



NATIONAL PARK SERVICE DEPARTMENT OF THE INTERIOR



WILDLAND FIRE REPORT

1994

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FIRE ACTIVITY SUMMARY - -

<u>Alaska Region</u>

Late May and early June indicated that Alaska would experience an active fire season. An indicator of an active fire season was the start of five fires in the Northwest Areas and one (6,000+ acres) in Gates of the Arctic National Park and Preserve. Two of the fires in the Northwest Areas required suppression efforts. One fire which occurred in a "Limited" fire management area within Wrangell-St. Elias National Park and Preserve tested the Alaska Interagency Fire Management Plan. The fire was within a couple miles of a cabin. Fire suppression organization requested to take suppression action on the fire due to proximity of the cabin. Park personnel denied the request and selected surveillance and cabin protection if necessary. Some political pressure did develop but the fire did not threaten the structure before rain extinguished it. Excellent cooperation occurred between Park and State suppression personnel.

During the third week in June weather patterns changed significantly. The fire meteorologist stated, "I see nothing in the forecast to indicate any change from the 'fall-like' weather pattern." Fire activity dropped off significantly. One large fire near Delta occupied interagency personnel with the remainder of the efforts in the lower contiguous United States. At one time 45 Alaska crews were dispatched to the "Lower 48."

Fifteen fires occurred in NPS units for approximately 13,000 acres. The fires,

categorized by Alaska management options included: 4 in full suppression; 1 in modified suppression and 10 in limited suppression.

Mid-Atlantic Region

Overall the region experienced a relatively quiet spring fire season with an increase of activity and potential in fall that lasted until mid-November. Delaware Water Gap had a higher than average number of fires with 11 starts that burned 25 acres. The Shenandoah area experienced one of the wettest and coldest winters on record. The effects of that cold and precipitation carried over into the spring and summer months. As a result, fire activity was relatively minimal until later in the fall fire season. Shenandoah experienced 8 fires for a total of 17.5 acres. Park personnel participated in suppression activities with local cooperators on an additional 8 fires for a total of 909 acres. Of particular significance was the Hickory Run fire that threatened homes located along the western boundary of the park's central district during the fall fire season. This fire began as a major threat to park resources, and swiftly changed direction threatening structures located in the area outside the park. Park suppression staff, as well as overhead staff, were instrumental in assisting State and local personnel in protecting homes from the effects of the fire and holding the size to 600 acres.

Like everyone else, fire activities at Mid-Atlantic Region in 1994 were dominated by the support of interagency wildland fire operations, especially in the western portion of the U.S. Mid-Atlantic parks provided a significant amount of resources to non-local fires beginning in May when several Type 6 and 7 engines were sent to the Fish Day fire in North Carolina. A high level of resource commitment continued through fall. The maximum single day commitment of personnel to non-local incidents was 119 in early September when crews were assigned to the Yaak-Red Dragon Complex in Montana and the Idaho City **Complex**, and 32 overhead were assigned to various fires. This figure does not reflect the sustained contribution by the region of 460 individuals for the year. It is also notable that the Inter-Regional Coordination Center at Shenandoah National Park mobilized a total of 727 individuals in support of non-local fires.

Midwest Region

The Midwest Region experienced a relatively quiet wildfire year, with a cool season in many of the northern areas helping to keep fire occurrence down and burned acreage reasonable. The usual exception was Indiana Dunes, which experienced 96 urban interface type fires. Ozark was the second most active in the region. All park wildfires responded well to initial attack efforts, and none developed into project fires, the largest being the Murphey fire (200 acres) at Indiana Dunes, with extensive use of foam from the park's new water tender being the savior of the day to protect apartments and vehicles. Fire causes were within the usual norms, most being attributed to human causal factors, with lightning playing a minor role.

Western wildfire support was extremely high this year, with a total of 227 resources committed over the exceptionally long season, including 7 crews made up entirely of NPS personnel and 3 NPS-lead interagency crews. On the lucky side, one of Voyageurs' crews arrived on the <u>South Canyon</u> fire the evening of the blowup, so were spared the direct trauma of the fatalities that occurred.

While the region has two parks (Voyageurs and Isle Royale) with approved Prescribed Natural Fire (PNF) programs, only Isle Royale had two acceptable natural ignitions occur this year. The Lucky Eagle fire, so named because of its immediate proximity (40 yards) to a Bald Eagle nest with fledglings, burned for several days, but never exceeded an acre. Consultation with the U.S. Fish and Wildlife Service was necessary because of the eagle nest's proximity with an interesting twist that suppression activities would probably have had more impact upon the nest's fledglings, than non-suppression. Another small PNF at the park, called the Osprey, also burned for a couple of days at less than an acre.

Parks in the Midwest experienced some difficulty in getting all of their Management Ignited Prescribed Fires (MIPF) off this spring, due to lack of acceptable prescription windows. Voyageurs was the heaviest impacted, having to cancel its <u>Wiyapka Lake</u> burn (nearly 600 acres) for the second year in a row. Of significant note, however, Ozark in conjunction with the Missouri Department of Conservation, executed the <u>Stegall Mountain</u> burn, a 933 acre joint burn in the Stegall Mountain Natural Area. This was the largest hardwood woodland prescribed burn ever in Missouri by an agency and established significant precedent and image.

North Atlantic Region

The Region had a fairly uneventful fire season in 1994. Several weeks of below average precipitation and above normal temperatures sent fire dangers to very high and extreme in both Acadia and Cape Cod, however, no new fire starts were reported.

Cape Cod conducted resource management prescribed burns on five separate days during the 1994 season. Saratoga scheduled three prescribed burns but could not complete them due to being out of prescription.

The Region sent a total of 92 people on western mobilizations; 80 of these people were members of 4 NPS Type II handcrews provided by the region. The other 12 personnel were assigned as single resource overhead, filling the need for Security Managers, Cost Unit Leaders, Water Handling Specialists, Expanded Dispatchers and Military Liaison. The single most firefighters mobilized on one day was 43 in the first week of August.

Pacific Northwest Region

The fire season in the Northwest was extremely busy, especially in Washington State. Major fires started in mid-July and were not controlled until the fall rains in October and November. Olympic, North Cascades, Crater Lake and John Day Fossil Beds all had fire incidents that required support from other agencies, including incident management teams. The other parks in the region had small fires, but a majority of their time was providing assistance to ongoing fires outside their areas. At one point in August, there were 185 people from Pacific Northwest park areas involved in fires and an additional 6 people hired as AD's in overhead positions.

Rocky Mountain Region

The 1994 season was the most severe fire season for the region since 1988. Glacier, Grand Teton, Rocky Mountain and Yellowstone National Parks all had large and complex fire incidents that required the use of Type I and/or Type II Interagency Incident Management Teams. Six teams were activated by these parks during the fire season.

Glacier National Park experienced an extremely complex fire situation that entailed simultaneously managing a large prescribed natural fire and numerous wildfires. The wildfires were managed by using the three different suppression strategies (confinement, containment and control). All of these incidents occurred during national and regional planning levels IV and V.

Yellowstone and Rocky Mountain National Parks determined that, in several large incidents, the containment and confinement strategies would most cost effectively allow for protection of their identified values at risk. In contrast, Grand Teton National Park determined that a very quick and aggressive full suppression strategy was necessary to protect the numerous structures threatened by the <u>Row</u> fire. Interagency cooperation provided another key to effective management of the regional fire situation. Rocky Mountain Regional personnel participated in Multiagency Coordination (MAC) groups for the Rocky Mountain, Northern Rockies and Great Basin Coordination Areas. These MAC groups met for a total of 65 days during the fire season. Rocky Mountain Region personnel actively represented the National Park Service on Type I and II Interagency Incident Management Teams, Interagency Coordination Centers and in a wide variety of single resource positions.

Fire activity in other parks varied from well above normal to average. Resource support of interagency incidents was excellent. Rocky Mountain Region Parks provided NPS hand crews, engines and a wide variety of single resources.

Southeast Region

Fire potential was high in the Appalachian Mountains during the spring fire season, however, fire activity was light in the Southeast Region parks. Notable fires did occur in Great Smoky Mountains National Park (129 acre **Dalton** fire) and at Shiloh National Military Park (50 acre Shiloh Branch fire). Firefighters from the Southeastern parks assisted in combating wildfires on the National Forests in Kentucky, North Carolina and Florida in May. The parks also provided firefighters in the spring to suppress wildfires on National Forests in Texas and Michigan and a National Wildlife Refuge in Oklahoma.

Great Smoky Mountains personnel from the Knoxville Tanker Base set up and

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operated a portable mixing plant at the <u>Fish Day</u> fire which occurred on the Croatan National Forest. Over 250,000 gallons of retardant was pumped in 4 days. Tanker base personnel also assisted the Department of Defense with an operation associated with military activities in Haiti.

Due to high indices, presuppression resources were dispatched to Everglades National Park in May and to Cumberland Island National Seashore in May and June. Fire activity was light in South Florida and along the Atlantic Coast during their late spring and early summer fire seasons. Rains generated by a tropical wave in late summer and rains brought on by tropical storm Gordon in early November led to Big Cypress National Preserve having no fires from September to November, a first since the NPS started documenting fires in the preserve.

From the end of July to the first of October the Southeast Region provided personnel to combat wildfires occurring in the Northwest, Great Basin and Rocky Mountain areas. The largest number of fire resources the parks had out at one time during the mobilization, and for that matter anytime during the year, was 96 firefighters and 32 overhead personnel on August 12th.

During the late summer western fire mobilization Everglades provided \$10,000 worth of firefighting supplies to the NIFC warehouse to help reduce the national shortage.

Fire potential was again high in the Appalachian Mountains during the fall

fire season, with fire activity picking up in November. The 50 acre Big Ridge fire in Great Smoky Mountains (with 10 acres in the park) threatened private homes near Gatlinburg, Tennessee. Suppression of the fire was a cooperative venture of the Tennessee Division of Forestry, NPS and the City of Gatlinburg. A 15 acre fire also occurred at Big South Fork. Park Service resources were dispatched to assist in suppressing large fires occurring on the Chattahoochee-Oconee National Forest (Georgia) and Cherokee National Forest (Tennessee). The Knoxville Tanker Base, operated by personnel from Great Smoky Mountains, was activated to assist with the suppression efforts.

Big Cypress completed approximately 45,000 acres of management ignited prescribed fire over a period of 33 ignition days during a 6 month time frame. Neighboring Everglades conducted 8 management ignited prescribed fires for 9,021 acres, and monitored 5 prescribed natural fires for 1,294 acres.

Natchez Trace conducted 18 management ignited prescribed fires for 286 acres. One of the prescribed fires was conducted in coordination with the Tombigbee National Forest where 72 of a total of 1,049 acres was burned on Parkway lands.

The Prescribed Fire Specialist position at Big Cypress has been refocused to fire effects monitoring, and will provide assistance in fire effects monitoring to the parks in the Southeast.

Southwest Region

After three consecutive above average moisture years the El Nino event finally declined leading to average rainfall and snowpack conditions throughout the region. except in southeast Texas where somewhat above average rainfall continued and occasional flooding was experienced. While overall precipitation amounts were normal most of the snows came early and the normal later winter snows and rainfall never materialized. March and April were warmer and drver than normal leading to unusually low fuel moisture conditions in Arizona, southern New Mexico and west Texas. By June precipitation amounts were lower than normal and higher temperatures were the rule with daily record highs occurring throughout the western half of the region. The summer monsoon never fully developed which led to further deterioration of fuel conditions throughout the summer. These conditions were mitigated somewhat by the relative lack of episodic wind events which characterize the region from February through July.

Even without the winds, normally the key factor in fire behavior in the Southwest, virtually all fires exhibited extreme fire behavior and unusual resistance to control, even at higher elevations, leading to poor success of initial attack forces and an unusual number of extended attack fires which drained both area and national resources capabilities. By mid-June competition for resources was severe and the SW Area Multiagency Coordination Group (MAC) was in place for much of the rest of the season. The failure of the monsoon to develop led to major fire activity continuing into August and early September, creating problems nationally since the southwest, normally a contributor of resources during this period, now needed additional outside help. Although the "luck of the draw" resulted in most major fire activity occurring on cooperator lands, a total of 115 wildfires resulted in 11,864 acres burned. The Marcus fire at Guadalupe Mountain National Park was the largest fire at 6,250 acres (5,500 NPS, 750 private) and was managed by a Type II **Incident Management Team from** northern Arizona. Significant fire activity was also noted at Buffalo River, Carlsbad Caverns, Big Bend, Lake Meredith, El Malpais, Fort Davis and Flagstaff area parks.

Resource mobilization was heavy throughout the entire season with a single day high of 106 employees. Although somewhat lower than some previous years the total number of red carded employees was down this year and several parks had to withhold qualified employees to meet local initial attack needs. Support was provided to cooperator incidents in Arizona, New Mexico, Texas, Arkansas, Missouri, Colorado, Utah, California, Nevada, Oregon, Washington, Idaho, Montana, South Dakota, North Carolina and Florida.

Conditions were good for executing both management ignited prescribed fire and prescribed natural fire projects throughout most of the year, however only 33 ignitions were achieved for 4,050 acres as available personnel were needed to meet first regional and then national suppression requirements. Projects were completed at Fort Smith, Buffalo River, Pea Ridge, Arkansas Post, Carlsbad

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Caverns, Bandelier, Big Thicket, Lyndon B. Johnson and Salinas Pueblo Missions.

Western Region

The Western Region had another active wildfire year, experiencing about 150 percent of the normal fire year in terms of numbers of fires. Acreage burned, support actions, and mutual aid responses were also well above the historic average.

More Type II handcrews were mobilized through the Western Region Mobilization Site at Marin Headlands, Golden Gate National Recreation Area, in 1994 than in any previous fire season. A total of ten crews were assembled, many of them composed of both NPS and BLM personnel, and turned over to North Zone for dispatch to fires throughout the Western U.S. Hawaiian parks contributed firefighters on three separate occasions during the season.

Notable wildfires in the Western Region in 1994 included the Mother's Day fire at Saguaro National Monument in May which burned 1,200 acres; the 90 acre Spirit Mountain fire at Lake Mead National Recreation Area; the Horizon fire in Yosemite National Park which burned 1,790 acres as a prescribed natural fire from May 31 through August 8, and an additional 2,860 acres after conversion to wildfire status on August 9; the **Rincon** fire at Saguaro which burned 2,400 acres as a prescribed natural fire and a total of 14,590 acres of Forest Service and NPS lands following conversion to a wildfire on July 4th; and the **<u>Pinnacles</u>** fire at Pinnacles National Monument which burned 620 acres within the Monument and an additional 534 acres outside.

PROGRAM ACCOMPLISHMENTS - -

Branch of Fire and Aviation Management

This was a year of significant change for the Branch's information management program. Several major events took place that have had an impact on all of us. Contracts were negotiated and awarded for the purchase of new hardware and for new software development (contract awarded to ML Technologies). All of this was orchestrated along with adjustments associated with the Branch offices being moved back onto the base in a newly constructed administrative headquarters building for the National Interagency Fire Center.

Interest in the NPS Wildland Fire Management Computer System (WFMCS) continued to escalate. The Bureau of Indian Affairs (BIA) and U.S. Fish and Wildlife Service (FWS) both are using software applications similar to NPS, on different hardware. The Bureau of Land Management (BLM) decided to adopt the NPS Qualifications/Certification and Fire Reporting software applications. With the signing of an interagency agreement between the four Interior agencies we were able to pool our funds to purchase one computer system to be shared by all four agencies; the Shared Applications Computer System (SACS). The new system went on line at the end of October.

The move to SACS required addressing operational management of the interagency system. The Branch advertised and filled two positions, Project Leader and Supervisory Program Analyst, that became a part of interagency staff called the Interagency Technical Implementation Group (ITIG). The ITIG was made up of these two new positions and a programmer from each of the partner agencies and supported by the contracting staff (ML Technologies). The two new employees, both previously employed by the U.S. Forest Service, include Nancy DeLong (Project Leader for ITIG) and Bruce Keene, Supervisory Program Analyst (Team Supervisor for ITIG).

Additional staffing changes included the loss of Elmer Hurd who left his position as Chief of the Branch of Fire and Aviation Management to become Director of the Office of Aircraft Services. Rick Gale, the Branch's Wildfire Operations Manager moved up into the Chief's vacancy created by Elmer's move. Long time Branch employee Fran Rutter, who served most recently as Budget Analyst, retired and that position was filled by Western Regional Office Fire Program Assistant Ken Hay. Dana Dierkes. secretary to the Branch Chief, moved into a writer/editor position with the Office of Public Affairs in WASO.

The Qualifications System has been fully converted to the new format on SACS and now holds data and qualifications for over 19,000 Department of the Interior employees. This information is available to all users and should help to facilitate trainee and overhead assignments. Further enhancements scheduled to come on line in 1995 include the long overdue report writers and the new NWCG approved prescribed fire positions and taskbooks.

The Prevention Workload Planning and Analysis software was developed and field distribution begun with a series of handoff workshops hosted around the country by the NPS and BLM. The software standardizes the prevention planning process for the Department of the Interior and enables agencies to compare common actions and costs. This will reduce duplication and provide for stronger justification for budgeting and projects in prevention.

The **FARSITE** software for large fire growth modeling has been completed through Phase I. It was field tested on two major incidents in 1994, the <u>Horizon</u> fire in Yosemite and the <u>Howling</u> fire in Glacier. The model projects fire growth over time and space and displays the projections over a GIS landscape. Initial distribution will begin during late winter, 1994-95, to selected users who will be required to attend a training session that explains the use and limitations of the model.

A Branch employee participated as a member of the Prescribed Fire and Fire Effects Working Team and assisted in the development of the final proposal to the National Wildfire Coordinating Group (NWCG) for Prescribed Fire Qualifications and Training Systems. The team also finalized 310-1, Part 2: Prescribed Fire Qualification Subsystem, and has forwarded these proposals to NWCG fir final approval.

Branch staff assisted in several phases of redetermining Department of the Interior fire management research needs. The initial phase of this process included conducting four workshops involving subject matter experts from all facets of fire management and developing research

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needs. The next phase concerned assigning priorities to these research needs. Following completion of these activities, research proposals were solicited, reviewed, and project funds allocated as appropriate. The assigned projects will be administered through the Interior Fire Coordination Committee's (IFCC) Research Working Team, composed of representatives from all Interior agencies.

Participation in the Environmental Protection Agency's first Conformity Workshop involved providing clarification of the conformity rules of the Clean Air Act.

Personnel from the Branch participated in information transfer to various fire management evaluation activities including: House Natural Resource and Agriculture Committee - Fire Policy Oversight Hearing; Fire Management and Forest Health in the National Park System; Interdepartmental Wildland Fire Management Policy and Program Status; and Federal Wildland Fire Policy Review. As a supplement to these reviews, Branch personnel assisted in preparation and publication of, "Fire Management and Ecosystem Health in the National Park System: Problem Analysis" (1994).

The third year of a scheduled 10-year NWCG suppression curriculum revision project was accomplished. Numerous NPS subject matter experts participated.

At the request of NWCG, NPS and BLM Training Chiefs drafted an "NWCG General Operation and Issue Identification and Processing Guide" which succinctly, in flowchart fashion, outlines the procedures by which issues are brought forward to NWCG for decisions and resolutions. This guide was approved and distributed among NWCG members.

The national interagency course "Fire Management for Agency Administrators" continues to receive high marks; 17 NPS superintendents and managers participated this year. The Interagency Management Review Team Report stemming from the South Canyon incident fatalities has mandated that this course be required for ALL agency administrators from the federal land management agencies. The steering committee will be making course presentation adjustments to meet the expected demand.

The NWCG's Training Working Team approved the development of the interagency "Fire Program Management" course, targeting current and future fire program managers who have direct responsibility to organize, budget, manage and evaluate fire programs, to include NPS fire management officers and chief rangers and chiefs of resource management. This 60 hour course will be linked closely with the "Fire Management for Agency Administrators" course, but after testing and instructor handoff in November 1995, will be presented by geographic area cadres, rather than held nationally. This course has also been mandated for fire program managers by the Interagency Management Review Team Report, with NPS Director concurrence.

The "RX90 Burn Boss" course package was finalized and submitted to the Publications Management Unit, NIFC, for publication and distribution.

Two videos were completed and distributed to each park, regional office and all NPS training centers (450 copies): "Fire Management in the National Park Service," an 18-minute program outlining NPS fire management policy; and "The Evolution of Fire Policy," a 12-minute video describing in visual and narrative format the evolvement of federal wildland fire policy. This office had significant input and direction into development of each video.

Branch staff presented several test sessions of all newly developed draft allrisk I-courses. In addition, Branch staff participated as instructors/facilitators/ evaluators in several prescribed fire training courses including: RX-590, Prescribed Fire Behavior Analyst; RX-91, Monitoring Prescribed and Prescribed Natural Fires; and RX-340, Introduction to Fire Effects.

The new ICS-215A "Incident Safety Analysis" form was completed and submitted to the Publications Management System. An article outlining its use was drafted for several different fire management publications.

Branch staff participated in various overhead capacities with Type I and Type II Incident Management Teams on fires occurring in Colorado, Utah, Nevada and Idaho. Support from Branch staff for prescribed natural fire management was provided to Glacier National Park during much of the 138 days of the <u>Howling</u> prescibed natural fire.

Rick Gale, Branch Wildfire Operations

Manager, had the unusual opportunity to put his incident command expertise to task in applying the principles of the Incident Command System (ICS) to NPS restructuring efforts. To that end, Gale served as Deputy Incident Commander for "Operation Opportunity," and as Incident Commander for "Operation Future," both elements of the Service's efforts to take a proactive part in the administration's efforts to restructure and improve efficiency within government. Advice was provided to NPS Restructuring and Training Task Groups. Branch staff also designed and produced 11 FIREPRO analyses to determine possible permanent staffing needs for System Support Offices (SSO) that could be created under proposed NPS restructuring. Memoranda with the FIREPRO analyses results were provided to the Regional Directors in mid-October for possible consideration in determining future SSO staffing.

Branch staff participated with regional office fire personnel in fire program reviews at Cumberland Island, Big South Fork, Congaree Swamp and Everglades in the Southeast, and Big Thicket in the Southwest. Combined fire program reviews/FIREPRO financial audits were conducted at Sequoia-Kings Canyon, Delaware Water Gap, Wind Cave and the Alaska Regional Office. The Branch also provided an individual to assist in a program review of the Southern Forest Fire Laboratory's Fire and Forest Meteorology Research Work Project in Macon, Georgia.

Branch staff participated in a fire review at North Cascades National Park.

Following the South Canyon fire accident

investigation by BLM and the Forest Service, a Branch member served as part of the Interagency Management Review Team (IMRT). The IMRT developed a plan of corrective action for implementing many of the recommendations from the South Canyon Accident Investigation Report. This corrective action plan was approved by the Director, BLM; and the Chief, U.S. Forest Service. The Director, NPS, signed in concurrence with this report.

Branch staff provided assistance for allrisk training efforts for Type II Incident Management Teams (IMT) in Mid-Atlantic Region (two teams), and the Western and Alaska Regions (one team each). Assistance was also provided by developing and conducting a simulation exercise for two Type II All-Risk IMT's in the North Atlantic Region. In addition, assistance was provided to the Department of the Interior All-Hazards Coordinating Group in developing a group charter and in assigning work groups.

A total of \$670,000 was allocated to parks to purchase 58 pieces of capital equipment in 1994. Since this program began in 1988, approximately 6.2 million dollars has been allocated to parks to purchase capital equipment in support of wildland fire operations.

The management approach to the structural fire program review process is being refined and focused on NPS needs. The principle architect of the International Association of Fire Chiefs Accreditation Committee's self-assessment process presented information to 25 regional and park structural fire coordinators about the origins and design of the system. The information was well received and several parks will be collecting and organizing the material in the recommended format for review and analysis by park management teams. Progress will be monitored and "how to" manuals developed to ease the use of the process by other parks. The completed product will assist park managers in understanding structural fire requirements in their facility and will make the job of park and regional structural fire coordinators more productive.

A chapter by chapter review of NPS-58 "Structural Fire Guideline" has been completed and subjects have been identified that require some work in order to be more responsive to service-wide needs. Because of the major impact of the self-assessment process on the way structural fire programs will be managed in the future, it is felt that the revision process should be placed on hold pending valid field experience with the new process in order to incorporate needed changes into the revised document. In the interim, NPS-58 can continue to be used in its present form.

Review and analysis of NPS training and operational requirements indicates the need for increased emphasis on safe operations and more sophisticated programs to address this subject. Cross training between wildland and structural fire operations will yield more efficient use of resources and greater tactical effectiveness on major incidents.

Major wildland fire activity during 1994 continued to demonstrate the need to better define the performance expectation for structure protection activities. Contacts have been made with other interested agencies to address operational requirements for information gathering, contacts with local officials, interaction with local fire service providers, evacuation planning, integration with perimeter control divisions, tactical deployment and unique demobilization concerns. Suggestions have been offered for inclusion in the revised Fireline Handbook.

One of the critical needs of the structural fire program is for an accurate, viable body of information about fire history and activity levels with the ability to identify trends that affect the level of fire safety in the facilities that we have the responsibility for protecting. Information is being assimilated and analyzed about the capabilities of the DI-1202 form in the Wildland Fire Management Computer System (WFMCS) and the National Fire Incident Reporting System (NFIRS). Program needs will determine the appropriate future course.

The structural fire program is undergoing a master planning process in conjunction with the automated data processing group to identify system and program needs for the future. Basic systems are being identified and interconnection to existing systems operated by others are being targeted for future connectivity. For example, information about buildings is contained in the Maintenance Management System (MMS) and the **Inventory Control and Assessment** Program (ICAPS) run by the Maintenance Division. It makes no sense for the structural fire program to "invent" another system for building information when the information already exists and

could be made available from the other system. It is hoped that early identification of system needs will result in economies of scale that will provide the greatest level of service at the least possible cost.

In April 1994, the responsibility for structural fire protection at the Presidio was transferred from the Department of Defense to the National Park Service. The NPS also picked up the emergency medical care that had been provided by the Letterman Institute. The full transition of the Presidio to the NPS occurred at the end of the fiscal year and is the culmination of many years of planning and negotiations. In addition to day-to-day level of service activities, there is an on-going need to complete the selfassessment process, improve the structural fire incident reporting process and to review and evaluate the fire prevention and fire code enforcement programs.

Numerous professional organization meetings were attended in relation to structural fire management program interests. In addition, site visits for structural fire program review and orientation to NPS structural conditions were conducted at seventeen facilities during 1994. Included were hazard fuel reduction planning evaluations, training regarding the self-assessment process and program review evaluations.

<u>Alaska Region</u>

The final field season of the three-year DOI supported fire research project on the implication of fire management on tundra carbon balance was completed. The final report is due in 1995. Significant headway has been made incorporating fire management data with other GIS themes for use at the regional level and in the parks. We are particularly excited about the use of <u>FARSITE</u> and <u>ARCview 2</u> for fire management planning and management of ongoing incidents. Unfortunately the curtailment of the 1994 fire season prevented testing of <u>FARSITE</u> on fires in Alaska.

The NPS and BIA co-sponsored S-290 and S-390 training. The Prescribed Fire Specialist served as unit leader of the national level "Fire in Ecosystem Management" training course and subsequently took over the Steering Group leadership for the course. The Fire Management Officer assisted with formation of a Type II All-Risk Incident Management Team for Alaska, and provided instruction for newly formed teams.

Regional fire staff and cultural resource management personnel and Wrangell-St. Elias natural and cultural resource personnel have actively been involved in the development of hazard fuel reduction programs for remote sites and modification of the programmatic agreement with the State Historic Preservation Officer for hazard fuel reduction activities adjacent to historically significant structures.

The departure of Fire Management Officer Steve Holder and Fire Program Assistant Wanda Grey, significantly altered the personality and continuity of the Alaska Region fire management program.

Mid-Atlantic Region

Significant interagency cooperation accomplishments were achieved in 1994. The Mid-Atlantic Regional Fire Management Officer became a member of the Southern Area Geographic Board and the Multiagency Coordinating (MAC) group. A charter was drafted to formalize interagency cooperation in incident management between federal agencies and the Commonwealth of Virginia. A memorandum of agreement was also approved between the Commonwealth and federal entities. The resource ordering process was streamlined by negotiating for direct contact between the Inter-Regional Coordination Center at Shenandoah National Park and the Southern Area Coordination Center. In 1995 Shenandoah will be the primary interagency coordination center for the Commonwealth, National Capital and Mid-Atlantic Regions.

Several park and regional office individuals assisted the national fire prevention program by participating in the national celebration of Smokey Bear's 50th Anniversary. Programs covering a variety of topics, including fire prevention, fire ecology, fire suppression equipment and Smokey Bear visits, were provided for schools near park units.

Shenandoah Fire Management Officer, Doug Raeburn, served as a participant in a local county's Urban Interface Advisory Committee. As part of the process, subdivisions surrounding the park are identified, located on the ground, assessed as to their vulnerability to wildland fire, and information gathered is then entered into a GIS map system. A major part of the process will include participation by subdivision residents in the rating process, and learning what they can do to protect their homes from wildfire. Current plans call for the expansion of this program to include other counties surrounding the park (eight in all).

Delaware Water Gap used mechanical means to reduce flashy fuels along approximately six miles of "boundary roads" in the Pennsylvania district. Defensible space was improved around 44 structures, 4 of which were new to the program.

Two Model 42 engines were transferred from Delaware Water Gap to New River Gorge. Delaware Water Gap obtained approval from GSA for going off contract, and wrote the specifications for two new replacement brush trucks that will fit their needs more appropriately than the Model 42's.

The staff at New River Gorge completed a comprehensive draft fire management plan. This will provide for a more systematic approach to fire activities at the park. Clearer definition of mutual aid zones, and identifying priorities for hazard fuel projects are key components of the plan.

A review of the structural fire program at Shenandoah was undertaken with participation and assistance of fire protection professionals from the North Atlantic Region, as well as ARAMARK (park concessioner). Utilizing the format suggested by Jim Farrel (Branch of Fire and Aviation Management) and the International Association of Fire Chiefs self-evaluation system, this review will assist management in guiding the structural fire program in a direction that best serves the needs of the park visitor.

Preliminary discussions at Shenandoah began with researchers and sister agencies regarding strategies in dealing with increased fuel loadings caused by tree mortality caused by Gypsy Moth, Hemlock Wooly Adelgid and Southern Pine Beetle infestations. Of particular concern are the large standing tracts of oaks killed by the Gypsy Moth, and the potential for extreme fire behavior these fuel loadings represent.

Midwest Region

Isle Royale completed the second and final year of its 2-year hazard fuel reduction project around its two major developed areas, Rock Harbor, the primary visitor use and concession accommodation complex, and Mott Island, the headquarters and employee housing complex. The project consisted of removing reproduction balsam fir, other ladder fuels and dead fuels within 50 feet of all structures.

Isle Royale continued its multi-year project of park-wide fuel loading survey, however, headway was limited by the Prescribed Natural Fire (PNF) monitor's commitment to Yosemite's <u>Horizon</u> PNF, Isle Royale's own two PNF's and two western fire dispatches. This fuels survey is being done in conjunction with vegetation surveys to complete a new vegetation map for the park. Eventually, the vegetation map will be used to create a new fuels map using the park's GIS system. Isle Royale's Resource Management Specialist participated in the hotshot crew detailer program, completing Single Resource-Crew qualifications on the way to attaining Burn Boss qualifications.

Indiana Dunes continued their multi-year urban interface hazard fuel reduction prescribed burning program around the community of Ogden Dunes. They also executed the second season of prescribed burning endangered Karner blue butterfly habitat. A total of 5 prescribed burns were executed for 300 acres. The new 1040 hour limitation on seasonals hampered accomplishing more as the experienced seasonal staff had to be terminated.

Indiana Dunes accepted delivery on a new 1,500 gallon water tender, with foam and monitor gun, replacing an old military 6X6 duce-and-a-half conversion that was becoming extremely unreliable and too complex for many seasonals to drive and operate. The old military vehicle was donated to a fire museum.

Ozark expanded their management ignited prescribed fire program to include ecosystem restoration by initializing burning to restore Rhyolyte glades. Several smaller burns and the 900 acre <u>Stegall Mountain</u> burn (the largest hardwood understory burn ever conducted in Missouri) have been executed to restore these glades. This will be an expanding program over the next few years.

National Capital Region

Streamlining efforts of the regional office resulted in the transfer of Fire Program Assistant Nancy Stanley to a ranger position in Harpers Ferry National Historical Park. Employees from Prince William Forest Park and National Capital Parks-Central assisted with those duties via detail assignments to the regional fire management office.

The year-long celebration of the creation of Smokey Bear 50 years ago came to a conclusion on August 9, in a day-long, gala celebration on the Ellipse in Washington, DC. The National Park Service and other bureaus of the Department of the Interior jointly developed a display entitled "Fire as a Tool for Resource Management and Wildland Fire Prevention." Over 40 employees of the National Capital Region and neighboring parks in the Mid-Atlantic Region worked to create and staff the booth and to help with the entire event. An interagency Incident Management Team, with many key members from the NPS, managed the very well attended event.

Partnerships with local agencies continued to develop and grow throughout 1994. The crowning achievement came in December with the development of a new interagency coordinating group, "<u>VMAC</u>," or Virginia Multi-Agency Coordination Group. The group, which grew out of the (Virginia) Training Coalition and the Dulles Module is composed of members from the Commonwealth of Virginia, USDA Forest Service, U.S. Fish and Wildlife Service, Blue Ridge Parkway, Shenandoah National Park and NPS Mid-Atlantic and National Capital Regions. The purpose of the group is to achieve efficiency and cost effective fire program management, and management of all risk incidents

occurring in Virginia and other areas within the Virginia Zone. Carl Douhan, Regional Fire Management Officer for NCR, was elected the first chairperson.

A Virginia Module was developed to improve response capabilities for wildland fire and all-risk incidents occurring within the Virginia Zone and for mobilization of resources in response to needs outside the zone. All members of <u>VMAC</u> will participate in the module. Procedures for the Interagency Coordination Center will also be further refined and defined.

Firefighters from regional parks participated in the suppression of several western fires or worked in mobilization centers and other related overhead duties. August 17th witnessed the highest singleday assignment of park and regional personnel to the western fires when 45 firefighters and single resource overhead personnel were assigned to various interagency incidents. The fires were used as an opportunity to improve individual firefighter qualifications and to meet the goals for the overhead development program.

Hazard fuel reduction projects were implemented at Prince William Forest Park and Catoctin Mountain Park. The project at Catoctin was fully completed and the project at Prince William is 50 percent completed. Both projects involved mechanical means to remove the accumulated fuels resulting from storm damage and Gypsy Moth kill.

North Atlantic Region

The region witnessed the departure of both the Fire Management Officer and

Program Assistant in late 1993. These departures left a gap in coverage of the fire management program, much of the work was assumed by the Cape Cod Fire Management Officer, the Regional Staff Park Ranger and the former Regional Fire Management Officer. The new Regional Fire Management Officer, Paul Head, assumed his duties in late April.

A variety of fire training accomplishments occurred in 1994. Cape Cod conducted S-130 and S-190 training. Acadia provided S-205 training to an audience including NPS, U.S. Forest Service, U.S. Navy, Maine Forest Service and local fire fighters. Fire Management Officers from Cape Cod and Acadia attended an NPS sponsored Fire Prevention Plan training workshop in Atlanta. Two employees from parks within the region were selected for training assignments to the Southern Area Interagency Hotshot Crew.

The North Atlantic Region hosted the National Fire Weather Advisory Group's fall meeting at Cape Cod National Seashore. The region also hosted a park Fire Management Officer workshop.

The Fire Management Plan for Acadia National Park was completed and approved in January. Acadia, in conjunction with the Maine Forest Service, hosted a Smokey Bear 50th Anniversary celebration that received regional media coverage.

Aviation management personnel from the Department of the Interior and the Branch of Fire and Aviation Management assisted the Regional Fire Management Officer in conducting an evaluation of the region's aviation management program. The evaluation highlighted the importance of safety and fiscal management in the National Park Service aviation program.

The structural fire program continues to gain acceptance and support from the field. Site visits and close cooperation with various disciplines within the NPS have verified the need for a comprehensive structural fire management program, not only in the region, but servicewide. Training and education of park personnel in fire safety and awareness have been identified as important areas for development. Requests for technical assistance continue to increase as the results of site visits and identification of existing unprotected values at risk. One park has been identified to participate in a test of the Structural Fire Risk Program Review Process to help evaluate its applicability to the region's parks and how it interfaces with our existing evaluation process.

Eleven additional sites were surveyed during the year, four comprehensive fire management plans were approved and a Structural Fire Management Workshop was conducted for 16 park Structural Fire Coordinators. Technical assistance was provided in the development of three collection management plans. Presentations on fire threats to buildings and program development were given at several regional and multi-regional workshops.

Members of the two Type II All-Risk Incident Management Teams assembled for an Incident Command System refresher and a simulation exercise at Cape Cod. The simulation was directed by the National Park Service's Type I AllRisk Incident Management Team. One of the Type II teams was activated to manage a special event at the Springfield Armory National Historic Site in July.

Pacific Northwest Region

The prescribed fire program at Crater Lake was hampered by the busy wildfire season and extreme conditions, but several hundred handpiles generated from hazard fuels were constructed by the Youth Conservation Corps and burned by park fire personnel. Snows prevented any under burning. North Cascades planned burns at Stehekin were also postponed for a year because of poor weather conditions during the planned burning period.

Fire management plans for Olympic, Mount Rainier and Crater Lake were all revised during the year. None were approved, however, because additional work needed to be done with the U.S. Fish and Wildlife Service (USFWS) regarding endangered species protection. Meetings with the USFWS should result in the plans being submitted for approval in the spring of 1995.

The Regional fire office lost two of its fire staff through transfers in 1994. Diane Wisley left in early September for a concession/management assistant position in Sequoia and Kings Canyon National Parks. Ralph Satterberg left the Portland Interagency Coordination Center for an interpretation position at Vicksburg National Historic Site in Mississippi.

Rocky Mountain Region

The most significant issue of the fire season, given the existing severity and

complexity, was that park superintendents chose to manage their fires under a variety of management options that balanced protection, natural resource goals and cost. This process has allowed the parks to more completely progress from <u>fire control</u> to <u>fire management</u> practices. Our success in fire management has permitted parks to increase their credibility with park neighbors and other land management agencies.

This diversity of management options was a challenge to information personnel of parks, the Region and incident management teams. Information personnel did an exceptional job of keeping our public informed of strategies, costs, risks and other factors associated with the management of these incidents. On numerous occasions these people met directly with the public and addressed issues of specific concern.

The role of management ignited prescribed fire continued to expand this year with Rocky Mountain National Park conducting it's first burn in recent years. The 125 acre <u>Moraine</u> fire was conducted by park staff, including the Alpine Hotshot Crew and with assistance from several neighboring agencies. The public information component of the fire received as much effort as did the burn plan. The fire met it's goals and objectives and received extensive media coverage by Denver television, numerous newspapers and National Public Radio.

Southeast Region

FIREPRO expenditure audits and fire program reviews were conducted at

Everglades, Cape Hatteras and Blue Ridge Parkway. In addition, fire program reviews were conducted at Timucuan Ecological and Historic Preserve, Cumberland Island, Big South Fork and Congaree Swamp. Personnel from the Branch of Fire and Aviation Management participated in the expenditure audit and program review at Everglades and in program reviews at Cumberland Island, Big South Fork and Congaree Swamp.

The Southern Area Geographic Board, comprised of Regional Fire Management Officers from the NPS, U.S. Forest Service, U.S. Fish and Wildlife Service and a representative from the state fire service, developed and initiated procedures for implementing the new performance-based fire qualifications system in the Southern Area. State interagency coordination centers are to maintain lists of personnel needing either an On-the-Job or Position Performance training assignment. Agency units having an incident long enough in duration to provide trainees are to notify the state interagency coordination center of the training positions available.

Through the efforts of the NPS Emergency Services Coordinator (Assistant Coordinator) at the Southern Area Coordination Center and with assistance provided by the Regional cc:Mail Coordinator, an electronic communication was established between NPS, U.S. Forest Service and U.S. Fish and Wildlife Service Regional Offices and field units.

Regional fire training funds were used to support the following courses: I-220, S-130 and S-190, hosted by Cumberland

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Island and Mammoth Cave; S-205 hosted by Great Smoky Mountains; and WIMS jointly hosted by the U.S. Forest Service and NPS Regional Office. The Regional Office hosted a fire prevention training course in Atlanta for the Branch of Fire and Aviation Management. Personnel from parks in the Southeast, North Atlantic, Midwest and Mid-Atlantic Regions attended the course.

A meeting for park Fire Management Officers from Big Cypress, Everglades, Great Smoky Mountains and Natchez Trace was held in Knoxville, Tennessee. Also attending were park Fire Coordinators from Big South Fork, Blue Ridge Parkway and Cape Hatteras. The major topics discussed were FIREPRO funding and the new performance-based fire qualifications system.

Cape Hatteras initiated a fire effects monitoring program. The Seashore conducted orientation programs for NPS wildland firefighting policies and procedures for local fire departments.

Southwest Region

Many of the planned administrative and training activities for the year failed to materialize as the fire season came early, stayed late, and was severe everywhere. Program reviews were completed at Big Bend, Chaco Canyon, Navajo and San Antonio Missions. FIREPRO audits were completed at Buffalo River, Carlsbad Caverns and Big Thicket.

Fire management plans were completed for Pea Ridge and Big Bend, introducing two new prescribed fire programs and significant progress was made on plan revisions for Chickasaw, San Antonio Missions, Lake Meredith, Padre Island and Pecos. Of major significance was the effort led by Carlsbad Caverns to develop an interagency ecosystem wide fire management plan, the first of its kind in the southwest. The project, when completed, will allow for comprehensive wildland fire management on lands managed by BLM, NPS, USFS, New Mexico State and private individuals in Texas and New Mexico.

Although total acreage was down due to the national suppression demands, the prescribed fire program continued to expand with projects being completed at Big Bend, Carlsbad Caverns, Buffalo River, Pea Ridge, Fort Smith, Salinas Pueblos, Arkansas Post, Bandelier and Walnut Canyon. It is hoped that programs at Padre Island, Guadalupe Mountains and Chickasaw can be brought on line in 1995. Additionally, both Carlsbad Caverns and Big Bend conducted prescribed natural fires. A major failure was the inability to improve on the regional fire effects monitoring program which, outside of Big Thicket, Bandelier, and El Malpais, remains largely non-existent. A regional workshop will be developed in 1995 to address this deficiency.

Two staff changes occurred during the year with Diana Vigil replacing Ben Espinoza as the regional fire clerk in May and Hallie Locklear transferring to Sequoia and Kings Canyon National Parks in September, leaving the regional fire program assistant position vacant for the rest of the year. Regional and park staff participated on several national committees and workgroups including the InciNet steering committee, the extended attack workgroup, NWCG Training Working Team, FIREPRO Steering Committee and the ICS curriculum development workgroup.

In November the region hosted the interagency prevention workshop which provided training to students from throughout the Department in the use of the new prevention planning software. Other significant training sponsored included I-420, I-440 and RX-91. Several students also participated in the Western Region engine academy.

Western Region

This Region continues to strive to be in the forefront of the development and support of a well-balanced total fire management program; to that end, several initiatives were undertaken in 1994 to strengthen our existing wildfire suppression, prescribed burning, prescribed natural fire and fire effects monitoring activities. The conversion of 17 seasonal engine foremen, fire crew supervisor, prescribed fire technician and fire effects and prescribed natural fire monitor positions to permanent status enabled us to attract a number of well qualified personnel and is a very important step in strengthening all elements of the fire management program.

Creation of the new Mojave National Preserve in Southern California by Congress in the fall of 1994 resulted in NPS responsibility for fire protection of an additional three million acres in California. A good deal of time and effort has been devoted to joint planning with the Bureau of Land Management in transitioning to a fully integrated, joint agency fire management program for the entire Mojave Desert area, including the new Preserve and greatly expanded Death Valley and Joshua Tree National Parks.

Constructive fire program oversight and review continues to be an important part of maintaining an efficient and cost effective program in this region and Regional fire staff participated in on-site reviews and audits at Saguaro, Sequoia-Kings Canyon, Golden Gate and Great Basin in 1994.

A major effort to make managers aware of their responsibilities in aviation activities was undertaken in 1994 and with excellent cooperation from the Training Branch of the Office of Aircraft Services in Boise. Three separate training sessions for Superintendents and Chief Rangers from all parks with significant aviation use were held in the spring of 1994.

The NPS assumed responsibility for structural fire control on the Presidio in 1994 and in doing so took over operation of the 35 person, 24 hour per day Presidio Fire Department, whose members are now being cross-trained in wildland fire control. Structural fire training courses, including a Level III command course, were sponsored at Grand Canyon, Yosemite, Whiskeytown, Organ Pipe and Redwood during 1994.

Five monitors observed 100 burn plots this year. The current plot network is 45

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percent burned, with 365 plots burned. Again, Western Region parks conducted many management ignited prescribed fires this year, despite numerous management constraints. The prescribed fire programs were affected by both the severity of the 1994 fire season and regionwide drought. However, the combined acreage of management ignited prescribed fire and prescribed natural fire was about equal to the total of 1993 prescribed fire.

Much of the prescribed natural fire acreage was the result of the <u>Rincon</u> fire in Saguaro and the <u>Horizon</u> fire in Yosemite. The former was converted to a wildfire due to a threat to the Coronado National Forest boundary, while the <u>Horizon</u> was converted because of a threat to both the maximum allowable perimeter and air quality.

The <u>Horizon</u> fire also involved the testing of the FARSITE fire spread model in the prediction of its growth. Based on its predictions, holding actions were taken to prevent fire spread to the north towards Yosemite Valley.

The management ignited prescribed fire program also showed widespread activity, with burns conducted in Lava Beds, Lassen, Whiskeytown, Redwood, Point Reyes, Golden Gate, Sequoia-Kings Canyon, Yosemite, Channel Islands and Grand Canyon. Fire personnel in Western Region parks showed good dedication to the program as they both participated in the ongoing national mobilization and continued to prepare for fall prescribed burns.

Fire program managers at both the park and regional level continued to work with cultural resource managers, air quality regulators and sensitive species specialists to work out methods by which these resources can be protected while prescribed fire is applied as broadly as possible. An example is the Interagency Smoke Management Council in California, which was established to allow representatives from the NPS, USFS, EPA and state and county air regulators to discuss smoke, fuel management and ecosystem health.



Year	Number of Fires	% Time Wildfire Suppression	% Time Prescribed Fires	% Time Other Projects
1985	42	65	5	13
1986	35	50	13	17
1987	35	63	4	15
1988	31	79	3	3
1989	32	68	10	6
1990	26	54	9	12
1991	30	51	5	20
1992	29	54	5	29
1993	22	51	14	13
1994	46	82	2	9

 Table 1. Interagency Hotshot Crew Workload Distribution 1985 - 1994

The National Park Service presently manages 2 of 63 Interagency Hotshot Crews as part of its contribution to national interagency fire suppression resources. The crews' primary function is hot-line wildfire suppression. When not needed for suppression activities, the crews are able to make significant contributions on interagency prescribed fire operations and other physically demanding natural resource projects.

The National Park Service crews are assigned to duty stations at host parks. The Arrowhead crew is permanently based at Sequoia-Kings Canyon National Parks and the Alpine crew became permanently based in 1993 at Rocky Mountain National Park.

In 1994, the Alpine crew project work occurred in their host park and included trail maintenance, fence construction, water system hookup to a visitor center, work on the new crew dormitory and provided assistance in the Bierma search. The Alpine crew provided assistance to Lake Mead in Tamarisk removal, hazard fuel reduction at Walnut Canyon, prescribed burn preparation at Grand Canyon and fence and trails work in their host park.

CREW NAME	FIRE NAME	LOCATION	DATES
Arrowhead	Jumbo	BLM/Las Vegas	5/30-6/2
	Miller	Coronado NF	6/3-7
	Coffeepot	Cibola NF	6/8-12
	Willow	Manti-Lasal NF	6/14-19
	Camp	Tonto NF	6/24-25
	Bush	Tonto NF	6/26-27
	Jurassic	BLM/Kingman	6/28-29
	4th Street	Kingman City	6/29
	Ryland	BLM/Phoenix	6/30
	Challenger	BLM/Phoenix	7/1
	Squaw	BLM/Phoenix	7/2
	Rattlesnake	Coronado NF	7/4-12
	Skunk	Shasta-Trinity NF	7/21-22
	Squaw	Shasta-Trinity NF	7/23-24
	Dillon	Klamath NF	7/25-8/5
	Crystal	Tahoe NF	8/6-9
	Horizon	Yosemite NP	8/12-17
	Cottonwood	Tahoe NF	8/18-23
e	Big Creek	Sierra NF	8/24-30
	Liberty	BLM/Kingman	9/6-9
	Echo Creek	Utah State	9/11-14
	Flume	Sierra NF	9/15-16
	Prospect	Shasta-Trinity NF	9/19-20
	Scorpion	Shasta-Trinity NF	9/20-23
	Specimen	Klamath NF	9/24-10/2

Table 2. Interagency Hotshot Crew Wildfire Assignments, 1994

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CREW NAME	FIRE NAME	LOCATION	DATES
Alpine	Fletcher	BLM/Craig	6/5-8
	Bridge	Lincoln NF	6/8-12
	Crosby	Cibola NF	6/12-13
	Ryan Complex	Cibola NF	6/14-18
	White	Kern Valley, CA	6/22-25
	Coffeepot	Cibola NF	6/25-30
	Rattlesnake	Coronado NF	7/1-12
	Ute Creek	White River NF	7/15-26
	Park Point	Mesa Verde NP	7/30-31
	Krueger Pt.	Mesa Verde NP	8/2-3
	Stewart	BLM/Craig	8/4-6
	Cliff Lakes	White River NF	8/6-10
	Highline	BLM/Grand Jct.	8/17-19
	Stella Owen	BLM/Grand Jct.	8/21-22
	Slow Elk	BLM/Grand Jct.	8/21-22
	Star Gulch	Boise NF	8/23-9/3
	Idaho City	Boise NF	9/6-24
	Salt Creek	White River NF	9/29-10/1

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 Table 2. Interagency Hotshot Crew Wildfire Assignments, 1994 - Continued

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Table 3. Fire Management Authorizations



WE 342 - Program Management

PWE 346 - Presuppression

Table 4. Fire Severity Funding, Fiscal Year 1994

REGION	REQUESTOR	AMOUNT
Pacific Northwest	Olympic NP	11,600
	North Cascades NP	6,500
	Coulee Dam NRA	10,600
	Regional Office	6,500
Rocky Mountain	Rocky Mountain NP	40,000
Western	Whiskeytown NRA	7,500
	Lava Beds NM	9,000
	Hawaii Volcanoes NP	3,500

TOTAL APPROVED FUNDING: \$95,200

In addition to the above authorizations, on September 7th, severity funding was also authorized to extend FIREPRO-funded seasonals that were scheduled to terminate before the end of the fiscal year due to lack of funds. The purpose of the authorization was to insure that resources were available to support interagency fire assignments while providing adequate initial attack capabilities in the host parks.

Severity funding must be requested through the Regional Directorate, for approval by the Branch of Fire and Aviation Management, National Interagency Fire Center.

Severity funding is intended to increase initial attack preparedness and fire prevention response to an anticipated long term fire potential greater than the normal fire year. The severe fire potential may be the result of long term drought, unusual fuel conditions or other objective conditions.

Severity differs from step-up planning in that step-up plans are approved by the regional fire management officer; are driven by staffing classes which are determined by the burning index. Step-up plans are shorter term increases in preparedness and prevention.

Severity funds must be terminated as soon as conditions return to the normal fire year.

REGION	UNIT	REQUEST	AMOUNT
Pacific Northwest	Regional Office	Air Tanker Operations	\$51,000
Rocky Mountain	Regional Office	USFS: Northern Rockies; R-1/FIDC; RMACC. BLM: WSFCC/Colorado; WICC/Wyoming. DOI Position/Missoula. MT Eastern Great Basin Coordination Center.	\$106,200
Southeast	Regional Office	Helicopters, Southern Area Coordination Center, Regional Cache	\$18,000
	Great Smoky Mountains	Interagency Air Tanker Base Operation	\$41,529
Southwest	Buffalo River	Support to Interagency Workgroup	\$4,000
	Regional Office	Santa Fe Zone, Oso Ridge Lookout	\$5,800
Midwest	Regional Office	Fire prevention activity	\$2,000
National Capital	Regional Office	Appalachian Trail, 50th Anniversary - Smokey Bear	\$8,500
Western	Regional Office	Coordination Centers, GRCA Air Tanker, GRCA Dispatcher, AZ Smoke Mgmt Coordinator	\$97,000
	Channel Islands	Interagency Helicopter Contract	\$30,000
	Joshua Tree	Interagency Coordination Center	\$4,000
ī	Lassen Volcanic	Susanville Interagency Dispatch Center	\$10,000
	Lava Beds	Modoc Interagency Dispatch Center	\$6,000
	Santa Monica Mtns	Angeles NF Dispatch Center	\$13,500
	Whiskeytown	Interagency Emergency Communications Center	\$1,500
Branch of Fire & Aviation Mgmt.		Wildland/Urban Initiative, Training	\$46,500

TOTAL \$445,529

1994 - FIRE STATISTICS

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Table 6. NPS Normal Fire Year¹ Statistics

SIZE CLASS IN ACRES	NUMBER OF WILDFIRES	NUMBER OF PRESCRIBED NATURAL FIRES
A (0 - 0.2)	494	96
B (0.3 - 9.9)	276	21
C (10 - 99.9)	63	13
D (100 - 299.9)	26	5
E (300 - 999.9)	16	7
F (1000 - 4999.9)	14	3
G (5000+)	5	0
TOTAL	894	145

Start Days: 312 (Wildfires); 293 (Rx Natural) Peak number of starts in a day: 36 (Wildfires); 24 (Rx Natural)

¹ The normal fire year calculation is based on an analysis of NPS fire history for ten years from 1985 through 1994. "Normal" occurrence is defined as the third worst year in a ten year analysis period, and the statistics for each size class may be derived from different years.

FIRE TYPE	# FIRES	NPS ACRES
Suppressed on NPS lands by NPS full control strategy	866	40,544.2
Suppressed on NPS lands by NPS modified control	45	19,667.7
Suppressed on NPS lands by other federal agency	17	8,555.1
Suppressed on NPS lands by non-federal agency	34	805.4
TOTAL WILDFIRES	962	69,572.4
Prescribed natural fires	67	8,559.9
Management-ignited prescribed burns	185	66,078.8
TOTAL PRESCRIBED FIRES	252	74,638.7
NATURAL OUT ON NPS LANDS	188	3,376.5
MUTUAL AID BY NPS ON OTHER LANDS	242	518.8
SUPPORT ACTIONS (NON-LOCAL)	1,464	
FALSE ALARMS	101	

Table 8. Wildfires and Acres by Size Class

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SIZE CLASS IN ACRES	AGENC FIRES	Y LANDS ACRES	ALL LANDS ACRES
A (0 - 0.2)	601	65.9	66.2
B (0.3 - 9.9)	256	419.9	444.2
C (10 - 99.9)	60	2,020.5	2,230.1
D (100 - 299.9)	19	3,017.1	3,210.1
E (300 - 999.9)	10	4,977.0	5,227.0
F (1,000 - 4,999.9)	12	28,551.0	33,313.0
G (5,000 +)	4	30,521.0	34,964.0
TOTAL	962	69,572.4	79,454.6

There were 962 wildfires reported on NPS land in 1994, which is 107% of the normal fire year calculat (Table 6). Approximately 89% of the wildfires were controlled at under 10 acres in total size.

	AGENCY LANDS		AGENCY LANDS		
CAUSE	# FIRES	# ACRES	% FIRES	% ACRES	
Lightning	474	62,204.1	49	89	
Campfire	140	352.6	15	1	
Smoking	44	170.3	5	0	
Debris Burning	28	1,084.0	3	1	
Incendiary	90	2,614.8	9	4	
Equipment Use	25	1,875.7	3	3	
Railroads	20	420.6	2	1	
Children	15	12.4	1	0	
Miscellaneous	126	837.9	13	1	
TOTAL	962	69 572 4			



Region	Park	Fire Name	NPS Acres	Total Acres
Rocky Mountain	Glacier	Adair #2	8,055	8,055
		Starvation Cr	3,954	3,954
	Grand Teton	Row	2,326	3,403
	Yellowstone	Tern	4,728	4,728
		Raven	3,000	3,000
		Robinson	8,482	8,482
Southwest	Big Bend	Estufa	3,774	3,774
	Guadalupe Mtns	Marcus	5,500	6,250
	Fort Davis	Westex	40	3,190
Western	Pinnacles	Pinnacles	619	1,154
	Saguaro	Mothers Day	1,200	1,200
		Rincon	8,484	8,484
	Yosemite	Horizon	3,560	3,560
Pacific Northwest	North Cascades	Butte Ck#2	1,000	1,000
		L.Boulder	2,700	2,700
Alaska	NW Alaska Area	A258	1,650	1,650

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Region	Park	Fire Name	Acres	Fuel Type	Cost/Acre
Southeast	Big Cypress	Highway N	1,769	Sawgrass	250.00
		Raccoon Pt	6,719	Pine/grass	1.94
		Brown2 Rx	2,658	Pine/grass	1.36
		Highway N3	1,170	Sawgrass	2.50
		Highway N4	1,207	Sawgrass	2.50
		Big DeerRx	16,249	Pine/grass	1.48
		WindmillRx	12,707	Pine/grass	.65
	Everglades	Pineglades	1,000	Sawgrass	2.70
		Pines Wofa	3,500	Sawgrass	.91
		L31W	1,690	Sawgrass	.25
Southwest	Big Thicket	FMU 1301	1,795	Open pine	1.35

Table 11. Large Management Ignited Prescribed Burns

There were 185 management ignited prescribed burns completed during 1994 for a total of 66,079 acres treated. The largest burn program was conducted at Big Cypress National Preserve, where 15 management ignited prescribed fires treated 44,739 acres.








KEY:			
MAR -	Mid-Atlantic Region	SWR -	- Southwest Region
MWR -	Midwest Region	NCR ·	- National Capital Region
ARO -	Alaska Region	RMR ·	- Rocky Mountain Region
SER -	Southeast Region	PNR ·	- Pacific Northwest Region
NAR -	North Atlantic Region	WRO .	- Western Region
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Table 14. Management Ignited Prescribed Burns by Region



Region







Table shows the maximum single-day commitment of people to interagency fire suppression in 1994.



1985 - 1994 FIRE STATISTICS

SERVICEWIDE





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Support actions are primarily wildfire suppression assists to non-local areas. They do not include local mutual aid responses. National mobilizations of National Park Service personnel for interagency wildf suppression efforts were unheard of until 1985. Since that time many agency personnel, including the whose regular job assignments are not fire-related, have been trained and dispatched to fire assignment

The above table displays the number of support action dispatches reported for the past ten years. The actual number of individuals dispatched is substantially greater. These figures do not include people v were involved in mutual aid or local suppression activities, or the people involved in fire-related suppositions at their home units.

In addition to personnel, NPS helicopters, engines and other equipment were used during mobilization

1985 - 1994 FIRE STATISTICS

BY REGIONS

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Year

















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