

Comprehensive Science Program Proposed for Alaska Region



National Parklands in Alaska

1. ANIAKCHAK
2. BERING LAND BRIDGE
3. CAPE KRUSENSTERN
4. DENALI
5. GATES OF THE ARCTIC
6. GLACIER BAY
7. KATMAI
8. KENAI FJORDS
9. KLONDIKE
10. KOBUK VALLEY
11. LAKE CLARK
12. NOATAK
13. SITKA
14. WRANGELL-ST. ELIAS
15. YUKON-CHARLEY RIVERS

Figure 1. Location of National Park Service Areas in Alaska. The areas are divided into parks, monuments, preserves, and wild/scenic rivers, totaling 23 units.

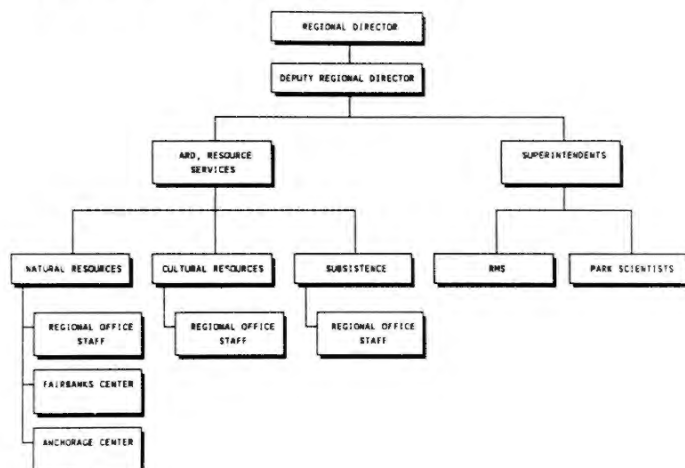


Figure 2. Organizational chart showing supervisory responsibilities. Science funding is managed through the Natural and Cultural Resource, and Subsistence Division Chiefs. Park scientists may be supervised either by Superintendents, Center Chiefs, or the Natural Resource Division Chief on a case-by-case basis.

By Dale Taylor, Allan Lovaas, and Ross Kavanagh

By passage of the Alaska National Interest Lands Conservation Act in 1980, Congress increased the number of National Park units in Alaska to 23, covering 53 million acres. These lands and resources are subjected to uses unprecedented in NPS history. The northern latitude of the parks makes them especially vulnerable to resource damage and their magnitude has allowed only cursory inventories. Preliminary Resource Management Plans and the Servicewide Natural Resources Assessment and Action Program listed needs for numerous research and resource management projects and managers are still identifying questions.

To meet the mandates for managing this huge area (Fig. 1), the Alaska Regional Director requested a plan that would, when funding is secured, ensure that administrative machinery is in place to operate a greatly expanded program for natural resources, cultural resources and subsistence research and management. Regional Director Boyd Evison stated:

"What will be proposed is going to be a 'roadmap' and rationale for the most fundamentally important undertaking to be engaged in by the Alaska Region of the NPS. It will put knowledge of park resources, and of their users, at the heart of all that we do in this region, to an extent far beyond anything ever contemplated by the Service at this level. It can be expected to devote a far larger percentage of positions and funds to those efforts, at the park and multi-park level, than are devoted to them anywhere else in the Service. The effects will be profound and far-reaching, on our ability to manage intelligently, on our perception of ourselves and our priorities as an organization, and on the way that others perceive us."

A team made up of NPS scientists, subsistence administrators and Superintendents recommended a preliminary plan (Fig. 2). The Cultural Resources Division of the Alaska Region supplied appropriate information and recommendations. The plan was then modified and enhanced according to comments from park Superintendents, the Regional Office, and a team of experts

from sister federal agencies, state agencies, universities, and the National Park Service.

An organization offering a balance between parks, research centers, and regional professional support was devised as the optimum structure for research and management in the Alaska Region (Fig. 3). To establish a "critical mass" of scientific expertise, and to reduce the total number of positions and housing costs, new Research Centers would be established at Anchorage and Fairbanks. A Cultural Resources Center is now in place in the Regional Office. Four distinct classifications of professional positions would be established:

1. **Natural and Cultural Resource Management Specialists** are professionals in the 100 or 400-series with probably full performance levels of GS-11 or 12. They should have achieved educational levels of Master's degrees or equivalent (e.g., NPS RM Trainee program) in the natural or cultural sciences, depending upon the position. These positions would be funded and supervised through the Park Superintendents (Fig. 3).

2. **Natural Research Scientists (Research Grade)**, with full performance level of GS-12/13/14, would be selected from the 400-series. They should have achieved educational levels of Ph.D., or equivalent.



Figure 3. The science team assembled to make recommendations for a comprehensive science program in the Alaska Region. Left to right: Al Lovaas (Chief Scientist, Alaska Region), Don Field (CPSU, Oregon State University), Dennis Fern (CPSU, Texas A & M University), Dave Graber (SEKI), Dave Parsons (SEKI), Dick Martin (Superintendent WRST), Lou Waller (Subsistence Chief, Alaska Region), Gary Davis CHIS, David Mills (Alaska Department of Fish and Game; now NPS Northwest Areas), Boyd Evison (Regional Director, Alaska Region).

These positions would be supervised through a Research Center Administrator, Natural Resources Division Chief (who in Alaska is also the Regional Chief Scientist), or Superintendent, depending upon the assignment (Fig. 3). The organization would be reviewed on an annual basis, and the Regional Director could change the supervisory level at his discretion. The positions would be funded through the Chief, Division of Natural Resources. Subsistence and Cultural Resource positions, not presently under research grade or research grants grade evaluation, are described in classification four below.

3. Natural Resource Administrators (Research Grants Grade) are Regional Office and Research Center Chiefs with Ph.D.s or equivalents and strong backgrounds in natural sciences research or administration. Full performance levels are usually GS-12/13 and 13/14 for administrators, depending upon the results of research grants grade evaluation. The positions would be supervised and funded through the Chief, Division of Natural Resources (Fig. 3).

4. Professional/Administrator are professional staff, administrators or subject matter specialists in the Regional Office Natural Resource or Subsistence Divisions, or Cultural Resources Center (Fig. 3). Individuals may be selected from the 025, 100, 400, or other series, depending upon the position descriptions. Full performance level would usually be GS-12 with some administrator positions grading GS-13.

In addition, support staff would include biological and cultural technicians, administrative clerks, clerk typists, budget and voucher examiners, and specialists in personnel management, contracting, and procurement. The positions grade from GS-4 through GS-11 and would be assigned at various levels within the Regional organization.

The present complement of scientists, resource managers, and cultural and subsistence specialists in the Alaska Region totals 24 permanent positions. Currently, two research wildlife biologists serve the 53 million acres, one resources management specialist for each 3.1 million acres, and one research ecologist, one management biologist (fisheries), and two full time subsistence specialists for the entire region. The Cultural Resources Center staff is nearly complete, with 13 positions filled, but funding for research projects and other cultural resource activities is inadequate.

If the proposed Alaska Region science program reaches full implementation, 134 new positions would be added, 41 new scientists, 33 new resource management specialists, and 60 new support positions. These numbers were reached by examining the resource needs in each of the 23 Units as expressed by Superintendents and Resource Management Specialists, mandates in the Alaska National Interest Lands Conservation Act, projects in resource management plans, and were refined through review by professionals in the advisory process.

Full implementation would result in 50 resource management positions in parks, 10 scientists in parks, 20 natural scientists in Research Centers, and 35 scientists/administrators (natural, subsistence, and cultural) in the Regional Office.

At present, most natural science research is accomplished by cooperative projects with the outstanding scientists available in the Alaska Department of Fish and Game, University of Alaska, U.S. Fish and Wildlife Service, U.S. Forest Service, and National Marine Fisheries Service. Even with a major expansion, the NPS never will be able to conduct all necessary research in-house, and will continue to rely heavily on these cooperative ventures.

The organization could not be put into effect in a single step. Housing and office space must be built and staff hired incrementally. Accordingly, the program would ideally be phased in at \$5.2 million the first year, \$2.5 million additional the second year, \$300,000 additional the third year, and \$700,000 the fourth year. The total operating base would thus be increased by \$8.7 million from the fifth year on.

Each position and each house and office was prioritized by year of implementation. The initial thrust would be to place resource managers and scientists in parks. Science Center Directors would be hired during year two to recruit staff during years three and four.

The program calls for expenditures of \$4.1 million annually for Resource Management Specialists and Scientists in parks; \$2.8 million for Research Centers to do research in parks; and \$460,000, \$180,000, and \$660,000 for additional Regional Office Natural Science, Subsistence, and Cultural Resources support, respectively. Even this increase in the Alaska Region's

present budget would place Alaska only in the mid-range of servicewide regional research and resources management capabilities.

The information base developed through the proposal would have value far beyond park boundaries. In addition, with new employees, jobs would be created in the private sector in communities ranging in size from Anchorage to Port Alsworth.

A frequent comment by reviewers was that the proposal, if anything, is too modest for the job that needs to be done. Although ambitious, far reaching, even evolutionary, we realize the plan still will not produce programs in parity with those of the major natural resource rich lower-48 state Regions. But, we maintain, once gains are consolidated into the next century, new visions will be forthcoming.

Taylor is a Wildlife Research Biologist, Lovaas the Regional Chief Scientist, and Kavanagh the Fishery Management Biologist in the Alaska Regional Office.