

U.S. Fish and Wildlife Service Fire Activity Report



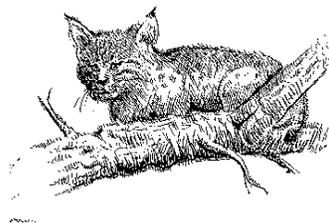
2001

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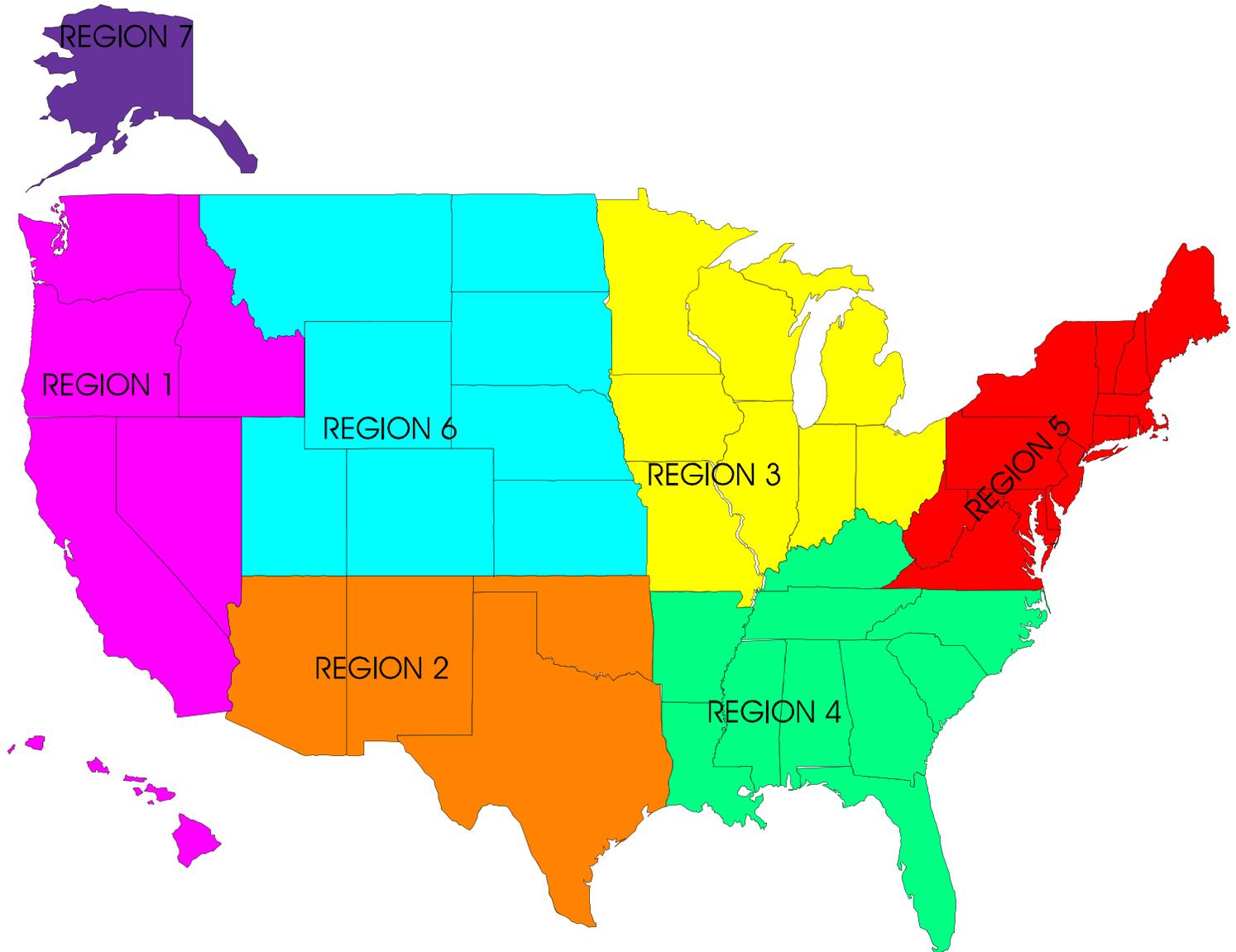
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U.S. FISH & WILDLIFE SERVICE Regional Map



REGION



Overview

The first wildland fire of the season in Region 1 was on January 3rd. The Santa Ana winds blew 30-40 mph and the 10,000-acre Foothill Fire headed straight for San Diego Refuge. It was stopped within a half mile of the San Diego Refuge boundary. The Type 1 Incident Management Team (IMT) provided a great opportunity for the refuge manager and project leader to attend IMT planning meetings and briefings. Those visits were very informative and well worth the time!

The Regional Director and Regional Chief, NWRS, both toured fire camp 60 miles from Portland on the Gifford Pinchot NF. This was their first opportunity to get a close look at what happens in fire camp. The Type II IMT provided an excellent overview of daily operations and coordination necessary for the development of the IAP and interface with the local administrator. This greatly increased their awareness and understanding of large fire operations.

It was the third year of drought in the Region. That made it difficult or impossible in some cases to complete our hazard fuel reduction projects. It was another busy fire year and a great deal of time was spent in wildland fire suppression. Live fuel moistures hovered around 35% and reached historic lows in chaparral in California.

National Fire Plan (NFP)

The National Fire Plan increased the Regional fire staff workload dramatically. We were unsure most of the time if we worked for fire management or the NFP. Short turnaround data requests were the norm, and continue. The field fire staffs worked extremely hard to meet the request deadlines, and were very successful in performing their NFP duties and meeting

their fire management obligations.

Region 1 is struggling to fill 18 positions. We are not alone in that the most critical vacancies are immediate supervisory in nature - the engine crew leader and assistant engine crew leader positions (GS-5/6). Region 1 also lost a number of qualified engine crew leader folks to other agencies through promotions. (We must be training them well.)

The Rural Fire Assistance Program (RFA) is a big success and was well received by the small communities. The Region distributed \$150,000 to fire departments in Washington, Oregon, California, and Idaho. Additional funding in RFA would be greatly appreciated, and would be money well spent.

Region 1 completed Wildland Urban Interface projects for 9,475 acres. These projects were completed through the use of both contracts and refuge personnel. Most projects were on refuge lands, but that is changing.

The addition of WUI Coordinator positions in Portland and Sacramento is beginning to show positive results. Both have been dedicated to quality control and quality reporting. Both Coordinators are members of interagency committees, which are developing strategies and setting priorities in a collaborative manner. Four field positions are also staffed and are working on developing, validating, and monitoring both on and off-refuge projects.

Planning

The Region completed 50 fire management plans that address the use of fire on refuges and national fish hatcheries. The planning continues on less fire-prone refuges, and is

slated for completion by the end of the fiscal year. Fire management in our Region has not previously addressed national fish hatcheries. There is a land base of nearly 5,000 acres in Region 1. With fires on two of them this past summer, completion of suppression fire management plans became paramount.

Air Quality

The air quality issue continues to be a big and growing concern throughout significant portions of the West. This is probably the biggest obstacle to fire use for the FWS. Funding to help pay for State air regulatory work is being assessed for most of our burns, some even if we don't burn them. It varies from State to State, but is becoming more costly every year.

Assistance

Region 1 was busy in support of the interagency fire community. In addition to helping the Federal fire community, the FWS assisted rural fire departments in areas where we are the primary Federal agency for support. The Region continues to work on local agreements to strengthen our support to local communities, and they to us. Region 1 also assisted the FWS in Regions 2, 3, 4, and 6. The exchange of FWS personnel is valuable for both prescribed fire and suppression. Experience in a variety of fuel types and learning how other Regions fight and light fire is invaluable. This was also a first time that four National Fish hatchery folks had been involved with large fire incidents. They spent more than 2 weeks in Washington on a National Park Service regular crew.

Fire Reviews

There were three fire reviews conducted this year; two were escaped prescribed burns, and one a smoke intrusion. Both escapes were no-fault issues. One, a blown spot weather forecast, was addressed with the National Weather Service, who has since

modified western regional policy to require updating spot forecasts when new data warrants.

The smoke intrusion required a more intensive review, and potentially carried State citations. The review was completed; the State air quality folks were invited to observe a prescribed burn which, to their amazement, moved exactly as predicted. Now, the air quality folks have photos of themselves with flames in the background on their walls, proclaiming the accolades of smoke management skills within the Service.

Wrap-Up

2001 will be remembered as the start of the National Fire Plan. Our R-1 Director implemented weekly NFP meetings to coordinate fire, ecological services, personnel, contracting, diversity and civil rights, regulatory compliance, hiring status, project tracking, wildfire situation reports, and interagency collaboration status. The Region hosted three GAO reviews, implemented four BAER plans, met with the Chief of Staff on our Region's accomplishments, participated in the NAPA report, and served on three different geographic areas' Multi-agency Coordination Groups for another busy fire season in an extended drought situation. The Region represented FWS on the Technical Fire Management steering committee and established/reserved, for the first time, three slots for the FWS. Several additional fire employees signed up for Type 1 and Type 2 Interagency Incident Management Teams, and joined other peers in serving the fire world. It was an incredible year of changes/new programs/increased workloads for the Regional Office and most importantly, the field.

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National Fire Plan Implementation

With strong support from the Administration, Congress and the Western Governor's Association, the National Fire Plan has provided increased capacity to Federal, State, Tribal and local fire management organizations. Considerable effort has been invested in the expansion of existing programs, creation of two program areas, and the addition of 46 additional FTEs, creating and providing data and reports to the National Fire Center in Boise, the Washington Office and the Secretary of the Interior. The Southwest Strategy Regional Executive Coordination (REC) Group assigned NFP Implementation to the Southwest Interagency Fire Management Board (SWFMB). The SWFMB has delegated authority from their respective Regional/State Directors and is made up of the fire program managers for the Federal land management, Tribal, and State forestry agencies, representing both New Mexico and Arizona. Under the SWFMB's direction are State Coordinating Groups, with the local established interagency zones within each State providing the local presence. The SWFMB and the respective State Coordinating Groups encourage the local Line Officers to remain involved, work together, and stay on task with the implementation of the National Fire Plan. There are similar efforts being coordinated with Texas and Oklahoma.

Wildland Urban Interface Protection/Rural Fire Assistance

Two new program areas have been created, Wildland Urban Interface protection (9264-WUI), and Rural Fire Assistance which increases firefighter safety and enhances the wildland fire protection capabilities of rural fire departments (9265-RF A). These additional fund codes include staffing of an additional nine positions to administer these

new programs, and \$148,000 of assistance grants to local departments which has been transferred under MOUs and grants to 48 Rural Fire Departments. Additions to personnel include one new position in each of the following areas: Personnel, Contracting and General Services, Wildland Urban Interface, Fire Ecology, and Fire Monitoring. These new positions will provide the capacity to work closely with our Federal, State, local and Tribal partners in providing improved protection and hazard fuel reduction on Service lands and adjacent communities.

Support to Rural Fire Districts:

<u>State</u>	<u>No. Of Departments</u>	<u>Funds/Equip Provided (9265)</u>
TX	42	\$108,000
OK	0	\$0
NM	5	\$20,000
AZ	1	\$20,000
Total	48	\$148,000

Hazardous Fuels Reduction/Ecosystem Restoration:

Project accomplishments for in these program areas for FY 2001 include:

<u>State</u>	<u>WUI (9264)</u>	<u>Haz. Fuels (9265)</u>	<u>Total Acres</u>
TX	3,266	23,763	27,029
OK	6	372	378
NM	0	17,000	17,000
AZ	320	18,790	19,110
Total	3,592	59,925	63,517

Fire Management Planning:

Efforts are well under way across the Region to complete updated Fire Management Plans for all stations with burnable vegetation. The highest priority was given to those stations which have significant prescribed fire programs that rely upon 9263 prescribed fire funding to assure uninterrupted funding in FY 2002. Due to considerable backlog, the requirement to update all FMPs to the June 2000 standard, and staffing vacancies, a contractor worked with the Regional Office staff to assist the nine Fire Management Officers in the Region in completing their Fire Management Plans. All of the districts have completed their plans for stations within their districts which currently employ prescribed fire as a management tool. Out of the 52 refuges and hatcheries in the Region, 16 stations with primary prescribed fire activity have had new plans approved this FY.

Wildland Fire Support

Another program area receiving considerable attention is large fire support, both within the Region and nationally. Fire activity remained consistent with annual averages. Staffing to meet these needs was in part met through our modest staffing during our fire-prone period across the Region. South Texas had a year-round fire season, with only two extended attack incidents.

The traditional May-July fire season in Arizona and New Mexico came early. There were one Type II incident and three extended attack incidents in New Mexico; one extended attack incident in Arizona, and 80 initial attack responses in Texas. Despite the drought in Oklahoma, fire activity was limited to only one extended attack and several initial attack incidents.

Miscellaneous overhead assignments were primarily due to the active fire season in the Pacific Northwest and Montana. Three individuals were qualified as Division Group Supervisors, One Type 3 Incident Commander, and several Single Resource and Strike Team Leaders. Several Type 2 Regular Crews were also put on assignment to the Moose fire in Montana.

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Region 3 had a below average fire season in 2001. The spring came slowly following late snow melt, and when it did come it was wetter than normal in the primary areas where most of the prescribed fire activity occurs. In spite of the short spring season, the Regional fire staff made significant progress with the help of 19 detailers and assistance from the National Park Service Black Hills Fire Use Module, the Minnesota Department of Natural Resources, and the Nature Conservancy, and a whole lot of committed collateral duty fire staff on the field stations involved. There was also some successful late summer and fall burning, which helped make up for the narrow season in the spring. All told, the Region had 46 wildland fires that were suppressed, with 291 acres burned. 36,051 acres were burned under prescription conditions in 291 separate burns. Of this total, 51 of the burns were done on 9 Minnesota and Iowa field stations for 8,294 acres in the late summer and fall.

On the interagency front, the Region administratively supervises and partially funds the Coordinator at the Minnesota Interagency Fire Center in Grand Rapids, Minnesota. In addition, Region 3 supports a partial dispatcher FTE at the Eastern Area Coordination Center. The Center is housed at the BHW Federal Building at Ft. Snelling.

The Rural Fire Assistance program was a great success in 2001. The Region was allocated \$248,000, and received requests for twice that amount. In order to achieve the greatest benefit for the greatest number of rural fire departments, each fire department was awarded an equal percentage of their request.

Western Zone

Fire Funded Staffing: One FTE permanent full-time Zone FMO, 6.8 FTE in career seasonal FFTRs. Additionally, four

Prescribed Fire Specialists were hired in June 2001 at Detroit Lakes (Steve Schumacher), Fergus Falls (Troy Boschee), Morris (Don Lantz), Iowa Rx District (Dan Angelo). At present the fire program relies heavily on collateral duty refuge staff to accomplish Rx burns. Most stations are only accomplishing approximately 50% of the burns/acres needed to meet resource objectives identified in station fire management plans.

Folks from Fergus Falls, Tamarac, Big Stone and Windom went on details to other Regions (R-2 and R-6) to assist with Rx fire. Resources from the Zone went west on type II crews, HECM, SEC1, and overhead assignments (DIVS). ENGBs and FFT1s were sent to R-1 Sheldon Hart Complex for severity assignments.

Training: The Zone hosted or assisted with instruction of 130/190 (multiple), annual refresher (multiple), S230, S231, RX300, and S300. Several employees went on task book/trainee assignments (ICT4, ENGB) to Region 1. Three people went to the Prescribed Fire Training Center. Dearborn continued with participation in the FWS Fire Management Mentoring Program.

Interagency Coordination: Continued work with interagency partners on working teams, committees, task forces, ECT, to include a new coordination center for Missouri/Iowa, Eastern Area Coordination Center, Minnesota Interagency Fire Center, Loess Hills Alliance (Iowa).

Fire Management Plans: Significant progress was made in approved Fire Management Plans; to date 11 of the 14 stations in the Zone have approved plans. Of the final three, one is in final public comment phase (Windom), two with drafts complete.

Eastern Zone

A lot of change has come to the Eastern Zone in 2001, with more on the horizon. The season started with the retirement of FMO Norm Brown at Necedah NWR. Norm had been in place since the late 70s and his roots were very deep. The year also included the hiring of Brian Winters as the Prescribed Fire Specialist at Big Oaks NWR in southern Indiana. Filling this position has been a welcome addition to address the growing Rx program at Big Oaks and to assist some of the smaller stations in the area.

Another big change has been the relocation of Zone FMO Tom Zellmer from Agassiz NWR in northwest Minnesota to Leopold WMD in Wisconsin. This relocation was part of a strategy to realign the Regional Zones after Norm Brown left and make the FMOs more effective. With the Eastern Zone now encompassing 6 States, Tom's new location is centrally located within the workload. Additional positions targeted for 2002/2003 should continue to alleviate some of the geographic hurdles that exist within this Zone.

The Zone acquired one new type 663 engine at Big Oaks NWR. As a new refuge, this is their first piece of equipment and it will be put to good use. Two additional engines were ordered for the Zone and should be arriving in the spring of 2002.

Much of the year was committed to station Fire Management Plans. With the realization that their prescribed burn programs could come to a screeching halt, managers decided it was time to make FMPs a priority. Of the 19 stations within the Zone, all but three should have approved plans in place for 2002.

Another accomplishment worth noting is that there are now seven interagency coordination centers fully active within the Zone. FWS presently co-funds two

dispatcher positions with the National Park Service - one at the Indiana Interagency Coordination Center (IICC), and one at the Missouri Interagency Coordination Center (MOCC). Our participation in the interagency community has been increasing proportionately with additional fire staff. Positions yet to come on line will continue to help build the relationships with our State and Federal partners.

Sherburne Zone

Zone personnel responded to seven wildfires during 2001. Five of these were on the Refuge and ranged in size from a spot to 21 acres (Larson Slough). The Larson Slough fire is suspected to be arson caused and required interagency support to control, including Minnesota DNR ground forces and helitack, and the Big Lake Fire Department, in addition to most of the Refuge staff. The fire burned in grass, brush, and oak and pine forest types. The Refuge responded to two fires off the Refuge in support of the Minnesota DNR. These ranged in size from .1 acre to over 110 acres in size.

The Regional Fire Cache, housed at Sherburne NWR, shipped over \$38,000 worth of fire gear to field stations in Region 3 during FY 2001.

Monitoring fire effects is an important aspect of Sherburne's fire program. Fire effects have been monitored since 1992 using the NPS Fire Monitoring Handbook (FMH) protocols. At the end of FY 2001, 102 FMH plots had been established at Sherburne. Of these, 47 are in grasslands, 28 are in oak savanna and 27 are in red oak forest. In 2001, 26 grassland plots, 27 savanna plots and 12 forest plots, plus 4 forest plots and 4 grassland plots at Crane Meadows NWR received pre-burn, post-burn, 1-year post-burn or 2-year post-burn or 5 year post-burn readings.

REGION



Region 4 had 138 wildland fires covering 45,193 acres. In the past 10 years this acreage has only been exceeded in 1999, when the Region experienced 52,610 acres of wildfires. Okefenokee NWR burned the most acres with 10 fires covering approximately 10,000 acres.

In spite of the sharp increase in wildfires from 2000 (12,198 acres), the Region also increased its Rx burned acres from 75,709 in 2000 to 85,079 in 2001. This was approximately 80% of the planned acres. The primary reason for not completing all acres planned was the extended drought being experienced in the Southeast. Refuges such as Okefenokee NWR, which burns 6,000 to 8,000 acres per year, were unable to complete any burning in 2001 due to the extreme drought conditions. Even as the western portion of the Region began to get rain toward the end of the year, the Eastern Seaboard States remained in drought conditions. Drought indices averaged 200-300 points higher than normal along the Gulf and Atlantic Coasts most of the year. Eight severity packages for refuges within the Region were submitted and approved during the year, up from 5 in 200, and a new record for the Region. During the fall fire season the Region hosted 6 interagency incident management teams at one time, also a new record for the Region.

Assistance was provided on 45 different fires within the Region on which 40,000 acres were burned. Approximately 100 FWS employees from Region 4 were detailed on 198 assignments in support of out of Region wildfires. Region 4 also supplied numerous pieces of equipment to these incidents.

Ken McLaughlin accepted the position as Regional Prescribed Fire Specialist and Robert "Bob" Eaton accepted the Regional Wildland Urban Interface position. We welcome both of these individuals to the Regional staff. This did, however, leave vacant FMO positions at Okefenokee and St. Marks Refuges, respectively. The FMO position at Merritt Island NWR also remains open. Terri Jenkins moved from the station FMO position at Pocosin Lakes NWR to the district FMO position at Savannah NWR which was vacated by Jim Stockie. The Region ended the year with 3 vacant district FMO positions.

Lynne Howard, Assistant Regional Fire Management Coordinator, left to accept the position of Regional Fire Training Officer with the U.S. Forest Service.

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The Northeast experienced one of the driest years on record, beginning with the New England States but continuing into the mid-Atlantic area and Virginia with the onset of summer droughts. Maine ended 2001 at 16 inches below normal precipitation, setting a new record. The drought started with snow melt and was severe enough during the spring months to force burning bans in Maine, New Hampshire, Vermont, and Massachusetts. This had a significant impact on refuge prescribed burn programs throughout the Region, as well as an increase in wildland fire activity across New England. The southern part of the Region experienced drought conditions later in the year, beginning in September and continuing through the end of the year. Great Dismal Swamp NWR recorded the highest Keetch-Byram Drought Index values for this time of year since they began keeping records in 1991. Conditions required keeping the fire crew on through mid November and bringing two engines from Maine for emergency preparedness. The Maryland Forest Service issued a burn ban in November and December, which prevented Blackwater NWR from conducting planned fall burns.

Moosehorn NWR had a relatively active wildfire season, reporting three fires including the 80-acre Hobart Stream fire, which occurred over Memorial Day weekend. This fire, caused by a discarded cigarette, involved designated wilderness on the Baring division and was difficult to control due to the very dry conditions. The fire occurred on both refuge and private lands, and was a good unified command exercise between FWS and the Maine Forest Service. Additional fires occurred at Petit Manan NWR, Lake Umbagog NWR, and Great Meadows NWR. Service firefighters also assisted on two State fires - the 30-acre Cooper fire and the 180-acre Veazie fire,

which threatened a natural gas power generating station. In the mid-Atlantic states, John Heinz NWR reported two wildfires and Erie reported one. All fires were human caused and were largely suppressed by local fire departments. In Maryland, Blackwater NWR responded to 16 wildfires totaling 4,874 acres. No major suppression action was required for most of these fires as many were located in marshes with water barriers and no adjacent values at risk. The Refuge fire crew responded to two major fires on cooperative State lands totaling approximately 3,300 acres.

Overhead assignments for Region 5 Fire Management Officers included a 17-day detail for Gary Kemp as TFLD/STCR in Washington and Oregon, and various assignments for Mike Durfee in Michigan, Montana (twice), and on the military mobilization training team. Region 5 personnel participated as FFT2, FFT1, or CRWB on joint NPS/FWS type 2 crews which were assigned to fires in the Northwest. The Great Dismal Swamp engine crew was assigned to emergency preparedness details at Arid Lands NWR Complex in Washington (14 days) and Dinosaur National Monument in Colorado/Utah (21 days). One Maine engine was dispatched to the Eastern Kentucky Complex fires in November. Two people from Blackwater NWR were sent to an emergency preparedness detail at the Saddle Mountains National Monument in Washington, and a Dispatch Recorder Trainee assisted at the Eastern Area Coordination Center in Minneapolis.

Major staff changes occurred in 2001 as a result of increased funding and guidance from the National Fire Plan effort. Experienced firefighters were converted to career seasonal status in the New England and DE-MD-VA-WV Districts in the

interest of developing a stable, skilled work force to be used primarily as prescribed fire crew members assisting District refuges. Mike Durfee, formerly of Sacramento NWR, was hired as Prescribed Fire Specialist for the NY-PA-NJ District stationed at Wallkill River NWR, and will serve a long-standing need for wildland fire expertise and service in this portion of the Region. Laura Mitchell, formerly Regional Fire Ecologist, has assumed new duties as a Regional Biologist with fire emphasis, one of the Regional Office National Fire Plan positions created in response to the National Fire Plan. Gary Kemp, formerly Fire Management Officer for the DE-MD-VA-WV District, transferred to the Regional Fire Ecologist position and the Region will benefit from his extensive experience in wildland fire monitoring. Steven Hubner, a civilian Natural Resource Specialist and Forester working for the Department of Defense Navy, was hired as Regional Wildland-Urban Interface Coordinator; Steve's experience in government contracting and forest management operations will make him a valuable addition to the Regional fire team. Wildland-Urban Assistant positions at Maine and Maryland refuges had still not been selected as of December 31, and the other two Regional Office positions specializing in contracting and personnel had not yet been hired.

In response to directives from the Director and the Regional Director, refuges were under the gun in 2001 to complete Fire Management Plans. Stations without updated Plans were forced to cease all prescribed burning operations and could not receive fire funds until the FMPs were developed and approved. Outstanding service, including on-site visits, was provided by Gary Kemp, Laura Mitchell, Mike Durfee, and Rick Vollick in providing input on certain portions, assisting with NEPA documents, developing drafts and generally shepherding and coordinating the

FMP process. Plans were developed and approved, or at least final drafts provided, for Bombay Hook NWR, Prime Hook NWR, Occoquan Bay NWR, Supawna Meadows NWR, Iroquois NWR, Long Island NWR, E.B. Forsythe NWR, and Patuxent NWR. Work is ongoing or near completion on at least 12 additional refuges.

Wildland-urban interface (WUI) project proposals were submitted through the State Foresters for Fiscal Year 2002 funding consideration. The State-Federal interagency planning effort seemed to work best in New Jersey, where four proposals involving New Jersey refuges and adjacent private lands were developed by the team and submitted for consideration. Joint State-refuge planning also worked well for Delaware (one large proposal involving Prime Hook NWR) and Maryland (six proposals involving Blackwater NWR). WUI projects funded and initiated in 2001 included projects at Back Bay NWR, Rachel Carson NWR, and Sunhaze Meadows NWR.

A Memorandum of Understanding was developed and signed in August for New Jersey refuges with the NJ Forest Fire Service. A similar MOU was drafted for Maine refuges/Maine Forest Service, but had not yet been approved as of December 31.

An individual from the Great Dismal Swamp NWR fire crew attended the Prescribed Fire Training Center in Tallahassee. Many Region 5 personnel attended various courses offered at the New York State Incident Management and Wildfire Academy in October, where Mike Durfee served as an instructor. Others attended the New Hampshire Fire Academy or served as instructor. New England District fire personnel presented three firefighter refresher sessions and served as instructors for S-290, S-130/190, and S-231. Three Region 5 Fire Management Officers

and one Refuge Manager serve as mentors on the FWS Fire Management Mentoring Program, and four refuge employees are active mentees.

Interagency cooperative efforts continued and expanded in 2001. Region 5 is involved in shared funding of Dispatcher positions at the Virginia Interagency Coordination Center, the Eastern Area Coordination Center, and the newly created New England Coordination Center in Maine. FMO Rick Vollick is involved in the Northeast Forest Fire Compact Fire Weather - Fire Danger Working Team. Mike Durfee has improved our cooperative relationships in the mid-Atlantic area through meetings with counterparts in the National Park Service, U.S. Forest Service, Department of Energy, New Jersey Forest Fire Service, and New York Forest Rangers. Blackwater NWR was elected into both the Dorchester County and the Maryland State Firemen's Association as a non-voting member, due to its history of assisting State and local fire departments in the refuge area.

Laura Mitchell was instrumental in bringing fire effects research funding into the Region to help refuges address management questions. Laura designed and coordinated (with USGS) a long-term FWS regional grassland breeding bird study to determine the effects of burning and mowing on breeding birds. This study involves 13 refuges in Region 5, and includes funding from USGS and the USDA Natural Resource Conservation Service. Laura assisted in securing research funding for several other studies, including a study of fire effects in mid-Atlantic coastal forests and another study to determine effects of burning on secretive marsh birds. Besides securing research funding and assisting refuges in developing Fire Management Plans, Laura has provided technical advice to refuges on matters pertaining to design of fire effects monitoring efforts, habitat objectives, fire history and other fire

ecology/biology information, invasive species control using fire, literature searches, and provided sampling and monitoring workshops at NCTC and Patuxent Research Center.

RFMC Carter visited 18 rural fire departments in May to provide information to the Chiefs on the new Department of Interior Rural Fire Assistance program, describe the application process, and distribute application information. This program was highly successful in its first year and resulted in providing grant assistance to 20 fire departments in the amount of \$148,000.

Carter continued to serve as FWS representative on the Joint Fire Science Plan Governing Board, attending four meetings and participating in numerous conference calls in 2001.

Fire crew quarters buildings were finally constructed in 2001 at Great Dismal Swamp NWR and Moosehorn NWR. Funds had been carried over from 1999 and 2000, respectively. A fire cache and equipment building at Moosehorn NWR was completed with the installation of a vehicle lift, electrical wiring, lights, and heating system.

The fire weather station at Moosehorn NWR was upgraded to GOES satellite capability. This now makes three of the 13 fire weather stations in the Region with satellite telemetry.

REGION



The Mountain-Prairie Region experienced significant fire program growth due primarily to implementation of the National Fire Plan. The Region as a whole benefitted greatly from the increase in budget, which resulted in a doubling of permanent fire staff. Two new interagency positions include a Northern Rockies Geographic Area (NRGA) Fire Weather Meteorologist and a NRGA Fire Line Safety Officer. The FWS Regional Office Fire Management staff now consists of the following positions: Regional Fire Management Coordinator, Regional Fire Management Specialist, Regional Fire Program Specialist, Fire Ecologist, Wildland/Urban Interface (WUI) Coordinator, and three Zone Fire Management Officers (FMO). In addition, the Region gained support positions in Human Resources, Contracting and General Services, and Administration. The staffing increases for the field stations are even more noteworthy. Seventeen out of 44 Region 6 Field Stations now have permanent fire staff. The breakdown of positions within the Region is as follows: District FMO's - 10, Assistant FMO - 1, Prescribed Fire Specialists - 6, Fire Program Technicians - 10, Range Technicians - 16, Dispatchers - 4, WUI Field Coordinators - 2. This brings the Region 6 permanent dedicated fire staff to a total of 57 positions.

With the National Fire Plan as the focal point for 2001, an enormous amount of time and energy was put forth from all fire staff to accomplish fuels treatment targets and reporting requirements. Fuels treatment reports and fire expenditure reports were completed on a weekly basis. Agreements were completed with all 8 States in the Region for the Rural Fire Assistance Program. The total awarded amount was \$307,000.

The Region conducted 342 prescribed fire

projects totaling 48,462 acres treated. Region 6 performed suppression action on 115 wildfires totaling 1,461 acres burned on Service lands. In addition, personnel from the Region contributed to the interagency wildland fire suppression efforts in 16 States.

MT/UT/WY Zone

The overall fire season could be described as having a lot of potential that didn't develop. Fire Danger indices were in the Very High to Extreme range from May through September throughout the Zone. The lack of lightning starts was the largest factor in having an average fire year as the potential for extreme fire situations extended through the summer.

Prescribed fire activity for the Zone was limited by the extended fourth year of drought conditions that prevented areas from being in prescription for prescribed burning to occur. Several attempts were made to get burn units completed, without much success. This puts the Zone at least 2 years behind on prescribed fire accomplishments. Most units will be carried over into next year's burning efforts. The Zone did accomplish 9 prescribed burns for a total of 3,380 acres.

Personnel actions included the following. Steve Nurse departed the FWS and accepted a position with the U.S. Forest Service in Missouri. Matt Plagenz was promoted to a Supervisory Range Technician position at CMR. Ben Pratt was hired as a Range Technician at the Jordan field station of CMR. Kevin Beck was hired as a Fire Program Technician for the National Bison Range. Bob Rebarchik was hired as the Zone Fire Management Officer for the Montana/Utah/Wyoming Zone of the Mountain Prairie Region, stationed in Missoula, Montana.

ND/SD Zone

The 2001 fire season was steady and busy with wildfire assignments, prescribed burning activities, Wildland Urban Interface fuel reduction projects, training and hiring new employees. A total of 221 prescribed burns was conducted this year, totaling 29,497 acres. This increase in the ND/SD zone is above the 4-year average (1998-2001) of 182 burns and 25,575 acres treated.

Dispatch operations from the North Dakota Dispatch Center (NDC) were steady this year. A total of 711 interagency employees, including 19 crews, 93 engines, and 110 overhead, were dispatched through NDC in 2001. Personnel from the Zone contributed 5,212 person days in support of 85 interagency fire incidents in 16 States.

Numerous fire positions were filled in the Zone this year. New positions include: 5 permanent fire program technicians, 8 career seasonal range technicians, 2 permanent prescribed fire specialists, 1 career seasonal refuge dispatcher, 1 permanent zone dispatcher, and 1 permanent zone dispatch center manager. Other personnel changes included the loss of Zone FMO/NDC Coordinator Brian McManus to Region 3 in November. We are glad to see him stay within the FWS, but his leadership and professionalism will be greatly missed.

NE/KS/CO Zone

2001 saw several organizational changes within the CO/KS/NE Zone. Several new positions were advertised and many were filled. Ken Kerr assumed the role of Zone Fire Management Officer in January after leaving the National Park Service. Bruce Winter left the BLM in Grand Junction, Colorado, to become the new Prescribed Fire Specialist in the Western Kansas Fire Management District. Mike Bland left the BLM in Roswell, New Mexico, to become the Prescribed Fire Specialist in the Eastern Kansas Fire Management District. David Carr became the Fire Program Technician at

Crescent Lake NWR in the Sandhills Fire Management District. Todd Schmidt became a permanent Engine Foreman based out of Quivira NWR. The Fire Program Technician position based at Brown's Park NWR was filled by Jess Register. Richard Sterry, previously FMO for the Eastern Kansas Fire Management District, was selected as the Zone Wildland Urban Interface Assistant.

Although Kansas and Nebraska managed to avoid the dry weather from 2000, Colorado - particularly northwestern Colorado - did not. The northwestern part of the State experienced a very similar year to 2000, both in the degree of drought and the number and sizes of wildfires that occurred. A severity account was opened for Brown's Park NWR in July, and stayed open through mid-September to alleviate anticipated increased fire activity in the area.

In cooperation with the BLM - Craig Field Office, the refuge also jointly managed a Wildland Fire Use for Resource Benefits fire. The Davis Draw Fire, part of the Ecklund Complex, burned 1,050 total acres, with 50 acres of refuge land involved. The refuge and the BLM jointly developed a Fire Management Plan for the Little Snake Resource Area and Brown's Park NWR in 2000 for this purpose. The remainder of the Zone experienced a fairly typical wildfire season. Seventy wildfires were suppressed in the zone - 533 Fish and Wildlife Service acres and 7,124 non-Fish and Wildlife Service acres.

The Zone was exceptionally active in prescribed fire this year. In 2001, 15,584 acres were treated in 112 burns. A great deal of intra-zone cooperation occurred in getting treatments implemented. BLM smoke jumpers from Boise, Idaho, were also used for planning and implementation this year in the Sandhills District.

Please note that the statistics reflect the breakdown by of acres by State. Lacreek NWR acres are reflected in the SD/ND Zone Acres. This is different than how it was reported in the Regional Weekly Intelligence Report due to the fact that Lacreek NWR is part of the CO/KS/NE Zone.

REGION



Fire occurrence during 2001 was well below the 10 year average in Alaska, due for the most part to cooler than normal weather patterns and moisture accompanying the lightning activity that did occur. On an interagency basis, 351 wildland fires burned 218,113 acres Statewide. Two human-caused fires near Fairbanks accounted for over 90% of the Statewide acreage. Lightning-caused fire activity was relatively minimal in Alaska in 2001, which was highly unusual.

The first refuge fire of the year occurred May 13 on Alaska Maritime National Wildlife Refuge, and the last fire of the year occurred on August 10 on Kenai National Wildlife Refuge. Fifteen fires burned a total of only 1,606 acres on five National Wildlife Refuges in Alaska, including three on Alaska Maritime NWR, ten on Kenai NWR, one on Koyukuk NWR, and one on Nowitna NWR. All of the fires were managed under the guidance of the Alaska Interagency Fire Management Plan. Of those 15 fires, one burned 0.1 acres in a Critical Management Option Area, eight burned 1.9 acres in Full Management Option areas, and six burned 1604 acres in Limited Management Option Areas. Only four of the fires were lightning caused. The largest fire (800 acres) occurred on Kavalga Island, out in the Aleutian Islands on Alaska Maritime NWR, which was human caused. One lightning-caused, limited management fire on Kenai NWR required a Type 2 management team because of threats to adjacent resources during an extremely dry period. Five fires received periodic surveillance action only, and 11 were actively suppressed.

Prescribed burning was substantially impacted by the wet weather in 2001. Two prescribed burns were completed on Tetlin NWR for a total of 10 acres. Three

Wildland Urban Interface projects were accomplished in 2001. A 745-acre broadcast burn was accomplished at Yukon Flats NWR that included 620 acres of refuge land and 125 acres of Native Corporation land near the village of Beaver. Thirty-five acres of previously cut and piled material were burned at Kenai NWR. Two acres of previously cut and piled material were burned at Tetlin NWR.

Through the Rural Fire Assistance Program, \$8,000 of supplies and equipment were provided to a volunteer fire department responsible for fire protection in subdivisions immediately adjacent to the WUI project completed on Kenai NWR. The VFD had only recently been registered with the State of Alaska, so the equipment was badly needed to enhance wildland fire suppression capability.

A Regional FireWise Workshop was held in Kenai, Alaska, in May. Kenai NWR fire management staff made significant contributions in organizing and logistically supporting the interagency workshop, and providing facilitators for accomplishing the exercises. A broad spectrum of over 75 people attended the workshop from Interior, South Central, and Southeastern regions of Alaska. FWS sponsored several residents from villages near refuges in interior Alaska to accommodate their attendance.

FWS personnel from Region 7 participated on fire assignments in 2001 in Alaska and Wyoming.

Education and outreach continued to be important facets of the Region 7 fire management program. Firewise Community Action Program for Alaska homeowners packets and Role of Fire education materials were distributed at several public events, including the Alaska State Fair. Fire

prevention and fire history themes were incorporated into campground chat programs by Rangers and other refuge staff at Kenai NWR. Role-of-fire education topics were incorporated into numerous education efforts, including a field-based Fire Science Camp for junior and senior high school students by Tetlin NWR, a local Fire Management Carnival for students by Tetlin NWR, and Science Camps by Koyukuk NWR and Innoko NWR.

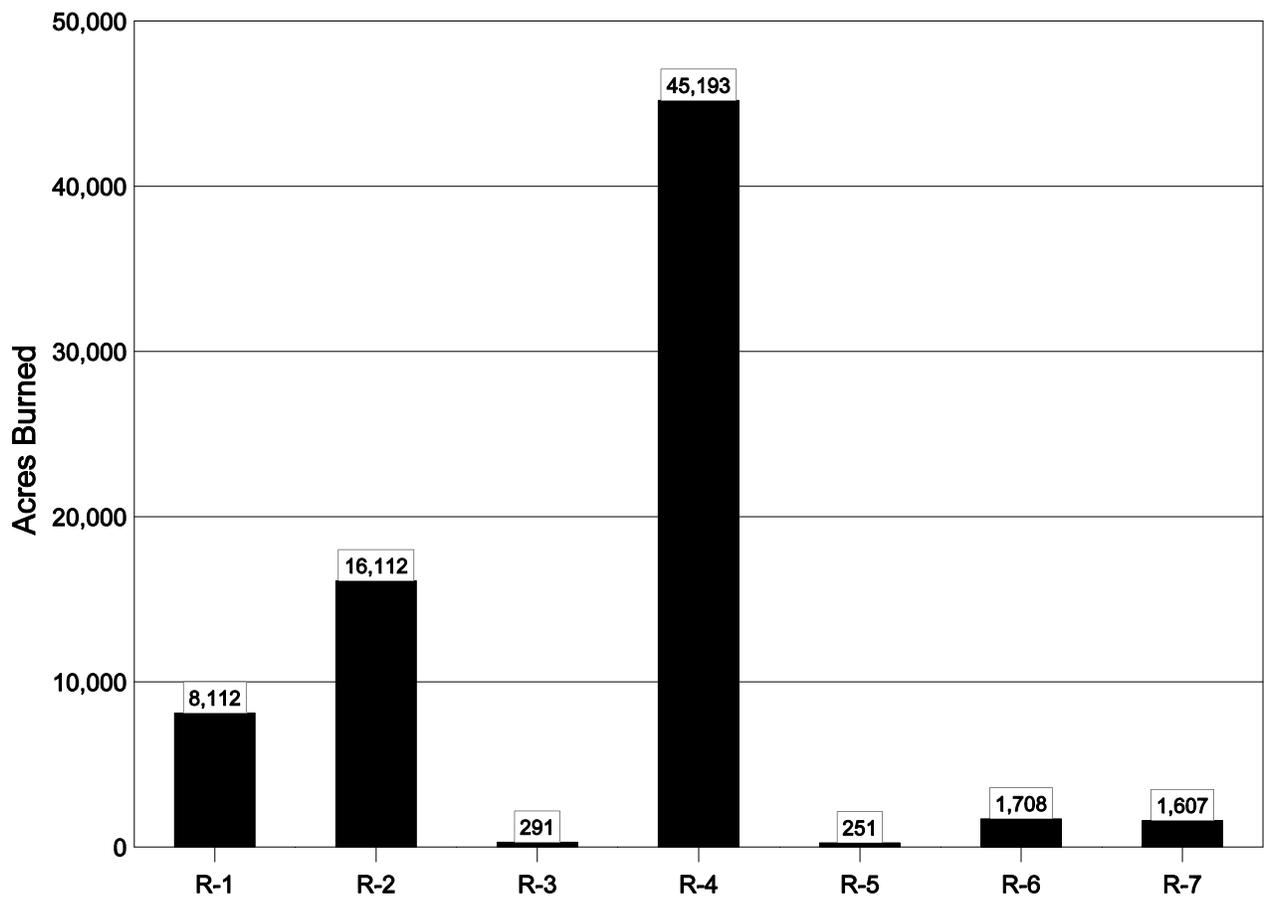
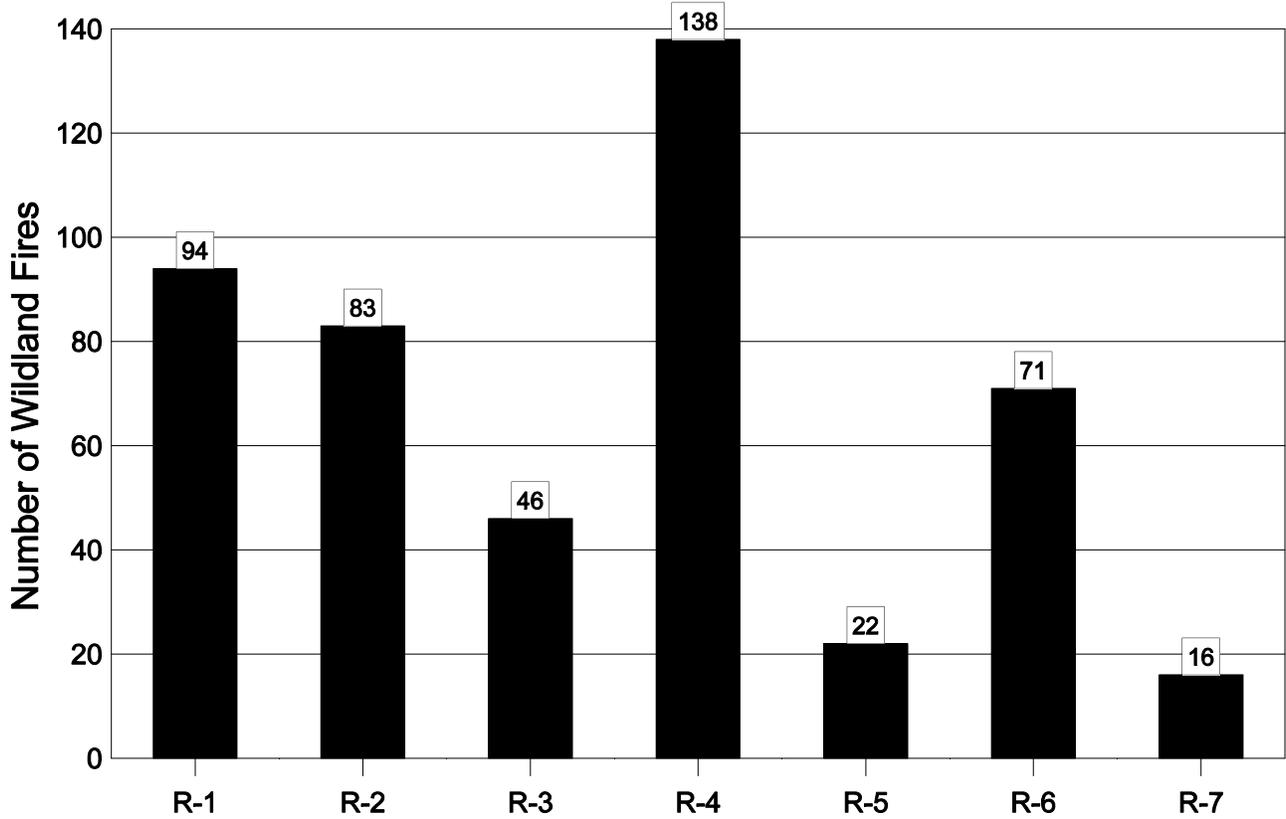
FWS personnel from Region 7 participated on geographic area committees and working groups, including the Alaska Wildland Fire Coordinating Group, and Alaska GACG committees and task groups on Firefighter Safety and Health, Fire Prevention Education and Awareness, Fire Research and Applications, Fire Effects, Predictive Services, and Training. FWS personnel from Region 7 also participated in peer review and evaluation of proposals submitted to the Joint Fire Science Plan.

Two Regional Office positions were filled in 2001. Karen Murphy was hired as Regional Fire Ecologist, and Gene Long was hired as the Regional Wildland Urban Interface/Rural Fire Assistance Coordinator. Both bring valuable perspectives to enhance their jobs – Karen in planning with USFS and FWS, and Gene working with Tribes via positions with BIA and Chugachmiut Corporation.

Two FMO vacancies occurred in 2001. Yukon Flats FMO Perry Grissom transferred to Sacramento River Complex in May 2001, and Koyukuk-Nowitna FMO Bob Rebarchik transferred to an FWS Zone FMO position in Missoula, Montana. Both Perry and Bob provided invaluable contributions to the development of the R-7 fire management program during the several years they spent in Alaska, and their expertise will be difficult to replace. By the end of the year, recruitment efforts were still underway at both refuges for replacements. Several vacancies of permanent seasonal and temporary firefighter positions occurred at inopportune times during the summer, largely due to personnel moving to positions at other agencies opening up as a result of National Fire Plan implementation.

FWS

WILDLAND FIRES - 2001



WILDLAND FIRES

by State

2001

STATE	# FIRES	# FWS ACRES
Alaska	16	1,607.0
Alabama	1	235.0
Arkansas	6	13.5
Arizona	11	54.7
California	32	3,587.2
Colorado	6	68.2
Delaware	1	10.5
Florida	52	14,979.4
Georgia	16	9,974.5
Iowa	1	0.5
Idaho	5	515.5
Illinois	2	21.4
Indiana	3	10.6
Kansas	17	441.9
Louisiana	24	18,420.0
Massachusetts	1	7.0
Maryland	2	1.1
Maine	4	67.7
Minnesota	35	253.9
Missouri	1	0.1
Mississippi	11	326.0
Montana	11	231.8
North Carolina	18	1,224.5
North Dakota	26	771.7
Nebraska	5	105.3
New Jersey	1	2.0
New Mexico	5	4,210.2
Nevada	13	67.7
New York	5	0.8
Oklahoma	8	0.9
Oregon	19	1,481.7
Pennsylvania	3	0.5
South Carolina	7	12.8

South Dakota	6	72.5
Tennessee	1	6.0
Texas	56	11,585.7
Virginia	7	162.4
Washington	28	2,720.2
Wisconsin	2	4.1
Wyoming	2	17.0
Total	470	73,273.5

WILDLAND FIRES

by Refuge - R1

<u>REFUGE</u>	<u># FIRES</u>	<u># ACRES</u>
Ash Meadows NWR	1	0.5
Bear Valley NWR	1	5.0
Clear Lake NWR	1	2,000.0
Columbia NWR	4	14.0
Deer Flat NWR	3	11.0
Delevan NWR	1	2.0
Desert National Wildlife Range	1	0.1
Hagerman NFH	1	398.8
Hanford Reach NM/Saddle Mtn.	11	125.4
Hart Mtn. National Antelope	3	870.4
Klamath Marsh NWR	6	73.5
Little Pend Oreille NWR	1	0.5
Lower Klamath NWR	2	84.2
McNary NWR	8	2,021.1
Minidoka NWR	1	105.7
Modoc NWR	1	1.0
Ruby Lake NWR	2	1.1
Sacramento NWR Complex	3	151.1
Sacramento Riv NWR	4	3.3
Salton Sea NWR Complex	1	24.0
San Diego NWR	3	71.0
San Luis NWR Complex	7	1,067.6
Sheldon NWR	8	65.8
Sheldon-Hart Mountain NWR	1	0.2
Stone Lakes NWR	4	1.2
Tijuana Slough NWR	1	0.1
Toppenish NWR	1	2.0
Tulelake NWR	4	11.7
Turnbull NWR	2	2.2
Umatilla NWR	7	997.6
Total	94	8,112.1

WILDLAND FIRES by Refuge - R2

<u>REFUGE</u>	<u># BURNS</u>	<u># ACRES</u>
Anahuac NWR	12	2,546.8
Aransas/Matagorda	7	8,326.7
Bosque Del Apache NWR	3	10.2
Brazoria NWR	2	50.1
Buenos Aires NWR	10	48.7
Havasu NWR	3	206.2
Imperial NWR	1	60.0
Las Vegas NWR	1	360.0
Lower Rio Grande Valley NWR	22	387.6
McFaddin NWR	12	274.4
Sevilleta NWR	1	3,840.0
Texas Point NWR	1	0.1
Washita NWR	2	0.2
Wichita Mtns. Wildlife Refuge	6	0.7
Total	83	16,111.7

WILDLAND FIRES

by Refuge - R3

<u>REFUGE</u>	<u># BURNS</u>	<u># ACRES</u>
Big Oaks NWR	1	2.0
Crab Orchard NWR	1	1.4
Cypress Creek NWR	1	20.0
Desoto NWR	3	0.8
Detroit Lakes WMD	4	90.0
Fergus Falls WMD	3	25.5
Hamden Slough NWR	2	3.2
Leopold WMD	2	4.1
Mingo NWR	1	0.1
Minnesota Valley NWR	15	7.1
Morris WMD	2	81.0
Muscatatuck NWR	1	0.1
Patoka River NWR	1	8.5
Sherburne NWR	4	20.6
Tamarac NWR	4	2.7
Windom WMD	1	23.8
Total	46	290.9

WILDLAND FIRES by Refuge - R4

<u>REFUGE</u>	<u># BURNS</u>	<u># ACRES</u>
Ace Basin NWR	2	8.2
Alligator River NWR	6	6.3
Arthur R. Marshall	15	13,837.7
Big Branch Marsh NWR	7	316.0
Black Bayou Lake NWR	1	0.3
Blackbeard Island NWR	2	2.0
Bon Secour NWR	1	235.0
Cedar Island NWR	4	1,101.2
Central AR Refuges	5	13.4
Florida Panther NWR	6	5.5
Grand Bay NWR	1	165.0
Lacassine NWR	1	40.0
Lake Wales Ridge NWR	2	630.1
Lake Woodruff NWR	1	0.1
Lower Suwannee NWR	2	3.8
Mackay Island NWR	7	59.0
Merritt Island NWR	17	386.7
MS Sandhill Crane NWR	1	110.0
N. Mississippi Refuges	1	20.0
National Key Deer Refuge	2	0.4
Noxubee NWR	6	30.3
Okefenokee NWR	10	9,971.8
Piedmont NWR	4	0.7
Pocosin Lakes NWR	2	53.0
S. AR Refuges Complex	1	0.1
Sabine NWR	13	18,048.1
Santee NWR	4	4.5
Savannah NWR	1	0.1
St. Catherine Creek NWR	2	0.7
St. Johns NWR	2	1.0
St. Marks NWR	4	112.6
St. Vincent NWR	1	1.5
Swanquarter NWR	1	6.0
Tennessee NWR	1	6.0
Upper Ouachita NWR	2	15.6
Total	138	45,192.7

WILDLAND FIRES

by Refuge - R5

<u>REFUGE</u>	<u># BURNS</u>	<u># ACRES</u>
Back Bay NWR	2	160.0
Cape May NWR	1	2.0
Chincoteague NWR	1	0.2
Erie NWR	1	0.2
Eastern MA NWR Complex	1	7.0
Great Dismal Swamp NWR	1	0.2
John Heinz NWR at	2	0.3
Lake Umbagog NWR	1	0.1
Long Island NWR Complex	5	0.8
ME Coastal Islands NWR	1	0.5
Moosehorn NWR	2	67.1
Patuxent Research Refuge	2	1.1
Potomac River NWR Complex	1	1.0
Prime Hook NWR	1	10.5
Total	22	251.0

WILDLAND FIRES by Refuge - R6

<u>REFUGE</u>	<u># BURNS</u>	<u># ACRES</u>
Alamosa NWR	2	60.0
Arrowwood NWR	11	205.0
Audubon NWR	1	40.0
Boyer Chute NWR	1	45.0
Charles M. Russell NWR	9	196.7
Crescent Lake NWR	2	60.0
Des Lacs NWR	2	43.1
Devils Lake WMD	11	432.6
Flint Hills NWR	5	37.0
Huron WMD	3	44.4
J. Clark Salyer NWR	1	51.0
Kirwin NWR	4	140.3
Lee Metcalf NWR	1	0.1
Madison WMD	2	28.0
Marais Des Cygnes NWR	4	258.6
National Bison Range	1	35.0
Quivira NWR	4	6.0
Rocky Mountain Arsenal NWR	4	8.2
Sand Lake NWR	1	0.1
Seedskadee NWR	2	17.0
Total	71	1,708.1

WILDLAND FIRES

by Refuge - R7

<u>REFUGE</u>	<u># BURNS</u>	<u># ACRES</u>
Alaska Maritime NWR	3	810.1
Kenai NWR	10	713.9
Koyukuk NWR	1	2.0
Koyukuk/Nowitna NWR	1	80.0
Yukon Delta NWR	1	1.0
Total	16	1,607.0

WILDLAND FIRES by CAUSE 2001

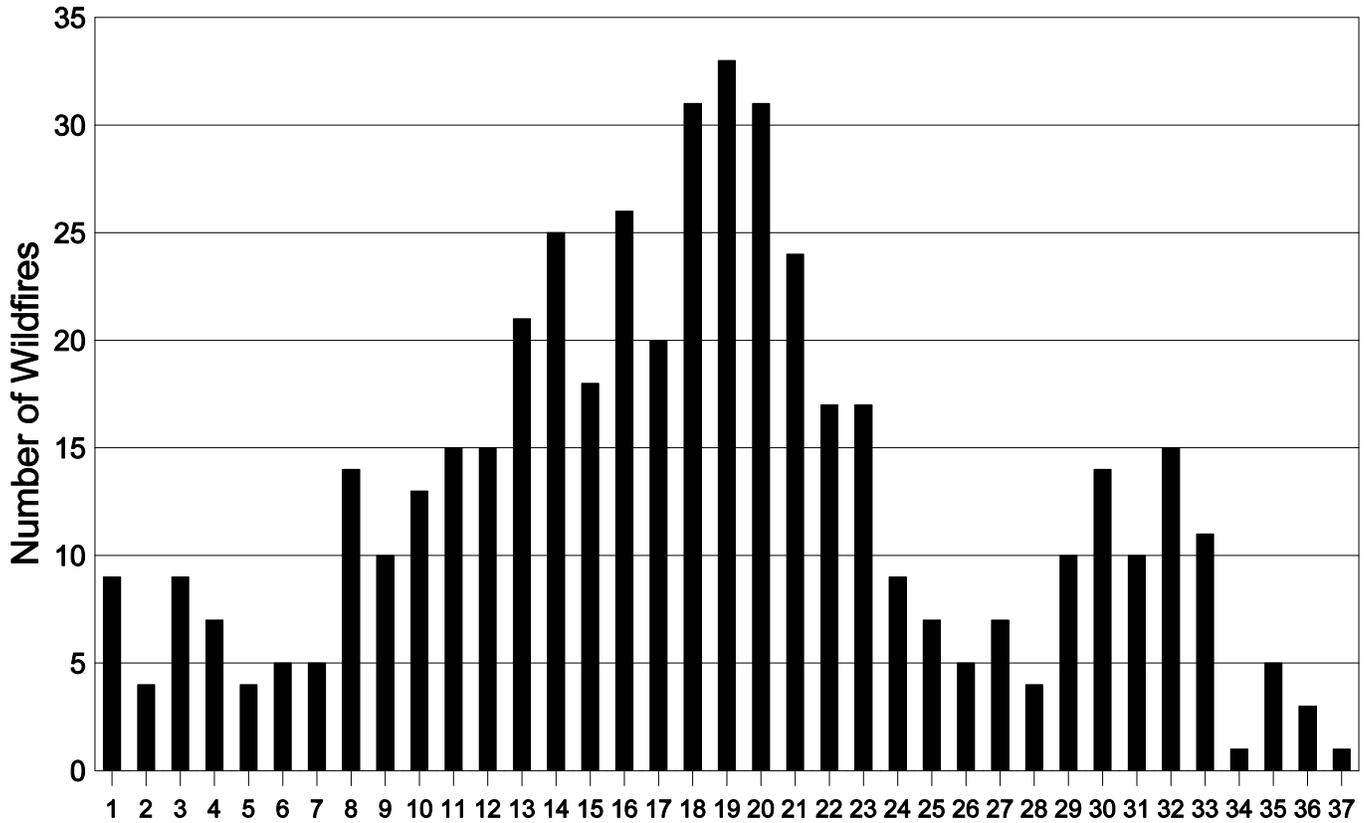
CAUSE	# FIRES	# ACRES
Lightning	132	52,106.2
Campfire	37	82.2
Smoking	25	161.7
Fire Use	73	8,712.7
Incendiary	55	3,999.9
Equipment Use	51	2,647.5
Railroads	11	3,010.8
Juveniles	11	93.6
Miscellaneous	75	2,458.9
TOTAL	470	73,273.5

WILDLAND FIRES by SIZE CLASS 2001

SIZE	# FIRES	# ACRES
A (0 - .2)	152	17.7
B (.3 - 9.9)	171	434.8
C (10 - 99.9)	93	3,088.6
D (100 - 299.9)	21	3,323.2
E (300 - 999.9)	14	7,741.9
F (1000 -	15	29,992.7
G (5000 +)	4	28,674.6
TOTAL	470	73,273.5

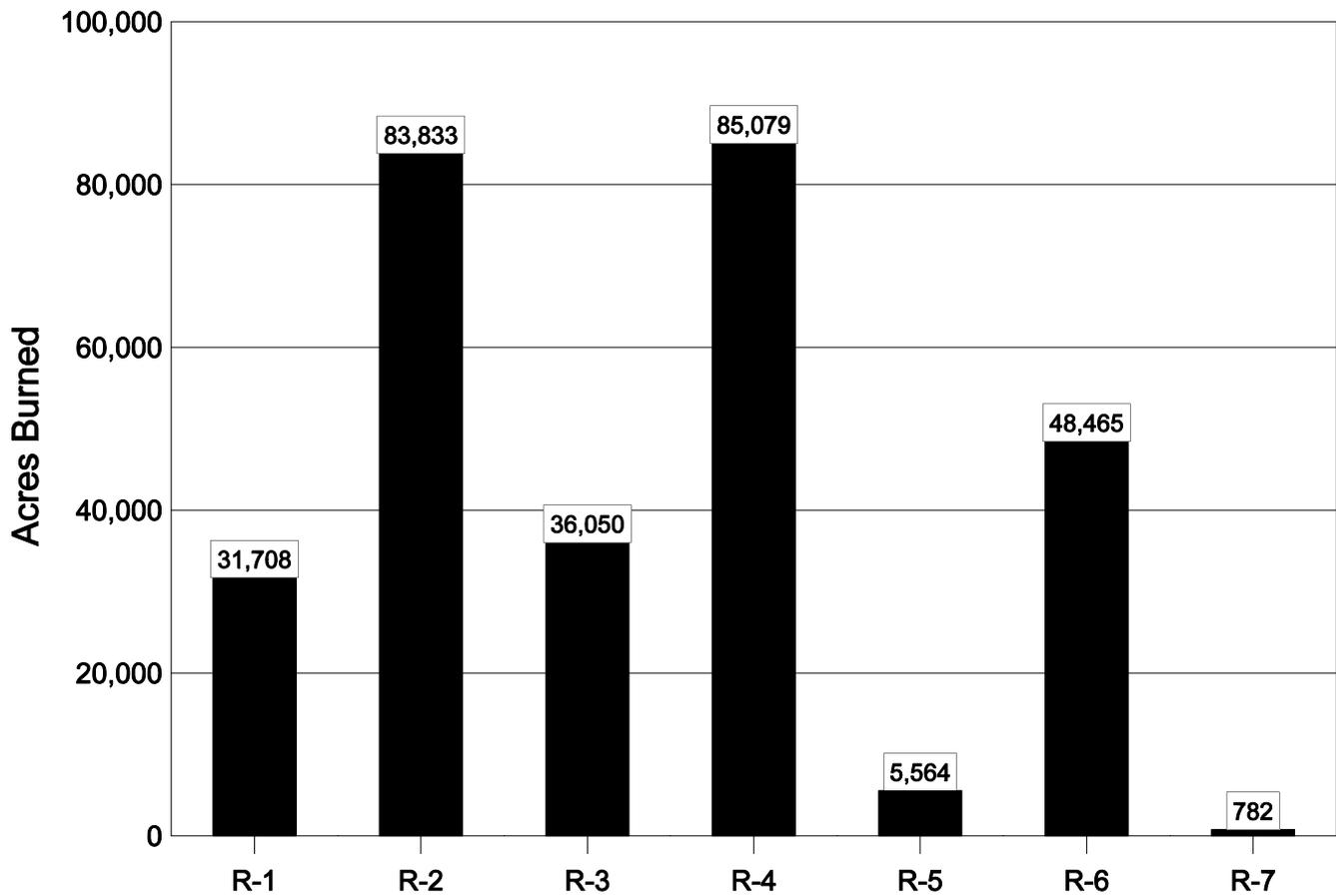
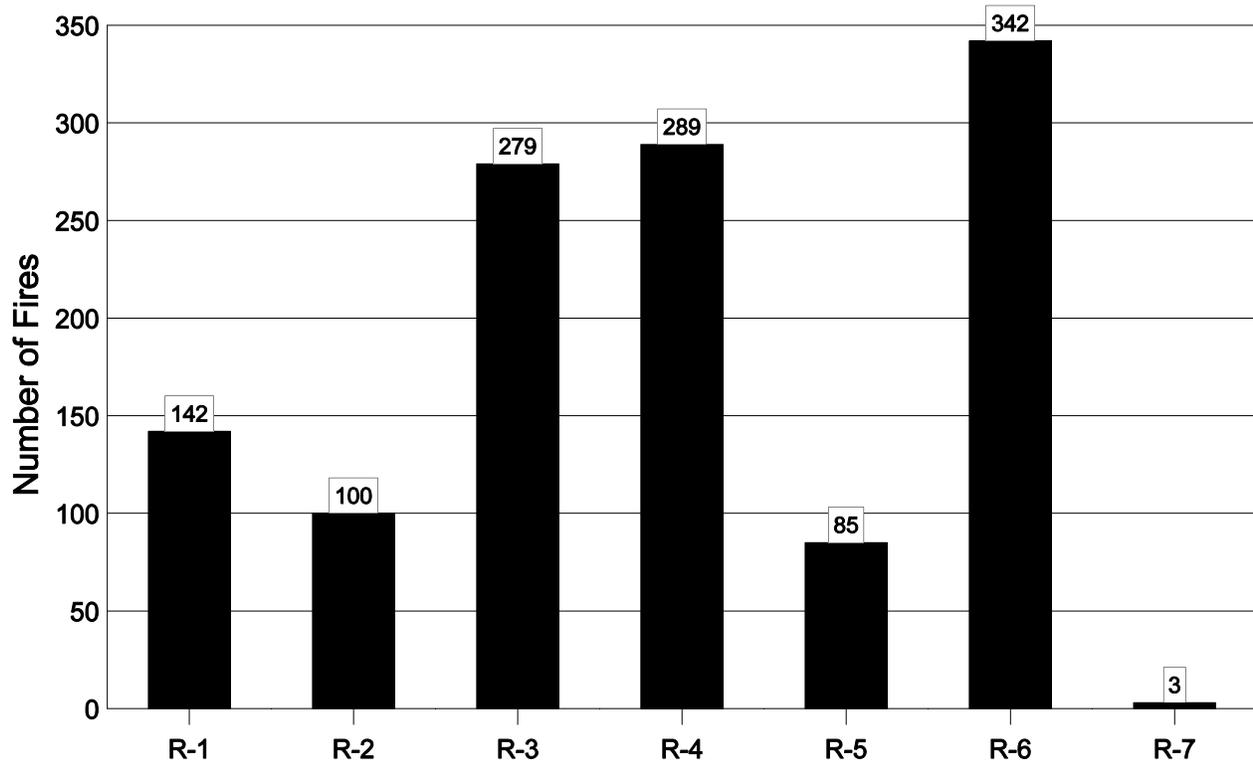
WILDLAND FIRES - 2001

10-Day Period



<u>Period</u>	<u>Dates</u>	<u>Period</u>	<u>Dates</u>	<u>Period</u>	<u>Dates</u>
1	Jan 01 - Jan 10	13	May 01 - May 10	25	Aug 29 - Sep 07
2	Jan 11 - Jan 20	14	May 11 - May 20	26	Sep 08 - Sep 17
3	Jan 21 - Jan 30	15	May 21 - May 30	27	Sep 18 - Sep 27
4	Jan 31 - Feb 09	16	May 31 - June 09	28	Sep 28 - Oct 07
5	Feb 10 - Feb 19	17	June 10 - June 19	29	Oct 08 - Oct 17
6	Feb 20 - Mar 01	18	June 20 - June 29	30	Oct 18 - Oct 27
7	Mar 02 - Mar 11	19	June 30 - July 09	31	Oct 28 - Nov 06
8	Mar 12 - Mar 21	20	July 10 - July 19	32	Nov 07 - Nov 16
9	Mar 22 - Mar 31	21	July 20 - July 29	33	Nov 17 - Nov 26
10	Apr 01 - Apr 10	22	July 30 - Aug 08	34	Nov 27 - Dec 06
11	Apr 11 - Apr 20	23	Aug 09 - Aug 18	35	Dec 07 - Dec 16
12	Apr 21 - Apr 30	24	Aug 19 - Aug 28	36	Dec 17 - Dec 26
				37	Dec 27 - Dec 31

FWS PRESCRIBED FIRES / WUI - 2001



Prescribed / WUI Fires By State 2001

STATE	# FIRES	# FWS ACRES	# WUI FIRES	#WUI ACRES
Alaska			3	782.0
Arizona	8	1,945.0	2	320.0
Arkansas	9	18,909.6		
California	40	8,300.0	14	342.3
Florida	81	28,256.0	23	8,968.0
Georgia	16	702.1	4	1,255.0
Hawaii	1	12.0		
Idaho	7	2,093.0		
Illinois	8	263.2		
Indiana	11	3,874.0		
Iowa	33	3,024.3		
Kansas	60	9,723.4	2	100.0
Louisiana	25	4,197.3	6	6,443.0
Maine	13	97.8		
Maryland	27	1,468.9	26	3,751.0
Michigan	1	26.0		
Minnesota	182	24,829.2		
Mississippi	28	5,999.5	34	10,142.0
Montana	4	350.1		
Nebraska	58	5,977.3		
Nevada	13	7,234.2	3	87.0
New	1	12.0		
New Mexico	6	17,224.5		
New York	12	133.8	3	25.2
North Carolina	16	6,299.0	5	2,816.0
North Dakota	140	17,923.3	42	7,472.2
Oklahoma	3	373.1	1	5.6
Oregon	19	5,341.2	9	4,890.0
South Carolina	28	4,011.0	13	3,695.0
South Dakota	39	4,105.0		
Texas	62	42,671.3	17	4,329.0
Utah	4	2,730.0		
Virginia	4	375.0	1	50.0

Washington	28	2,243.2	8	1,165.0
Wisconsin	36	3,817.2		
Wyoming	1	300.0		
Total	1,024	234,842.5	216	56,638.3

PRESCRIBED FIRE

by Refuge - R1

<u>REFUGE</u>	<u># FIRES</u>	<u># ACRES</u>	<u>#WUI</u>	<u>WUI ACRES</u>
Bear Lake NWR	2	810.0		
Bear Valley NWR	1	140.0		
Bitter Creek NWR			1	43.0
Camas NWR	1	75.0		
Cold Springs NWR	1	10.0		
Columbia NWR	13	772.2	1	150.0
Delevan NWR	4	240.5		
Grays Lake NWR	2	1,008.0		
Hart Mountain Natl Antelope Refuge	5	1,200.2	1	100.0
Hopper Mountain NWR			1	5.0
Kern NWR	1	50.0		
Klamath Basin NWR Complex			2	4,400.0
Klamath Marsh NWR	1	468.0		
Kootenai NWR	2	200.0		
Little Pend Oreille NWR	2	740.0	2	600.0
Lower Klamath NWR	8	2,570.0		
Malheur NWR	7	3,372.0		
McKay Creek NWR			1	16.0
McNary NWR	4	320.0	2	55.0
Moapa Valley NWR			1	2.0
Modoc NWR	2	120.0		
Oahu Complex	1	12.0		
Ruby Lake NWR	3	1,795.0		
Sacramento NWR Complex	3	285.0		
Sacramento River NWR			1	7.3
Salton Sea Complex	1	12.0		
San Diego NWR			8	201.0
San Luis Complex	14	1,021.0		
Sheldon NWR	6	4,654.2	2	85.0
Stillwater NWR	4	785.0		
Stone Lakes NWR	1	281.0		
Sutter NWR	1	0.5		
Tijuana Slough NWR	1		3	86.0
Toppenish NWR			1	80.0
Tule Lake NWR	5	3,720.0		
Turnbull NWR	9	411.0	2	280.0
Umatilla NWR	4	151.0	5	374.0
Total	108	25,223.6	34	6,484.3

PRESCRIBED FIRE by Refuge - R2

<u>REFUGE</u>	<u># FIRES</u>	<u># ACRES</u>	<u>#WUI</u>	<u>WUI ACRES</u>
Anahuac NWR	7	1,742.5		
Aransas/Matagorda Island Complex	16	9,017.1	5	1,096.0
Attwater Prairie Chicken NWR	5	2,496.0		
Balcones Canyonlands NWR	17	2,944.0	11	1,732.0
Big Boggy NWR	1	168.0		
Bitter Lake NWR	1	225.0		
Bosque Del Apache NWR	4	449.5		
Brazoria NWR	6	7,164.0	1	1,501.0
Buenos Aires NWR	9	18,909.6	1	200.0
Cibola NWR			1	120.0
McFaddin NWR	2	9,652.0		
San Andres NWR	1	16,550.0		
San Bernard NWR	3	1,352.0		
Texas Chenier Plains Refuges	3	3,806.1		
Texas Point NWR	2	4,329.6		
Wichita Mountains Wildlife Refuge	3	373.1	1	5.6
Total	80	79,178.5	20	4,654.6

PRESCRIBED FIRE

by Refuge - R3

<u>REFUGE</u>	<u># FIRES</u>	<u># ACRES</u>	<u>#WUI</u>	<u>WUI ACRES</u>
Agassiz NWR	11	6,755.4		
Big Oaks NWR	7	3,788.0		
Big Stone NWR	26	2,362.0		
Crab Orchard NWR	6	216.2		
Desoto NWR	20	471.2		
Detroit Lakes WMD	26	2,906.0		
Driftless Area NWR	1	17.3		
Fergus Falls WMD	47	4,298.6		
Horicon NWR	6	130.0		
Leopold WMD	11	482.7		
Minnesota Valley NWR	15	432.5		
Morris WMD	28	2,874.0		
Muscatatuck NWR	4	86.0		
Neal Smith NWR	7	773.1		
Necedah NWR	13	3,017.0		
Port Louisa NWR	9	1,027.0		
Sherburne NWR	1	945.0		
Shiawassee NWR	1	26.0		
St. Croix WMD	6	187.5		
Tamarac NWR	2	1,493.0		
Two Rivers NWR	2	47.0		
Union Slough NWR	4	952.0		
Windom WMD	26	2,762.7		
Total	279	36,050.2	0	0

PRESCRIBED FIRE

by Refuge - R4

<u>REFUGE</u>	<u># FIRES</u>	<u># ACRES</u>	<u># WUI</u>	<u>WUI ACRES</u>
Ace Basin NWR	6	335.0		
Alligator River NWR	7	3,838.0	1	1,407.0
Bayou Sauvage NWR			1	380.0
Big Branch Marsh NWR	2	51.0	2	333.0
Bogue Chitto NWR	3	169.0	1	80.0
Cameron Prairie NWR	1	121.0		
Carolina Sandhills NWR	17	3,265.0	13	3,695.0
Chassahowitzka NWR	3	2,372.0	1	26.0
D'Arbonne NWR	12	629.2		
Florida Panther NWR	9	5,131.0		
Grand Bay NWR			1	73.0
J.N. Ding Darling NWR	4	8.0		
Lacassine NWR	3	2,738.0	2	5,650.0
Lake Woodruff NWR	11	1,895.1	4	5,321.0
Lower Suwannee NWR	3	330.0	3	670.0
Mackay Island NWR	8	2,331.0	2	459.0
Merritt Island NWR	9	8,154.0		
Mississippi Sandhill Crane NWR	11	3,797.0	19	7,045.0
National Key Deer Refuge	3	47.0		
Noxubee NWR	16	2,142.5	14	3,024.0
Piedmont NWR	15	701.1	4	1,255.0
Pocosin Lakes NWR	2	430.0	3	1,000.0
South Arkansas Refuges Complex	8	1,945.0		
Sabine NWR	1	243.0		
Savannah Coastal Refuges	1	1.0		
Savannah NWR	5	411.0		
St. Marks NWR	33	8,149.9	15	2,951.0
St. Vincent NWR	6	2,169.0		
Upper Ouachita NWR	4	306.1		
Total	203	51,709.9	86	33,369.0

PRESCRIBED FIRE

by Refuge - R5

<u>REFUGE</u>	<u># FIRES</u>	<u># ACRES</u>	<u># WUI</u>	<u>WUI ACRES</u>
Chesapeake Marshlands Complex	27	1,468.9	26	3,751.0
Great Bay NWR	2	42.0		
Great Dismal Swamp NWR	2	74.0		
Iroquois NWR	5	59.2		
Long Island NWR Complex	3	2.6	3	25.2
Montezuma NWR	5	73.0		
Moosehorn NWR	10	60.8		
Rachel Carson NWR	2	7.0		
Total	56	1,787.5	29	3,776.2

PRESCRIBED FIRE

by Refuge - R6

<u>REFUGE</u>	<u># FIRES</u>	<u># ACRES</u>	<u># WUI</u>	<u>WUI ACRES</u>
Arrowwood NWR	32	4,070.0	6	765.0
Audubon NWR	18	1,474.0	5	524.0
Bear River Migratory Bird Refuge	2	1,650.0		
Bowdoin NWR	1	290.0		
Boyer Chute NWR	6	455.0		
Crescent Lake NWR	10	172.0		
Crosby WMD	3	280.0	1	557.0
Des Lacs NWR	12	1,781.0	4	1,712.0
Devils Lake WMD	26	1,430.3	3	376.0
Fish Springs NWR	2	1,080.0		
Flint Hills NWR	25	2,753.3	1	20.0
Fort Niobrara NWR	7	724.0		
Huron WMD	16	1,799.0		
J. Clark Salyer NWR	13	1,715.0	11	1,642.2
Kirwin NWR	6	564.1	1	80.0
Lacreek NWR	10	1,122.0		
Lake Andes NWR	7	696.0		
Long Lake NWR	7	581.0	3	345.0
Lostwood NWR	6	3,913.0	2	594.0
Lostwood WMD	4	217.0	3	288.0
Madison WMD	2	62.0		
Marais Des Cygnes NWR	15	946.0		
Medicine Lake NWR	3	60.1		
North Platte NWR	2	31.0		
National Elk Refuge	1	300.0		
Quivira NWR	14	5,460.0		
Rainwater Basin WMD	25	4,379.0		
Sand Lake NWR	2	321.0		
Tewaukon NWR	18	2,422.0		
Upper Souris NWR	1	40.0	4	669.0
Waubay NWR	2	105.0		
Total	298	40,892.8	44	7,572.2

PRESCRIBED FIRE by Refuge - R7

<u>REFUGE</u>	<u># FIRES</u>	<u># ACRES</u>	<u># WUI</u>	<u>WUI ACRES</u>
Kenai NWR			1	35.0
Tetlin NWR			1	2.0
Yukon Flats NWR			1	745.0
Total	0	0.0	3	782.0

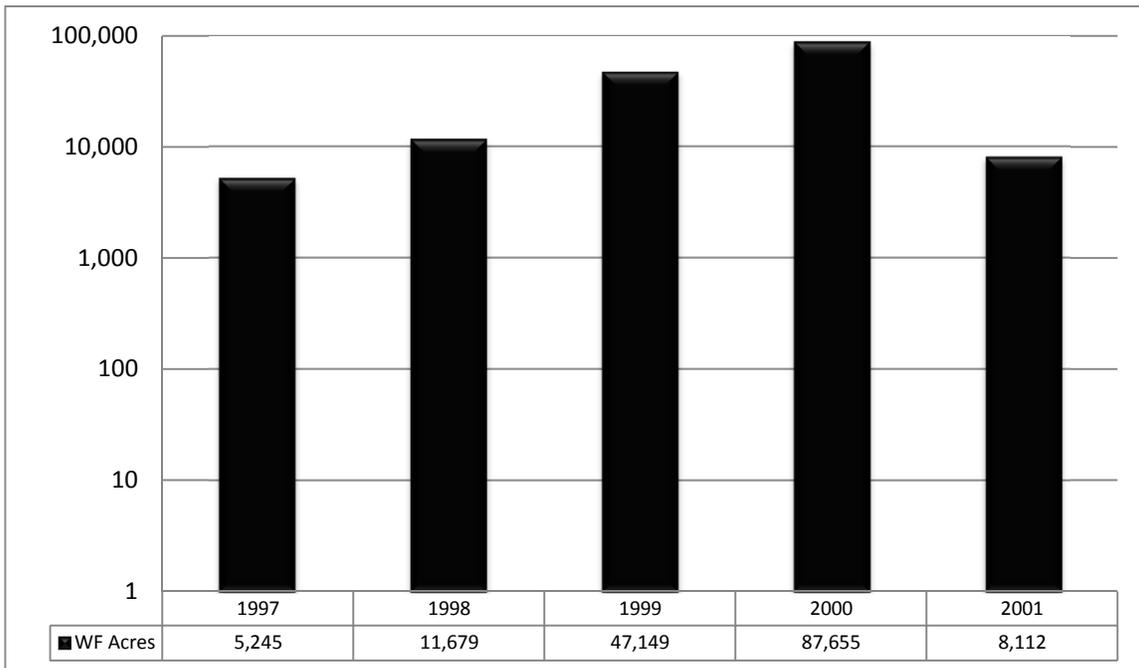
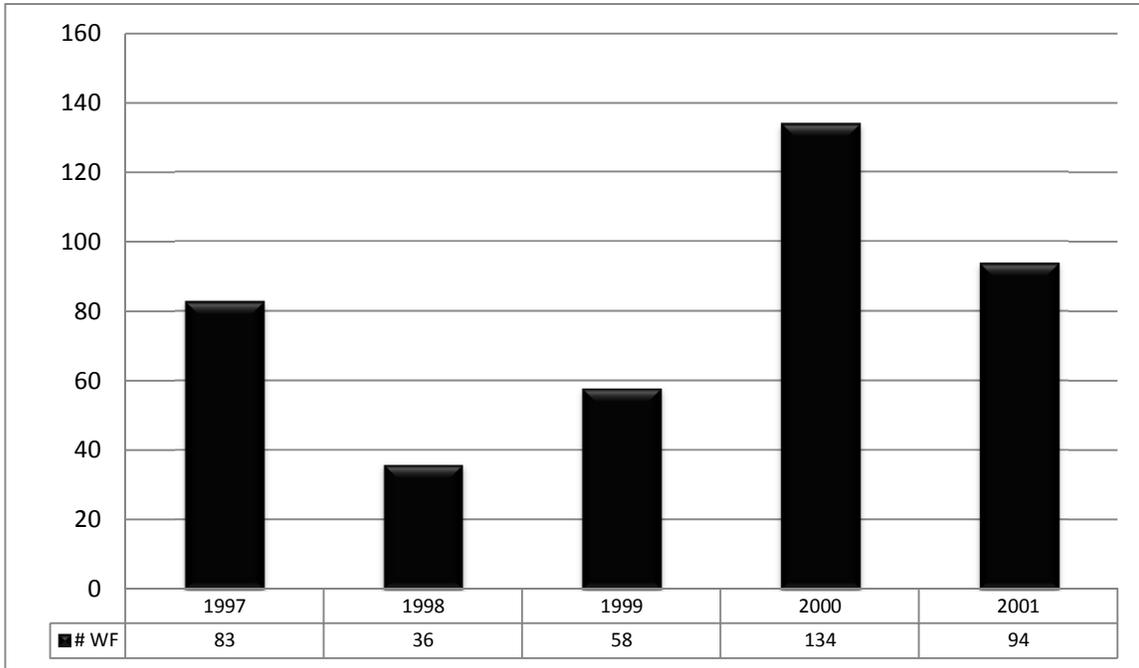
PRESCRIBED FIRES

Burn Plan Objective

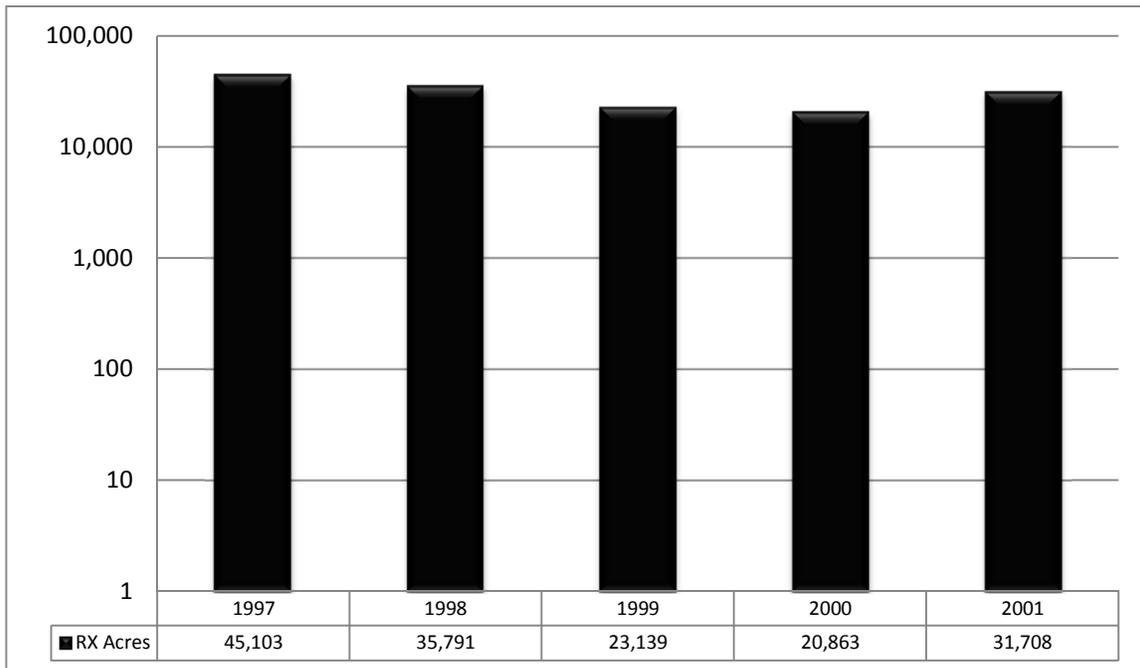
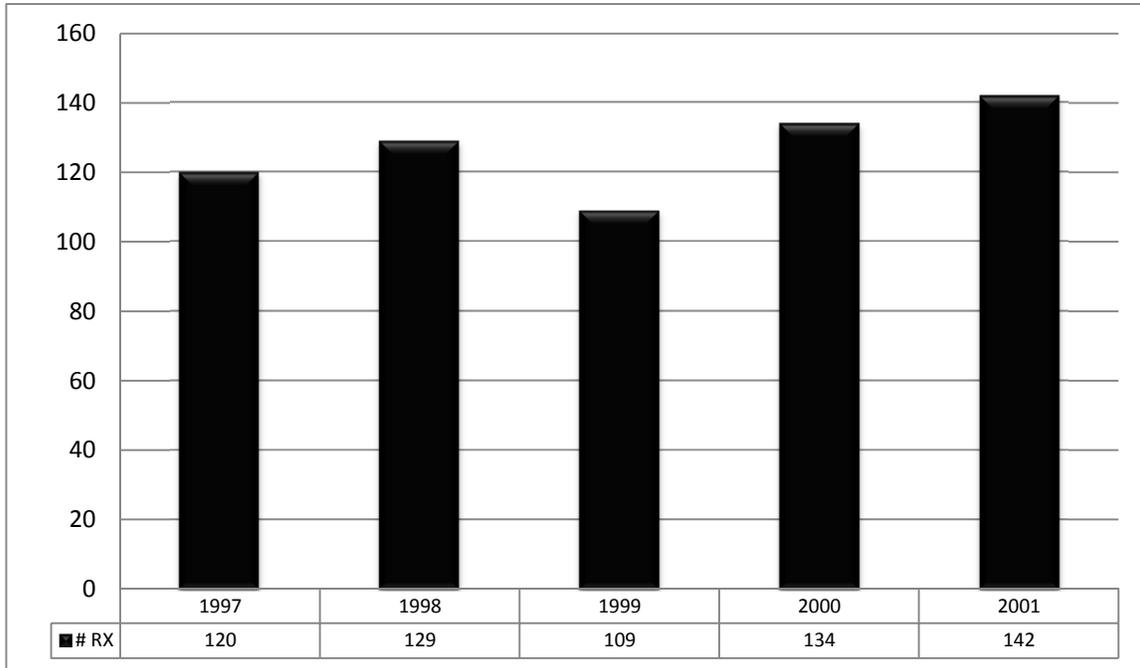
2001

OBJECTIVE	# FIRES	# FWS ACRES
Cultural Scene Maintenance		
Other Cultural Site Maintenance	2	289.2
Natural Systems		
Exotic or Undesirable	134	13,288.9
Habitat Maintenance	562	134,066.9
Research	28	998.8
Hazard Reduction		
Fuel Reduction - Activity	34	4,436.1
Fuel Reduction - Natural	317	106,133.8
Real Property Protection	18	699.0
Boundary Protection	63	21,039.6
Fuel Break Maintenance	2	47.0
Maintenance		
Debris Removal	45	1,866.3
Vista Removal	2	0.4
Silvicultural		
Seed Bed Preparation	8	388.0
Vegetative Type	12	1,449.8
Insect and Disease Control	4	560.0
Other	9	6,217.0
TOTAL	1,240	291,480.8

REGION 1 WILDLAND FIRES 1997-2001

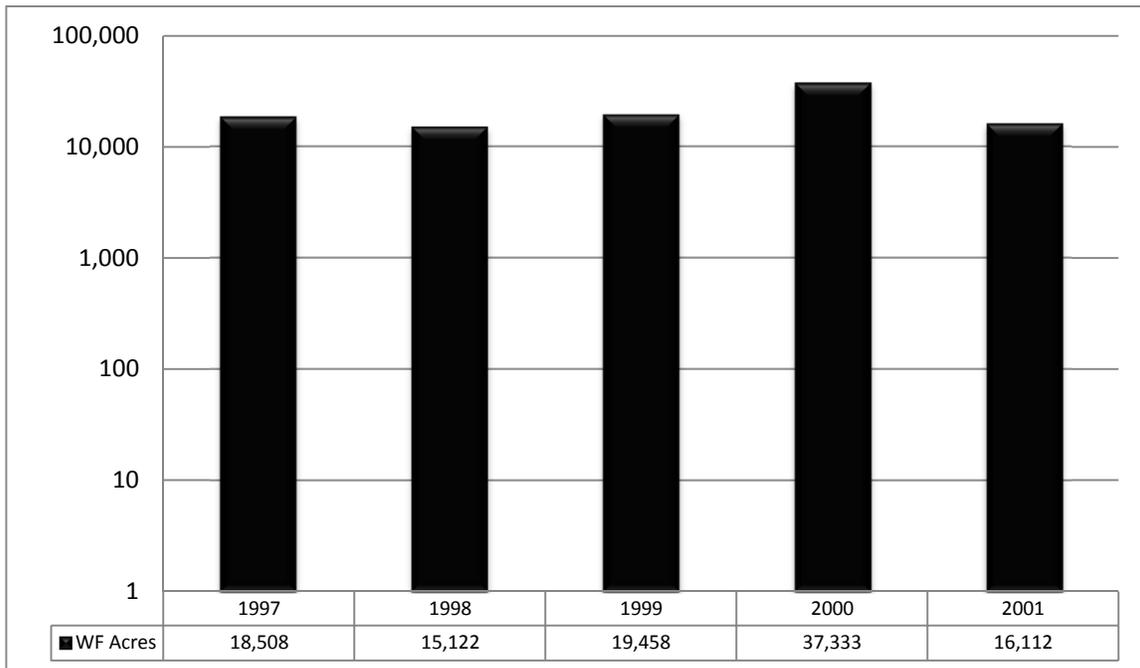
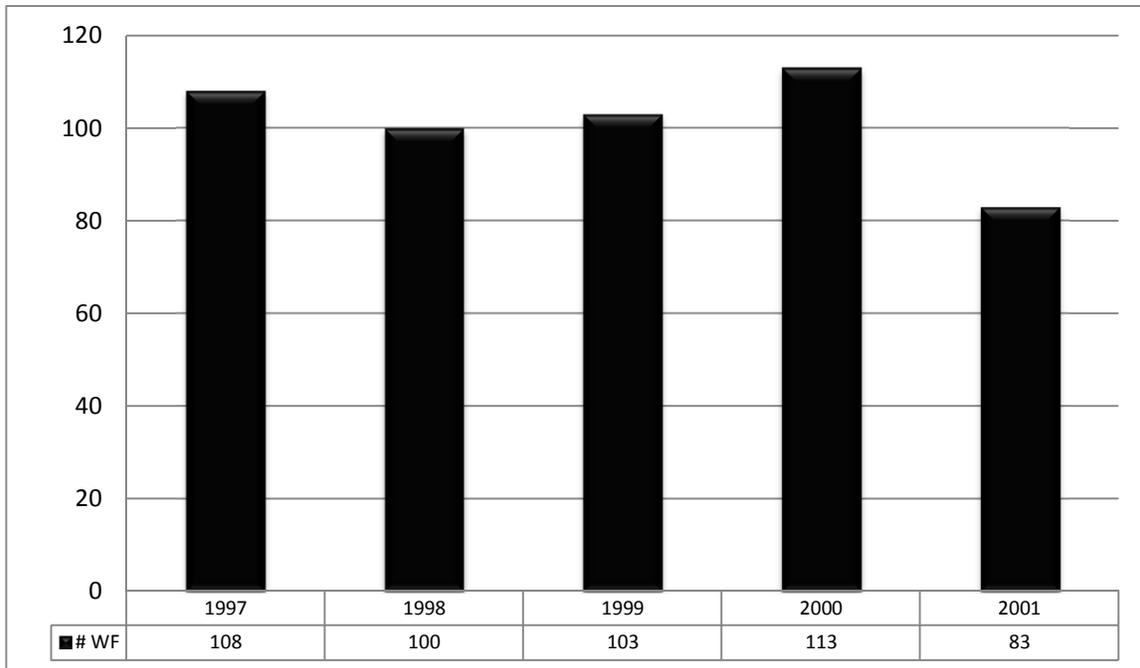


REGION 1 PRESCRIBED FIRES 1997-2001

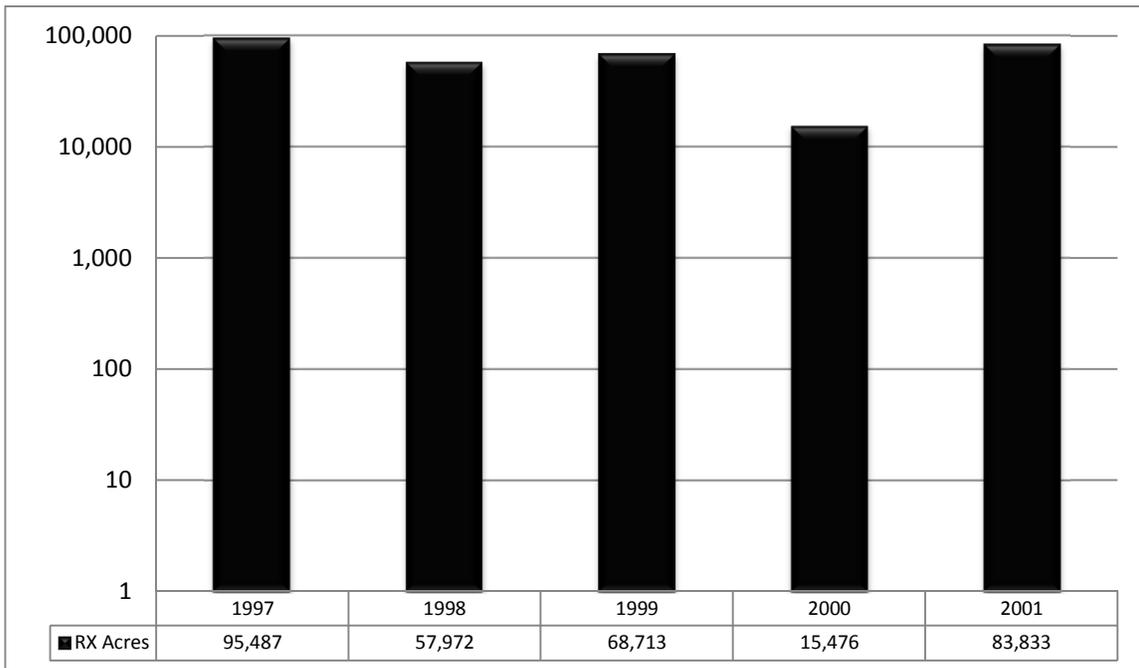
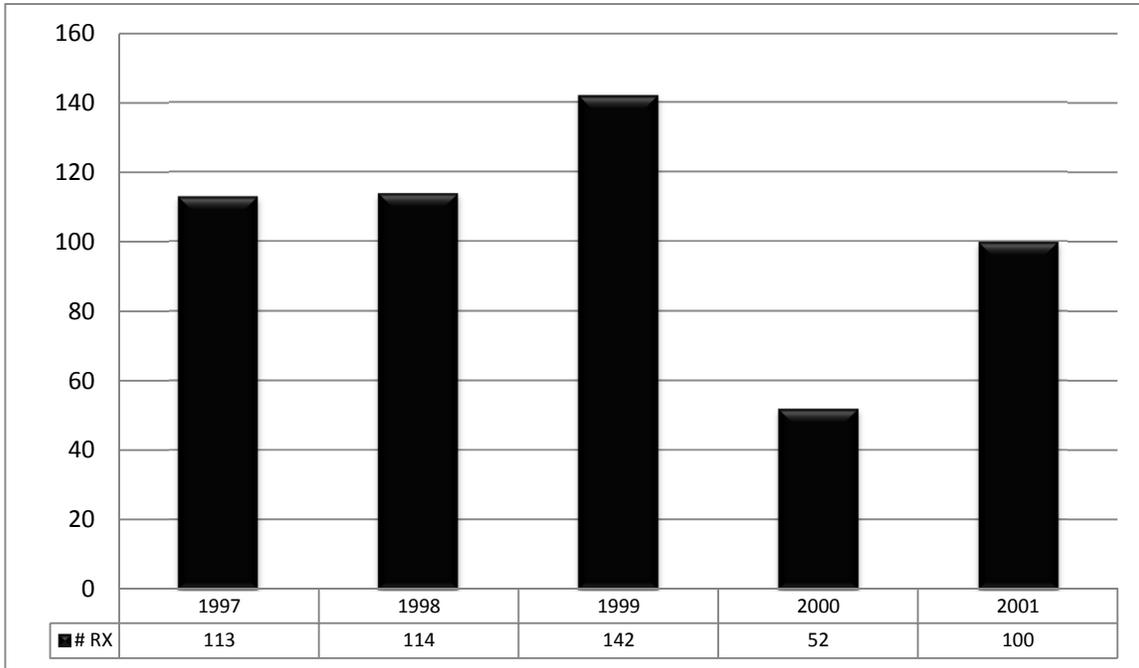


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REGION 2 WILDLAND FIRES 1997-2001

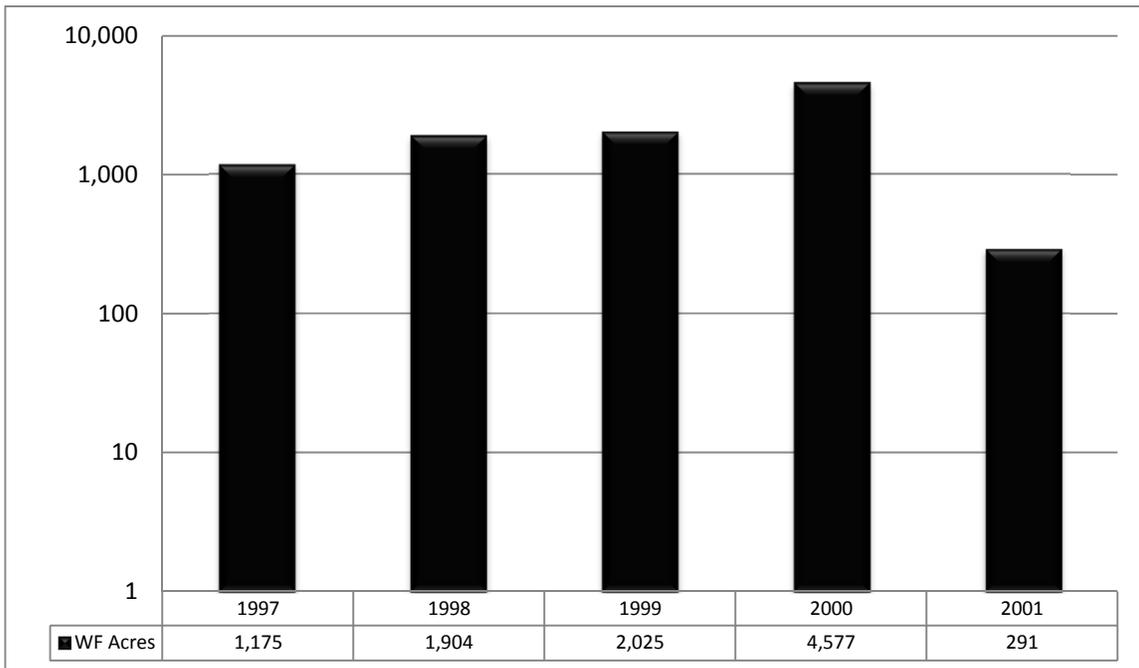
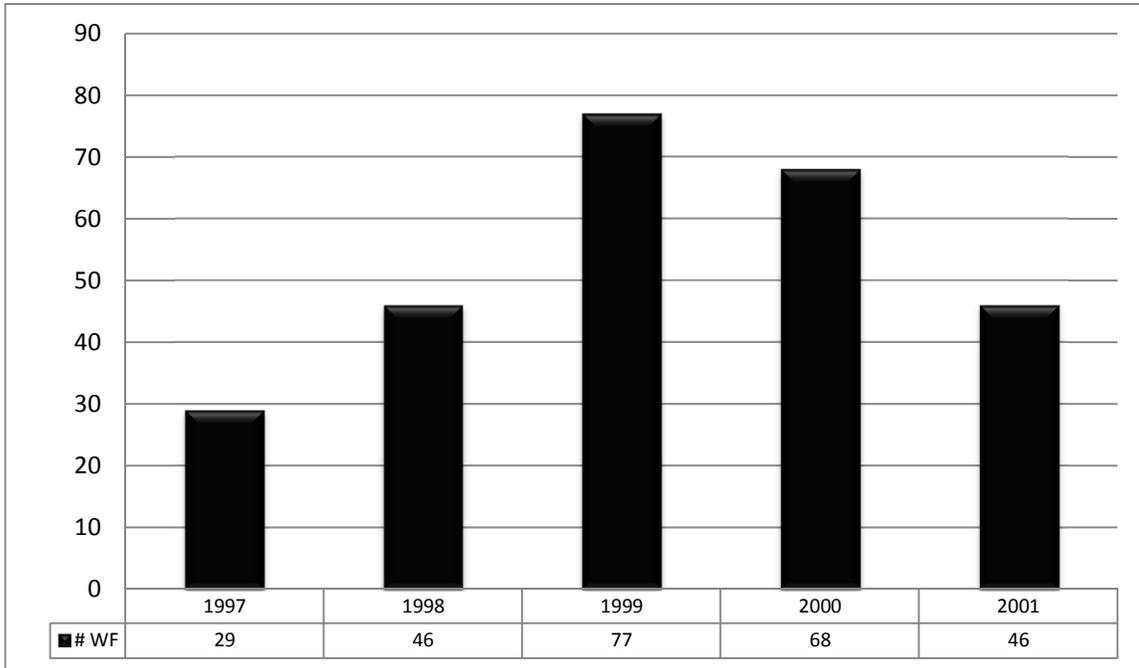


REGION 2 PRESCRIBED FIRES 1997-2001

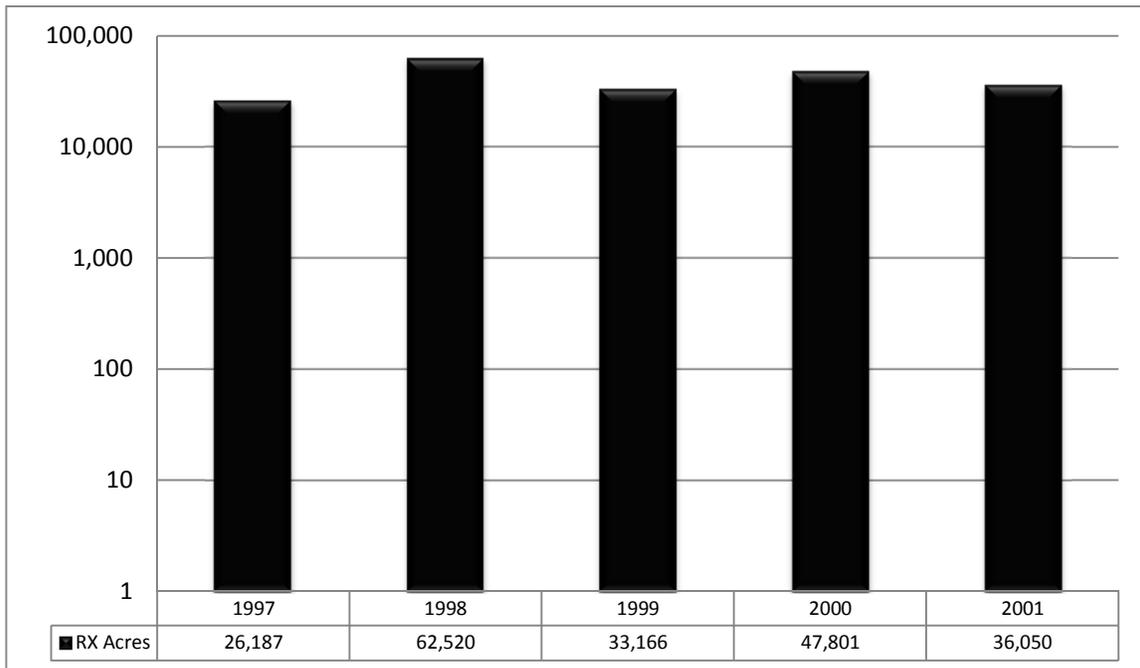
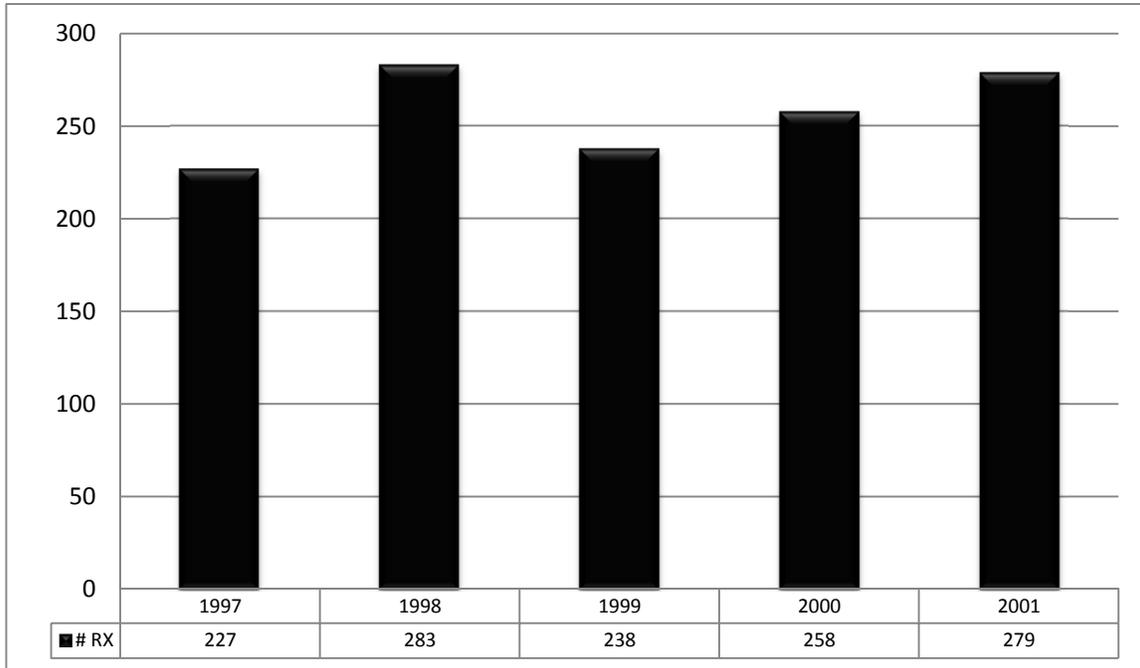


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REGION 3 WILDLAND FIRES 1997-2001

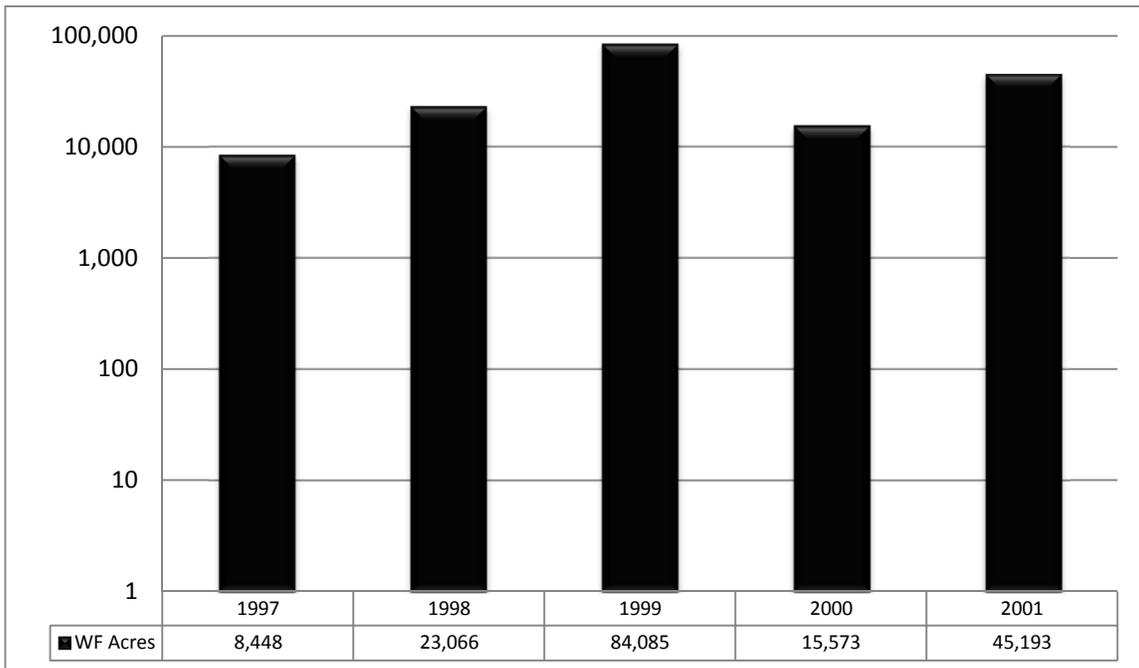
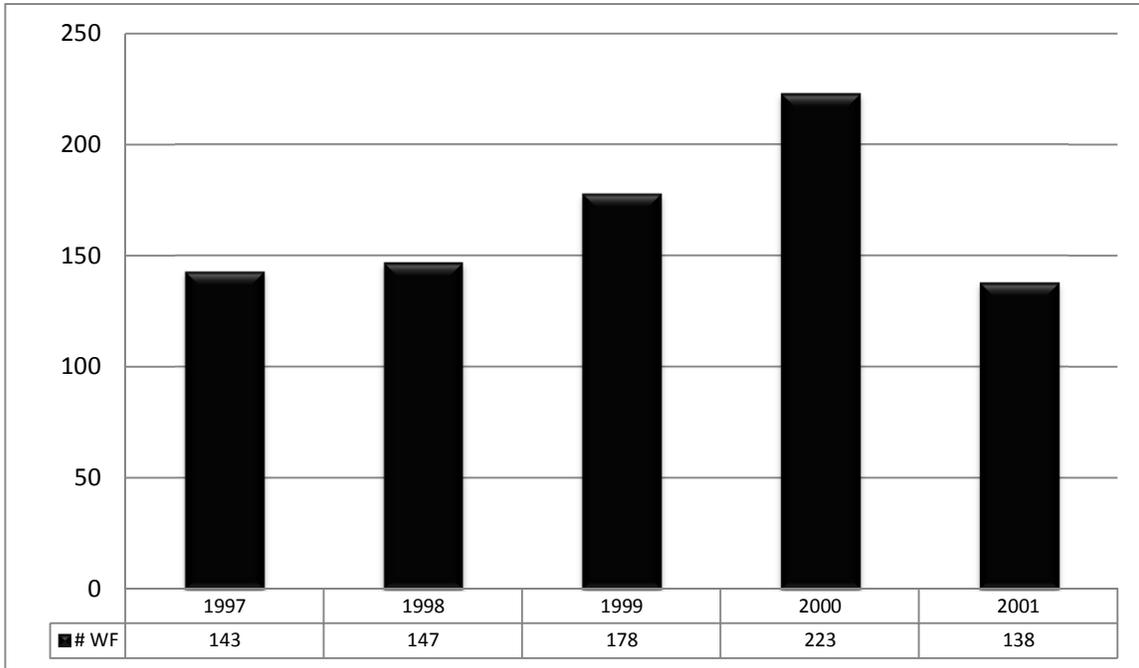


REGION 3 PRESCRIBED FIRES 1997-2001

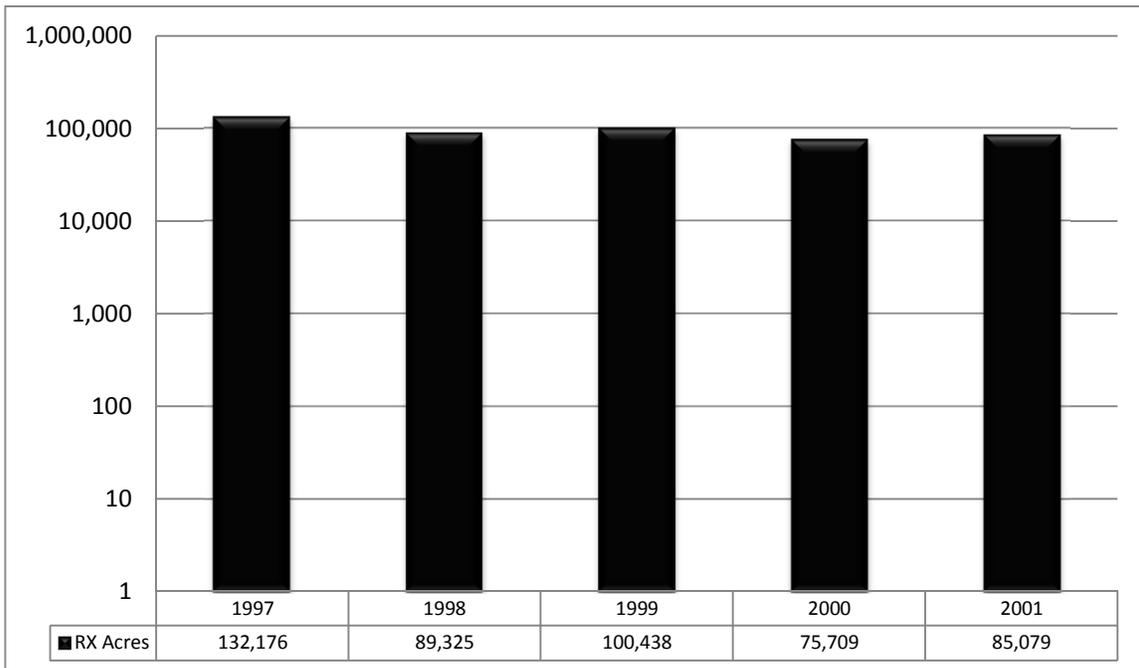
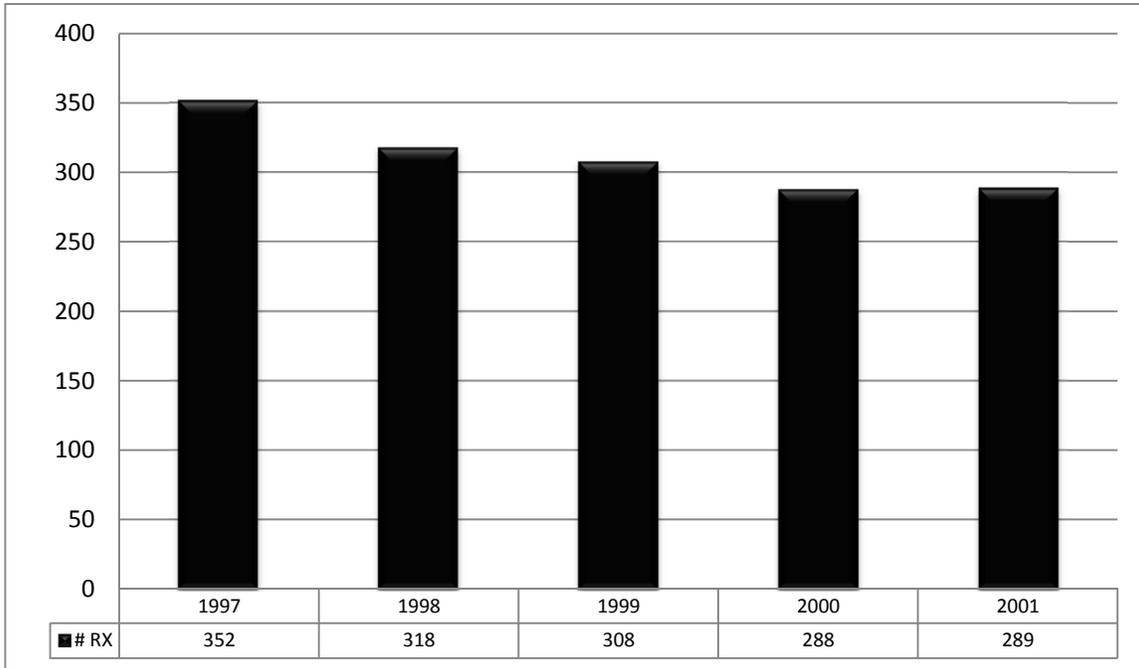


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REGION 4 WILDLAND FIRES 1997-2001

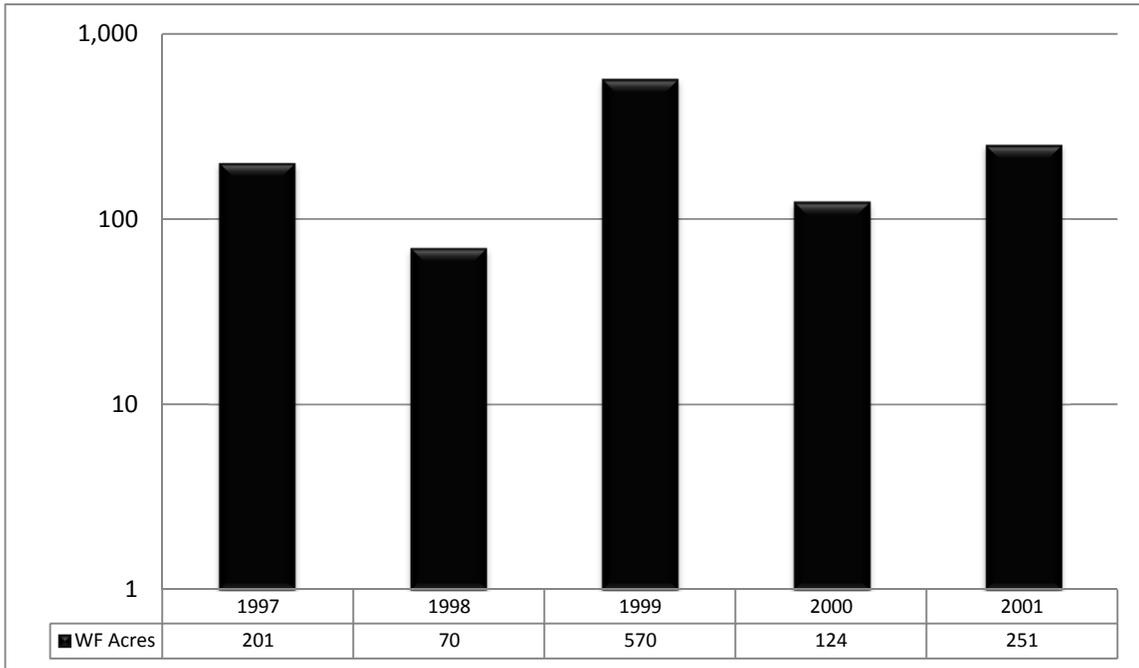
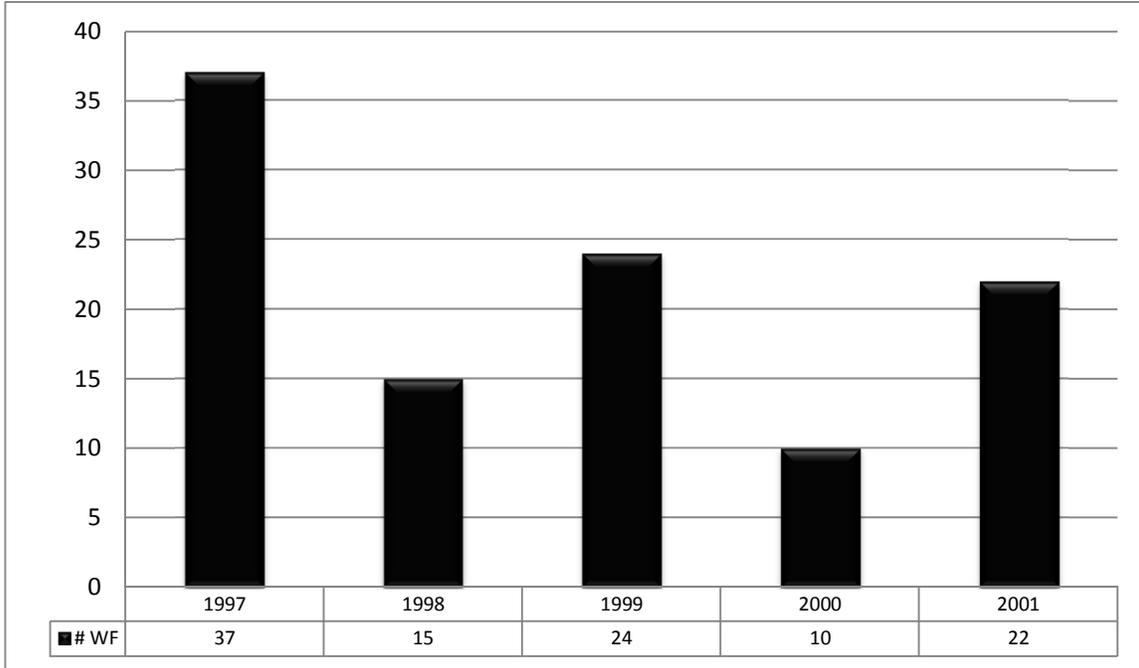


REGION 4 PRESCRIBED FIRES 1997-2001

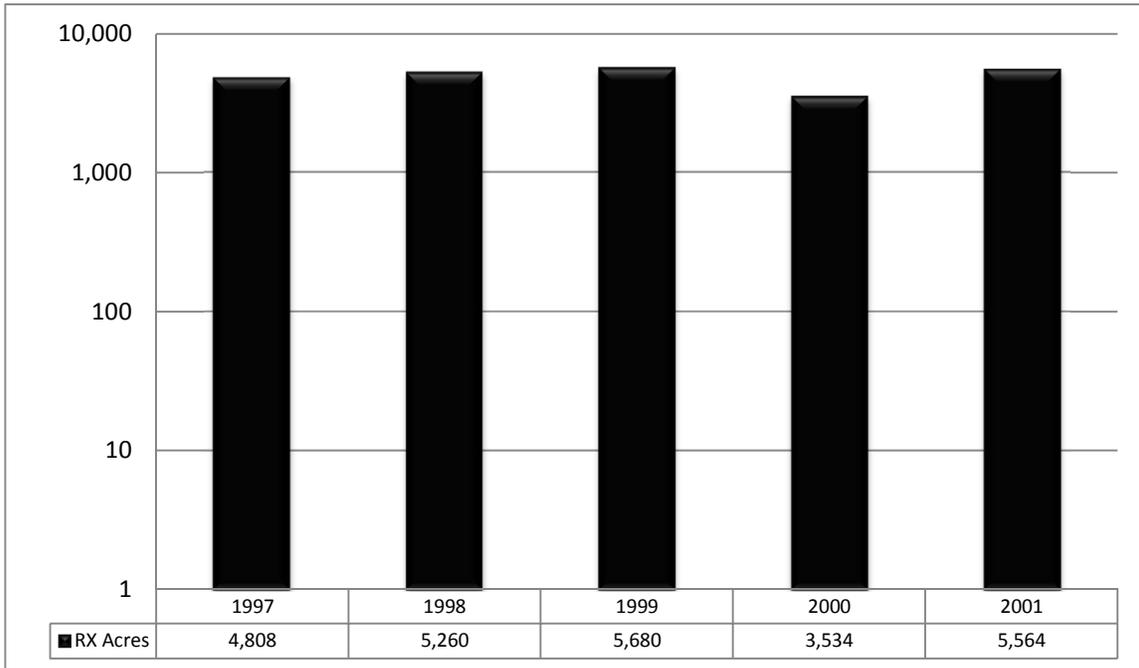
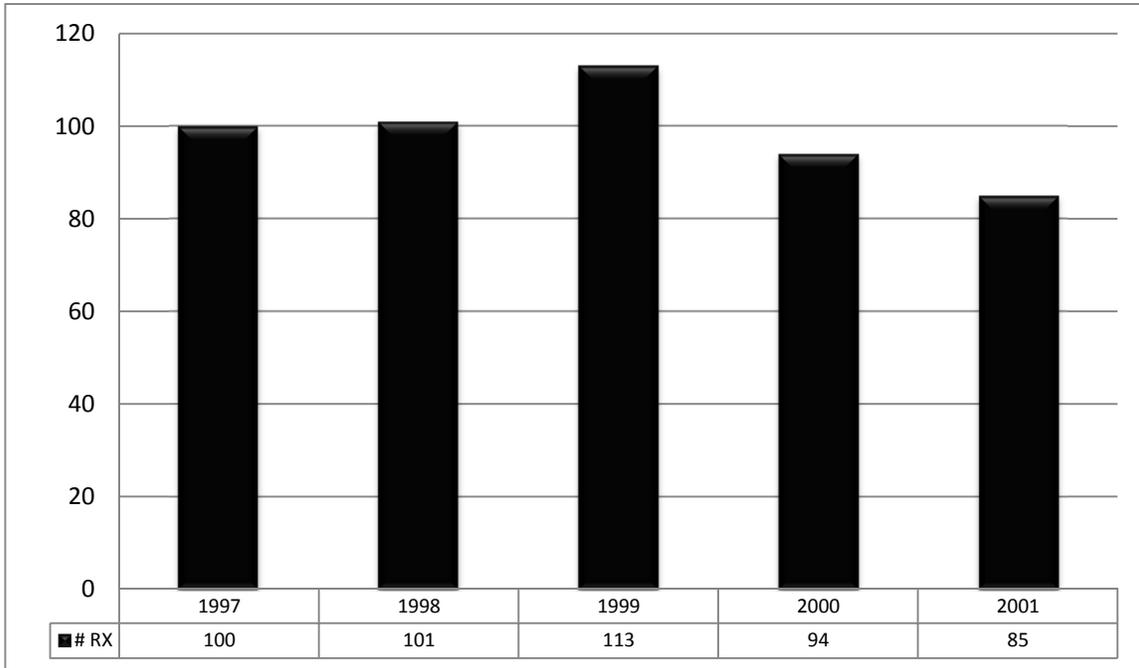


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REGION 5 WILDLAND FIRES 1997-2001

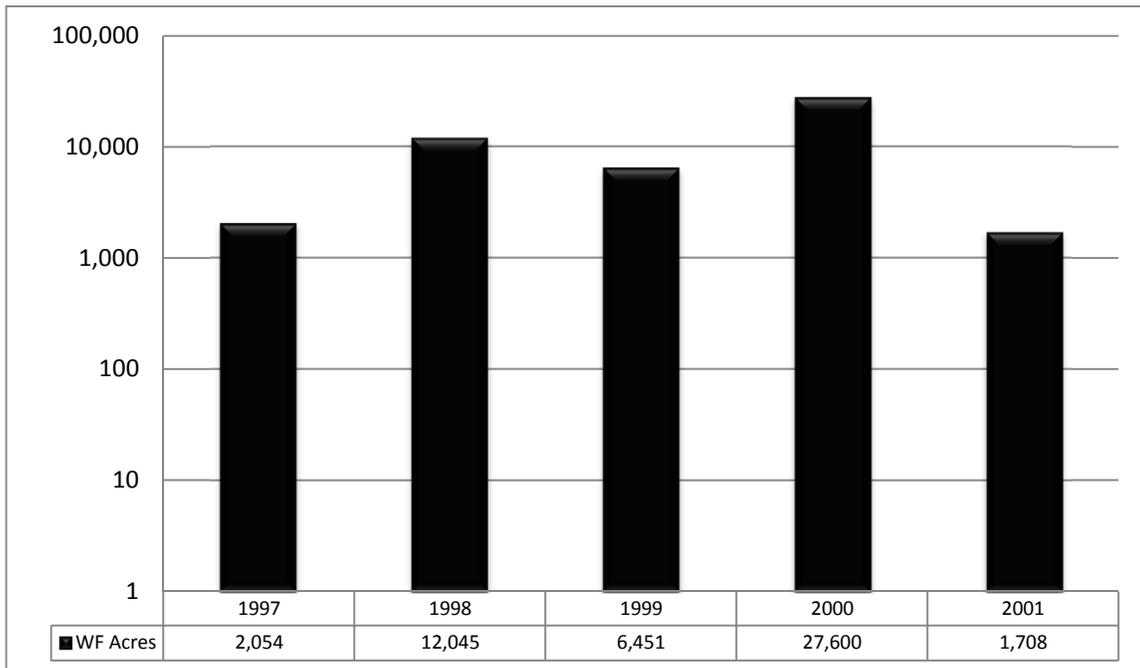
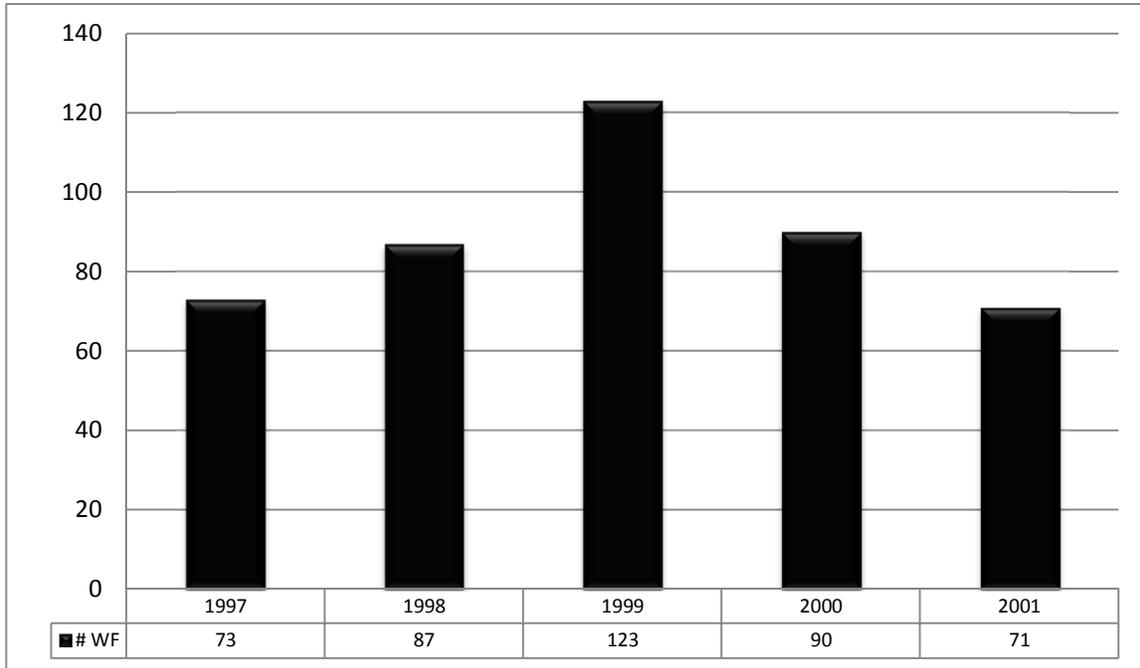


REGION 5 PRESCRIBED FIRES 1997-2001

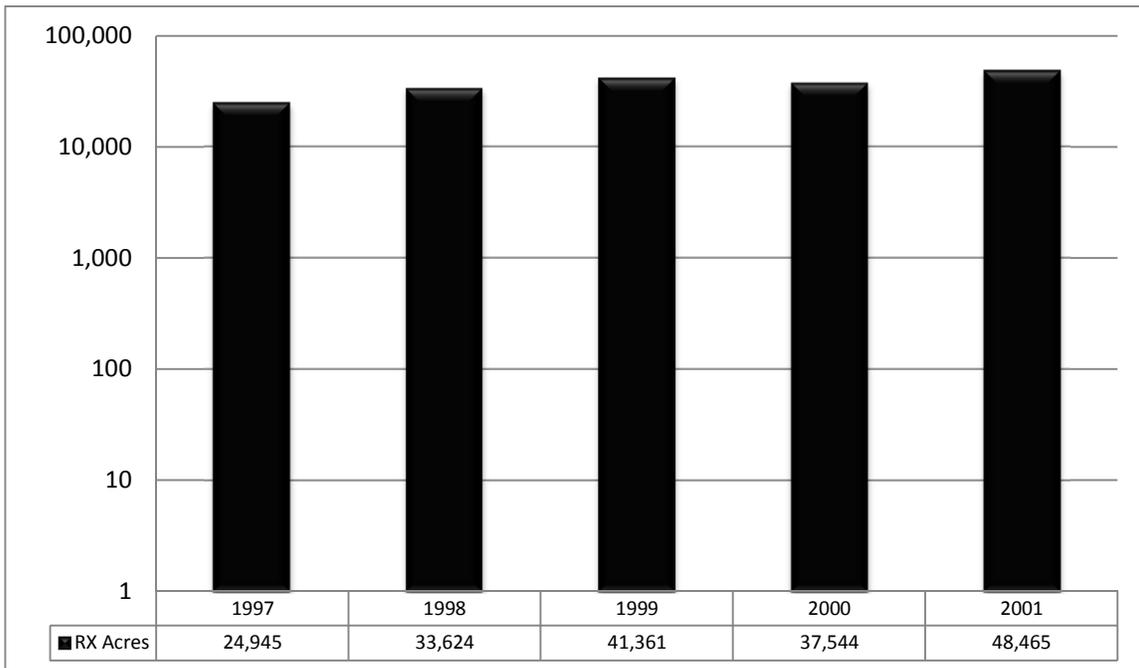
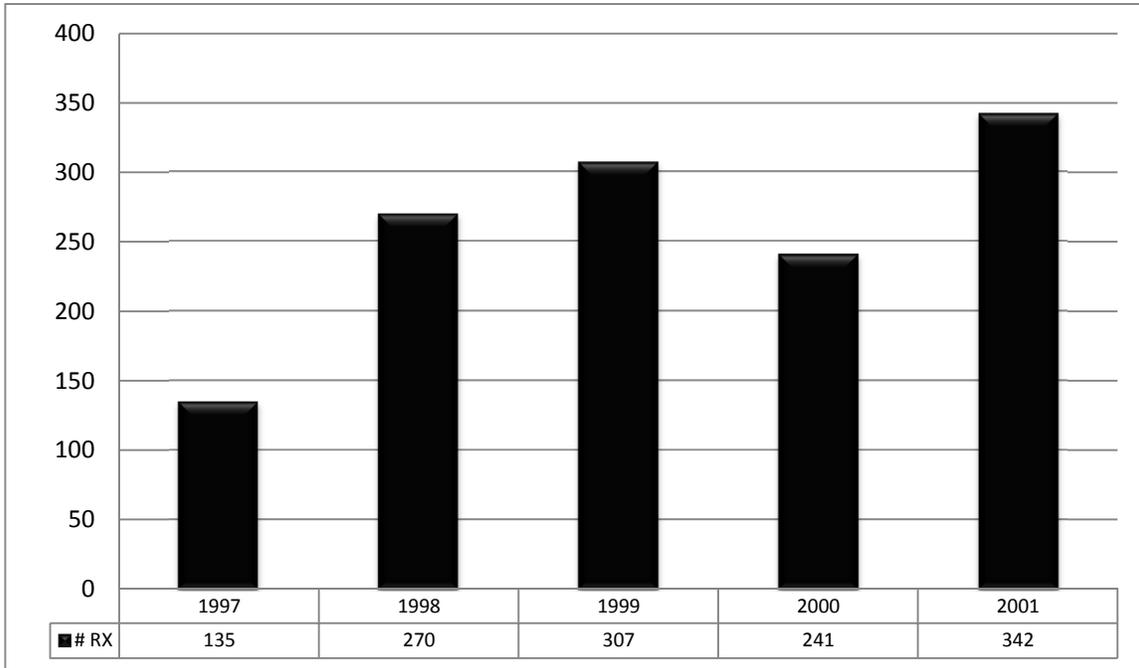


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REGION 6 WILDLAND FIRES 1997-2001

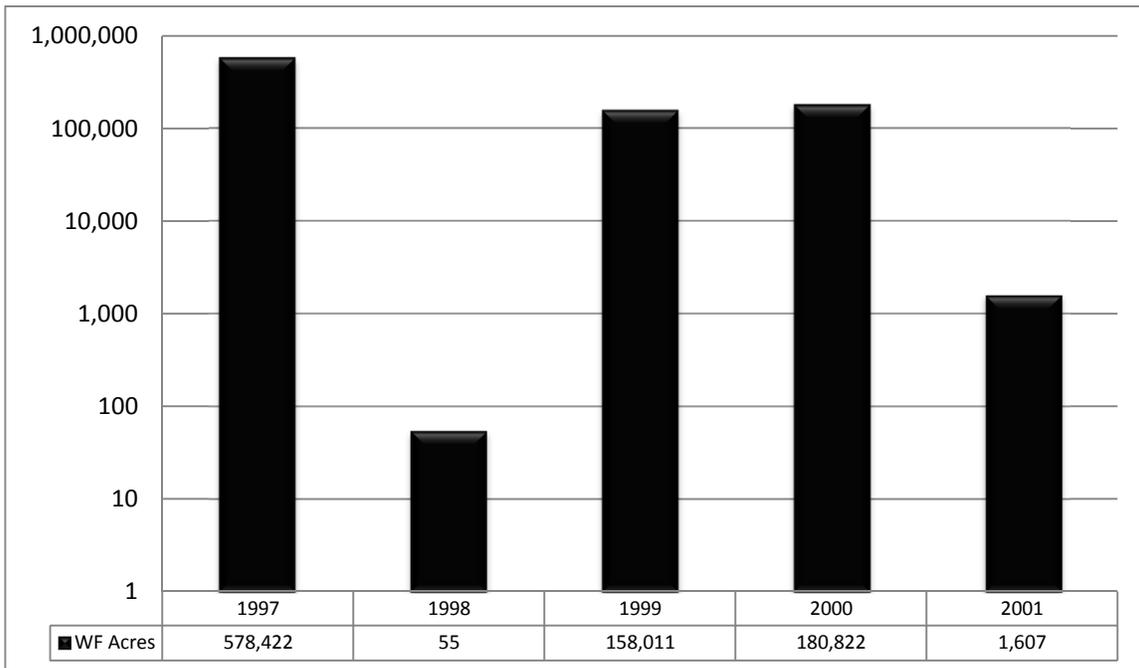
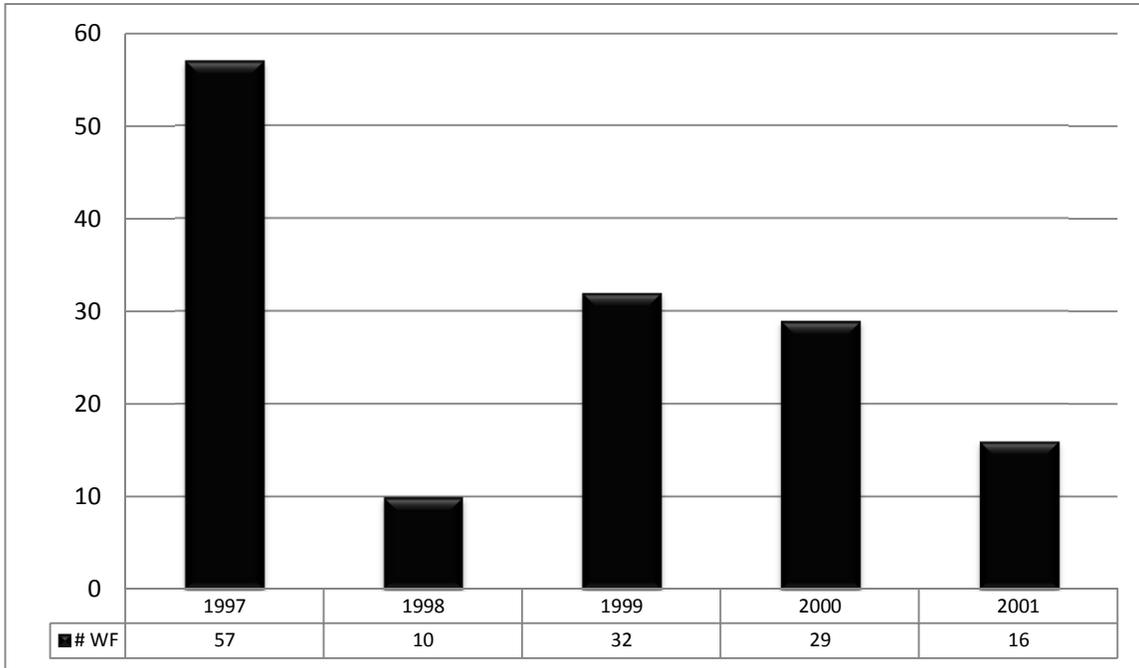


REGION 6 PRESCRIBED FIRES 1997-2001

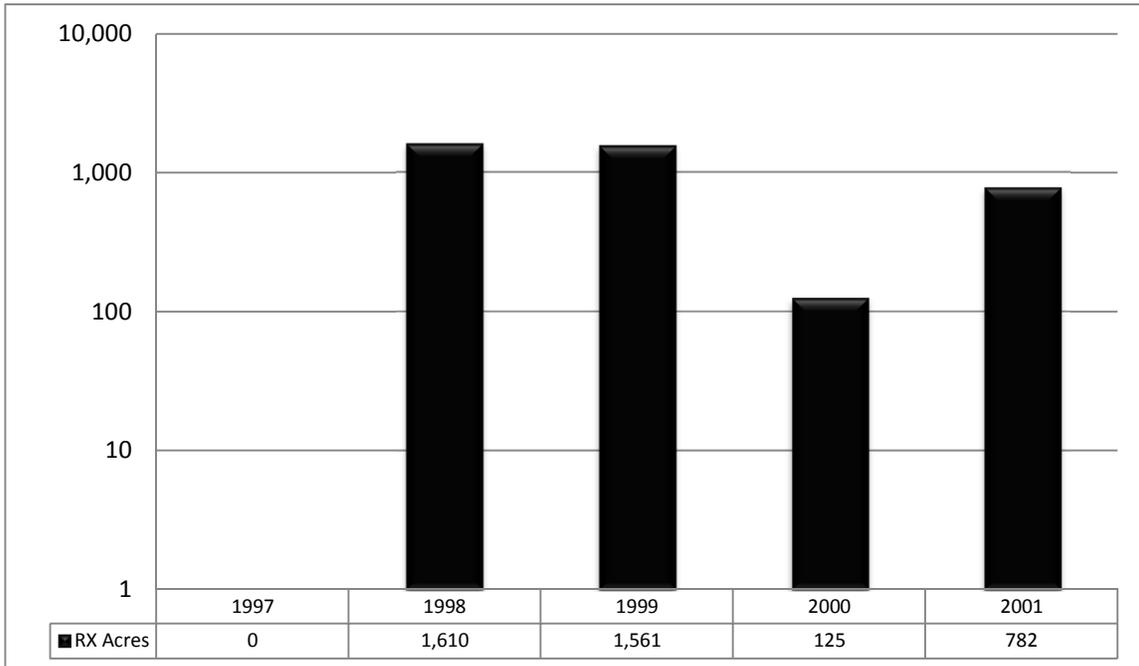
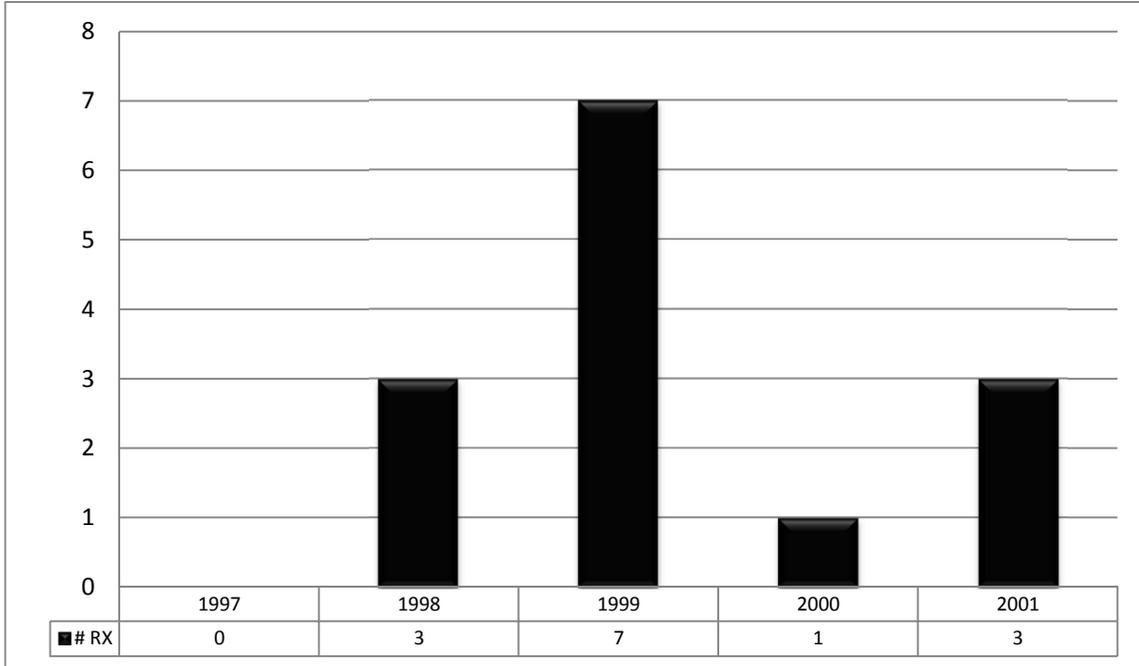


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REGION 7 WILDLAND FIRES 1997-2001



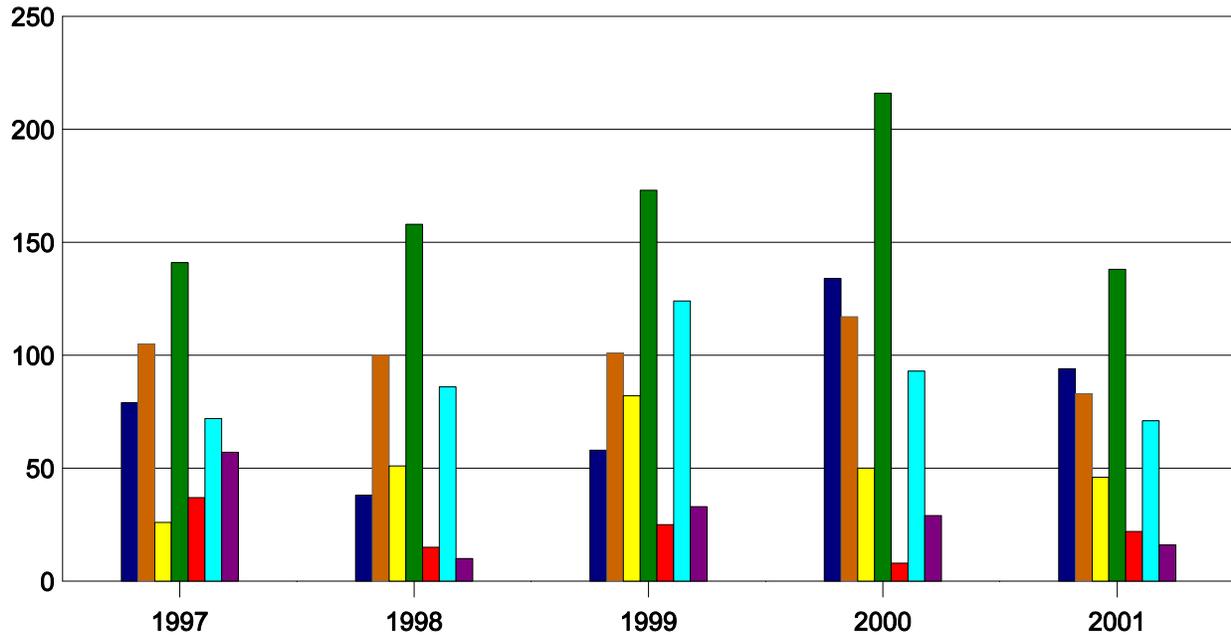
REGION 7 PRESCRIBED FIRES 1997-2001



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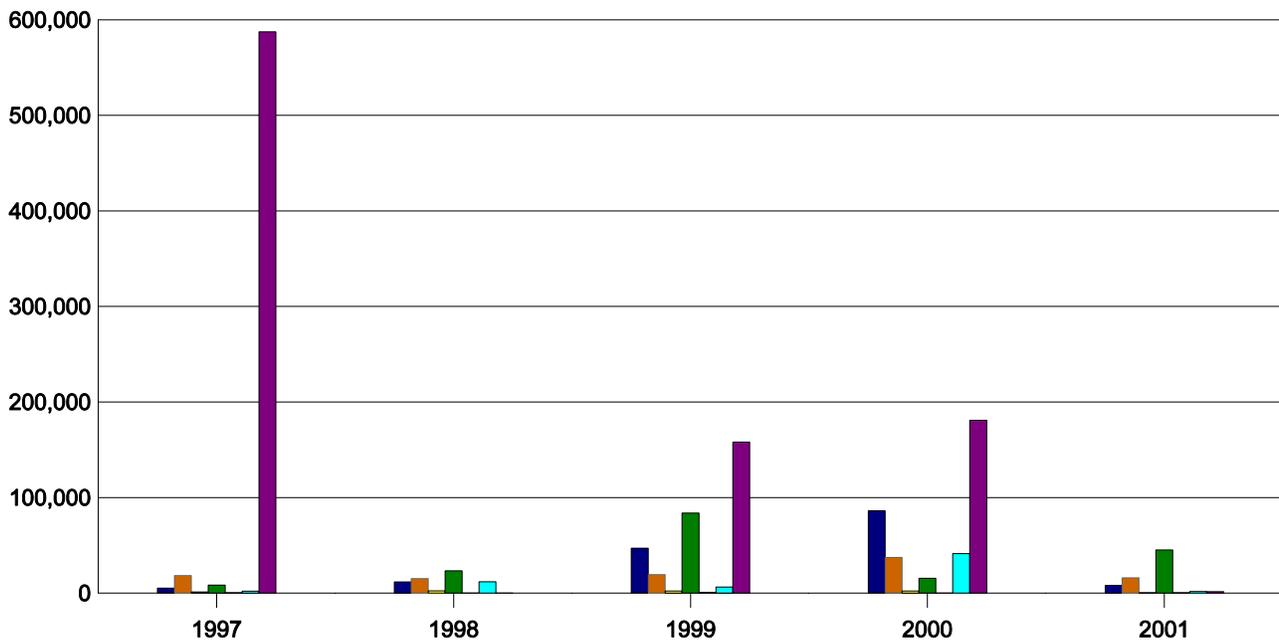
WILDLAND FIRES 1997 - 2001

Number of Wildland Fires



■ R-1
 ■ R-2
 ■ R-3
 ■ R-4
 ■ R-5
 ■ R-6
 ■ R-7

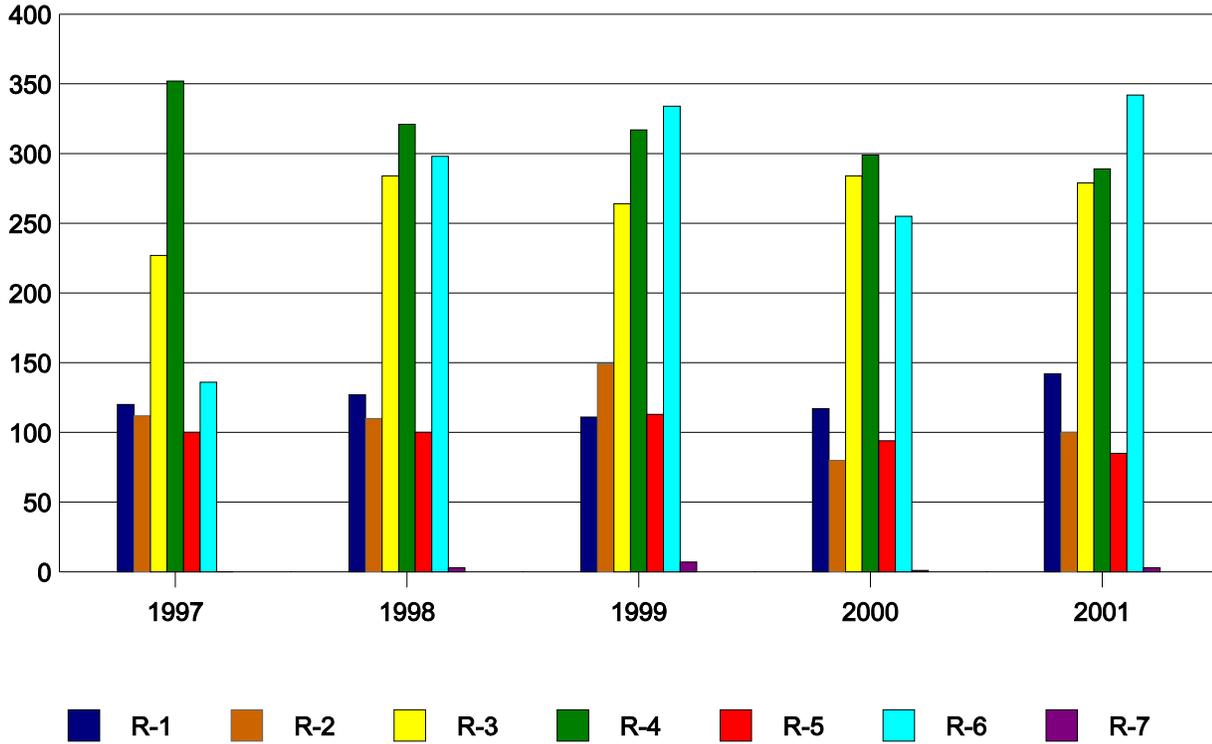
Number of Acres Burned



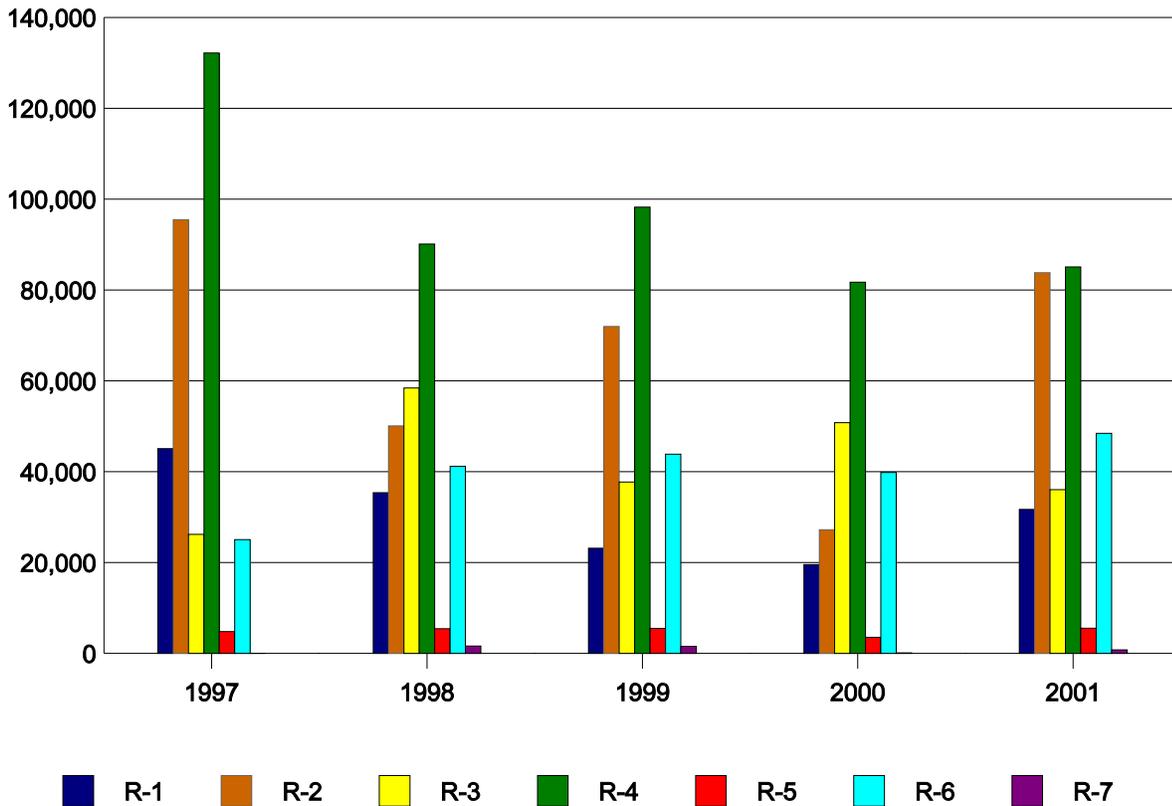
■ R-1
 ■ R-2
 ■ R-3
 ■ R-4
 ■ R-5
 ■ R-6
 ■ R-7

PRESCRIBED FIRES 1997 - 2001

Number of Fires

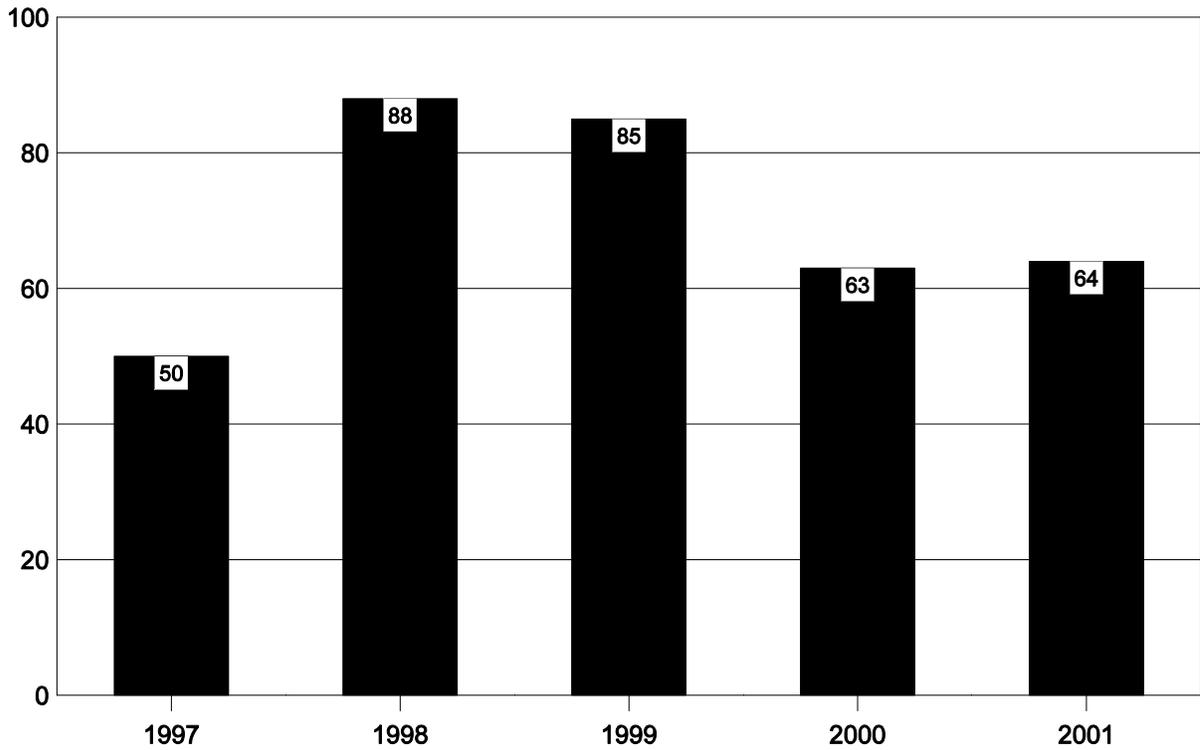


Number of Acres Burned

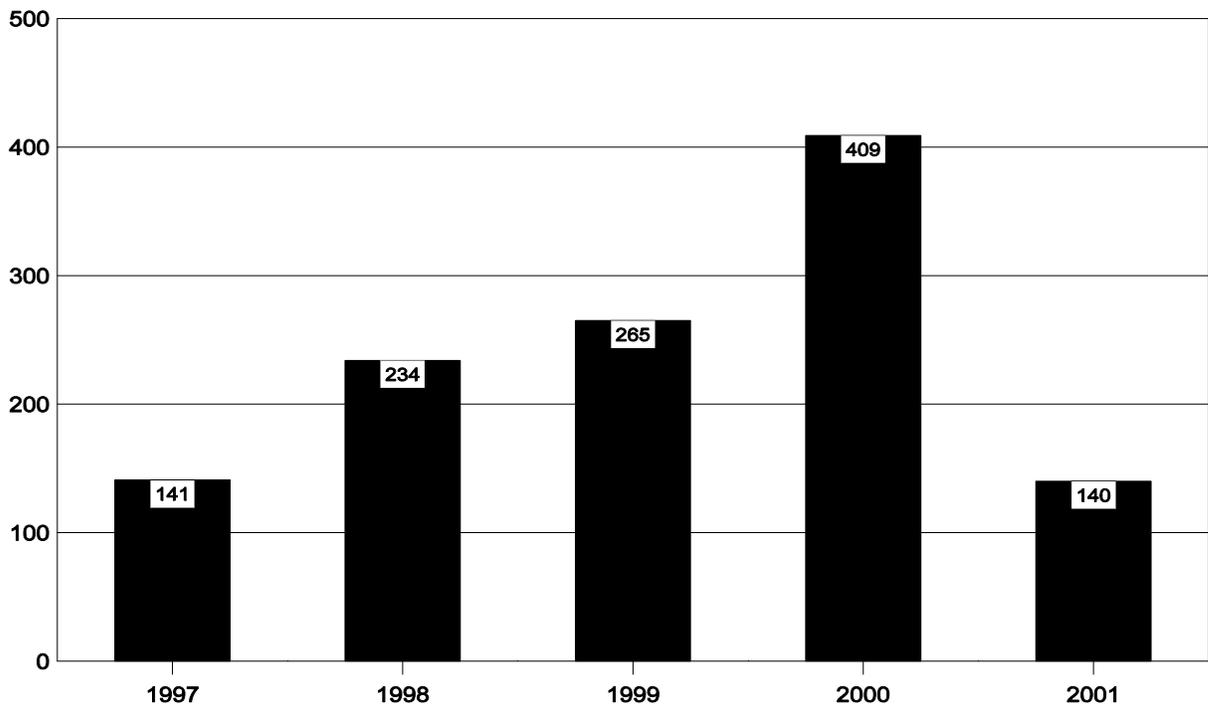


REGIONS 1 - 7

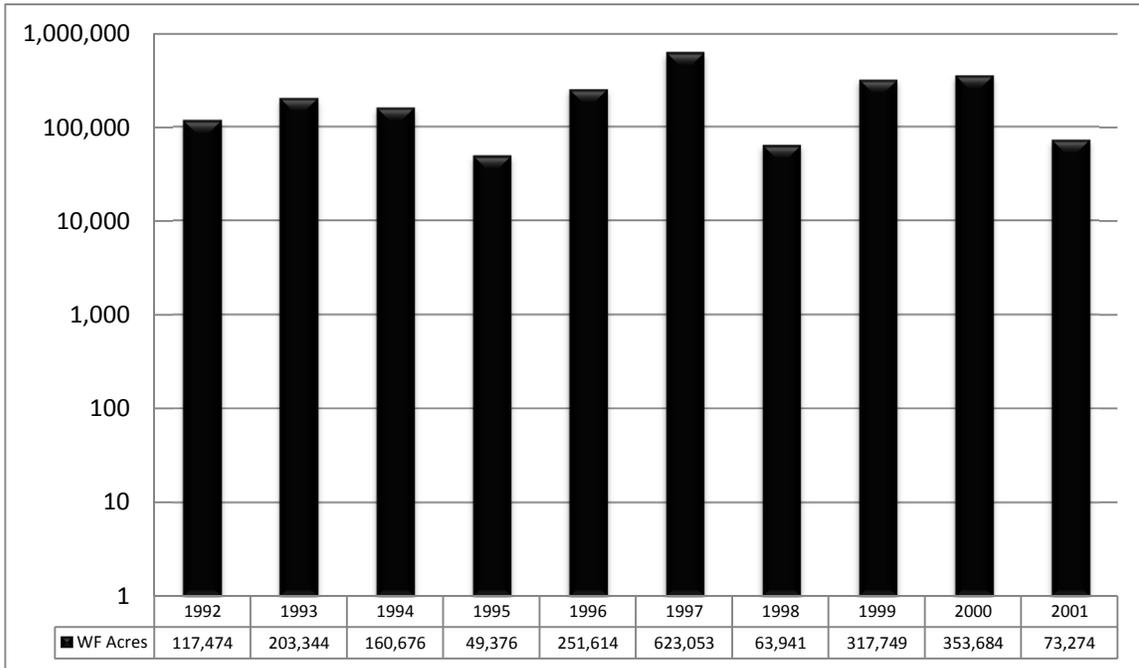
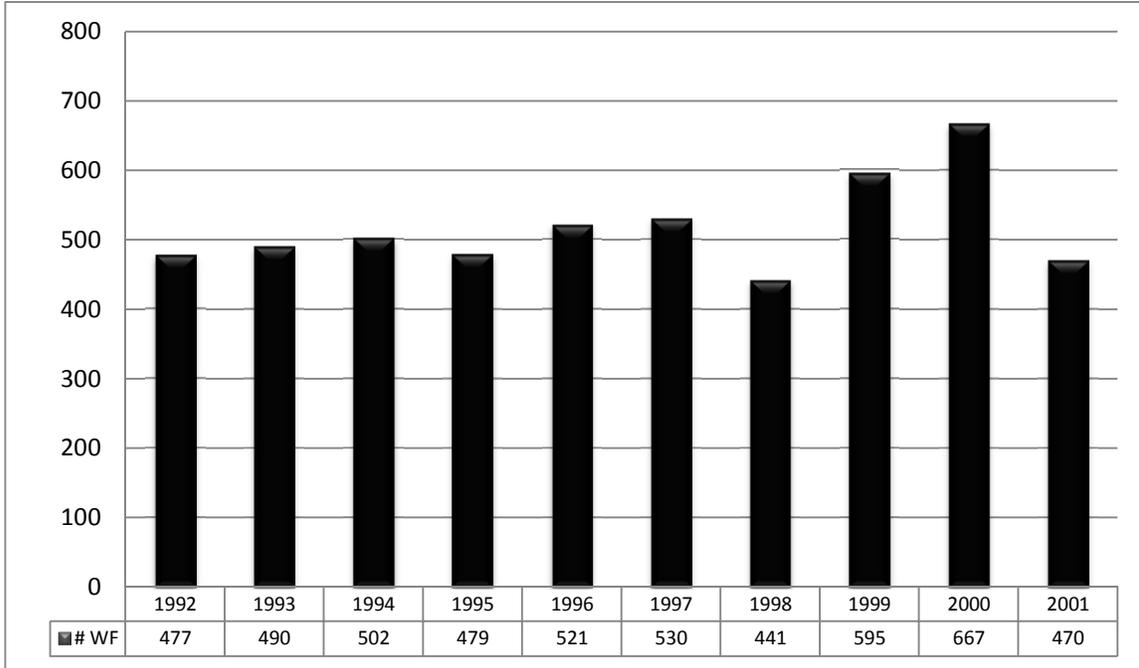
FALSE ALARMS 1997 - 2001



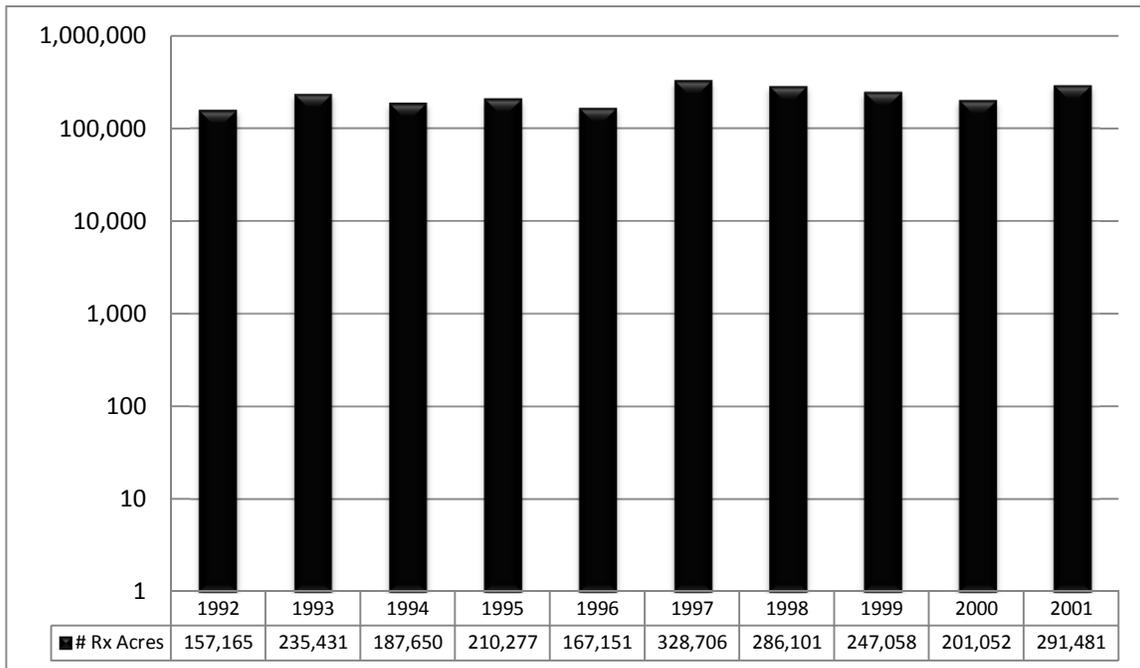
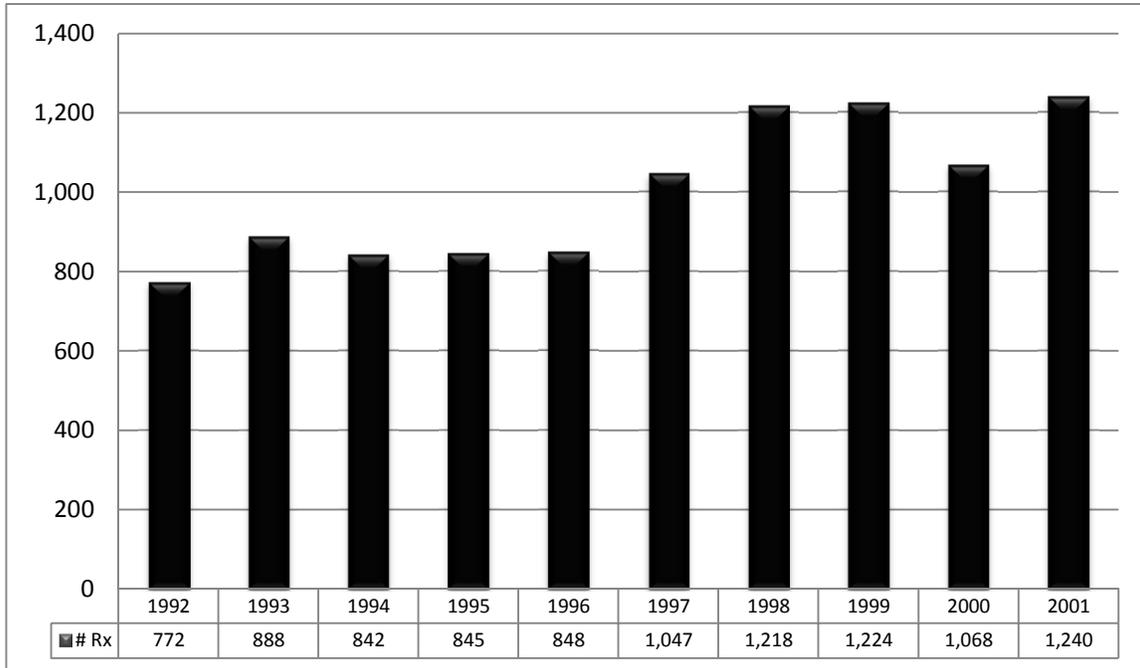
SUPPORT ACTIONS



WILDFIRES 1992 - 2001



PRESCRIBED BURNS 1992 - 2001



This includes Non-WUI + WUI