3-Year Start-up Review of the Southeast Alaska I&M Network
March 27-28, 2012, Juneau, Alaska
Report and Recommendations from the Review Panel

1. Introduction

In 2000, the National Park Service organized 270 parks with significant natural resources into a system of 32 ecoregional networks that share core funding and a professional staff to provide an efficient means of carrying out expanded inventory and monitoring (I&M) activities. The national program office and the 32 I&M networks leverage the program's limited resources through partnerships with others as part of a strategy to maximize the use and relevance of the data for key target audiences. This integration and collaboration with other NPS programs and agencies, and the interdisciplinary approach to compiling, analyzing, and reporting natural resource information, are key aspects of the I&M strategy.

The 32 I&M networks have been the flagship of the Natural Resource Challenge, and OMB and the Department of the Interior initially focused on the I&M program as a means of measuring the performance and success of NPS natural resource stewardship activities. Strong accountability has been an important aspect of the success and popularity of the program in the NPS. The program is accountable to the parks through the Boards of Directors and networks' Steering Committee, and is accountable to OMB, Congress, and the taxpayers through oversight by the Boards of Directors, Regional I&M Program Managers, National I&M Program Manager, and the Associate Director for Natural Resource Stewardship and Science. Each network was provided with funding over 4-5 years to develop a monitoring plan that describes the highest priority needs for long-term monitoring in the form of a "short list" of vital signs, with detailed information on measurable objectives, sampling design, data management and reporting procedures, products to be delivered, staffing plan, schedule, and other information needed for parks to share funding and staff to meet their highest-priority needs and to meet the goals and standards of the I&M Program.

The primary responsibilities of the small staff of each of the 32 I&M networks are to (1) facilitate the 12 basic natural resource inventories; (2) collect, manage, analyze and report long-term data for a modest set of vital signs (measurements of resource condition); and (3) effectively deliver data and information on resource condition to park managers, planners, interpreters, and other key audiences. Parks in each I&M network share core funding and a professional staff that is augmented by funding and staffing from park base accounts and other sources to plan, design, and implement an integrated long-term monitoring program. A February 2008 memo to the NPS Regional Directors summarized the core duties and expectations for I&M network staff, the roles and responsibilities of the network Boards of Directors and Regional and National coordinators, and updated program requirements:
http://www1.nrintra.nps.gov/im/monitor/docs/Operations_of_I&M_Networks.pdf

2. Objectives of the Review

Periodic program reviews are an essential component of quality assurance for any long-term monitoring program. This 3-year "start-up review" of the Southeast Alaska I&M Network (SEAN) focused on the operational and administrative aspects of the network's monitoring program and asked the basic question "Is the network set up to succeed?" The review was an opportunity for network and park staff to step back and evaluate their initial progress against the objectives and schedule set forth in the network's monitoring plan, to develop a "road map" for completing and implementing the first set of protocols, and to make adjustments if needed. Three years is long enough for the network to appreciate the realities of implementing the program and to determine

what level of monitoring is sustainable with current funding, but short enough to make adjustments and improvements before too much has been invested. The review was intended to help the network get off to a good start in developing a practical, sustainable monitoring program that provides parks with timely, relevant information.

Key questions that were addressed by the review included the following:

- Is the network on track to measure trends in the condition of selected park resources and to provide useful information to park managers, planners, and interpreters?
- Are the roles and responsibilities of key groups and individuals such as the Board of Directors, Technical Committee, Network Program Manager, and Principal Investigators for each protocol adequately defined, and are good communication mechanisms in place?
- Which protocols have been implemented, and do protocols still in development have a reasonable timetable for completion?
- Is the network following good procedures for managing and analyzing monitoring results? Are the databases and data management systems working as designed?
- Is the network generating preliminary reports, and are adequate procedures in place for effectively delivering monitoring results to park managers and planners? Are managers using the information?
- Are there some current or anticipated problems that the network needs to address?
- What should happen to make the program better over the next 5-10 years?

The following three panel members participated in this review:

Steve Fancy	I&M Program Leader, WASO Natural Resource Stewardship and Science
Matt Patterson	South Florida/Caribbean I&M Network Program Manager
Sara Wesser	Regional I&M Program Manager, Alaska Region

An online survey was sent out prior to the review to obtain feedback from superintendents, park natural resource chiefs and other park staff, network staff, and key cooperators on whether the SEAN was off to a good start. Comments on the network's progress were received from 18 park and network managers and staff. The results of the survey, as well as background materials and all of the presentations and handouts given during the review, are posted on the following website: http://www1.nrintra.nps.gov/im/monitor/networks/SEAN/SEAN_review.cfm

3. Review Panel Comments and Recommendations

Based on a review of products, procedures, and monitoring protocols developed by the network, and the comments by park managers and key park staff through the anonymous survey and during the review meeting, the Southeast Alaska I&M Network is off to an excellent start. The network and park managers and staff have worked together to design and implement a program that is valued by all of the parks and meets the goals and standards of the I&M Program. There has been strong collaboration and cost-sharing between the individual network parks and the core I&M network, that has beneficial to all. The accomplishments and productivity of the small network staff to date has been impressive. The SEAN network has done a particularly outstanding job of developing the data management systems and procedures, including routines for promoting data quality and integrity, and automating many of the routines for summarizing data and routinely producing reports and graphics. Park managers spoke highly about the scientific and technical support that network staff provide to their park, and the dedication and professionalism of the core network staff. The National I&M Program Leader presented Brendan Moynahan and Bill Johnson with special recognition awards for their excellent work to date in designing and implementing the SEAN

monitoring program. Overall, the network is meeting the "Job 1" requirements and standards of the I&M Program at this stage of the network's development, and the network is set up to succeed.

A. Network Strengths:

- The network has hired a group of dedicated, hard-working professionals who enjoy working together and who are held in high esteem by park managers and staff. They are well organized and have clearly put a lot of effort into thinking about the goals and objectives for monitoring and building a solid, scientifically credible, long-term program.
- The strong support expressed by park superintendents and park resource chiefs at the review meeting and in the anonymous survey is an encouraging element for success. Park managers and key park staff have been actively engaged since the beginning in a series of planning and scoping meetings, and various workgroups focused on prioritizing inventory and vital signs needs and developing long-term monitoring protocols to provide relevant, credible, and timely scientific data to the parks. More recently, the park superintendents and natural resource chiefs have been actively engaged through the network's Board of Directors and Technical Committee.
- The results of the anonymous survey taken prior to the review meeting were very positive, and the park superintendents, resource chiefs, and other park staff spoke highly about the dedication and productivity of the network staff, and the value of the resulting inventory and monitoring data and information for their parks.
- There has been a high level of collaboration and cost-sharing between the individual parks and the network. The oceanography protocol and the shared biotech position at KLGO are two examples of this excellent collaboration that has made it possible to accomplish much more than if the program boundaries and funding sources were kept separate. The 12 vital signs on the network's "core" list is a lot considering the size of the SEAN staff and budget, but because of the strong collaboration between the parks and network, there is a high likelihood of success in developing a sustainable monitoring program for the 12 core vital signs.
- Brendan Moynahan was recognized by managers and other staff from all of the parks for his excellent leadership and collaboration with the parks over the years. Brendan has gone above and beyond the call of duty, makes good decisions, hires good people, and has been effective in leveraging network funds and expertise.
- Because of the dedication and high productivity of the core network staff and staying focused on the key objectives, the network has been able to accomplish more than was expected. There has been an emphasis on quality and the collection and delivery of reliable data and information.
- The Kitzlett's Murrelet protocol was an excellent example in which the network developed a very solid statistical design that had better precision, and yet was much less expensive and time consuming, and had less safety risk to employees, as compared to previously-used methodologies. The network deserves a lot of credit for the attention it has given to safety concerns and efforts made to reduce the exposure to risk of NPS employees and partners.
- The network has established a number of productive partnerships with the USDA Forest Service, NOAA, USGS, the University of Alaska, and others.
- The initial phase of the 12 basic natural resource inventories is more than 90% complete, and the reports, data sets, GIS layers, species lists, and other products of the inventories are already being used by the parks.
- The data management systems and procedures are top notch. This is one of the strongest components of the network's efforts: well thought out, understandable, practical with an eye to the future. The strong foundation and the standards and procedures that have been put in place will pay big dividends over time.

- Excellent progress has been made in the development of the network's internet and intranet websites, which are being used to share a large number of data sets, protocols, reports, work plans, resource briefs, and other products of the inventory and monitoring efforts. The reports, data sets, maps, and other products that have been discovered, organized, compiled, or produced by the network are available through the IRMA data system (http://irma.nps.gov, Integrated Resource Management Applications) to make them more readily available to park managers and staff. It may take a few years before park managers, planners, and others learn about the utility of these sites as a source of I&M and other natural resource data and information, but the efforts will pay off over time. The information and products available through these websites will especially be important for upcoming planning to address climate change impacts, and for the future development of a Natural Resource Condition Assessment, Resource Stewardship Strategy, and State of the Park report for each park.
- Overall, the "Job 1" core duties of facilitating the 12 basic inventories and routinely collecting, managing, analyzing, and reporting data for a modest set of vital signs are being accomplished, and the network is doing a fantastic job at this stage of its development.

B. Discussion Items and Recommendations for the Network to Consider:

- Park managers and staff are encouraged to try out the IRMA data system at http://irma.nps.gov (or just type in http://irma from a park service computer) to see the list of documents and datasets and species lists that are already available for their park. One of the purposes of the data system is to save park managers time and effort by making it easier for them to find documents and maps and other products for their park, and for them to find reports and other products developed by other parks or partners on issues and topics that are relevant. It is hoped that once park managers see what is already there for their park, that they will find it to be a useful tool that saves them time, and the park managers will support the uploading of additional park documents that aren't already in the system. Also, the Alaska Region NPS is currently working with the Alaska Resources Library and Information Service (ARLIS) to edit and update content in IRMA.
- Interpreters from all three parks participated in the review meeting, and there were excellent discussions about the importance of "science communication" and the need to translate and communicate many of the scientific findings from the I&M Program and other scientific studies at the parks to visitors, the general public, and to our own park managers and staff. Several action items came out of those discussions, including agreement to hold a workshop in Fall 2012 between scientists involved in the I&M efforts and interpreters and other key staff and partners from parks.
- There was discussion about developing a strong collaboration with the Alaska Ocean Science Learning Center and the potential for dissemination of a number of the products from the I&M Program and the science communication efforts with the park interpreters through the learning center.
- The network should consider developing "Science Minute Videos" or other short interpretive videos to communicate to visitors and the public about how the inventory and monitoring results are used to inform park management planning. Some networks have found opportunities using university or other courses where students help put together such videos as part of their course assignments (e.g., Lisa Thomas, program manager of SCPN has used this approach and could probably shed some light on this opportunity). For example, see the videos developed by I&M networks involved with the Learning Center of the American Southwest and the Greater Yellowstone ecosystem at the following two links:

  http://www.southwestlearning.org/video/humans_nature

http://greateryellowstonescience.org/node/3577

- Managers from KLGO expressed interest in developing a State of the Park report for the park, with a scoping workshop "penciled in" for October or November of 2012. State of the Park reports are one of the items in the NPS Call to Action Plan, with the primary purpose of the reports being to "assess the overall status of park resources and use this information to improve park priority setting and communicate complex park condition information to the public in a clear and simple way." The indicators and measures of resource condition in the State of the Park reports tie directly back to the NPS mission and our core policy to maintain and improve resource condition. Managers and staff from all three parks are encouraged to review examples of the reports being developed "in-house" by NPS staff under this new approach:
  BIHO: http://www1.nrintra.nps.gov/im/stateoftheparks/biho/assets/docs/BIHO_State_ofthe_Park.pdf
  CABR: http://www1.nrintra.nps.gov/im/stateoftheparks/cabr/Cabrillo_StateOfThePark.pdf
  ORPI: http://www1.nrintra.nps.gov/im/stateoftheparks/orpi/OrganPipe_StateOfThePark.pdf
  Website version for BIHO: http://www1.nrintra.nps.gov/im/stateoftheparks/biho/

- The need for natural resource monitoring on the outer coast of GLBA and the "lost coast" of Wrangell-St. Elias NP was raised during the discussion and in several comments in the online survey taken prior to the meeting. Parks were encouraged to "try again" with the previous effort to obtain long-term funding for monitoring by SEAN and GLBA staff along the "lost coast" through an OFS request.