panel unanimously agreed that the COV concerns merited a response.

The Science Panel then proceeded with an extensive discussion of the issues raised by the COV. The discussion focused on the development of a formal letter responding to the COV concerns. The SP decided not to address each individual science point made by the COV but to address the main issues of concern as structured in their August 2 review. The final response letter from the SP to the COV (Appendix 2) was then sent to the Board for further discussion during the scheduled Wednesday morning

teleconference. Following that teleconference, the letter was finalized and the Panel asked staff to send it to the COV on their behalf.

3. Summary of Previously Funded Projects

Staff gave a status report regarding the 22 competed projects totaling \$3.9M that were approved or conditionally approved for funding by the Board at their April 2010 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. 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.

Responding to questions, staff reviewed the concordance between Science Panel recommendations and Board decisions, and agreed that increased transparency was desired when the Board made changes to their recommendations. It was noted that the Science Panel spends a substantial amount of time at their April meetings to balance their evaluations of meritorious research projects with response to funding categories approved by the Board. When the Board makes changes to the balance as approved by the Science Panel, it would be useful to have written feedback on the Board's changes to enable the Science Panel to continuously improve its process in crafting future RFPs and funding recommendations. Therefore the Science Panel respectfully requests that for each proposal rated as "Tier 1" that is subsequently removed by the Board, the Board provide a brief paragraph explaining their rationale.

4. Budget

Clarence Pautzke reviewed the current budget numbers for the NPRB and recommended aiming for a \$3.5M RFP for 2011. Pautzke reminded the Science Panel that NPRB funding comes from 20% of the EIRF interest with 80% going back to the principal. Funding projections have been based on a 4% interest rate but current Treasury rates are down to about 2.6%, indicating that the Board should be conservative in their spending until Treasury rates increase again.

5. 2011 Request for Proposals

The Science Panel began deliberations of the 2011 RFP with an extensive discussion about an alternative, cyclical RFP process, whereby some research priorities are not present in the RFP every year but instead appear in two-year cycles. Reasons for cycling research themes included being able to provide more research funds to individual categories, limiting the number of proposals received and allowing larger-scale scientific questions to be addressed. It was noted that one of the critical elements of implementing a cyclical approach is to decide the cadence of categories (but not the sub-topics) for a couple of cycles in advance, let the community know what the plan is and then, of course, stick to the plan. After further discussion and recognizing the benefits on not spreading the reduced resources across too many categories in any given year, the Science Panel recommended that a cyclical RFP process be developed for the 2011 RFP. That basis for this, however, is the development of a full 'regular' RFP, which would also serve as their 'traditional' recommendation in case the Board does not want to proceed with the cyclical RFP this year.

Staff reviewed the documents that were used as the basis for developing research priorities for the full (i.e., traditional) 2011 RFP. Research priorities identified by the North Pacific Fishery Management Council, NOAA Alaska Fisheries Science Center, NOAA National Marine Fishery Service, NOAA National Ocean Service, U.S. Arctic Research Commission, U.S. Marine Mammal Commission, Alaska Department of Fish & Game, Alaska SeaLife Center, Western Alaska Interdisciplinary Science Conference/SeaGrant, Oil Spill Recovery Institute, Prince William Sound Science Center, and the NPRB Science Plan, in addition to information gathered through meetings, literature, and staff contacts, all

served as the basis for the research priorities in the draft 2011 RFP. The draft RFP also considers the evolution of past NPRB RFPs as well results coming from projects funded in the past.

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 a full RFP and associated funding targets provided to the Advisory Panel and Board for their consideration. The Science Panel also developed a two-year, cyclical RFP process for the Board to consider. This approach includes the marine mammals, seabird, other prominent issues and a new “theme item” research priority appearing in the RFP on a two-year cycle. Other research topics had a two-year cycle in funding level with one year of elevated funding followed by a year of reduced funding for the category (see Appendix 3).

Regarding the marine mammal research priority, Science Panel members discussed in-depth the need for, and timing of, Steller sea lion research, given the new Biological Opinion issued by NOAA and discussed at the recent North Pacific Fishery Management Council meeting in Anchorage. Bill Wilson indicated that one of the big missing pieces of information was diet information for animals in the western Aleutian Islands. The Science Panel considered including Steller sea lions as a research priority in the RFP but concluded that while this would be premature for the 2011 RFP and it would probably be good timing for 2012. Thus, given the proposed cyclical nature of future RFPs, the Science Panel recommended omitting a marine mammal category in 2011 so that it would be present in 2012 when research needs for SSL would be ripe. The Science Panel further recommends that the Board state that NRPB plans to contribute to Steller sea lion research in 2012 contingent upon agencies putting together a strategic research plan together with a commitment of funds. To support preparation of a strategic research plan in this fiscal year, the Science Panel recommended that the Board provide non-RFP funds to assist with a planning workshop to develop an integrated SSL research plan, perhaps held in conjunction with AMSS 2011.

6. GOAIERP Teleconference with Board

A teleconference meeting was held on August 25th at 12pm (AST) between the Science Panel and Board to discuss the Science Panel’s response to the COV concerns regarding the GOAIERP. In attendance were all the Science Panel members listed above and the following Board members: Nancy Bird, CAPT Michael Cerne, Dorothy Childers, Doug DeMaster, Michele Longo Eder, John Gauvin, John Hilsinger, Howard Horton, John Iani, Paul MacGregor, Heather McCarty, Gerry Merrigan, Eric Olson, Pam Pope and Ian Dutton (chair). Science Panel members were introduced to the Board and John Hilsinger noted that Sue Aspelund was also sitting in on this call as she will be his representative from the Alaska Department of Fish and Game at the September Board meeting.

The Board chair noted that previous meeting summaries would be approved at the September Board meeting. Board members questioned whether the purpose of the current meeting was to discuss the COV concerns and Science Panel’s response or to go one step further and make a decision on how to proceed. Clarence reminded everyone of the timeline detailed in the July 16th letter to the COV and reiterated that time was of the essence. The Board should reach a decision at this meeting and, if there was concurrence between the Board and SP to go forward, then staff would submit the proposal package to the Secretary of Commerce for approval by September 1st. This would hopefully allow for SOC approval by mid-September. Any further delay would jeopardize the entire GOAIERP program, given the seasonal cruise schedule and leveraged NOAA surveys scheduled in 2011 and 2013. The chair also stipulated that a decision needed to be made at this meeting.

Clarence summarized the history of the COV concerns, stating that the Board received a letter on July 1st indicating that in the COV’s opinion, the GOAIERP program was fatally flawed and should be halted. The Board requested a more detailed review from the COV identifying specific issues on July 16th, and a response was received on August 3rd. The Science Panel reviewed this letter and responded the COV’s concerns.

Doug Woodby, chair of the Science Panel, reviewed the Science Panel’s response (Appendix 2) and summarized by stating that the Panel did not agree with the COV’s assessment that the GOAIERP was

fatally flawed, but rather this was a work in progress that would be tended by NPRB staff. The Science Panel is confident that the teams that have been selected to participate in the GOAIERP will be able to produce a product of value to the NPRB and the greater scientific community.

Board members asked whether specific COV issues had merit. Woodby responded that the COV had raised concerns about things the SP had already identified and discussed, and thus had already been dealt with or are currently being resolved. The current program management approach is based on lessons learned through the BSIERP process, and integration is something that will be continually worked on in the GOAIERP as it is in the BSIERP. He further noted that the budget limitation of this program should also be considered, and therefore it does not seem reasonable to judge the GOAIERP against BSIERP as the COV appears to have done.

Board members asked about the scientific issues raised in the review, specifically in regards to the Lower Trophic Level (LTL) statement of work and, in general, whether the SP believed the individual projects were sound. Woodby replied that the Science Panel discussed the scientific issues raised by the COV but had decided not to respond to each one in detail because they did not see starting a debate on specific scientific issues as productive. Woodby did point out that the issue of trace metal analysis within the LTL proposal is being addressed through ongoing collaboration with the PI, and thus the Science Panel does not consider this a fatal flaw. Woodby also noted that the Science Panel agreed with the COV in several points, specifically about the need for more transparency regarding the Panel's standard operating procedures. The Panel has already asked the staff to formalize those procedures in a written document.

One Board member stated that if we were to terminate the GOAIERP program now, all of the matching support would be lost and we would likely not end up with a stronger program if a new RFP was issued. If anything, NPRB would lose time and, more importantly, credibility by terminating the GOAIERP program. Woodby stated that the Science Panel had also discussed this possibility and had come to the same conclusion. As noted previously, the Science Panel believes that much can be gained from the program and thus there is much value to move forward with what is in hand.

Another Board member asked about possible ramifications (funding or otherwise) if the Board decided not to follow the recommendations of the COV. Chair Dutton stated that NPRB is the COV's client and that the COV has no formal authority or influence beyond what the Board gives it. Therefore rejecting the COV recommendations would have no concrete ramifications beyond NPRB. He did note, however, that both points of view will be part of the public record and will be submitted to the SOC as part of the funding package, and thus the Board would need to be prepared to defend such a decision.

A Board member stated that relative to the BSIERP, the GOAIERP is not a complete IERP, so perhaps it should be called something other than an IERP. Woodby reiterated that GOAIERP is an integrated program but that it simply is not as comprehensive as the BSIERP. The GOAIERP does not cover the entire top-to-bottom ecosystem the way the Bering Sea program is able to, due to the funding limitations. Board members varied in their opinion on whether a name change for the GOAIERP was necessary.

Chairman Dutton reiterated that a decision had to be made regarding how to proceed – either to go forward and submit the GOAIERP package to the Secretary of Commerce or not. Board members questioned if this would include the marine mammal component of the program. Chairman Dutton replied that as per the time line set out in Pautzke's July 18th memo, the package would go to the SOC without the marine mammal component and that the marine mammal issue would be taken up at the September Board meeting in Juneau.

A Board member asked about the discrepancy between the COV and the Science Panel/staff comments regarding the nature of the GOAIERP PI meeting. Staff seemed to indicate that everything had gone very well and that it had been a productive meeting, but the COV seemed to imply the opposite. Staff noted that the COV was not present at the GOAIERP PI meeting nor had they asked staff about it. It is therefore unclear how the COV came to their conclusion that the meeting was not successful.

After further discussion, Michele Longo Eder made the following motion:

“Send the GOAIERP package as currently constructed to the Secretary of Commerce for review by 31 August 2010.”

The motion was seconded by John Gauvin. Further discussion followed on what would be included in the package to the SOC. It was clarified that, aside from the proposals, the submission would include the COV letter as well as the Science Panel response. The motion passed with one recusal (Doug DeMaster) and one objection (Heather McCarty).

Chairman Dutton thanked the Science Panel for their work on this matter and adjourned the meeting.

7. Bering Sea Integrated Ecosystem Research Program

Staff gave an update on the Bering Sea Integrated Ecosystem Research Program, including details about current field season activities and planning for upcoming synthesis meetings for the Lower Trophic Level (LTK)/Subsistence Harvest group and for the Patch Dynamics group.

Following the general update, staff summarized ongoing complications in the BSIERP data management project. The Panel was reminded that the original plan for BSIERP data management had been to partner with the Alaska Marine Information System being developed by a UAF-based team with main funding from the Alaska Ocean Observing System (AOOS) and additional funding from NPRB. However, as of August 2010, the AOOS funding was re-competed and the new data systems provider for AOOS is an Anchorage-based group that will be developing a new data discovery and exploration tool. The former partnership between BSIERP data management and AMIS is therefore finished. Staff, together with the Bering Sea Project Science Advisory Board (SAB), are currently working together with the data management PI (Coyle) to resolve the situation in one of three possible ways: (1) reduce the data management goals to the simplest ‘data portal’ approach, (2) work with the current data management PI and the SAB to agree on a new statement of work continuing the work of the current data management team, or (3) develop a new collaboration between the data management PI and the new AOOS data management provider. The Science Panel reinforced the SAB’s position that novel data discovery tools may be useful and valuable, that staff should continue their work in supporting the development of new tools, but that the basic data archival and access role of the data management project should not be compromised.

Staff then provided an update of the integrated ecosystem modeling project, describing the success over the past nine months in bringing modeling team members together for fully integrated hindcast development. The integrated hindcast model is currently anticipated to start within the next few weeks. Staff emphasized the importance of team management, with special emphasis on the strategy and milestone focus and frequent updates developed since the November 2009 in-person modeler team meeting, and in the past nine months as part of the biweekly or weekly modeling team teleconferences. They also noted the value of SAB members participating in the modeling team teleconferences and the tight connections between field researchers and modelers developed through group meetings. Staff and Science Panel members observed that this is an important lesson learned for application to the GOAIERP and other IERP projects.

Staff closed the BSIERP update with a review of integration activity in four main directions. These included the upcoming Bering Sea Project special issue of the *Journal of Deep-Sea Research II* (review-ready manuscripts are due at the end of November 2010) with a second and possibly a third special issue anticipated on a roughly one-year cycle. Integration discussions will also occur during the next PI Meeting, to be held 22-24 March 2011 in Anchorage. More synthesis activity involves long-term data needs to bridge between BSIERP I and a possible future BSIERP II, and the expected NSF announcement of opportunity for synthesis-focused support, potentially enabling some BEST researchers to extend their synthesis work into 2012.

All Science Panel members were invited to attend the next PI Meeting, and Seth Macinko, Vera Alexander, and John Piatt were especially encouraged to attend the PI Meeting as part of their volunteer work on the BSIERP Science Advisory Group. Science Panel members asked how BEST-BSIERP is contributing to our understanding of pollock dynamics. Panel members were encouraged to refer to recent summaries of this issue provided by Mike Sigler and Patrick Ressler as part of their outreach work in BSIERP. It was also noted that the project is only now beginning a full effort of data analysis and synthesis, and that more complete results are not yet available. Staff and Science Panel agreed that it is critical for BSIERP PIs to provide clear and, to the degree possible, unequivocal statements describing what they have learned, how what they've learned may relate to management (if applicable), and how the "IERP" nature of BSIERP has impacted their work.

8. Other Matters

Guest speaker

Dr. Polovina joined the Science Panel on Thursday morning to speak on "Recent changes at the top and bottom of the central North Pacific subtropical ecosystem." A question-and-answer discussion session followed Dr. Polovina's talk, drawing comparisons between research and management issues in the Central and North Pacific.

Science Panel Membership

Science Panel members were made aware of their term dates. The following members have terms that end on 30 September 2010: Elizabeth Andrews, Dick Beamish, Mike Dagg, Bob Gisiner, Seth Macinko, John Piatt, Andre Punt, Cheryl Rosa, and Doug Woodby. These members were asked to contact Clarence to indicate if they were interested in serving another term on the Science Panel.

2011 Alaska Marine Science Symposium

The 2011 Alaska Marine Science Symposium will be held in Anchorage, January 17-21, 2011. Science panel members are strongly encouraged to attend.

Meeting Schedule for 2010 and 2011

The Science Panel scheduled their April 2011 meeting for April 12-14 in Seattle and tentatively set their August 2011 meeting for August 23-25 in Anchorage.

Process of constructing the annual RFP

Staff asked Science Panel members their opinion of how the RFP construction process worked and if the Science Panel would like to see any changes to that process. Currently, staff develops a draft RFP based on the inputs received from various agencies and institutions. Additional information is gathered through meetings, literature, and staff contacts, and serves as the basis for the research priorities in the draft RFP.

Science Panel members indicated it would be nice to have more opportunity to think about what new topics could be placed in the RFP ahead of the meeting. Other panel members indicated that there are already too many topics in the RFP and funding is being spread too thin. The biggest challenge in the future might not be what to fund, but what to prune back. NPRB is helping to grow and strengthen scientific research in Alaska and plays a leadership role in research ongoing now and in the future. It is critical to be able to commit enough funds to any one research topic.

Panel members also noted that to date the RFP has followed a “disciplinary research structure,” which did not always allow funding for looming issues in the marine environment. Perhaps the RFP should be more issue-oriented rather than structured around disciplines. Panel members also noted that some of these concerns would be addressed if the Board adopted the cyclical RFP approach, which incorporates a “theme item” category every other year to address current issues (e.g., the Arctic in 2011). Panel members also noted that the RFP was based on the Science Plan and perhaps that document needed refreshing. A suggestion was also made that perhaps each SP member could be responsible to a section of the RFP based on their expertise. This approach will be further discussed at the April meeting.

Meeting Summary

North Pacific Research Board
GOAIERP Marine Mammal Group of Experts,
Monday, August 9th – 12pm AK time

The GOAIERP Marine Mammal Group of Experts (GOE) met by teleconference to discuss the responses received from the UTL Team regarding the questions posed by the GOE in their July 23, 2010 letter. Attending the teleconference were Bob Gisiner, Andre Punt, Cheryl Rosa, Samantha Simmons, Bill Wilson and Doug Woodby. The meeting was staffed by Francis Wiese, Carrie Eischens and Tom Van Pelt.

After reviewing the agenda and approving it with no changes, the GOE moved into reviewing the UTL Team response document received on August 2nd, 2010. It was noted that, in addition to the specific answers to the questions the GOE solicited, 38 pages of additional information were provided. Specifically, the response had four parts:

1. Pages 1-4: “Response to questions” posed by the GOE,
2. Pages 5-27: “Reference document #1” written as a proposal providing information about the marine mammal retrospective work,
3. Pages 28-31: “Appendix A: expanded proposal” detailing work that could be done with ‘additional’ money, mostly focusing on scat analysis of SSL and harbor seals,
4. Pages 41-42: “Reference document #2” providing the context from the UTL PIs perspective of the evolution of the marine mammal component in the GOAIERP

(Note that pages 31-40 contained the references for the entire document)

During the GOE’s review and discussion surrounding the extensive UTL response of Aug 2, many GOE members expressed confusion in terms of what should and should not be evaluated to stay true to the GOE’s Terms of Reference (TOR). Questions focused on: Which section of the response document described ‘new’ proposed work in comparison to the March 31st proposal? Which of the sections in pages 5-27 of the response are an expansion of what is already planned (i.e., included in the June 30th revised proposal), and which would fall under ‘to be funded with additional funds’? Also, a figure of \$300K (as a cap or as additional funds) is mentioned repeatedly throughout the document, and the GOE could not discern which of these was the \$272K that was reinstated vs. the \$304K that was effectively removed, vs. the \$300K that is referred to in the GOE’s Terms of Reference as potential additional funds the Board is willing to provide for marine mammal work.

To discern the answers to these questions and thus evaluate the response accordingly, the GOE discussed (1) the Board’s May 10th letter to the UTL PIs that removed the SSL work (but not all of the marine mammal work), (2) the reinstatement of the \$272K on June 18th to ensure that, as intended by the Board, only the SSL portion was removed and not other parts of the retrospective or fisheries work, (3) the statement in UTL’s Aug 2 response “Reference document 2” (p. 41-42) in regards to the 20 page cap imposed on the proposals that did not allow them to fully explain their marine mammal component before, and (4) Appendix A in the Aug 2 response: “Expanded Proposal”, submitted as “...an amendment to the present plan...,” “...should the marine mammal component of the UTL not be capped at \$300,000...” (lines 117-119).

Upon consideration on this information, the GOE decided to move forward with their review of the Aug 2 response based on the following assumptions:

1. Pages 5-27 in the UTL Aug 2 response were considered to be a detailed explanation of the marine mammal portion of the retrospective analysis currently included in the UTL’s June 30th proposal,

given that only SSL were removed in the Board's May 10 letter and the \$272K were reinstated by the Board on June 18th to ensure nothing else was affected.

2. Based on (1) above, the GOE interpreted the section of their Terms of Reference relating to "is a marine mammal component necessary" to mean "is an additional marine mammal component necessary," since only SSLs were removed by the Board, not marine mammals overall, and thus marine mammals are in the currently funded work.
3. The term 'necessary' in (2) above was interpreted to mean 'within the focus of the currently funded GOA IERP, whose main focus it is to better understand processes that control recruitment during the first year of life for the five focal fish species'.
4. The GOE was unanimous in its determination that Appendix A (pp. 28-31 in the UTL response) asked for 'additional' funds beyond the \$300K cap, and was therefore considered to be 'new' and 'unsolicited' proposed work. While they appreciate the effort, the GOE deemed it unfair to consider such new work at this time, as the Board still has to decide how to proceed if the GOE were to recommend that additional marine mammal work should be funded (e.g. issue a special RFP as stated in the TOR).

With these assumptions and interpretations in mind, the GOE evaluated the UTL's Aug 2 responses to the three questions posed. The GOE then drew upon their evaluations to address the questions posed to them by the Board as detailed in the TOR.

GOE Review and Evaluation of the UTL's Aug 2 Responses:

Question 1: To be relevant to the currently funded GOA IERP program, a relevant marine mammal component would require determining the spatial and temporal distribution of the proportion of biomass removed of the young life stages (YOY) of the five focal species by a marine mammal. How does the retrospective work and scat analysis outlined in your March 31st proposal provide that information as it pertains to Steller sea lions? Please be specific and address the issue of detecting small size/age-classes in scat analysis.

Several of the GOE members expressed that the UTL team had not specifically answered this question. Some felt that the UTL team had discounted the GOE's question by stating that "*Focusing solely on marine mammal biomass removal of a select year class (e.g. YOY) of the five target species would conflict with the overarching goal of identifying ecosystem processes which create direct and indirect pressures that influence fish recruitment.*" (lines 46-48). GOE members found the UTL PIs response confusing and questioned whether the UTL team was saying they needed additional funds to accomplish the work already included in the June 30 proposal (lines 58-62).

The Chair of the GOE referred back to their Terms of Reference and the GOE meeting summary of July 20th. The TOR asked the GOE to address whether "a marine mammal component is necessary within the context of the currently funded GOA IERP program" (i.e., June 2010 proposals). The GOE's assessment at their last meeting (July 20) had been that it was probably not necessary but there was uncertainty associated with this. As a result, and because the GOE was instructed to interact with the UTL PIs, the GOE had posed Question 1 to the UTL PIs for clarification. The issue now before the GOE was whether the response received from the UTL dispelled any of this uncertainty.

Several GOE members stated that they were not convinced that the work proposed by the UTL team in the March 31st proposal would provide the information needed (i.e., the spatial and temporal distribution of the proportion of biomass removed of the young life stages (YOY) of the five focal species by a marine mammal). Further, the GOE was of the opinion that the UTL team had not provided information in their responses that indicated they would be collecting the appropriate information needed to determine the proportion of YOY biomass removed by a marine mammal species.

GOE members also questioned whether they should consider the “supplement” document that was provided with the responses to the three questions in their evaluation given the constraints of their TOR. After some discussion, the GOE concluded, as noted above, that pages 5-27 of the response document could be considered as further detail of the marine mammal work included in the current (June 30, 2010) proposal (retrospective analysis). Everything beyond page 27 was considered new work and, as per the GOEs Terms of Reference, would not be considered by the GOE

After further discussion, the GOE developed the following summary evaluation of the UTL team’s response to Question 1: **Although information was provided by the UTL PIs, this information did not directly answer the question asked by the GOE. Based on their response it appears that the UTL PIs will not gather the data needed to estimate the proportion of YOY biomass removed by a marine mammal species.**

Question 2: In addition to predation, and as mentioned in your proposal, competition is another potential ecosystem process that might influence recruitment dynamics. Recognizing that the effect of marine mammals on competition with or between the five focal fish species (prior to recruitment) and other forage fish is not clear and may be hard to quantify: does the work outlined in your March 31st proposal (retrospective and scat analysis) intend to quantify the effect of competition on the subsequent recruitment of the five focal fish species, and if so, how?

When considering the UTL team’s response to this question, the GOE expressed concerns about the inclusion of humpback whales as this species was not specifically named in the March 31st proposal. Some GOE members questioned whether this was “new” work and was therefore outside the scope of their TOR. Giving the UTL team the benefit of the doubt, it was decided that the mention of “whale estimates” in Table 1 on page 18 of the March 31st proposal, indicated that humpback whales were part of the original planned work.

Based on the UTL team’s response, it was the opinion of the GOE that the effect of competition would be determined as part of the retrospective analysis. The GOE noted, however, that the PIs did not provide any details on how this would be done. Lines 530-578 of the Aug 2 response seemed to provide more detail on this matter, but it was the overall opinion of the group that only dietary overlap and not competition or a competitive effect of marine mammals on recruitment dynamics would be determined. Several GOE members stated that the information provided did not convince them that the UTL team would be able to quantify competition or a competition effect.

After further discussion, the GOE developed the following summary evaluation of the UTL team’s response to Question 2: **The UTL PIs say that they intend to quantify the effects of competition on YOY recruitment. However, based on the methods and analyses described in their Aug 2 response, the GOE is doubtful that they will be able to do so.**

Question 3: How does the work outlined in your March 31st proposal address the effect of the gauntlet on marine mammal populations?

The GOE considered the UTL team’s answer to this question and determined that lines 104-109 of the response document contained the most important information and adequately addressed the question:

“A thorough literature review on marine mammals in the GOA is planned, in addition to the collection of all available datasets relating to marine mammal abundance, distribution, and diet. With this information we will test the role of marine mammals in the GOA ecosystem cycle by comparing shifts in abundance, distribution, and diet of marine mammals with recruitment trends of the five focal fish species.”)

One GOE member felt that the mention on line 112-113 of the scat analysis left unclear whether they would be able to address the issue of the effect of YOY recruitment (i.e., the gauntlet) specifically.

After further discussion the GOE developed the following summary evaluation of the UTL team’s response to Question 3: **The UTL PIs have answered this question and adequately described in lines 104-109 of their response how their work outlined in their March 31st proposal meant to address the effect of the gauntlet on marine mammal populations.**

GOE’s Responses to Board’s questions in the Terms of Reference:

The GOE, following their evaluation on the responses received, addressed the questions posed to them by the Board in their Terms of Reference.

1. *Is a marine mammal component necessary within the context of the currently funded GOAIERP program?*

As mentioned above, it was the view of the GOE that the currently funded proposal includes marine mammals (offshore observers and retrospective work) and thus they decided to clarify the questions by adding the word ‘*additional*.’ The question now states:

”Is an additional marine mammal component necessary within the context of the currently funded GOAIERP program?”

In the opinion of the GOE, the answer to this question is:

“No, an additional marine mammal component is not necessary at this time.”

However, the GOE recognized that the GOAIERP program in its current form does not address all of the ecosystem questions and components. The GOE felt that the best course of action would be to let the GOAIERP program get started and revisit the marine mammal question in a year or two when the program is more fully established. At that time, possible linkages and gaps related to marine mammals or to other parts of the program could be more clearly recognized and addressed.

The GOE’s Terms of Reference state that if the GOE answers “No” to the question of whether an additional marine mammal component is necessary, then the GOE has completed its task.

On the subject of UTL teams continued requests to have a face-to-face meeting with the GOE, it was decided that GOE Chair Doug Woodby would contact the UTL team directly to learn about their intended goals for a face-to-face meeting. The Chair will bring that information back to the GOE to evaluate the need for a potential meeting. Given the difficulties of bringing all GOE members together at short notice, any potential in-person meeting would likely not be possible until October, concurrent or adjacent to the intended GOAIERP PI meeting.

Next Steps:

1. Draft meeting notes will be distributed to all GOE members later this week for comments with the intent to finalize by Monday Aug 16th.
2. The GOE chair will contact Jamal Moss to inquire about purpose of a possible in-person meeting and bring the answer back to the group for consideration of further action.
3. Staff will write a briefing email for the entire Science Panel informing them of the current GOAIERP marine mammal issues to ensure SP members have enough time to digest this new information before the Aug 23-26 SP meeting.

4. The GOE chair will present the GOE evaluation and recommendations to the full Science Panel at its 23-26 August meeting, at which time the full SP will develop their recommendation for the Board for consideration at the September Board meeting.

Addendum:

On August 11th, Doug Woodby (GOE chair) spoke by telephone with Jamal Moss (lead UTL PI) regarding the purpose of a possible in-person meeting between the GOE and the UTL PIs.

On August 12th, Woodby communicated the outcome of this call to the GOE via email as follows:

“I had a pleasant phone conversation with Jamal Moss yesterday regarding his interest in meeting with the GOE. He did not feel any meeting was needed, but wanted us to know that he was available to answer any questions we might have. So, I asked him about the funding source for the 3 case studies described on pages 5 to 27 of his August 2nd response to us. He said that those case studies would require additional funding beyond what is currently funded (that is, the 300k that was not reinstated for the UTL proposal), and that the Appendix A study would require additional funds beyond the 300k. Hence, the 3 case studies are not part of the currently funded retrospective work, but comprise what they plan to do should the 300k be made available to them for a marine mammal component. “

Woodby stated that it was his impression that even though this response changes some of the assumptions the GOE made in their evaluation of the response, the ultimate conclusion the GOE reached will likely not change. Adding \$300K for more marine mammal work in regards to the GOAIERP will likely not add anything significant in regards to understanding survival of the YOY focal species. The UTL PIs still do not adequately address proportional biomass removal of YOY fish by a marine mammal species, and the only place they address competition is through their humpback whale case study which, as they infer in lines 560-561 of their response, will only result in qualitative statements of overlap not in quantitative estimates that could inform survival of YOY fish.

Whether the entire GOE shares that view or would recommend otherwise given this new information needs to be further discussed during the August Science Panel meeting (four members of the GOE will be present in person and two (Rosa and Will Simmons) will be able to attend via teleconference.

August 30, 2010

Dear Committee of Visitors,

The NPRB Science Panel would like to express appreciation for the diligence of the COV. Many of the issues raised by the COV have been topics of discussions and deliberations by the 17 member Science Panel and focused consideration by the Ecosystem Modeling Committee over the past 3 years as the GOAIERP has evolved. In many instances where the COV identified problems, NPRB's Science Panel and staff recognized the same issues as opportunities to move the boundaries of ecosystem research to a new level of integrated ecosystem research. We would like to address the concerns of the COV in a systematic way that will encourage the Board to continue their support and the time line of the GOAIERP.

Here we respond to the issues raised in five 'categories' in the COV review document dated 3 August 2010:

Category 1: Concept and clarity of purpose

COV review: RFP should have been more specific

Given the diversity of management issues outlined in the NPRB Science Plan, and the limited budget available for the program, the intent in the NPRB GOAIERP call for proposals was to cast a wide net, to give responders room for creativity. While the COV saw this as a lack of specificity, the SP felt this left the call open so that proposers could demonstrate their creativity given the budget limitation and the expertise of the proposers.

Category 2: Proposal generation process

COV review: Process resulted in a non-competitive process in all levels but the UTL, there is lack of integration between the components and the modeling 'objectives' were impossible to achieve.

Lack of competition and sequential process: The COV states that by choosing a sequential process, i.e. selecting the UTL component first and subsequently the other three components, the NPRB limited the intellectual creativity and involvement of the MTL, LTL, and modeling components. The SP understands this concern, but views the sequential process as a means of focusing the intellectual development of the GOAIERP, rather than limiting it. With a limited budget the need for a focus for the other three components was deemed critical to achieve the desired goals of the program. The SP shares the disappointment expressed by the COV in the low number of proposals received for the non-UTL components, but does not feel that this was an outcome of the proposal generation process. Instead, the SP views this degree of response as a result of (1) a team proposal approach, rather than individual PI proposals, and (2) a limited number of experts available to conduct this work within the Gulf of Alaska. Had the SP felt the proposals received contained fatal flaws, the process would have stopped then. Instead, there were viable proposals among those received.

Lack of integration: The process was purposefully designed to have four components which would be integrated through a series of meetings once the proposals were selected. This decision was based on lessons learned from BSIERP, in which only a small number of proposals were received from large teams. Efforts to integrate the component research and researchers started in February 2010 and will continue throughout the program. Reports from the May PI meeting reflect a strong spirit of collaboration and integration among all four program components and support our decision to foster collaboration on an ongoing basis.

Modeling objectives: The objectives referred to by the COV were intended to be evaluation criteria, not 'objectives'. In defining those criteria, the Ecosystem Modeling Committee (EMC) was aware that a

high standard was being set. However, the SP and the EMC believe these are important criteria for any modeling program to strive for. It should be noted that the BSIERP program was and is being held to the same standard. As part of its management plan and approach to integration, just as with BSIERP, the NPRB staff is and will continue to work with the modeling group to satisfy these criteria.

Category 3: Content of proposals

COV review: Inappropriate time scale of the study, vague and untestable hypotheses

Time scale: The Science Panel recognized and discussed the temporal aspects of these proposals during several meetings. As pointed out by the COV multi-decadal drivers cannot be addressed within the data collection effort of this or any other program as they would necessarily have to span several decades. The PIs seem to also be fully aware of this and as a result the overall program has a strong emphasis on retrospective analyses.

Hypotheses: The COV described the three primary hypotheses of the UTL proposal as vague and largely untestable. Below we organize our response by the a-c hypotheses as listed in the COV document:

Hyp A:

Direct measurement of fish cohort survival through all life stages up to recruitment is effectively beyond the reach of any integrated ecosystem program, including GOAIERP. However, the Science Panel is confident that this new multi-disciplinary, integrated approach will gain much new information by looking at the spatial and temporal scales of fish recruitment that have been selected.

Hyp B:

The SP has previously recognized the general issue of connectivity between predator diets and the YOY life stage of interest to this study, and does not disagree with the COV. In fact, this issue is central to the ongoing discussion of marine mammal inclusion in the study. Through active involvement of NPRB staff and the Science Panel, connectivity between top predator diets and YOY life stages of GOAIERP target species has been questioned and the program has been correspondingly modified. This is an ongoing process and work with PIs continues to more clearly define the connectivity.

Hyp C:

The Science Panel recognized that validation for some parts of the modeling aspect will be difficult when the proposals were reviewed. The SP and an EMC expect to work with the PIs to identify and develop approaches to validate as many aspects of the models as feasible. The validation process for BSIERP has also involved a similar iterative process between the modeling PIs, EMC and NPRB staff.

Category 4: Review of proposals and decision making

COV review: (i) concerns by technical reviewers not sufficiently considered, (ii) integration between components a concern, (iii) SP appears to lack clear SOPs in regards to technical reviews, (iv) SP does not have a clear system to rank proposals.

The COV viewed the review and decision making process for the GOAIERP with concern. The COV listed four items in relation to the Science Panel proposal review process which are addressed individually as follows:

(i) The SP disagrees with the COV regarding the consideration of the technical reviews received. The Science Panel gave full consideration to technical reviews provided. However, the proposal evaluation process for an integrated ecosystem approach also requires a balance of the technical aspects of the proposals and overall program integration. External or technical reviewers see proposals in isolation, but then it is the responsibility of the SP to interpret the technical reviews within the context of the overall program. As a result, the overall recommendation of the SP sometimes differs with the opinion of the

technical reviewers. Recognition of both the scientific quality of a proposal and its role within the overall program is key component of the SP review process.

(ii) As noted by the COV, the SP has had its own concerns about integration within the GOAIERP and, together with NPRB staff involvement, continues to actively address integration issues. The first full GOAIERP PI meeting in May 2010 was an important and productive step in this direction.

(iii) The SP has clear operating procedures, although many are not in the form of a SOP document. Review and ranking procedures are described in the RFP and in most meeting minutes where proposals were considered, and are also fully disclosed to the Board. The SP notes that in many cases, the procedural guidance for particular circumstances such as the GOAIERP is contained in the form of Action Memos for specific meetings, rather than a general SOP. The SP agrees with the COV that the procedures could be made more transparent to those outside the SP. Thus, the SP will request that NPRB staff formalize existing SP evaluation procedures into a SOP document that can be provided to interested parties.

(iv) The SP disagrees with this assessment and feels that the internal ranking of proposals used is adequately documented within the meeting summaries.

Category 5: Evaluation and recommendation

COV review: The Board should suspend the current program and start over using the BSIERP model

The SP finds the COVs suggestions to re-compete the program as a fully integrated IERP modeled on the conceptual framework of BSIERP rather surprising, since the current approach has been based on lessons learned from the BSIERP process. That BSIERP is seen as “the model” to emulate speaks well of NPRB’s ability to use the experiences of planning and administering that program to guide the GOAIERP. The SP strongly disagrees with the final recommendation made by the COV to suspend the current GOAIERP process. The SP is not unaware of the issues raised by the COV. However, we are confident that the teams that have been selected will be able to produce a product of value to the NPRB and the greater scientific community. Several of the issues raised by the COV have already been resolved and staff and the SP will monitor the as yet-unsolved issues with concern and diligence.

The Science Panel thanks the COV for providing a snap shot of what NPRB looks like from outside the process and for flagging what they interpret as program deficiencies. We understand the difficulty of trying to evaluate weeks of deliberations by the SP and EMC and months of efforts by the NPRB staff to communicate and coordinate program objectives and requirements. NPRB’s departure from the NSF style of grouping single investigator proposals requires much more communication and directed coordination within ecosystem teams to achieve truly integrated ecosystem research. The early success of BSIERP is strong evidence that NPRB has both the skills and vision to administer and guide the GOAIERP successfully. We assure the COV that the NPRB will strive for periodic course corrections as appropriate within the current constraints as the program moves forward. BSIERP and GOAIERP with their differing approaches are works in progress and will need to be evaluated for their future applications to IERPs.