



# United States Department of the Interior

NATIONAL PARK SERVICE  
NATURAL RESOURCES MANAGEMENT DIVISION  
Branch of Fire Management  
Boise Interagency Fire Center  
3905 Vista Avenue  
Boise, Idaho 83705

IN REPLY REFER TO:

Y14 (9560)

March 4, 1982

## Memorandum

To: Chief, Natural Resources Management Division

From: Chief, Fire Management Branch

Subject: Review of 1981 Fire Season

The final report of the 1981 fire season review is enclosed for your information. Most of the recommendations that were made at the review have been incorporated into revisions of NPS-18, which are being processed at the present time. Other items will be addressed as soon as conditions permit.

Considering the magnitude of fire occurrence during the 1981 season, I believe the Park Service came through the situation in pretty good shape. We are fortunate that the multi-regional involvement that was anticipated earlier in the year did not materialize. The situation in the Southeast region, while placing a strain on the system, was isolated enough that it did not overly impact the rest of the Service.

If you have any questions or suggestions in regard to the review report or proposed actions, please don't hesitate to call them to my attention.

David B. Butts

Enclosure

NPS FIRE REVIEW  
November 3-5, 1981

SPECIFIC FIRE REVIEWS

The formal fire reviews conducted for the Piney River Fire at Shenandoah National Park, the Turner #10 complex at Big Cypress National Preserve and the Southcut Fire at Cumberland Island National Seashore were briefly discussed, as was the general fire situation at Canaveral National Seashore. Topics for further discussion included the resource impacts at Shenandoah, a Fire Information Officer and cooperative agreements at Cumberland Island, and the need for assistance on extended initial attack at Canaveral.

Other fire situations discussed were:

Wilson Camp, Wrangell-St. Elias - situation was complicated by having a cooperative agreement with BLM, but not directly with the State, and little or no indications of land ownership in the fire area.

Emperor, Grand Canyon - a safety decision was made to not man the fire, due to steep terrain, and to use indirect attack along chutes. A communications problem with the Superintendent was discussed.

Pakalolo, Hawaii Volcanoes - encountered problems with the logistics of getting supplies to the Island and use of untrained and inexperienced crews.

Olympic National Park - a trained climber cutting a root fell 30 feet and was injured. Was the root worth the risk?

Rocky Mountain Region - had good interagency cooperation, lots of prescribed natural fires. Grand Teton used a resource management council to make decisions.

The review participants then broke into sub-groups to discuss and find solutions to specific topics raised in one or more of the fire reviews.

SUB-GROUP TOPICS

1. Staffing. Mainly discussed firefighter staffing. WASO needs to clarify the importance of priority release of personnel for fire duties. Regional emergency operations plans should specify dispatch commitments. Need Regional Director/Superintendent's commitment is needed.
2. Cause determination. Within NPS, 19% of fires list the cause as unknown. There is a need to call attention and train in cause determination. NPS-18 Prevention section should note importance of cause determination. Maybe a policy statement is needed on cost recovery on proven gross negligence or criminal intent cases under Suppression. Forest Service has full time investigators that can be borrowed.

The Wildfire Cause Determination slide/tape is available. Suggested checking with FLETC about incorporating wildfire cause determination in their law enforcement courses. Law enforcement personnel should take the responsibility for a professional investigation.

3. Equipment. An August 12 memo from FIRE to Associate Director Albright addressed the need for a standing fire equipment review board. Stan Albright supports this.
4. Retardant. No problems.
5. Accidents. Safety decisions should be upheld. Continue training, especially on the individual level to improve judgement.
6. Dispatch. Canaveral NS handled this through the region and in cooperation with Fish and Wildlife Service. Regions need to clarify their designated dispatch process.
7. Interagency agreements. Parks need to have a work session yearly with cooperators to problem-solve and critique the past season. The cooperative agreement document is secondary to the process of cooperation.
8. Island logistics. The problem was solved.
9. Detection. Individual problems are controlled by terrain, etc. Fixed wing is becoming more cost effective. IR scanners are great if available. FIRE should inform regions of state-of-the-art and availability of IR equipment. A tour of the BIFC IR shop was set up for Wednesday. Rocky Mountain Region has not found ALDS to be productive, but other areas have. A communications system is needed to make the system function.
10. Management philosophy. Until cooperators' philosophies become more compatible with NPS, it is still a problem. Others should be involved in the fire programs, i.e. air quality, state to minimize adverse reactions.
11. Insects/impacts. The pest management program is handling some of this. Post-fire monitoring for impacts needs clarification on priorities, funding source, length of monitoring. The types of documentation and monitoring needed as in prescribed fire should be defined. Wildfire information is pertinent to prescribed fire, also. The proceedings of the La Mesa Fire will be distributed to regions when available.
12. Prevention. In Southeast Region, prevention is a cultural problem. Arson investigation is essential to the prevention program. One action to be pursued is a regional team approach to investigation. PWE 341 probably should be used for backup law enforcement personnel during heavy arson activity.

13. Fire weather/danger. NOAA is cutting back personnel, i.e. fire weather meteorologists, which complicates spot forecast requests. Some "air portable" mobile weather units are available. Some place (i.e. Macon Fire Lab) should be requested to work on monitoring drought conditions, especially in the Southeast, to try to correlate fuel sampling with weather conditions.
14. Air operations. Most area staffs are not trained to the point where they could determine the need for air support. Regional coordinators should assume a stronger role. The Bell 214 heli-tanker was discussed. If aerial observation is required over working plows, maybe the situation is too hazardous to put the plows in the field. Indirect attack might be a better choice.
15. Unique skills. The red card system can be used to identify these. The new NIFQS system allows 80 free spaces on a card for this. Possible categories were discussed and Scott Erickson will finalize them.
16. Tactics. Usually the fire qualifications of the park staff determine when crews are called. Maybe cost effectiveness is being stressed too much. If local qualifications are low, the regional coordinator should take a stronger role, i.e. small areas that lack expertise. Also stress use of resource advisors to assist parks.
17. Communications. Breakdowns in communication can lead to incidences, and fatalities. A problem was identified with 9600 channel VHF sets. If NPS-18 is followed and areas use qualified aircraft, then communications will be available in the ships. Areas should specify fire-devoted radio frequencies in the fire plan. BIFC radio kits are available through fire orders. FIRE should incorporate use of BIFC catalog and cache in NPS-18. Suggest putting copy of SF-259, Fire Order in BIFC catalog for local reproduction.
18. Fuels management. This should be incorporated into the fire management plan and objectives. Fuels management is a legitimate use of prescribed fire in re-establishment of historic fuel loads and hazard reduction to limited areas. Program must be "sold" to the neighbors.
19. Overhead teams. This subject overlaps with staffing. There is a lag between recognition of a problem and the overhead team call. The dispatch of a resource or fire management officer-type person to assess the situation before calling an overhead team is encouraged. They suggested a checklist in NPS-18 for levels of Fire Boss I and Fire Boss II. The NPS-18 Complexity Guide should be used. The closest forces concept will be used nationally.
20. Finance. The Interagency Fire Business Management Handbook is ready for printing. When the forms are available it will be printed and distributed. FIRE and administrative personnel will set up training this winter. They will write the NPS interface to provide links between the IFBMH and NPS procedures. Incident

Command should not affect training in finance positions. WASO-administration is working on a solution to a FIRE request for larger imprest funds and traveling cashiers.

21. Fire Information Officer. Regions should encourage the field to develop FIO's from their staff or large parks. Natural resource personnel could work together with a PIO, or be trained as an FIO. Suggested providing a self study training package. FIO's could also be used on prescribed fires. Could bring in FIO from outside to "draw fire" away from park personnel.
22. Volunteer fire departments. NPS-18 should address the use of volunteer fire departments. Their qualifications must be accepted at face value. The Incident Command System facilitates the use of volunteer fire departments "as they are".
23. Delegations of authority. NPS-18 should require that these be written in advance with cooperators.
24. Regional coordination. The role of the regional coordinators is not parallel between regions. The critical factor is that all the parks in a region know their system.
25. Mobilization. The Escaped Fire Analysis should be required for every extra period fire. Parks should request outside help to complete it if necessary. The Forest Service is revising their system.

#### SPECIAL TOPICS

##### A. Reviews

NPS-18 had only a half-page discussion on reviews. National reviews this year followed a 13-page outline from the Forest Service manual. How can we achieve the same coverage while speeding up the process? Kirkland said the Cumberland Island review was held before the fire was out due to political pressure, and that participants were not as candid as they would have liked due to the presence of the Georgia State personnel. He liked the outline format. Dimont said the review at Big Cypress was benefitted by the presence of Florida State personnel, and thought the desired format should reach the park prior to the review to allow time to gather maps, handouts, etc. Butts said we need to separate politically triggered reviews from the constructive analysis-type review of fire programs. Kuenzel thought the Fish and Wildlife Service and maybe even NASA should have participated more at the Canaveral review.

The proposed timeframe would result in four to six weeks to conduct, draft, request comments and finalize a fire review. Court recorders are good for exact transcriptions and quotes, but are expensive and require a 30-day transcription time. Reviews are

called by the Superintendent, the Regional Director or WASO for special circumstances, i.e. complex project fires and selected extra period fires. There should be a set criteria for required national reviews; others may surface via notification of FIRE, which may opt to participate and should receive reports of reviews. There should be a follow-up within one year to see that recommendations were carried out. Question came up of tying the overhead team's close out session, or "hot line review" with the formal fire review. They are aimed at two distinct purposes. The first is a close-out by the overhead team with the line manager. The second is an objective overview of the fire and Service fire management program. The fire review board should review the decision making process and when and who made which decisions. NPS-18 rewrite should include the above ideas.

B. Plans

NPS-18 section has been re-drafted based on last year's comments. The highlights were read to the group. The desired contents of a Fire Management Plan were explained. Simple fire management programs should stop at suppression. Conversion to prescribed fire plans requires information search and analysis and possibly research. Ro described General Management Plans, Resource Management Plans, and the various "action plans". If the RMP is written right, Environmental Impact Statements should be necessary only on selected action plans. Manning classes, burning indices and the mobilization plan should be reviewed annually and updated if necessary.

C. Equipment Review Board

The Branch of Fire Management's August 12 memo requested establishment of a fire equipment review board, which would provide for regional level procurement. They will compile satisfactory contracts for use and compile sets of good specifications. The Firescope system already "types" vehicles. Suggested targets for standardized specifications include:

Trucks, 2 x 4 and 4 x 4  
Tanks, 500 and 1000 gallon  
Pumps, 750, 1000, and 1200 gpm (structural)  
Pumps, wildland, 250 and 500 gpm (wildland)  
Trailers  
Auxilliary Pumps  
Loading Device  
Slip-ons  
Utility Bodies

The board would provide a list of reasonable options. The specifications will facilitate evaluation of needs and selection of appropriate equipment.

D. Situation/Monitoring

Fire situation reports are submitted via AFFIRMS and by phone to and from regional fire coordinators. In summer, the Park Service has 60 to 80 fires per week, which are not all showing up on the situation reports. The reporting system has been outlined, and implementation requires field cooperation. Timely situation reporting raises the NPS presence in the fire management community. FIRE submits a weekly fire update summary to the WASO Directorate during high fire activity. We monitor national trends for prepositioning to critical areas. A memo will go out next spring to remind everyone about situation reporting. We are also trying to consolidate the three AFFIRMS charges at Boise. There is a weather station monitoring system within AFFIRMS to track fire danger and drought trends nationally. To be 100% effective, a Firefamily analysis for the area is needed. This can be used for regional activation of PWE 341 for areas without NFDRS. The objective is to intensify situation reporting, and improve regional NFDRS monitoring. There is a need to address overall NPS meteorological monitoring needs.

E. Fire Training Program

A memo was sent to the field on using PWE 341 in FY 81 for special training in areas with serious drought. Southeast region used it, as did Mid-Atlantic. Midwest region needs S130/S190 training this winter and asked to could use PWE 341. Feedback was requested by John Bowdler on the incidental firefighter training package. Steve Smith suggested using incidental firefighters for mop up only. That would entail assignment to a fire which is outside their intended use. Methods of certifying fire training instructors were discussed.

F. NPS Fire Crews

The current status of fire crews and ideas for next year were discussed; project work, length of season, number of crews, duty stations. Bob Sellers will write a package for potential host parks.

G. Hot Region Assistance

Could we have provided more assistance to Southeast region this year? Steve Smith said he was heavily involved in dispatch and let his other responsibilities slide. He asked if prepositioning a crew would have helped, or sending a "portable fire staff". Sending other park resource managers to zone centers would provide a training opportunity. There is a need to maintain flow of communications from region and park during crises which may require special detail of personnel.

## 1982 QUALIFICATION/CERTIFICATION

Scott has prepared a draft of Chapter 5, the NPS supplement to the National Interagency Fire Qualification System manual. The discussion covered training needs, summary, transfer to and the additional information card. We went over the new form, the 1982 schedule, and two proposals.

There should be no doubt that all firefighters should be qualified. The master file for NIFQS is a data file for FIREPRO. A problem was identified that some people are being restricted for out-of-park dispatch. Having a red card, though, does not require outside dispatch. Steve Smith would like to see lists sorted by park. The new system will print the name of the area instead of a code.

### A. Training Needs

If we can clean this information up on the SF-227, it can be used to project training needs. Scott will convert all NIFQS files to the new system and will delete all past training needs at that time. He will also clean out inactive files. The current files can be microfiched for later retrieval of old qualifications.

The system makes no judgements on training needs. It was suggested that the Service's needs for service, plans and finance functions be made visible to the field, providing an overall picture. Training needs requests should be incremental up to Fire Boss II, after which consultation with the regional office is required to address regional and national needs.

### B. Transfer To

Files cannot be transferred outside of the National Park Service. The instructions were rewritten to make it clear how to fill out the header information when transferring records; must use the code for where the files are located in the system, i.e. the previous park code.

### C. Additional Information Card

This information has no software for sorting, but does have 62 columns for additional information of the agency's choice. The group worked up a list of fire-related special skills which Scott will work into three-letter codes.

Emergency Medical Technician  
Climber  
Languages  
Natural Resource Advisor  
Arson Investigator-Wildfire  
Dispatcher  
TI-59  
Helitack

Law Enforcement Card  
Special equipment  
Archeologist  
Cultural Resource Advisor  
Land Managers Representative  
Pilot  
Field Purchase Authority  
Prescribed Fire

Regions were asked to identify how many copies of Chapter 5 they would need, and a list follows:

WR - 50 plus 10 NIFQS Manuals  
PNR - 30 plus 12  
RMR - 60  
SWR - 30  
MWR - 50  
NAR - 30 plus 12 Manuals  
MAR - 30  
SER - 85  
NCR - 25  
AK - 10 plus 6 Manuals

D. Proposals

A proposal to change the red card input and output schedules to once a year was discussed. The proposed schedule was changed to February 15 for input and April 15 for output. This will be incorporated in NPS-18. The schedule will be used this year.

Another proposal was discussed to have an open season for fire-fighter qualifications. It was decided not to have an open season, and to maintain the integrity of the qualifications. Regional coordinators will evaluate individual qualifications for S130 and will encourage challenging S190 for this year's input only.

PHYSICAL EXAMS

Physicals are required as policy. We set up standards for the IR crews this year. The wording in NPS-18 has been changed to biennial.

FIREPRO

Current progress on fire programming was discussed. Regions were asked to supply us with a list of Priority I areas within two weeks of this meeting. Priority I areas are all those with fire occurrence, including prescribed fire. Areas must have fire plans by FY 83 or will be dropped in priority. Priority II areas are all those left over. Priority I areas will eventually have either AFFIRMS or TI-59 capability. Steps for the pilot area project include a transmittal to the field, multi-area workshops, and area visits. This year's pilot areas now include:

CACO	BICY	CUIS
DENA	DINO	YOSE
SAJH	SHEN	HAVO
FRSP	ISRO	BITH
PRWI		

A TI-59 training session will be held in late March or early April. In FY 83 areas can do contingency planning and fire programming. At the February Regional Coordinators meeting, Scott will show the group a mock-up of FIREPRO.

## TRAINING

### A. Course Development

S130 is bogged down for at least another year. S190 will be printed within six months as a self study course. S390 will be available from NAC in February or March.

### B. Nominations

A nomination system has been drafted for NPS-18 for training above the park needs. Steps include:

1. Announcement.
2. Recommendations from Superintendents (includes personnel commitment).
3. Selection by region.
4. Documentation on SF-182 and SF-227.

A memo to the field was suggested detailing management commitments for higher level courses. John Bowdler solicited comments on national course needs over the next three years. National attendance at Marana courses was discussed and ideas of where to re-assign the dollars if some of the courses are cancelled.

S520	Yanish, Gause (LAME)
S620	Mazna (PNR)
Mg. Fire Eff.	Pierce (PORE), Katahira (HAVO)
Pre. Fire Mgmt.	Schramm (LABE), Taylor (HAVO)
FBO	Dunnagan (MORA, check), Sweaney (YELL)
Adv. Fire Mgmt.	Berg (GRSM), Casey (CUIS), Taylor (CANA),
	Dimont (BICY), Wilson (MWR), ? (INDU),
	Decker (CACA), Wegner (LABE), Harris (GUMO),
	AK (2), Steffen (GRCA)
S460	Knox, Danielson, King
S470	Brant, Goodrich, ?
M410	(3) plus INDU, Freet (WICA)
S440	Hulick
S420, Ashville, NC	

## FEBRUARY MEETING

Fire coordinators meeting will be held the first week of February and include two days of prescribed fire (include Kathy Davis), and one day preseason planning. FIRE will draft a directive from Garrett to define legitimate uses of PWE 341, i.e. training for identified deficiencies, helicopters, crews.

## 1981 NPS FIRE REVIEW PARTICIPANTS

1. Randall Baynes, Shenandoah National Park
2. Chris Cameron, Fire Coordinator, Western Region
3. Howard Dimont, Big Cypress National Preserve
4. Doug Erskine, Regional Coordinator, Alaska Region
5. Charles (Butch) Farabee, Grand Canyon National Park
6. Gary Gregory, Washington Office, Natural Resources
7. Dick Hoffman, Fire Coordinator, Pacific Northwest Region
8. Ben Holmes, Fire Coordinator, Midwest Region
9. Zachary Kirkland, Cumberland Island National Seashore
10. Dennis Kuenzel, Canaveral National Seashore
11. Stuart (Mike) Maule, Fire Coordinator, Mid-Atlantic Region
12. Ken Miller, Grand Canyon National Park
13. Tom Monroe, Fire Coordinator, National Capital Region
14. Jim Olson, Fire Coordinator, Rocky Mountain Region
15. Bill Paleck, Wrangell-St. Elias National Monument
16. Dan Sholly, Hawaii Volcanoes National Park
17. George Sites, Fire Coordinator, North Atlantic Region
18. Steve Q. Smith, Fire Coordinator, Southeast Region
19. Mike Warren, Fire Coordinator, Southwest Region
20. Roland Wauer, Chief, Natural Resources Division, WASO

## 1981 FIRE SEASON REVIEW

### Tuesday, November 3

0830 Meet, BLM Boise District Office Conference Room  
Plans for '81 and Realities

0900 Highlights of National Reviews (15 min. each):  
Shenandoah NP, Baynes Canaveral NS, Kuenzel  
Cumberland Island NS, Kirkland Big Cypress NP, Dimont

1000 Break

1015 Review Fires/Special Topics:  
Wilson Creek, Paleck Dinosaur NP, Olson  
Emperor, Farabee Olympic, Hoffman  
Pakalolo, Sholly Grand Teton NP and  
Yellowstone NP, Olson

1130 Lunch

1230 Sub-Groups/Generate Servicewide Solutions to Topics Raised

1400 Break

1415 Full Group Discussion of Completed Solutions  
Refocus on Remaining Solutions

1630 Close

1800 "Social Hour", Dave Butts' home

2000 Dinner - Kowloon Restaurant, Fairview and Five Mile Roads

### Wednesday, November 4

0815 Special Topics:  
Reviews (D) Situation Monitoring (D-S)  
Plans (B) Equipment Review (J)  
NIIMS Handbook

1000 Break

1015 NPS Crews  
USDI Class I Teams  
Special 1981 Training

1130 Lunch

1230 IR Briefing  
Hot Region Assistance/OFM Assistance

1400 Break

1415 Wrap Up Topics, Did the Plans and Programs Produce?  
Outlook for 1982 Operations

1630 Close

Thursday, November 5

0815	Regional Coordinators, Best Western Vista Inn Conference Room 1982 Qualification/Certification Training Session
1000	Break
1015	Qualification/Certification, continued
1130	Lunch
1230	Ro - Resource Management Outlook Dickenson presentation to Rangers Association Fire Training Program
1300	NIIMS
1400	Break
1415	FIREPRO memo and program
1545	February Fire Coordinators meeting
1630	Close

# 1981 FIRE REVIEW TOPICS

	Topic	Southcut Fire	Canaveral NS	Piney River	Turner # 10	Olympic NP
1.	Accidents					X
2.	Air Operations	X	X	X		
3.	Cause Determination	X		X		
4.	Communications	X	X	X		
5.	Delegation of Authority			X		
6.	Detection		X		X	
7.	Dispatch		X			
8.	Equipment	X	X			
9.	Finance	X	X			
10.	Fuels Management		X		X	
11.	Impact/Insects	X		X		
12.	Information Officer	X				
13.	Interagency Agreements	X	X		X	
14.	Island Logistics/Transportation	X		X		
15.	Management Philosophies	X				
16.	Mobilization				X	
17.	Overhead Teams (Class I and II)	X		X		
18.	Plans	X		X	X	
19.	Powerlines			X		
20.	Prevention				X	
21.	Regional Coordination	X		X		
22.	Retardant			X		
23.	Staffing	X	X	X	X	
24.	Tactics	X	X	X	X	
25.	Unique Skills				X	
26.	Volunteer Fire Depts.		X			
27.	Weather/Danger	X	X	X	X	

# SUB-GROUPS FOR TOPIC SOLUTIONS

<u>Group</u>	<u>Members/Topic Numbers</u>
1.	Cameron, Kirkland, Bowdler 3, 8, 22
2.	Olson, Hoffman, Baynes 1, 7, 13, 14
3.	Warren, Kuntzel, Wauer 6, 23, 15
4.	Holmes, Dimont, Erickson 11, 27, 20
5.	Smith, Erskine, Sholly 2, 25, 24
6.	Sites, Paleck, Sellers 4, 10, 17
7.	Monroe, Farabee, Butts 9, 12, 26
8.	Maule, Miller, Gregory 5, 21, 16

Planning/Plans - Special Topic - Wednesday