

30 APR 1979

## Memorandum

To: Chief, Special Programs Division, DSC

From: Chief, Branch of Science

Subject: Report, Regional Chief Scientists Meeting, April 19-20

## Attendees:

<u>Name</u>	<u>Office</u>	<u>Title</u>
Dave Butts	WASO/BIFC*	Fire Management Officer
Dick Tousley	WASO	Chief, Ranger Activities
Al Greene	WASO	Asst. Director, Park Science
Don Field	PNRO	Regional Chief Scientist
Ro Wauer	WASO	Chief, Division of Natural Resources
Bill Anderson	NARO	Plant Scientist
Don Jackson	NARO	Resource & Visitor Protection Specialist
Gary Gregory	SWRO	Natural Resource Specialist
Jim Reid	RMRO	Regional Chief Scientist
Denny Fenn	WRO	Regional Chief Scientist
F.H. Jacot	WRO	Chief, Natural Resource Management
Dick Weisbrod	WASO	Endangered Species Coordinator
Gary Ahlstrand	SWRO	CPSU Leader, Texas Tech. University
Steven Q. Smith	SEKO	Natural Resource Management Specialist
Mike Maule	MARO	Resource Management Specialist
Scott E. Erickson	WASO/BIFC*	Training Specialist
John F. Karish	MARO	Acting Regional Scientist
Milford Fletcher	SWRO	Regional Chief Scientist
Maurice Nyquist	DSC	Program Manager-Remote Sensing
Harvey Fleet	DSC	Chief, Branch of Science
Ray Herman	WASO	Chief, Division of Air & Water Resources
Paul Larson	PNR	Chief, Resources Management & Visitor Protection

Illness prevented Ted Sudia from attending.

\*BIFC - Boise Interagency Fire Center

Major items of discussion were the status of Science and Technology; functions and capabilities of the Boise Interagency Fire Center; the relation of scientific research to operations and resources management; planning, managing and fighting fires; functions and responsibilities of the Air and Water Resources Division, WASO; requirements of the Endangered Species Act of 1973 and amendments; resources management planning and training; the Second Conference on Scientific Research in the National Parks, and the intergration of backcountry-use data with other public-use data.

### Status of Science and Technology

Al Green reported that Science and Technology got very little money and no positions, except for Air Quality, for FY '80. They still have not received an approved operating plan (10-561) for this fiscal year. The position for Chief, Social Science Division, has been eliminated. Greene, Smith, Sudia, and Lim continue to occupy their unconfirmed positions in acting capacities only. Stewart, Clark, Gilbert and Herman have been appointed. Barbara Brown, program manager for Air Quality under Ray Herman, has her own office in Main Interior away from the rest of the science directorship on L Street. She has nine permanent-less-than-full-time positions for air quality work and three less-than-full-time positions for water quality. In addition, an energy coordinator (GS-14) plus a GS-9 assistant will be established under Herman. Emphasizing the parks, the Director cut \$80,000 from the publications program and took another \$100,000 from an additional Science Technology program for expenditure in the field.

Programs in pesticide information, cave radiation, bear monitoring, back-country-use information, fire mangement, and endangered species will continue.

### Scientific Research and Resources Management

The persistent problem of translating research findings into management strategies--and then executing these strategies--surfaced frequently. The all-too-prevalent situation is that researchers produce knowledge that may make its way into a resources management plan only to have no one available or appropriately trained to implement it. Typically, following through on the action proposals of a resources management plan, from taking periodic instrument readings to carrying out specific control practices, fall to park rangers, interpreters, or maintenance personnel with little time, familiarity, or enthusiasm for the work. Consequently, if the researchers wish to see their recommendations

properly and effectively instituted, they must do the work themselves-- at the expense of their research. Staffing the parks with rangers skilled in natural resources fields and provided with sufficient and recurring training (as suggested in a memo by Boyd Evison) may help alleviate the problem. A comprehensive Servicewide program for training in resources management providing for program-specific (as in fire management or control of exotics) and park-specific activities would be of great benefit. Perhaps shunting some of the positions cut from central office staffs into resources management would be effective. Evidently, resources management and scientific research have too low a Servicewide priority to warrant adequate funding at this time.

#### Air And Water Resources Division, WASO

Ray Herman, Chief of the Air and Water Resources Division, WASO, is responsible for compliance with the requirements of the Clean Air, Federal Water Pollution Control, and Flood Plain Management Acts, as amended. Some of the significant requirements have to do with water quality planning, establishing water quality standards, identification of federal reserve water rights, determining and restricting development of floodplains, setting up a water resource studies program, and monitoring air quality in the parks. The Division will act as a Servicewide Technical Consultant on these issues.

#### Endangered Species Act

Dick Weisbrod, Endangered Species Coordinator, WASO, reported on the requirements of the Endangered Species Act of 1973, as amended. Noting that the initiating indicating agency must submit to FWS a "biological assessment" utilizing "all available scientific data" (which must be acquired, if not in the hands of the agency), Weisbrod offered the opinion that the act's impact on the NPS could be equal to or greater than that of NEPA. He also pointed out that the act's purpose is to protect ecosystems containing endangered species, rather than only the species themselves. The establishment of a 90-day limit on formal consultation, which requires a formal written response (from FWS), the prohibition on limiting alternatives once the formal consultation period has started, exemptions from the act for Alaskan Natives and other ethnic groups, and the right of citizens to bring suit against anyone are other significant elements of the act. Questions requiring further study: Is consultation with the States required? Should the NPS be only a consultant or full member of recovery teams? Can superintendents issue permits for "taking" endangered species?

### Boise Interagency Fire Center

The Park Service maintains a five-person staff at the Interagency Fire Center, run by the BLM, Forest Service, National Weather Service, and Bureau of Indian Affairs. The center's capabilities are focused around the detection and control of wildfires. It is extremely well-equipped and includes all facilities and supplies for smoke jumping, aircraft, communications, weather monitoring and prediction, and training. The personnel and equipment of the center are routinely used to fight fires throughout the midwestern and western United States. Development of lightning detection devices and remote weather stations is also an active part of the center's activities.

In addition to wildfire prevention, monitoring, and control, the NPS staff is concerned with developing fire and fuel models and training people in fighting, planning, and managing fires. They are equipped and experienced to give Servicewide support and training in all of these activities. Scott Erickson, fire management specialist at the center, is working on applying the National Fire Danger Rating System, derived from twenty basic fuel models, to NPS units. The AFFIRMS computer program is used to run the fuel models. Erickson is also producing a handbook on building and applying fuel models in conjunction with this work.

### Fire Management

"Fire management" includes all fire-related activities, from lightning detection to building fuel models, from fire reporting to prescribed burning, and from preparing fire management plans to measuring the actual severity and intensity of ongoing fires. The key to effective use and control of fire in the National Park System is sound fire management planning. Such planning requires, for each park, an accurate fire history, systematic and complete monitoring of weather, fire behavior and fire effects, a soil survey, vegetation and land use maps, and information on endangered and exotic species. Vegetation maps would appear to be prerequisites for constructing fuel models. The Service is woefully deficient in providing training and adequate staff for fire management. (An interesting note: smoke from prescribed burns may be in conflict with air quality regulations.)

### Science Conference

Arrangements and publication of the Second Conference on Research in the National Parks, scheduled for the week after Thanksgiving in San Francisco, are being contracted through the American Institute of Biological Sciences.

The General Superintendent's Conference in Denver, to be held during the first week of October, may reduce the number of managers attending the Science Conference, a major thrust of which is aimed at helping managers do their jobs better. No alternatives would appear to be available. Science and Technology will take up the issue of authority to grant attendance with the Director. A tentative agenda will be issued shortly. Program coordinators have already been selected: Jay Gouge, Conference Chairman; Paul Godfrey, Botany Resources Management; Mary Meagher, Zoology Resources Management; Ray Herman, Physical Sciences; Leo Marnell, Aquatic Biology; Doug Douglas, Information Sciences; Don Field, Sociology; Dick Bowser, Technology; Doug Scovill, Anthropology; Dick Hammerschlag, Environmental Concerns/Urban Areas. Maury Nyquist will lead a subsection in Remote Sensing.

#### Backcountry-use Data

The processing and reporting of backcountry-use data were discussed briefly with the result that the Science Branch was asked to look into the possibility of integrating the collection, analysis, and reporting of backcountry-use data with our ongoing Public-use Monitoring Program.

#### Other Issues

--Tommy Gilbert, Chief, Natural History Division, has written a memo recommending the establishment of a Natural History Curator for coordinating all NPS activities associated with natural history collections, specimen control, archives, and herbaria.

--Servicewide consistency in approaches to resources management, fire management, training, legislative compliance, and other broad areas of endeavor is not necessarily desirable. The test would appear to be: "if it works, leave it alone." Some way of consistently measuring each Region's performance in these various fields may, however, be very desirable, since this would provide a reasonably objective indication of when a given program or policy was not working satisfactorily.

--To date, NPS scientific publications have not been subjected to quality control. Technical review by a qualified committee may be instituted. Details have not been proposed.

--There is widespread support for the Natural Resources Newsletter. Science and technology will make another pitch for authorization.

--Holding of a Regional Chief Scientists Meeting in Denver remains a possibility. The San Francisco Science Conference and Science and Technology's desire to hold the next meeting in Washington makes such an event unlikely until the spring or summer of 1980.

--The Butts' entertained the crowd royally on Thursday evening. Many thanks for a great time!

/s/ Harvey Fleet

Approved for Distribution:

(Sgd) Howard J. Haines, Jr.

APR 30 1979

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Chief, Special Programs Division

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Date

cc:

WASO-130-Mr. Wright

bcc:

DSC-M-Mr. Galvin

DSC-TNE-Mr. Glover

DSC-TMW-Mr. Reynolds

DSC-TWE-Mr. Carlstrom

DSC-TSE-Mr. Beyer

DSC-NCP-Mr. Biderman

DSC-SPE-Mr. May

DSC-SPS-Dr. Nyquist

DSC-SPS-Dr. Hornback

DSC-SPS-Mr. Waggoner

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