

Local and Traditional Knowledge Research

THE BOARD HAS WORKED THROUGHOUT ITS FIRST EIGHT YEARS TO DEVELOP A ROBUST PROGRAM OF LOCAL AND TRADITIONAL KNOWLEDGE (LTK) RESEARCH. ONE APPROACH WAS TO HAVE A SEPARATE LTK COMMITTEE. THAT IDEA FIRST CAME UP AT THE BOARD MEETING IN MARCH, 2002.

In drafting the 2003 RFP, the Board discussed the use of committees to help refine research priorities, with an option to use two separate committees, one with LTK and subsistence users, and the other with commercial and recreational users and non-governmental organizations. The executive director developed a discussion paper on committee structure for the Board to review in March 2003. The Board concluded that while there are merits to having a separate LTK committee, it would be better served by placing emphasis on achieving such representation on its single Advisory Panel so that all points of view could be expressed through one panel. It would also reduce costs. This discussion was held against a backdrop of the funding crisis of 2003 discussed elsewhere in Part III of this report. The Board noted that it would address this subject again in considering its science plan.

Information, understanding and wisdom accumulated over time, based on experience and shared within a group or community, offers new perspectives and paradigms for understanding Alaska's marine ecosystems.

Ad Hoc Committee and Initial LTK Activities

The Board returned to the discussion of establishing an LTK committee in context of its implementation plan in September 2004, and decided to establish an ad hoc committee with one-year terms, renewable for up to three years, which would report through the Advisory Panel to the Board. Membership would include one member of the Board and Science Panel, two members of the Advisory Panel, and one elder, one fisherman, and one community representative from each of the three large marine ecosystems—Gulf of Alaska, Bering Sea, and Arctic/Chukchi region. Residency within the marine ecosystem region was encouraged. In early 2005, the Board solicited new members.

That year, the Board also earmarked \$250,000 for LTK activities, including hiring a contractor, holding workshops, and supporting an LTK committee. In March 2005, the Board was briefed on a possible partnership opportunity with the National Science Foundation that would have two purposes: (1) to describe a pathway for developing the LTK program, and (2) to describe a potential opportunity for collaboration with NSF on LTK beginning in 2005 and building toward major programs during the International Polar Years (IPY) in 2007-2008. It would begin



with a pilot program of community observations in three areas – the Bering Sea (Pribilof Islands) in partnership with the Alaska Native Science Commission; the Gulf of Alaska with the Gulf of Alaska Coastal Communities Coalition; and Baffin Island with NSF support. The lessons learned from those pilot programs would be very useful to the Board in establishing a longer-range LTK program and partnership with NSF. The Board authorized the newly formed LTK Committee to work with staff to develop pilot projects up to a total of \$80,000, and to work with the NSF to get this underway as a proof of concept, believing it would help inform the 2006 RFP and further development of LTK. The proposals for pilot projects would not have to come back to the Board for review.

LTK Committee members were appointed in May 2005 for one-year terms, renewable for up to three terms (see Appendix IC). The Committee first convened in June 2005, and discussed the notion of spending \$80,000 on pilot projects, among other items. The LTK Committee and two applicants that earlier had submitted proposals for the pilot projects (Alaska Native Science Commission and Gulf of Alaska Coastal Communities Coalition) thought this would be premature and that the \$80,000 would be insufficient for any substantial projects. Therefore, no pilot projects were funded over the summer. Secondly, they developed recommendations for the 2006 RFP for the Board to consider in September 2005. They recommended that LTK projects be funded through a research priority set at \$100,000-\$250,000 in the 2006 RFP, and also that NPRB sponsor activities that would help generate specific questions and hypotheses for future RFPs. They urged NPRB to cooperate with other agencies to explore the potential for a system for recording observations as part of the International Polar Year. The Committee also made recommendations on evaluating LTK-related proposals and expressed concern about impacts to local communities from research projects, for example, disturbance of migratory birds and mammals.



Science Panel Recommendations for LTK and Community Involvement

In developing the 2006 RFP at their August 2005 meeting, the Science Panel recommended incorporating pilot projects for a community-based observation system and a request for LTK-related studies in the 2006 RFP at a total target funding level of \$300,000. The Advisory Panel concurred with the Science Panel recommendations, and also recommended that a permanent LTK seat be appointed to the Science Panel and that there be a provision for an ad hoc review group of three to four Native scientists to review LTK and community involvement proposals and make recommendations to the Science Panel and the Board in time for the 2006 RFP review cycle. The Advisory Panel also supported focal workshops to develop three-to-four research topics to guide the 2007 RFP at a funding level not to exceed \$80,000.

In September 2005, the Board approved the Science Panel recommendation and placed a two-part research priority in the 2006 RFP. One was for pilot projects for community-based observation systems at \$150,000 and the other was for LTK studies that addressed other priorities in the RFP and engage LTK in projects responsive to the LTK components of the *Science Plan*. Six proposals were submitted for these research priorities to the RFP and the Board approved funding for three projects for \$450,000 as shown in Table 4.

Table 4: LTK Projects

Project	Title	Research Theme
643	Bering Strait Region LTK Pilot Project	Humans
644	Response and Intervention System for Climate Change Induced Paralytic Shellfish Poisoning in Aleut Communities	Other Prominent Issues
645	Alaska Rockfish: Subsistence Harvests and Local Knowledge of Alaska Rockfish (genus <i>Sebastes</i>)	Humans

LTK as Part of Integrated Ecosystem Projects

Also in March 2006, after reviewing proposals, the Board discussed how LTK should fit into the overall BSIERP. The Board concluded that in considering the 2007 RFP in September, it would discuss whether to place LTK inside or outside of the RFP for integrated ecosystem research programs and, if the latter, whether to use a target amount in dollars or put in a percentage (e.g. 10%) of the overall program funds. The Board noted that if it really wanted a strong commitment to LTK in the proposal development phase, then it should be directly incorporated as a component of the IERP.

Associated with the LTK topic, the Board also heard from its community involvement committee in March 2006. This committee was a sub-committee of the Advisory Panel. It met on February 24, 2006 to provide advice on developing the Board's outreach into rural communities. Its three main recommendations included:

- (1) identify community and research priorities in the annual RFP
- (2) hold community workshops to facilitate communication between scientists and community members about local research and understanding of the ecosystem
- (3) help build capacity so that rural residents and Tribal organizations can develop individual and collective abilities to participate in scientific research on par with other research institutions.

The Board received the recommendations and had no reservations about arranging for community workshops, but urged that they be coordinated with other educational programs in the rural communities. The Board heard another report in September 2006, but took no immediate action.

The LTK Committee convened next in December 2006 to focus on research issues and priorities for future RFPs. The committee discussed the developing integrated ecosystem research programs for the Bering Sea and Gulf of Alaska, and how to enhance education and outreach in local communities. The December 2006 meeting was the final meeting of the LTK committee.



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Combined LTK and Advisory Panel

In 2007, the Board proceeded with a thorough review of the operations and necessity of having both an Advisory Panel and LTK committee. It held in abeyance further committee work on LTK-related activities until its Bering Sea ecosystem program was more fully fleshed out and the LTK components identified. In September 2007, the Board decided to merge the Advisory and LTK panels together into one large 13-member committee to facilitate communications and reduce costs. In December 2007, five members volunteered to be on an ad hoc committee to develop a call for nominations for a reconstituted Advisory Panel. The call for nominations was circulated beginning in February 2008, with applications due by March 3, 2008. The Board approved 12 members to the reconstituted Advisory Panel by teleconference on March 31, 2008. The new committee met for the first time on April 28-29, 2008. Through 2008, the Board continued to seek a 13th member that would represent the North Slope region.

The Board also proceeded to embed LTK as a component funded at \$1,000,000 in BSIERP and develop a program that would document existing knowledge, foster collaborative analysis, generate research hypotheses, collaborate with other projects in the overall program, and record observations. The program would examine all animal species harvested by residents of the partner communities, focusing on species that are significant subsistence resources (nutritionally, culturally, or otherwise) and that also serve as focal species for other program components. For example, the cultural and subsistence practices regarding walrus in Savoogna, fur seals in St. Paul, and seabirds in all communities, as well as other species or environmental parameters would be examined. Local community advisory boards would be established to work closely with a regional board to help guide LTK research.

The Board continued to include LTK priorities in its 2007-2008 RFPs at the \$100,000 level for each priority. Four proposals were submitted in 2007 and one project (728) on herring synthesis was funded for \$100,000. In 2008, the Board funded one of the four proposals received for \$99,535, for a study of the cultural models of Copper River salmon (Project 823).

Community involvement projects that were funded in 2007 include the COASST Project (732) and the Pribilof Island Ocean Monitoring Project (733), for a total of \$159,692. In 2008, the Board received one community involvement proposal but it was not funded.