

U.S. Fish and Wildlife Service Fire Activity Report



2003

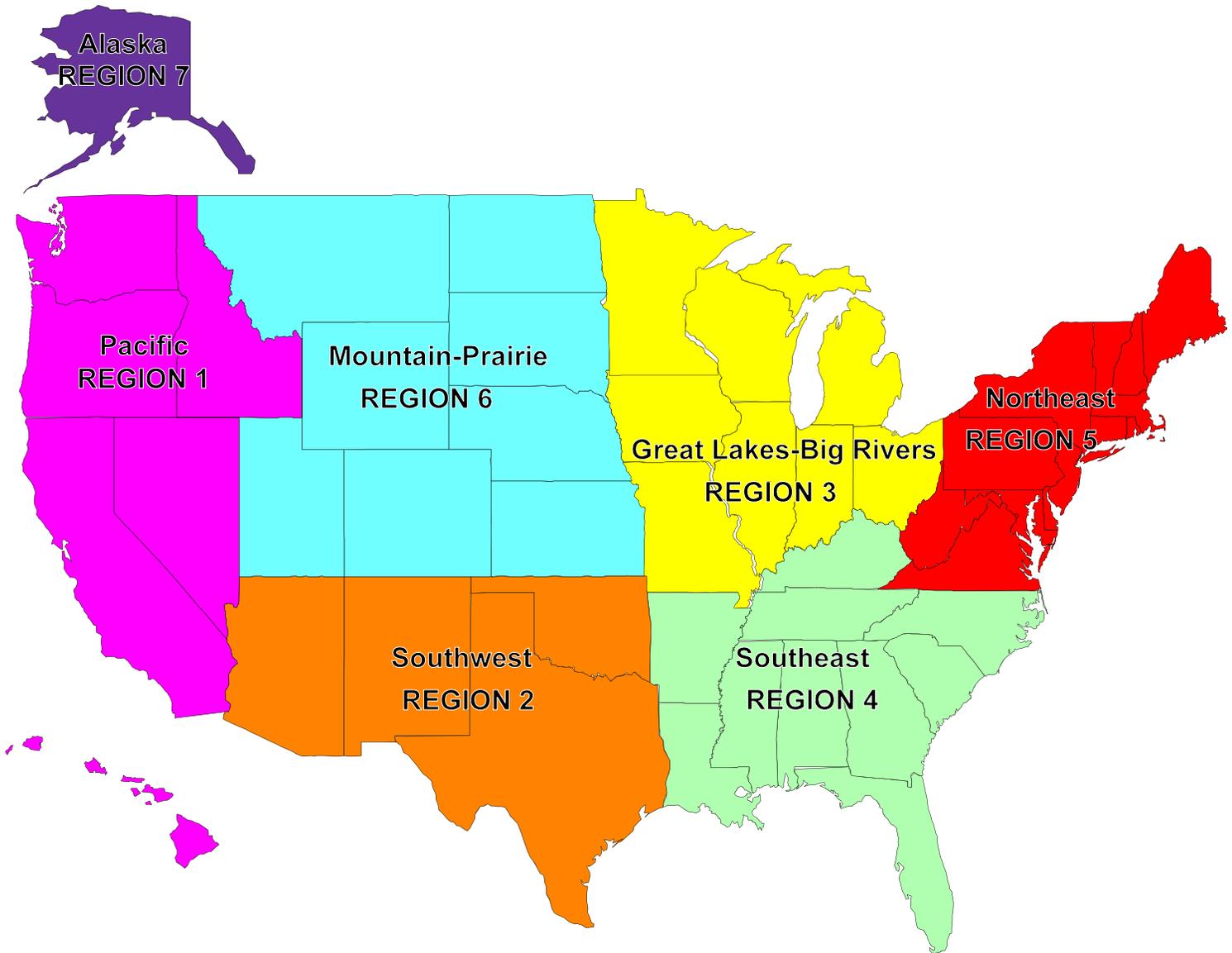
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U.S. FISH & WILDLIFE SERVICE Regional Map



REGION



The majority of the Region continued to remain in drought conditions for the fifth year in a row. Record low snowpacks in the Cascades contributed to extremely low fuel moistures throughout the fire season. Fire season activity was above average and crews remained busy well into October, with the culminating event in Southern California dragging the fire season into November. Though most of the Region never reached Regional Preparedness Level V, a total of 37 days were spent in Level IV. The Santa Ana winds and El Niño conditions provided for an extended season in California. Throughout this busy fire season, Region 1 personnel remained safety conscious and no major injuries to Service employees were sustained.

The fire season was slow to develop in the West but continued well into the holiday season. Service personnel (many non-fire funded staff) assisted in fire suppression efforts throughout the West, as well as in other Regions. Field personnel were instrumental in protecting structures and resources during large fires at Kootenai, Hopper Mountain (2), and San Diego National Wildlife Refuges. Regional fire staff were heavily involved with fire activity (Geographic Coordinating Groups) from July through October. Severity requests were received and processed early in August and some stations continued severity well into December. Much of Region 1 continues to experience below average annual precipitation, remaining between the 90th and 99th percentiles.

Emergency Stabilization and Rehabilitation (ESR) plans were submitted for six wildfires on refuge and fish hatchery lands. Progress in prior year ESR plans in support of severely damaged resources resulted in

completing multi-year rehabilitation efforts. The resource damage continues to be of concern for refuge managers throughout the Region.

The National Fire Plan (NFP) continues to provide an increased, but manageable workload. Fire Management Officers and field stations are utilizing the National Fire Plan Operations Reporting System (NFPORS) for long-range planning and accomplishment reporting, allowing a smoother transfer of data. NFPORS has helped alleviate some of the data calls and eased response to compressed turnaround times on reporting functions.

Region 1 accomplished nearly 70,000 total acres of fuels treatments in Hazardous Fuels Reduction (HFR) and Wildland Urban Interface (WUI). Prescribed burn personnel continued conducting fire operations in a safe and effective manner while meeting or exceeding their targets.

Contracting fuels treatments continued to be a major emphasis and the Region continued to streamline the process. However, budget constraints threaten to limit contracting opportunities. With projects and contractors identified, additional projects are on the table waiting funding. As the NFP momentum builds, Region 1 continued to lead the Service in contracted acres while fulfilling the Agency's land management goals and striving to meet the NFP goal of contracting 60 percent of the fuels reduction workload.

Region 1 accomplished 20,865 acres of WUI fuels reduction treatments. Over 17,000 of those acres were treated mechanically using service contracts or agreements with partners. The Region

continues to place priority on the treatment of hazardous fuels adjacent to or near “Communities at Risk” identified by the National Fire Plan. Community prevention and education programs were also developed and completed with WUI funding.

The Region initiated and completed an Environmental Assessment (EA) for a hazard fuel reduction project at Leavenworth National Fish Hatchery using guidance outlined in the President’s Healthy Forest Initiative. This EA was one of ten completed nationwide by the Federal land management agencies and the only one for the Service. This new streamlined approach allowed the Region to assess the environmental concerns of a project and complete the hazardous fuels reduction treatment within nine months. These actions led to the identification of a local subdivision at high risk from wildland fire.

The Rural Fire Assistance (RFA) program assisted in the purchase of wildland fire equipment and training for small fire departments in the six western states serviced by Region 1. Nearly \$150,000 was obligated during FY 2003. The RFA is a very successful program and is well received by the public.

Six fire management plans were signed in 2003, and the remaining fifteen are in various stages of completion. A rigorous schedule has been developed to ensure completion of the remaining plans by the Department’s December 31, 2004, deadline. Many Refuges are becoming involved in interagency preparedness planning in conjunction with the development of the Fire Program Analysis system. Time is very short with the fire season in the West preceding the implementation date of the beginning FY 2004.

With the help of a consulting firm, Jones & Stokes, the first year of Region 1’s fire effects monitoring program was a success. During the summer of 2003, 38 plots were installed at three Refuges and pre-burn data were collected. Three more Refuges have been selected to join the monitoring program in FY 2004. Jones & Stokes and Region 1 fire staff continue to develop and refine the draft Fire Effects Monitoring Handbook.

The Pacific Northwest (PNWCG) and California Wildfire Coordinating Groups (CWCG) met together for the first time in Reno, Nevada, to discuss various fire management issues. The meeting was beneficial, but disrupted due to the firestorm from the southern California wildfires. Future meetings are planned to enhance cooperation and coordination.

The Rocky Mountain and Great Basin Coordinating Groups met for the second time to discuss sharing of incident management teams and common issues between the two geographic areas. Close coordination between adjoining geographic areas is imperative.

The Regional Fire Management Coordinator chaired the PNWCG for the second straight year through another difficult fire season. The Regional Fire Management Officer served as Chair of the PNWCG Training Working Team and is still an active member of the Great Basin Training Working Team. Various field personnel are participating on aviation, operations, weather, fire business and other working teams throughout the Region. Region-wide, employees continued to fill various positions on Incident Management Teams (Type I, II, and III).

The challenges of fire management continue to grow in Region 1. Fatalities on fire incidents, contracted resource issues,

shortages of highly qualified fire personnel, interagency differences, extreme fire conditions and very tight budgets all combine to make for a rigorous, demanding situation in the West. Safety of the public and our firefighters is still the primary issue to keep in focus.

REGION



The 2003 fire season started in January with wildfire activity continuing through the winter months in the Western and Southern most areas of the Region on the Colorado River, Lower Rio Grande, and the Gulf Coast of Texas. Arizona, New Mexico, and West Texas continued to be affected by extended drought, which led to the second worst fire season in the last 10 years, only to be rivaled by the 2002 seasons, which was the worst fire season on record. In total, Southwestern State and Federal agencies responded to 4,059 fires with nearly 278,000 acres burned. Region 2 assisted with this and the National effort filling 263 assignments with employees from Texas, Oklahoma, Arizona, and New Mexico, totaling 2,142 person days on large fire support. In addition, Region 2 provided leadership in GIS, logistics, and operational oversight assisting NASA with recovery efforts following the NASA Space Shuttle Columbia disaster. The Texas Interagency Coordination Center played a critical role in managing expanded dispatch for this incident mobilizing 21 overhead teams and over 17,000 personnel between February and April 2003. Region 2 employees filled 61 critical need positions and provided 786 person days in the recovery effort. While these interagency support actions are notable, Region 2 Refuges were also busy with wildfires on Service lands and with fires threatening boundaries. These suppression actions totaled 266 fires for more than 15,000 acres burned.

The Service requested 105 days of severity funding in 2003. Request for severity covered May through August supplementing local suppression resources with engines, overhead, and helicopter support along the Gulf Coast of Texas. Most notable of these requests was the need to preposition a

helicopter on the Gulf Coast of Texas. Hurricane Claudette made landfall on the Southeast Texas coast bringing with it a four-foot tidal surge inundating much of the fresh and intermediate marsh on Refuges. The salt-killed grass proved to be highly susceptible to lightning ignition from passing storms and quickly exhausted capabilities of local suppression resources. This helicopter proved invaluable in controlling new starts in the first burning period, thus reducing the commitment of other critical resources during National Planning Level 5.

Refuges suppressed 52 wildfires fires in Arizona, 10 in New Mexico, 16 in Oklahoma, and 188 in Texas. The largest fires on or threatening Service lands were the 4,282 acre Unit 6 fire on McFaddin NWR, 275 acre Lighthouse fire on Imperial NWR, and the 500 acre Park fire on the boundary of Wichita Mountains NWR.

Despite above average rainfall on the Gulf Coast of Texas and historically dry conditions in Arizona and New Mexico, the hazardous fuels and Wildland Urban Interface (WUI) programs exceeded targets taking every opportunity to complete prescribed burns and mechanical projects. Region 2 completed 71 hazardous fuels projects treating 64,100 acres and 60 WUI projects, which reduced the fire threat to local communities on 19,338 acres. Region 2 also provided considerable support to its neighboring jurisdictions and other Regions in the planning and execution of prescribed fires. The Region hosts a prescribed fire module located at Balcones NWR outside of Austin, Texas, which completed 15 projects on their home Refuge and assisted with an additional 32 projects across 5 states.

Region 2 completed five Burned Area Emergency Stabilization projects in 2003--three in Texas at the Lower Rio Grande NWR and two in New Mexico at the Bitter Lake and Bosque del Apache NWRs. In addition, two plans were completed and are being implemented in Arizona on the Havasu NWR and the Cibola NWR following the 2003 wildfires. The Burned Area Emergency Stabilization program has proven an invaluable tool for both the immediate stabilization of fire areas and rehabilitation of fire damaged habitats on Refuge lands.

A strong emphasis was also placed on research within the Region in 2002. Two Joint Fire Program proposals were funded to study fire effects on the Yuma and California Black Rails on the Colorado River and Induced Heterogeneity on Rangelands: effects on fuels, fire behavior, and invasive species. An additional project was funded through the Science Support Group, Region 2, to evaluate the effectiveness of fuels treatments on the Aransas NWR, Texas. Combined, these projects brought in over \$667,000 in funding. The commitment of Refuge research funds represents the dedication of Region 2 to evaluate the effectiveness of fuels treatments to improve habitats on Refuge lands.

Rural fire assistance continued to play a critical role in providing needed training and equipment to local fire departments in 2003; the Region distributed over \$160,000 to 39 fire departments in New Mexico, Oklahoma, and Texas. Refuges in Region 2 are remotely located and are dependent on small rural fire departments for wildfire suppression assistance. These departments often have insufficient funds to provide needed safety equipment and required training, which limits their use on Refuge wildfires. The funds granted to the fire

departments were prioritized for buying personal protective equipment and providing training, which led to recruitment and hiring opportunities from motivated volunteer firefighters. Funding for this program limited grants to only a small percentage of our cooperators; future funding increases to the program will improve firefighter safety, increase suppression capabilities, and provide avenues for cooperation and collaboration with the local governments.

Region 2 remains active with interagency support and cooperation in the Southwest area. The Region cost share the Southwest Coordination Center Manager position with the Bureau of Indian Affairs, Bureau of Land Management, National Park Service, and U.S. Forest Service and provide the Chief of Predictive Services and a Dispatcher/Training Assistant working the fire season at the Southwest Coordination Center and winters at the Fire Use Training Academy. The Region also hosts the Interior Coordinator at the Texas Interagency Coordination Center and provides funding for shared dispatch positions in four coordination centers in New Mexico and Arizona.

In 2003, training continued to be a great success in Region 2. In Texas, the Service partnered with the Texas Forest Service, U.S. Forest Service, National Park Service, and local fire departments to present two fire training academies. Combined, these academies trained more than 1,200 firefighters in 43 subject areas of operational and fire support position. The Service plays a critical role in providing instructors for operations courses bringing in instructors with the depth of experience in multiple fuel types and geographic areas to provide quality training. Region 2 also partnered with the same agencies to host S-420 Command and General Staff in Texas and is working with Federal and State partners in

Arizona to present a similar academy in Prescott, Arizona, providing quality training for all the interagency fire community. Region 2 Service fire staff continues to participate as instructors at zone fire academies, interagency sponsored courses, and provide the annual refresher and developmental training to Refuge employees.

Additions to the Regional fire management staff in 2003 were Brent Woffinden, FMO Aransas NWR, transferring from the Wildland Urban Interface Coordinator at Texas Midcoast Refuge Complex.

REGION



Region 3 experienced a year of robust activity and accomplishment in 2003. It was a year highlighted by tremendous prescribed burn accomplishments, a long and active wildfire season enhanced by long periods of drought, and continued fire program growth and development.

The Regional fire program has increased in size and complexity to where the East fire zone was sub-divided creating a new fire management zone covering the States of Michigan, Ohio, and Indiana. This gives the Region four distinct fire management zones to better manage the fire operations. Increased fuels management needs, responding to National Fire Plan direction and an ever-growing Wildland Urban Interface (WUI), necessitated this expansion. The four fire management zones are respectively: West zone (Minnesota); East zone (Wisconsin plus several Minnesota Refuges); South zone (Iowa, Illinois, Missouri); and the Michigan/Ohio/Indiana zone.

The Spring 2003 prescribed burn program began in earnest in late February and early March with planned burns conducted on Region 3's southern most Refuges. As the winter receded and spring progressed, the burn program moved northward. Accompanying the onset of warmer weather came an unexpected prolonged drought throughout the greater portion of the Region. Initially, these excessively dry conditions contributed to tremendous prescribed burn accomplishments; however, as the prolonged drought continued, these conditions worsened and created the worst wildfire weather seen in many locations for many decades. For example, in Minnesota, the Region has not seen such explosive wildfire conditions since 1976. The Refuges

within the Region were no exception with fire staff providing initial attack capabilities on all lands within their response zones.

An example of the intensity of wildfire activity is this recount of events that occurred at Detroit Lakes, Minnesota. [Prompt action by the Detroit Lakes Wetland Management District (WMD) fire staff in coordination with the Minnesota DNR and Minnesota InterAgency Fire Center dispatch of retardant drops from air tankers saved the Detroit Lakes WMD office complex along with a local housing community from an April 13, 2003 wildland fire.]

The drought conditions persisted throughout the late summer and into fall, requiring many Refuges in Wisconsin and Minnesota to utilize emergency preparedness funding for additional fire coverage. Eventually, weather conditions worsened to the point that a request was made and granted for national severity funding for these same Refuges. Finally, late autumn rain and lower temperatures eased the fire danger with no major fire events occurring. There were 115 wildfires within Region 3 in 2003.

Region 3 completed 158 percent of planned Hazardous Fuels Reduction (HFR) Treatments in FY 03. The planned acreage was 42,660 acres while the actual HFR accomplishment was 71,958 acres. No other Region within the country exceeded their target acreage by a higher percentage or in a more cost effective manner. These accomplishments included 21,385 acres of prescribed fire treatment of WUI acreage, and 50,573 acres of prescribed fire treatment of HFR acreage. A total of 364 prescribed fires were conducted within the Region in 2003. Additional assistance in conducting

the spring burns was obtained by utilizing the Boise smokejumpers.

Thousands of acres of habitat restoration have been accomplished within Region 3 that utilize prescribed fire to maintain these fire-adapted ecosystems. Oak savannas at Necedah NWR, Wisconsin, and Sherburne NWR, Minnesota, are showcase examples of restoration ecology with reliance upon fire for maintenance. Many of the prescribed burns conducted this year were for the express purpose of restoring and maintaining oak and pine savannas, prairie grass ecosystems, or wetland habitats. Monitoring of burn sites is progressing well and the recorded results have indicated significant improvement to many ecological features directly attributable to the fire program.

In coordination with the Regional Branch of Contracting, and in accordance with Federal Acquisition Regulations, an IDIQ (Indefinite-delivery, Indefinite-quantity) contract was developed in Region 3. This will enable all Regions of the Service, along with all Bureaus of the Department of the Interior as well as the U.S. Forest Service, to purchase Marsh Master tracked vehicles for firefighting purposes. This contract is a tremendous streamlining of the contract process and greatly expedites orders. The Region was able to obtain four new Marsh Master tracked vehicles through this process to be located at Seney NWR, Michigan; Necedah NWR, Wisconsin; Agassiz NWR, Minnesota; and Fergus Falls WMD, Minnesota. Special thanks are extended to Ken Kaseforth and Bob Hansen, Region 3, Branch of Contracting, for their assistance in carrying out the details of developing this contract.

The Student Conservation Association was contracted to provide three crews for the spring/summer burning season. This

program utilized WUI (9264 funds) to help meet the contracting requirements of the National Fire Plan.

In addition, more than 100 Regional Service employees participated in out-of-region fire suppression activities, answering the call for assistance by the National Director due to the extreme fire danger nationally at Planning Level 5. This included providing engine crews, water handling equipment, overhead, and aviation personnel to various Federal, State, and local wildfire assignments.

Region 3 distributed \$319,013 through the Rural Fire Assistance Program. This funding purchased personal protective gear, equipment, supplies, and fire training and was distributed to 58 rural fire departments in 8 states. This greatly assists the local fire departments adjacent to NWRs and WMDs to expand their firefighting capabilities and garner equipment otherwise unavailable.

Regional Fire Ecologist, Tim Hepola, developed a Remote Automatic Weather Station (RAWS) Information Guide that was distributed to all Service Regions and the National office. The RAWS program contributes ever-important weather information to the local stations for conducting their burn program and providing an important parameter for firefighter safety.

In conclusion, 2003 was a banner year for the Region 3 fire program. Tremendous accomplishments were attained setting a stage for continued program growth in the coming year.

REGION



Region 4 had 50 wildland fires covering 32,403 acres in 2003. The largest fire occurred on the Sabine NWR and totaled 1,460 acres. A total of 358 treatments were conducted for a total of 115,267 acres. There were 334 prescribed burns accomplished for a total of 114,371 acres.

Extreme wet conditions in the Region affected the timing of certain prescribed burns, but the Region achieved approximately 130 percent of the target prescribed burns. These wet conditions continue to provide for a management challenge to balance the prescribed burning and the wildland fire suppression programs.

The Region was slightly busy during the spring fire season. The majority of the fires took place in Louisiana, Mississippi, and North Carolina. The total amount of fires during the spring was 20. This was a tremendous drop in wildland fires from previous years, which can be attributed to a historically aggressive prescribed burning program as well as a wetter than normal year.

The Region is within the Southern Area Geographical Area, and during the fall fire season there were only a couple of fires, with the largest occurring on the Sabine NWR at 1,460 acres. The fall fire season was non-eventful due to the abundance of precipitation in the southern area.

In previous years, the Southeastern states applied and received FEMA Fire Assistance grants in the spring and fall fire seasons. Due to the abundance of precipitation in 2003, there were no applications received during this time period.

Carolina Sandhills, Merritt Island, St.

Marks, Piedmont, and Lake Woodruff prescribed burned over 70,256 acres, even with the extreme wet conditions. These Refuges accounted for 61 percent of the Region's prescribed burn acreage and 58 percent of the number of burns.

The Regional Director presented a group award to the Region's Prescribed Fire Management Team for "Sustained Excellence in Prescribed Fire Management" during FY 2002 and FY 2003. The Region treated approximately 35 percent of the Service's total acreage during FY 2003 for hazardous fuels reduction and was recognized for these outstanding accomplishments.

Support was provided locally to other agencies for primarily non-wildland fire incidents. The first incident started in February with assistance to the State of Texas with the NASA Columbia Space Shuttle Recovery. Agencies that provided support for this effort were the Service, U.S. Forest Service, National Park Service, FEMA, NASA, EPA, U.S. Navy, and various States. There were numerous other agencies that assisted with this effort also. This incident was operated with a unified command staffed by FEMA, NASA, EPA, and the State of Texas. The Service's support to the incident concluded on May 15, 2003, after approximately three months of involvement. This was due to the possibility of the approach of spring and the Southwest fire season.

Support was next provided to the Refuges in North Carolina (Region 4) and Virginia and Maryland (Region 5). This assistance was due to Hurricane Isabel slamming the Outer Banks of North Carolina during the month of September. The North Carolina Refuges

sustained major and minor damages depending on exact locations; i.e., downed trees, loss of power, movement of large amounts of sand, over-washed highways and roads, etc. Over 40 personnel from Region 4 assisted in this clean-up effort during the months of September and October.

With the active Western and Southwestern season, there were approximately 100 overhead positions and firefighters that went on 14-day assignments. Region 4 also supplied a few Type VI engines with crews and the Agency Type III helicopter for these fires.

For the wildland fires in Montana, Idaho, Wyoming, and New Mexico, Region 4 supplied 110 individuals and filled 19 overhead team assignment requests. Some individuals went out two or three times during the summer season. Nationally the preparedness level was at Preparedness Level V for approximately 31 days. The Southern Area deployed their two Incident Management Teams as well as their two Area Command Teams to the West for fire assignments. There were also three State Type II Incident Management Teams that went out on western fire assignments.

In July, Debbie Downey accepted the job as the Regional Fire Program Assistant in Atlanta, Georgia. Pete Kubiak filled the Regional Prescribed Fire Specialist position in June. His duty station will be Atlanta. Pete transferred from the Office of Aircraft Services in Atlanta. Jennifer Hinckely transferred from the State of Florida to the ARM Loxahatchee NWR as the Prescribed Fire Specialist. Boyd Blihovde also transferred from the State of Florida and accepted the position of Wildland Urban Interface Specialist at Merritt Island NWR. Howard Poitevint, Regional Wildfire Suppression Specialist, retired in December after 34 years of Federal service.

David Robinson, Forester/FMO at Carolina Sandhills NWR, retired in May after 35+ years of Federal service. Pat Boucher, the FWS Assistant Area Coordinator, has been the Lead Instructor on the ROSS application and implementation for the Southern Area. Pat has taught 6 ROSS classes in various states within the Region. With the cooperation of all the state centers, she implemented ROSS in the Southern Area on June 1, 2003. Pat is the main contact and SME for ROSS in the Southern Area and she is also the main contact for FireCode, Unit IDs, and mnemonics for the Southern Area.

Three of Region 4's District FMOs are now on Type I (Red) and II (Blue) Overhead Teams. Tony Wilder, District 7 FMO, is Operations Section Chief on the Red Team; Jim Durrwachter, District 6 FMO, is Operations Section Chief on the Red Team; and Glenn Stratton, Acting District 5 FMO, is Division Supervisor on the Blue Team. Two of the Regional Office staff are now on these teams as well. Bob Eaton, Assistant Regional Fire Management Coordinator, is a Division Supervisor on the Red Team and Dave Brownlie, Regional Fire Ecologist, is a Situation Unit Leader on the Red Team.

The Region provided two firefighters to the Department's International Assistance Program during the month of November. Tony Wilder, FMO at MS Sandhill Crane NWR, and Carl Schmidt, Forester at Piedmont NWR, both traveled to Uganda in Africa to share their expertise in fire suppression tactics with personnel from two of Uganda's national parks. During their three-week visit to Africa, Tony and Carl taught two courses in fire suppression techniques and also developed fire management plans for the Bwindi Impenetrable National Park, one of the last remaining homes for the mountain gorilla. Tony and Carl were both nationally

recognized for their efforts by the African Wildlife Foundation and the Uganda Wildlife Authority.

Roger Boykin and Sami Gray each were awarded National Fire Plan Awards in January 2003, for their outstanding accomplishments in carrying out the National Fire Plan during FY 2002. Roger was presented the award for “Excellence in Hazardous Fuel Treatment” and Sami was presented the award for “Excellence in Implementing the National Fire Plan.”

REGION



An unusually high amount of precipitation in 2003 resulted in minimal wildfire activity in the Northeast and affected Region 5's ability to meet prescribed fire targets. Fire staff managed to work around the inclement weather and accomplished a number of notable successes. At Prime Hook NWR in Delaware, 2,100 acres of invasive Phragmites were treated with prescribed fire in combination with mechanical and chemical applications in an ongoing Wildland Urban Interface (WUI) program effort to reduce the wildfire threat to three beach communities. Research plots at Chincoteague NWR were burned as part of a Joint Fire Science Program study to determine the effects of prescribed fire on the federally endangered Delmarva fox squirrel. Cooperative burning efforts strengthened partnerships at Back Bay NWR/False Cape State Park, Chesapeake Marshlands NWR/Maryland DNR, E.B. Forsythe NWR/New Jersey Forest Fire Service, and Rachel Carson NWR/Nature Conservancy. Around the Robbins/Shorters Wharf communities adjacent to Chesapeake Marshlands NWR, 600 acres of high-risk WUI fuels were treated.

The WUI program treated approximately 5,455 acres in 2003 with a combination of prescribed fire, mechanical, and chemical treatments. Project funds in the amount of \$776,000 were executed to accomplish these treatments, as well as several planning efforts and equipment acquisitions to support future WUI projects. Work occurred in association with 9 Refuges in the States of Maryland, New Jersey, Maine, Virginia, Delaware, and New York. The WUI program exceeded the 35 percent contract performance measure by contracting approximately 90 percent of its project dollars.

The Rural Fire Assistance (RFA) program awarded 21 grants worth \$149,000 to fire departments in Maine, Massachusetts, Maryland, New Jersey, New York, Virginia, West Virginia, and North Carolina. WUI/RFA Specialists Gerald Vickers (South Zone) and Bob Harris (North Zone) conducted 16 compliance visits to monitor fire department compliance from the 2002 grant program. Ninety fire departments received copies of the new video series "Firefighter Safety in the Wildland Urban Interface." The Region 5 RFA program distributes all available grant funds directly to the fire departments with no administrative assessments or pass throughs to state agencies, yet with full collaboration of state fire supervisors. Regional WUI/RFA Coordinator Steven Hubner was instrumental in the success of the RFA program in Region 5.

Fire Management Plans were completed and approved for Back Bay, Great Swamp, Cape May, Eastern Massachusetts, and Maine Coastal NWRs. Several other Plans are in the process of being drafted. Refuge Program Specialist Catherine Hibbard provided invaluable assistance to the Regional fire program by visiting all Hatcheries and initiating Fire Management Plans, all of which were in draft phase at the conclusion of 2003.

Regional Fire Ecologist Gary Kemp, working in collaboration with the Fire Management Officers, WUI staff, and Regional/Refuge biologists, initiated fire behavior and fire effects monitoring efforts at the Chincoteague and E.B. Forsythe NWRs. These efforts will expand to additional Refuges in 2004 with the addition of a Regional fire effects monitoring team. Gary served as a member of the Service's

Fire Ecologist Working Group and helped develop a charter, which was accepted at the Fire Management Leadership meeting in October.

All fire staff in the Region were heavily engaged in providing assistance to western fire suppression efforts during the hectic 2003 wildfire season. South Zone WUI/RFA Specialist Gerald Vickers served as Safety Officer on four separate details as a member of Stan Benes' Type 2 Northern Rockies Incident Management Team. Fire Ecologist Gary Kemp was gone from July to September, serving as Division Supervisor trainee, Task Force Leader, and Dozer Boss on incidents in Arizona, Montana, and Idaho. Central Zone FMO Mike Durfee served on several incidents, including an extended detail as Military Strike Team Leader on the Fish Creek Fire. North Zone WUI/RFA Specialist Bob Harris worked three details as Support Dispatcher to Coordination Centers in Salt Lake City, Albuquerque, and Missoula. Chesapeake Marshlands FMO Joe Krish went on a two-week assignment to central Oregon as a Helibase Manager on the B&B Complex. Chesapeake Marshlands staff also assisted on the Columbia Space Shuttle recovery efforts and a detail to Washington, D.C., serving homeland security efforts. Other fire staff, as well as numerous Region 5 employees, worked on interagency Type 2 hand crews. Particularly noteworthy was the effort of North Zone FMO Rick Vollick in forming eight interagency hand crews, which were mobilized through the Northeast Coordination Center.

A partnership success story, which is a source of pride to Region 5, is the Northeast Coordination Center (NECC) in Augusta, Maine, the first truly interagency coordination center in the Northeast. The Service has been instrumental in establishing NECC, thanks to the initiative

of Rick Vollick and Service Dispatcher Stephanie Fournier. Working in partnership with the U.S. Forest Service, Bureau of Indian Affairs, and Maine Forest Service, the Region managed to mobilize 535 people through NECC to western fire details, as well as other incidents such as the Columbia recovery efforts. Thanks to this effort and numerous other initiatives, the Service has been recognized as a key player in the Northeast Forest Fire Compact.

Region 5 fire staff has contributed to various task groups, working teams, and training efforts. Stephanie Fournier and Bob Harris served on the ROSS training cadre for the Eastern Area in 2003 and assisted in instructing several ROSS user classes. Gary Kemp served as Region 5 representative on the Service's Operations and Safety Working Team, serves on the national committee to establish a Prescribed Fire/Fuels Specialist curriculum, and began involvement with the National Stepping Up to Leadership program. Gerald Vickers, Mike Durfee, Rick Vollick, Joe Krish, and Tim Craig all served as lead or unit instructors for numerous NWCG training courses and annual refreshers. Regional Fire Management Coordinator Allen Carter continued to serve on the Joint Fire Science Program Governing Board (passed the torch to Region 4 Fire Ecologist Sue Grace in 2003), Eastern Area Coordinating Group, and the Service's FireBase Committee.

REGION



Suppression actions in Region 6 occupied a large portion of fire staff time in 2003. Suppression action was performed on 105 wildfires totaling 27,613 acres burned on Service lands. The severe conditions experienced in most of the states in the Region challenged fire management staff to meet prescribed fire targets. Region 6 completed a total of 234 prescribed fire projects, accomplishing 33,346 acres.

Service fire staff participated in numerous interagency sponsored courses as course coordinators, cadre members, steering committee members, revision subject matter experts, and students. Throughout the Region 100 / 200 level courses and annual refreshers were hosted locally. The Region presented Intermediate National Fire Danger Rating System (S-491) and Prescribed Fire Planning and Implementation (PFPI) in 2003. Four students attended the Prescribed Fire Training Center and two students were accepted into the Technical Fire Management program.

For the first time in several years the Regional Office is fully staffed. Neal Beetch filled the WUI Coordinator position in Lakewood, Colorado. The field stations are still experiencing some vacancies and recruitment efforts are continually underway to fill the positions.

2003 was drastically different from prior years for the North Dakota/South Dakota (ND/SD) Zone. An unusually dry fall and winter resulted in a majority of the Zone being in or near drought conditions. This was then followed by an exceptionally wet spring and then another unusually dry summer. The small window of opportunity resulted in drastically reduced prescribed fire activity across the Zone.

Fire crews in the ND/SD Zone conducted a total of 122 prescribed burns totaling 17,737 acres in 2003. Wildfire occurrence within the Zone neared record highs with 32 wildfires burning a total of 1,776 acres. The majority of these fires were due to escaped agricultural burning during excessively dry and moderate drought conditions.

Wildland Urban Interface (WUI) projects in the ND/SD Zone migrated from on-the-ground treatments to community assistance and information programs. Information and Education Program Activities included: 19 fire danger index signs constructed and distributed across the Zone; a portable display booth purchased and displayed across the Zone; *Living With Fire on the Prairie* brochure; phase II portion of the DC Booth National Historic Fish Hatchery WUI project; and 34 fire management plans under the Dakota County Fire Management Plans project.

The Service completed a three-year cooperative agreement with the North Dakota Forest Service (NDFS) for the administration of the Rural Fire Assistance Program (RFAP). During FY03, the NDFS received \$74,438 under this Program. The NDFS was then tasked with distribution of these funds to 38 volunteer and rural fire departments across North Dakota. South Dakota received \$41,832 in RFAP funding during FY03. These funds were allocated via grants to 7 volunteer and rural fire departments across South Dakota.

The ND/SD Zone has been plagued with vacancies the last few years; however, in 2003 seven permanent positions were filled. Two permanent positions still remain vacant.

The Northern Great Plains Dispatch Center dispatched 13 Service overhead personnel and 9 Service type 6 wildland engines to incidents across the country during 2003. The North Dakota Dispatch Center (NDC) dispatched 16 Service personnel to 23 various assignments. The NDC also dispatched 30 Service type 6 engines, one type 4 and 4 ATV's during 2003.

2003 proved to be a busy year for the fire program in the Montana/Utah/Wyoming (MT/UT/WY) Zone. All three States experienced elevated fire dangers early in the fire season. Montana continued into its fifth consecutive year of drought with extreme fire behavior exhibited throughout the summer. Utah and Wyoming remained extremely dry throughout the fire season but did not get the fire occurrence that Montana experienced. Severity crews from across the Nation assisted in interagency efforts, which kept new starts to a minimum.

The MT/UT/WY Zone experienced a near record wildfire season statistically. Benton Lake and Fish Springs NWRs were the only two Refuges in the Zone that did not have wildfire activity. Red Rock Lakes NWR and the CMR NWR hosted Incident Management Teams (IMTs) for the Winslow and Missouri Breaks incidents. In the Northern Rockies Geographic Area over 14,100 firefighters were assigned to large fires at the season's peak, with 84 IMTs assigned during the season. There were no fire related fatalities, no shelter deployments, no aviation accidents, and only three aviation incidents with potential.

Forty wildfires were reported on Refuge lands in the MT/UT/WY Zone accounting for 25,025 Service burned acres and almost 50,000 non-Service mutual aid wildfire acres burned this year. Zone firefighters and overhead spent hundreds of person days out in support of the national fire suppression

effort, as well as All Risk Incident Management responses. The Zone's prescribed fire activity was well below average primarily because of the drought and severity conditions. Roughly 875 acres were treated in 10 burn units in 2003.

The MT/UT/WY Zone participated in a number of activities related to implementing the National Fire Plan, including updating Refuge Fire Management Plans. Through the RFA Program \$130,533 was distributed in Montana, Utah, and Wyoming. The WUI program accomplishments included the completion of one hazard assessment at Jones Hole National Fish Hatchery and the implementation of the National Interagency Fire Plan Operational Reporting System.

New additions in personnel to the MT/UT/WY Zone include: Paul Pallas, the AFMO position at Charles M. Russell NWR; and Nathan Hawkaluk, the Range Technician position at the Jordan field station.

Several individuals were recognized for their fire management and Refuge support accomplishments within the MT/UT/WY Zone. Mike Granger was recognized for his support of the Columbia Space Shuttle recovery incident. There were many others who performed admirably and helped to make the Zone as safe and productive as it was in 2003.

It was another busy year in the Colorado/Kansas/Nebraska (CO/KS/NE) Zone for suppression and severity. Southern and Northwestern Colorado Refuges experienced severity conditions from July to September; however, very few wildfires were recorded on Refuge lands this year. Wildfires consumed 811 acres on Refuge land in 33 wildfires. Severity crews from all over the country assisted the Service in ensuring that those fires that did

start were kept small, and interagency cooperators were very appreciative of the additional support provided by Service severity crews. The Zone also supported severity efforts in Montana Refuges this year. Bill Waln served with his Type 1 IMT (DIVS(T)) during the summer and Ken Kerr served as OSC2 on a Fire Use Team. The Brown's Park Interagency Engine Module (NPS/BLM/FWS) experienced a very successful second season.

The CO/KS/NE Zone treated a total of 14,734 prescribed fire acres in 102 projects. Highlights in the Zone were the large, successful burns completed at Quivira NWR, as well as renewed burning at Brown's Park NWR. Other highlights in Eastern Kansas were the addition of bottomland hardwood burns in the District with more to come in 2004. Kirwin, Flint Hills, and Marais des Cygnes NWRs all hosted successful WUI mechanical contracts.

The CO/KS/NE Zone WUI Coordinator, Rich Sterry, provided oversight for the RFA program within the Zone as well. The total distributed to Colorado, Nebraska, and Kansas through this program was \$52,166. Rich was also involved with the development and oversight of several contracts within the Zone designed to implement National Fire Plan goals and objectives. These included: WUI/HFR assessments for Colorado Hatcheries and Refuges using R-6 WUI criteria; development of engine/tender contracts for prescribed burning; and the mechanical treatment of 330 acres by contract.

The Service contributed \$5,000 to completion of NEPA analysis work for an Interagency Environmental Assessment and subsequent Fire Management Plan for the newly acquired lands in the San Luis Valley. This cooperative effort is with the National

Park Service and The Nature Conservancy. In 2004, the Service will contribute \$30,000.

The CO/KS/NE Zone has filled several positions throughout the year. The personnel additions include: Troy Davis, the Sandhills Fire Management District FMO; Jess, Register, the Fort Niobrara Fire Program Technician; Patrick Harty, the Sandhills Prescribed Fire Specialist; and Dave McCauley, the Quivira SCEP Fire Program Technician.

REGION



The 2003 fire season was a moderate year for fire occurrence in Alaska--465 fires burned over 618,133 acres in Alaska. Alaska experienced lighter than normal snowfall, which melted quickly during the spring and was followed by warm dry weather. As a result, the fire season started early and vigorously. Fires began in March, two months earlier than the traditional late May starts, but not unusual for the last few years with fire season beginning earlier before green up. Late summer rains occurred over most of the State, but left isolated pockets of drier conditions that extended the fire season later than normal.

There were 23 wildland fires that burned over 298,674 acres on Alaskan National Wildlife Refuges. Five of the Refuge fires were human causes, one a false alarm, and the remainder where lightning caused. On May 31, lightning on the Yukon Delta NWR started the first Refuge fire. An abandoned campfire on the Kenai NWR caused the last fire on Refuge lands on September 24.

Fires occurred on the Yukon Delta, Kenai, Selawik, Koyukuk, Yukon Flats, Innoko, Tetlin, and Arctic NWRs. Of these fires, 5 were in the Full Suppression Option, 7 fires burned in the Modified Suppression Option, and 11 fires burned in the Limited Suppression Option. Of the 11 limited fires 6 were not initially attacked in accordance with preplanned responses and received only surveillance until declared out. All limited fires were designated as use fires accounting for 298,106 acres. The largest fire of the season occurred on the Yukon Flats NWR. The fire started on June 24 and burned until September 9, for a total of 192,489 acres. The fire was monitored and the only suppression action taken was for cabin and Native allotment protection.

Twenty-one Region 7 Service employees participated on interagency fire assignments to incidents in Alaska and the lower 48. Assignments included SOF2, FFT2, FFT1, SITL Type 1 and 2, HEMG, HECM, EQPM, CREP, SCKN, security officer, and remote sensing (infrared) interpreter.

Prevention efforts in the Koyukuk, Nowitna, Innoko, and Selawik NWR areas included visits to local village councils to present Firewise recommendations, a synopsis of the upcoming fire season, and an appearance by the Refuge FMO on the local radio station. On the Tetlin NWR fire information is prominently displayed in the Refuge office, visitor center, and the Tok Alaska Public Lands Information Center. The Kenai NWR conducted patrol and public contact concerning fire danger and suppressed several unattended campfires. The Refuge gave several press releases on fire-related topics to the local newspaper.

Region 7 Service staff participated in several fire education opportunities. Staff assisted with the planning and implementation of a Firewise workshop in Fairbanks. Attendance at the workshop was close to 80. The Service provided scholarships to 12 rural village representatives to attend this workshop. The Tetlin NWR Public Education Coordinator, Mary Timm, helped teach the "Fire in Alaska" teachers workshop. Mary also helped Karen Murphy, Regional Fire Ecologist, to finalize the Service web-based "Role of Fire in Alaska" curriculum. The Service supported the State of Alaska, Division of Forestry, in the development of the "Fire in Alaska" distance learning prototype model. Gene Long, Regional Fire Management Coordinator, participated as a subject matter expert for a "Fire in Alaska"

schoolteacher workshop in Anchorage. Other activities included a fire ecology presentation at the community of Hughes high school and a fire ecologist session at the McGrath Science Camp. Fire ecology and activity reports were prepared for a local radio station.

On the Tetlin and Kenai NWRs, 9 prescribed burns for 5062 acres were planned. Prescribed burning was impacted by the lack of availability of contingency forces, most notably the lack of helicopter support. Weather was a major factor contributing to the lack of prescribed fire accomplishment. During the early part of the burning season wet weather prevailed. During the later part of the season on the Kenai NWR dry fuel conditions and high temperatures contributed to prescription parameters being exceeded.

Wildland Urban Interface (WUI) projects took place on the Kenai, Tetlin, and Kanuti NWRs. The Kanuti NWR staff and the Allakaket Native village contract crew accomplished 35 acres of mechanical work (thinning) and 35 acres of pile burning on lands surrounding the Village of Allakaket. Kenai NWR staff and contractors accomplished 356 acres of mechanical treatment on Refuge lands near the communities of Sterling and Funny River. Tetlin NWR staff and the Northway Village contract crew accomplished 35 acres of mechanical treatment and 35 acres of pile burning near the community of Northway Junction. In addition, they accomplished 18 acres of mechanical treatment and 30 acres of pile burning near the community of Port Alcan and the US Custom Border Station. For the Port Alcan WUI project, the Service was the lead agency and collaborated with the Bureau of Land Management (BLM) and the General Services Administration (GSA). Portions of the project were on BLM and GSA administered lands. The S-

212 chainsaw safety and operations class was provided to both the Allakaket and Northway Village crews. The Service, BLM Alaska Fire Service, and the State of Alaska provided instructors for the chainsaw class. Several members from both crews became certified (Class A) saw operators.

Through the Rural Fire Assistance Program \$23,400 was awarded to rural fire departments at Bethel, Anchor Point, and Bristol Bay Emergency Services. These awards were made in cooperation and coordination with the Alaska Wildland Fire Coordinating Group, National Fire Plan Task Group.

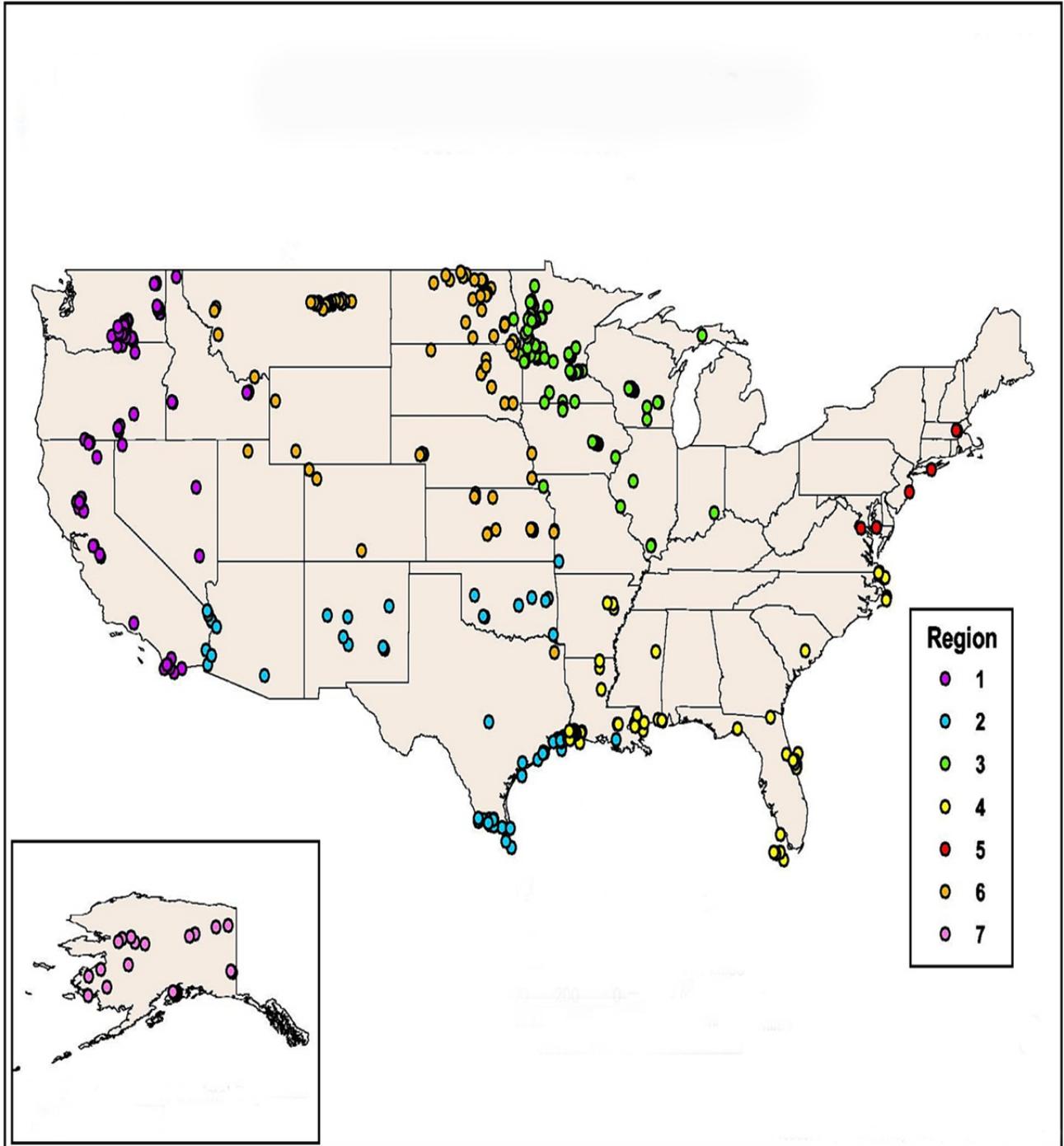
Region 7 employees provide instruction support for interagency courses in aviation safety, chainsaw safety (S-212), Firewise, annual safety refresher, work capacity testing, basic firefighting (S-130), fire behavior (S-190), firing methods (S-234), helicopter crewmember (S-271), helicopter manager (S-372), and squad boss/advanced firefighter (S-131). Region 7 fire staff were able to complete individual training in various courses to advance their fire qualifications.

Region 7 employees represented the Service on the Alaska Wildland Fire Coordination Group, several committees, and task groups including research, fire effects, ecology, safety, education and prevention, training, and air quality. Fire effects research plots have been established on the Kenai and Tetlin NWRs. The State of Alaska, Department of Environmental Conservation, completed the Enhanced Smoke Management Plan for Prescribed Burning. The Plan has been a collaborative process among the various Federal and state agencies. The Plan has been adopted by the Service.

Two Refuges upgraded and purchased new equipment. The Tetlin NWR upgraded their Type 6 engine with a new pump unit and purchased a trailer to be used on WUI projects. The Kenai NWR acquired a Mark II sphere dispenser and a DOT compliant helitorch.

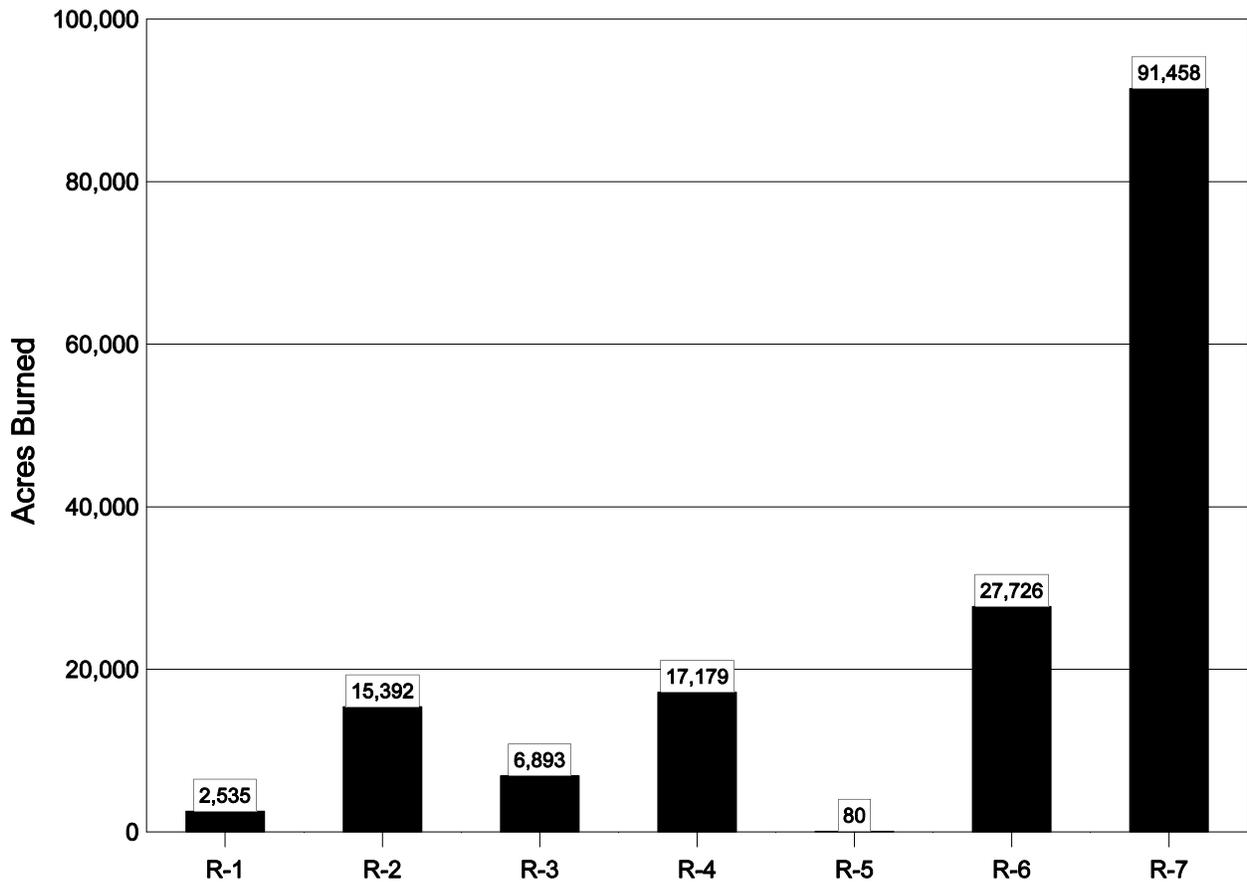
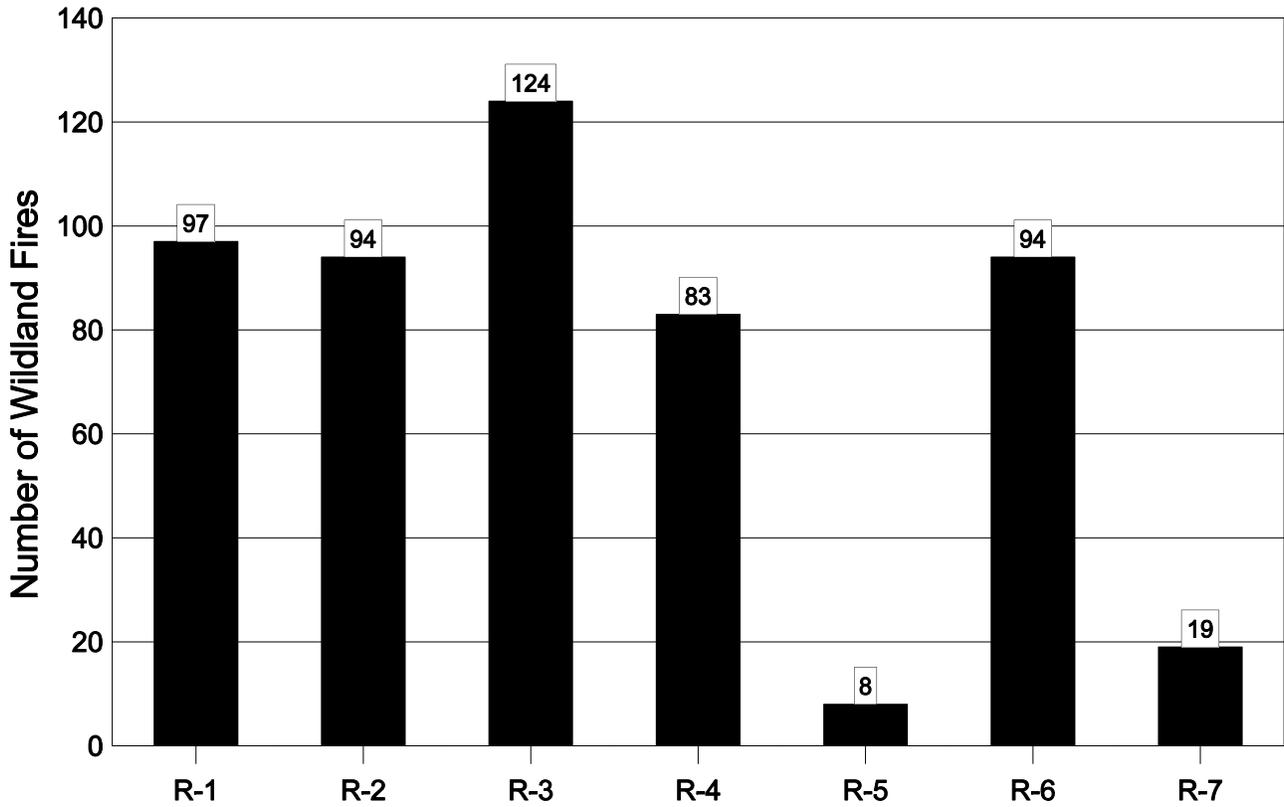
Staff changes in Region 7 included Eugene Long assuming the Regional Fire Management Coordinator position and Dianne MacLean assuming the Assistant Fire Management Officer position at the Kenai NWR.

Wildland Fires 2003



FWS

WILDLAND FIRES - 2003



WILDLAND FIRES

by State

2003

<u>STATE</u>	<u># FIRES</u>	<u>FWS ACRES</u>
Alaska	19	91,457.8
Arkansas	3	10.4
Arizona	9	348.5
California	37	830.5
Colorado	3	1.1
Florida	19	2,978.9
Georgia	1	81.0
Iowa	19	1,298.3
Idaho	6	371.5
Illinois	3	13.8
Indiana	1	300.0
Kansas	24	433.1
Louisiana	46	11,285.4
Massachusetts	4	26.3
Maryland	2	50.1
Minnesota	86	4,581.1
Missouri	2	4.0
Mississippi	4	27.2
Montana	25	24,711.7
North Carolina	6	2,312.2
North Dakota	25	1,032.4
Nebraska	5	212.2
New Jersey	1	0.5
New Mexico	7	21.5
Nevada	4	579.8
New York	1	3.0
Oklahoma	18	116.0
Oregon	12	442.0
Puerto Rico	3	483.3
South Carolina	1	0.1
South Dakota	9	1,021.0
Texas	58	14,354.4
Utah	1	300.0
Washington	40	863.3
Wisconsin	13	695.7
Wyoming	2	14.0
Total	519	161,262.1

WILDLAND FIRES by Refuge - R1

<u>REFUGE</u>	<u># FIRES</u>	<u>FWS ACRES</u>
Camas NWR	3	245.5
Columbia NWR	5	277.1
Colusa NWR	1	0.1
Deer Flat NWR	3	106.2
Hanford Reach NM/Saddle Mtn	16	511.5
Hart Mtn Natl Antelope Refuge	4	0.4
Hopper Mtn NWR Complex	1	30.0
Julia Butler Hansen Refuge	1	0.2
Klamath Basin NWR Complex	1	0.1
Kootenai NWR	1	20.0
Little Pend Oreille NWR	4	0.5
Lower Klamath NWR	1	427.0
Malheur NWR	1	0.8
McKay Creek NWR	2	2.7
McNary NWR	7	62.5
Modoc NWR	1	0.2
Pahranagat NWR	1	0.8
Ruby Lake NWR	1	79.0
Sacramento NWR Complex	1	0.1
Sacramento River NWR	4	0.8
San Diego NWR	5	370.1
San Diego NWR Complex	5	34.0
San Joaquin River NWR	8	1.1
San Luis NWR	2	301.5
Sheldon NWR	1	3.0

Sutter NWR	2	0.3
Tijuana Slough NWR	3	0.2
Toppenish NWR	1	9.0
Tule Lake NWR	2	37.0
Turnbull NWR	5	2.3
Umatilla NWR	4	11.1
Total	97	2,535.1

WILDLAND FIRES

by Refuge - R2

<u>REFUGE</u>	<u># FIRES</u>	<u>FWS ACRES</u>
Anahuac NWR	10	2,284.5
Aransas/Matagorda Island	2	1.1
Balcones Canyonlands NWR	1	0.5
Bill Williams River NWR	1	50.0
Bitter Lake NWR	3	3.0
Bosque Del Apache NWR	3	13.5
Brazoria NWR	3	84.0
Buenos Aires NWR	1	7.0
Cibola NWR	3	13.5
Deep Fork NWR	2	0.3
Havasu NWR	5	555.0
Imperial NWR	1	275.0
Little River NWR	1	0.5
Lower Rio Grande Valley	4	14.4
McFaddin NWR	19	11,773.5
Moody NWR	1	20.0
S. TX Refuges Complex	13	165.1
San Bernard NWR	3	1.2
Sequoyah NWR	2	38.8
Sevilleta NWR	1	5.0
Tishomingo NWR	1	2.8
TX Midcoast Refuges Complex	1	10.0
TX Point NWR	1	0.1
Washita NWR	1	8.5
Wichita Mtns Wildlife Refuge	11	65.1
Total	94	15,392.4

WILDLAND FIRES

by Refuge - R3

<u>REFUGE</u>	<u># FIRES</u>	<u>FWS ACRES</u>
Agassiz NWR	1	1,275.0
Big Oaks NWR	1	300.0
Big Stone NWR	2	1.1
Crab Orchard NWR	2	7.8
Detroit Lakes WMD	14	1,463.5
Fergus Falls WMD	11	503.0
Great River NWR	1	3.0
Hamden Slough NWR	1	1.0
Horicon NWR	2	250.2
IL River National Wildlife & Fshry Rfgs	1	6.0
Leopold WMD	4	27.6
Litchfield WMD	2	145.0
MN Valley NWR	21	93.6
Morris WMD	9	998.0
Neal Smith NWR	3	0.3
Necedah NWR	7	417.9
Port Louisa NWR	12	1,218.0
Sherburne NWR	5	6.2
Squaw Creek NWR	1	1.0
Tamarac NWR	16	26.4
Union Slough NWR	4	80.0
Windom WMD	4	68.3
Total	124	6,892.9

WILDLAND FIRES

by Refuge - R4

<u>REFUGE</u>	<u># FIRES</u>	<u>FWS ACRES</u>
Alligator River NWR	2	2,300.1
Bald Knob NWR	1	2.0
Big Branch Marsh NWR	4	365.5
Black Bayou Lake NWR	1	0.1
Bogue Chitto NWR	3	17.0
Cabo Rojo NWR	2	33.3
Cache River NWR	2	8.4
Cameron Prairie NWR	4	1,013.5
Catahoula NWR	1	30.0
Currituck NWR	2	10.1
Grand Bay NWR	2	26.0
Laguna Cartagena NWR	1	450.0
Lake Woodruff NWR	2	2,966.0
Mackay Island NWR	2	2.0
Merritt Island NWR	11	12.1
MS Sandhill Crane NWR	1	1.0
National Key Deer Refuge	5	0.7
Noxubee NWR	1	0.2
Okefenokee NWR	1	81.0
Sabine NWR	27	9,750.2
Santee NWR	1	0.1
SE Louisiana Refuges	5	109.0
St Marks NWR	1	0.1
Upper Ouachita NWR	1	0.1
Total	83	17,178.5

WILDLAND FIRES

by Refuge - R5

<u>REFUGE</u>	<u># FIRES</u>	<u>FWS ACRES</u>
Chesapeake Marshlands NWR	2	50.1
Edwin B Forsythe NWR	1	0.5
Eastern MA NWR Complex	4	26.3
Long Island NWR Complex	1	3.0
Total	8	79.9

WILDLAND FIRES

by Refuge - R6

<u>REFUGE</u>	<u># FIRES</u>	<u>FWS ACRES</u>
Alamosa NWR	1	0.8
Arrowwood NWR	4	93.1
Bear Riv Mgrtry Bird Rfg	1	300.0
Boyer Chute NWR	2	7.1
Browns Park NWR	2	0.3
Charles M Russell NWR	21	23,744.4
Crescent Lake NWR	3	205.1
Devils Lake WMD	8	345.3
Flint Hills NWR	10	336.9
Huron WMD	3	407.0
J Clark Salyer NWR	5	246.0
Kirwin NWR	4	73.3
Kulm WMD	2	22.0
Lake Andes NWR	1	1.0
Lee Metcalf NWR	1	0.2
Long Lake NWR	1	2.0
Madison WMD	1	18.0
Marais Des Cygnes NWR	7	5.4
National Bison Range	2	1.1
Quivira NWR	3	17.5
Red Rock Lakes NWR	1	966.0
Sand Lake NWR	2	285.0
Seedskafee NWR	2	14.0
Tewaukon NWR	2	307.5

Upper Souris NWR	2	1.5
Valley City WMD	1	15.0
Waubay NWR	2	310.0
Total	94	27,725.5

WILDLAND FIRES

by Refuge - R7

<u>REFUGE</u>	<u># FIRES</u>	<u>FWS ACRES</u>
Arctic NWR	1	3,646.0
Innoko NWR	1	3.5
Kenai NWR	5	513.4
Koyukuk NWR	2	631.5
Selawik NWR	4	43,655.7
Tetlin NWR	2	42,909.0
Yukon Delta NWR	4	98.7
Total	19	91,457.8

WILDLAND FIRES by CAUSE 2003

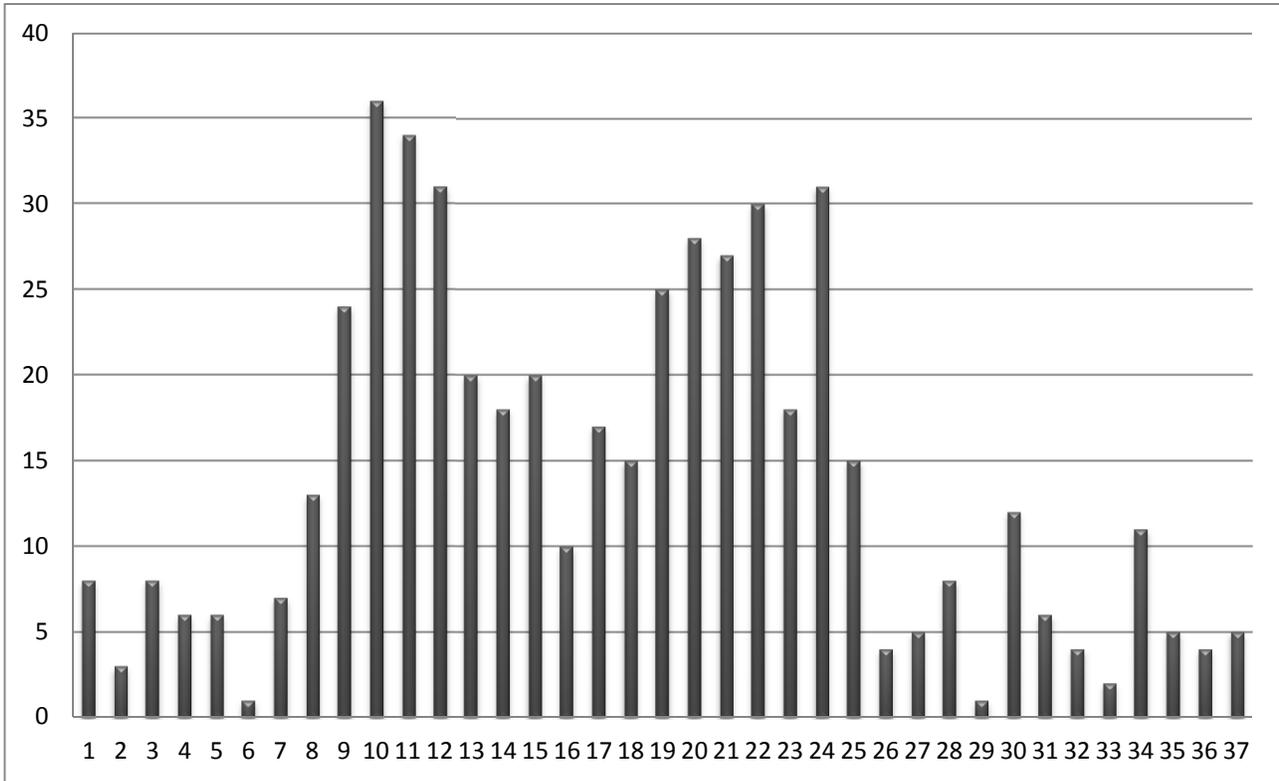
CAUSE	# FIRES	# ACRES
Natural	124	131,904.8
Debris/Vegetation Burn	49	3,454.1
Equipment Use	45	953.0
Exceeded RX (prescription)	3	637.0
Incendiary	70	4,640.2
Misuse of Fire	22	405.3
Open or Outdoor Fire	45	565.8
Smoking	5	1.8
Structure	2	5.5
Other Causes	36	3,759.1
Undetermined	118	14,935.5
TOTAL	519	161,262.1

WILDLAND FIRES by SIZE CLASS 2003

SIZE	# FIRES	# ACRES
A (0 - .2)	173	20.6
B (.3 - 9.9)	168	458.2
C (10 - 99.9)	90	2,685.4
D (100 - 299.9)	41	7,188.0
E (300 - 999.9)	28	13,250.4
F (1000 - 4999.9)	14	31,039.6
G (5000 +)	5	106,619.9
TOTAL	519	161,262.1

WILDFIRE STARTS - 2003

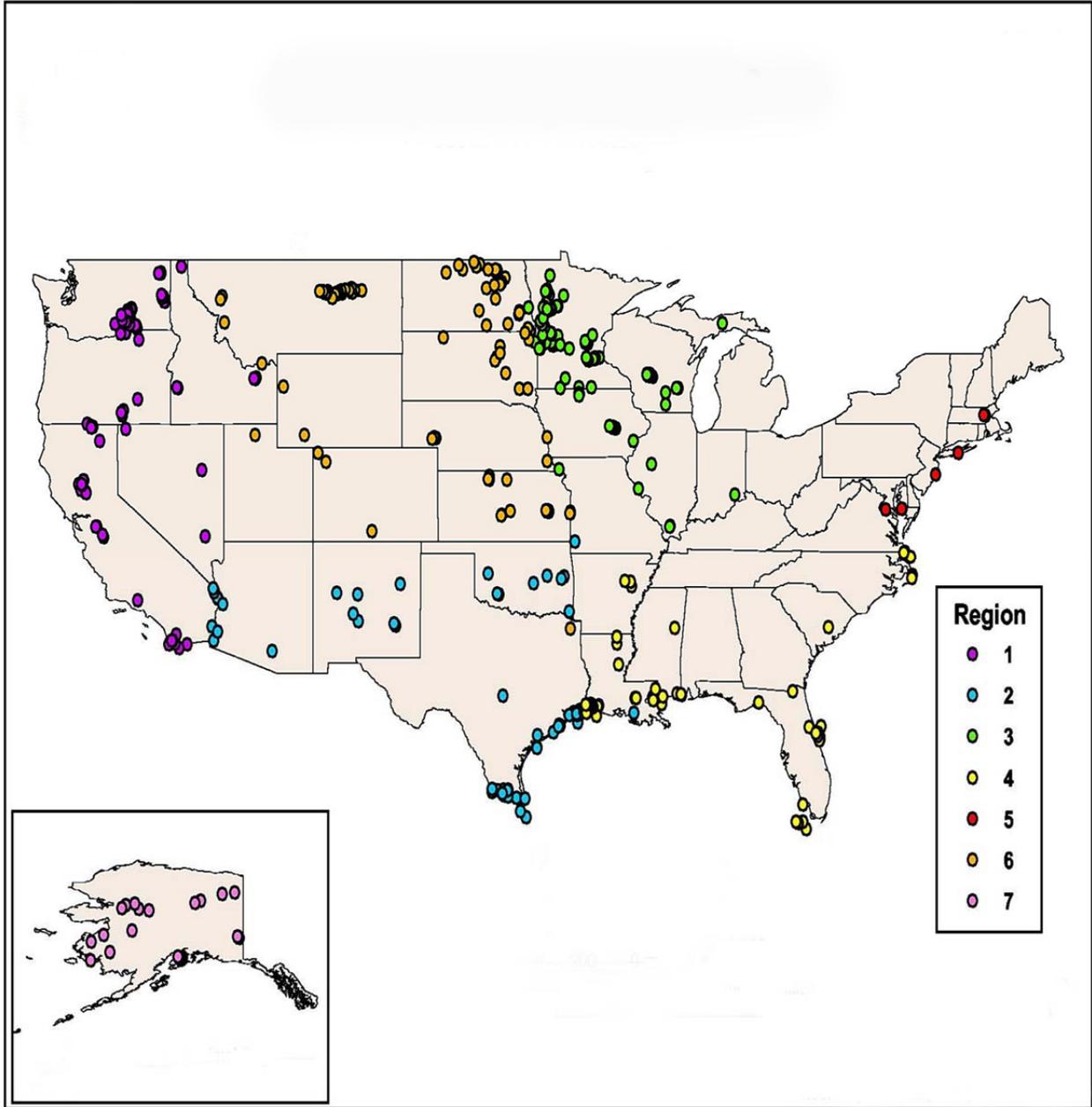
10 - Day Period



<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 - Sept 07
2	Jan 11 - Jan 20	14	May 11 - May 20	26	Sept 08 - Sept 17
3	Jan 21 - Jan 30	15	May 21 - May 30	27	Sept 18 - Sept 27
4	Jan 31 - Feb 09	16	May 31 - June 09	28	Sept 28 - Oct 07
5	Feb 10 - Feb 19	17	June 10 - June 19	29	Oct 08 - Oct 17
6	Feb 20 - Mar 1	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

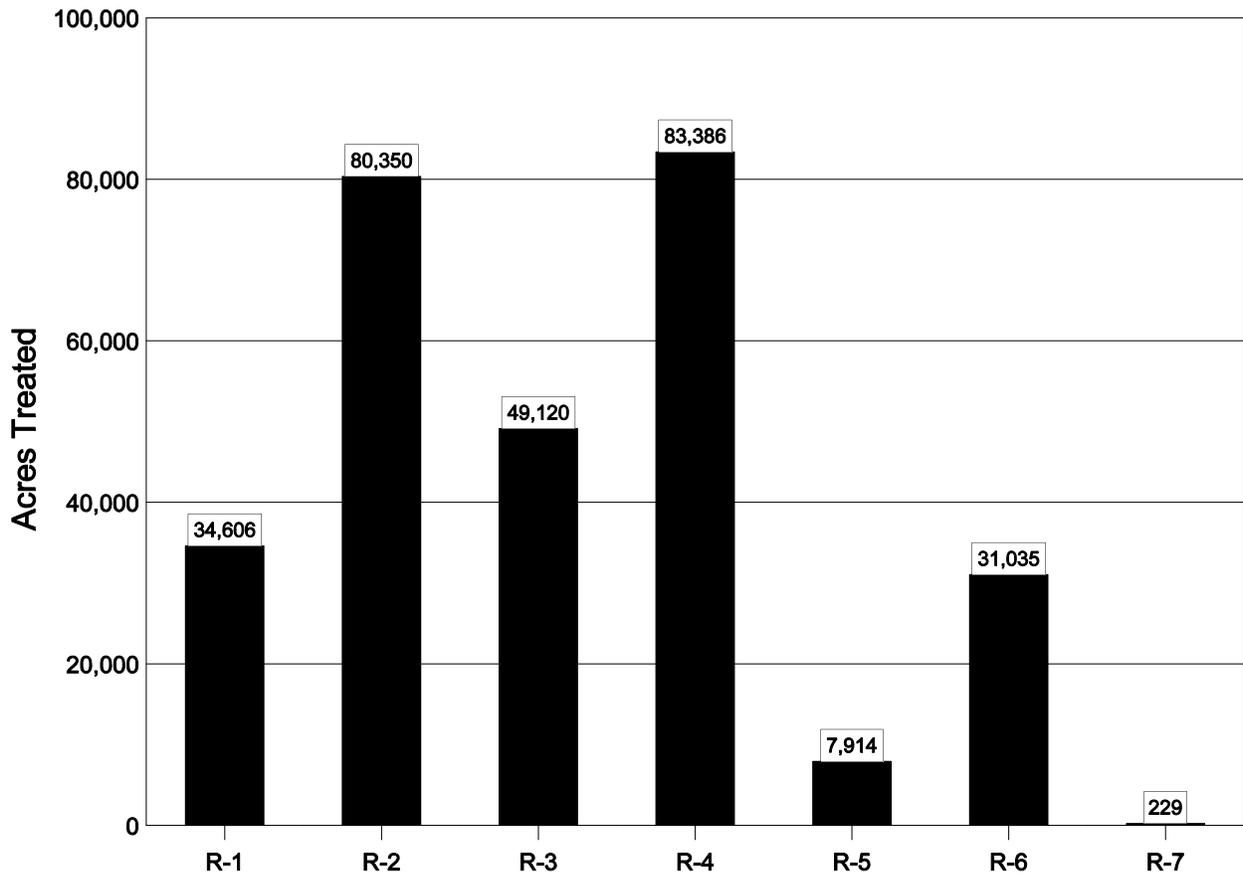
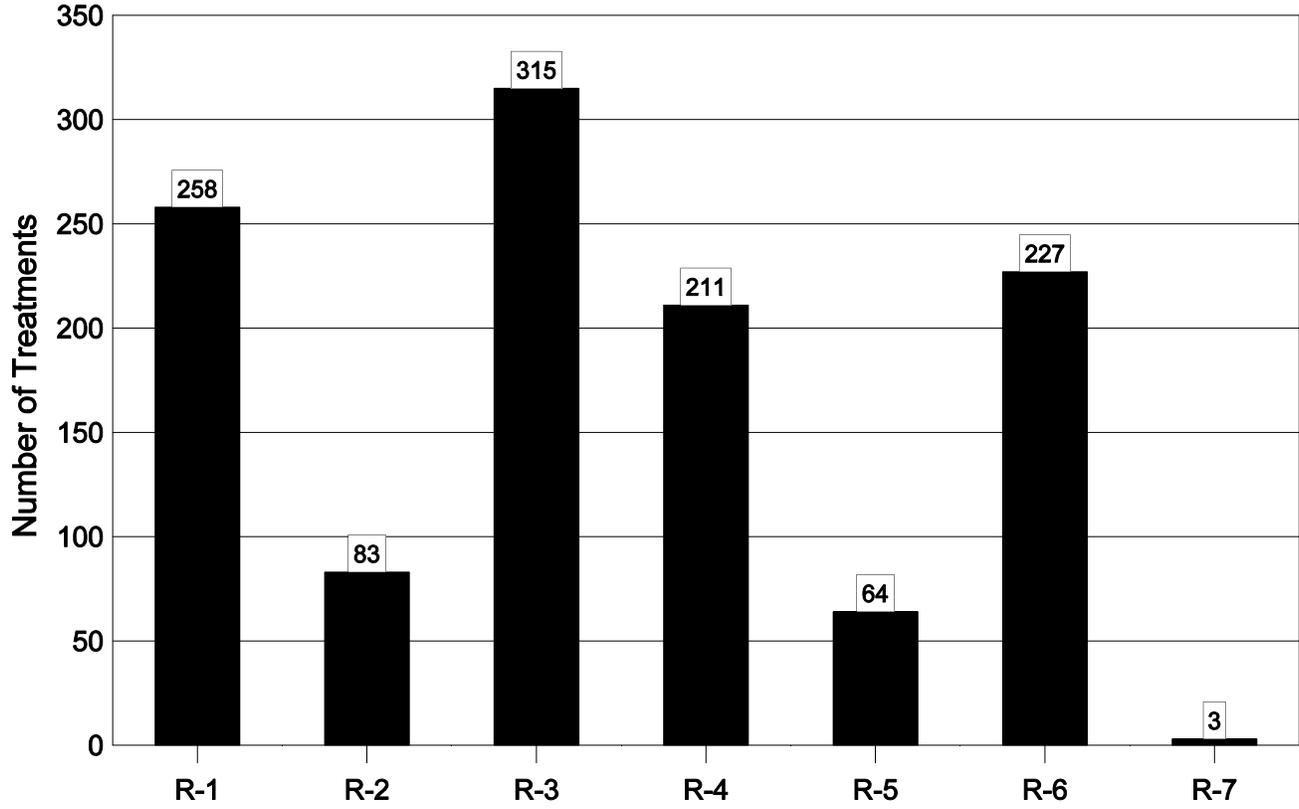
NON-WUI TREATMENTS

2003



TREATMENTS - 2003

Non-WUI



Treatments (Non-WUI) by State 2003

State	Number	RX Acres	Mech Acres	Other Acres	Total
Alabama	2	609.0			609.0
Alaska	3	81.0	148.0		229.0
Arizona	8	9,306.0			9,306.0
Arkansas	1	60.0			60.0
California	122	17,464.5	500.0	120.0	18,084.5
Colorado	4	275.0			275.0
Connecticut	1		10.0		10.0
Delaware	3	2,210.0		3,000.0	5,210.0
Florida	76	29,134.6			29,134.6
Georgia	51	19,602.5			19,602.5
Idaho	4	304.0			304.0
Illinois	14	459.1			459.1
Indiana	1	706.0			706.0
Iowa	42	3,730.6	70.0		3,800.6
Kansas	59	9,996.7			9,996.7
Louisiana	18	13,141.5			13,141.5
Maine	14	240.3	158.0		398.3
Maryland	26	1,133.0	6.9	5.0	1,144.9
Massachusetts	1		2.0		2.0
Michigan	9	1,478.0			1,478.0
Minnesota	194	39,773.8	64.4		39,838.2
Mississippi	27	4,917.2	556.0		5,473.2
Missouri	16	832.0			832.0
Montana	8	643.0			643.0
Nebraska	33	2,169.4			2,169.4
Nevada	15	4,809.8	1,000.0		5,809.8
New Hampshire	1		80.0		80.0
New Jersey	1			50.0	50.0

New Mexico	7	29,756.0	150.0		29,906.0
New York	7	136.0			136.0
North Carolina	21	11,008.6			11,008.6
North Dakota	103	16,756.2			16,756.2
Oklahoma	9	1,656.6			1,656.6
Oregon	47	6,383.1	274.6		6,657.7
Pennsylvania	1	45.0			45.0
Rhode Island	2	34.0	133.0		167.0
South Carolina	15	4,357.0			4,357.0
South Dakota	19	860.0	121.0		981.0
Texas	59	38,814.9	666.0		39,480.9
Utah	1	200.0			200.0
Vermont	2	94.0			94.0
Virginia	5	577.0			577.0
Washington	70	2,855.5	894.0		3,749.5
Wisconsin	38	1,971.6	16.5		1,988.1
Wyoming	1	32.0			32.0
Total	1,161	278,614.5	4,850.4	3,175.0	286,639.9

TREATMENTS (Non-WUI) by Refuge - R1

<u>Refuge</u>	<u>Number</u>	<u>RX Acres</u>	<u>Mech Acres</u>	<u>Other Acres</u>	<u>Total Acres</u>
Baskett Slough NWR	11	122.0	115.0		237.0
Camas NWR	1	100.0			100.0
Cold Springs NWR	1		4.6		4.6
Columbia NWR	11	365.0			365.0
Colusa NWR	3	54.0			54.0
Delevan NWR	3	206.0		120.0	326.0
Hanford Reach /Saddle Mtn	4	552.0			552.0
Hart Mtn Natl Antelope Refuge	5	380.1			380.1
Klamath Basin NWR Complex	1	800.0			800.0
Kootenai NWR	2	154.0			154.0
Little Pend Oreille NWR	14	691.5	343.0		1,034.5
Lower Klamath NWR	9	2,979.6			2,979.6
Malheur NWR	4	3,685.0			3,685.0
McNary NWR	1	1.8			1.8
Merced NWR	5	210.0	50.0		260.0
Oxford Slough Wtrfwl	1	50.0			50.0
Pahranagat NWR	2	15.0			15.0
Ruby Lake NWR	3	0.3			0.3
Sacramento NWR Complex	3	72.0			72.0
Sacramento River NWR	3	237.0			237.0
San Joaquin River NWR	2	3.0	100.0		103.0
San Luis NWR	7	237.0	350.0		587.0
Sheldon NWR	4	2,160.0	1,000.0		3,160.0
Stillwater NWR	6	2,634.5			2,634.5
Sutter NWR	1	3.0			3.0

Toppenish NWR	4	1.2			1.2
Tule Lake NWR	89	14,487.4			14,487.4
Turnbull NWR	36	1,244.0	551.0		1,795.0
Umatilla NWR	7	84.5			84.5
Willamette Vly NWR Complx	2	20.0			20.0
William L Finley NWR	13	267.0	155.0		422.0
Total	258	31,816.9	2,668.6	120.0	34,605.5

TREATMENTS (Non-WUI) by Refuge - R2

<u>Refuge</u>	<u>Number</u>	<u>RX Acres</u>	<u>Mech Acres</u>	<u>Other Acres</u>	<u>Total Acres</u>
Anahuac NWR	8	5,995.7			5,995.7
Aransas/Matagorda Island NWR	14	6,711.0	666.0		7,377.0
Attwater Prairie Chicken NWR	6	2,281.0			2,281.0
Balcones Canyonlands NWR	8	1,266.0			1,266.0
Bitter Lake NWR	1		150.0		150.0
Bosque Del Apache NWR	2	418.0			418.0
Brazoria NWR	5	2,743.0			2,743.0
Buenos Aires NWR	6	9,059.0			9,059.0
Hagerman NWR	4	229.2			229.2
Havasu NWR	1	230.0			230.0
Imperial NWR	1	17.0			17.0
McFaddin NWR	5	11,989.0			11,989.0
S. TX Refuges Complex	1	20.0			20.0
Salt Plains NWR	2	742.5			742.5
San Andres NWR	1	15,304.0			15,304.0
San Bernard NWR	5	3,851.0			3,851.0
Sequoyah NWR	1	560.0			560.0
Sevilleta NWR	3	14,034.0			14,034.0
Tishomingo NWR	3	273.0			273.0
TX Point NWR	3	3,729.0			3,729.0
Washita NWR	3	81.1			81.1
Total	83	79,533.5	816.0	0.0	80,349.5

TREATMENTS (Non-WUI) by Refuge - R3

<u>Refuge</u>	<u>Number</u>	<u>RX Acres</u>	<u>Mech Acres</u>	<u>Other Acres</u>	<u>Total Acres</u>
Agassiz NWR	14	16,205.0			16,205.0
Big Oaks NWR	1	706.0			706.0
Big Stone NWR	15	2,216.0			2,216.0
Crab Orchard NWR	8	258.0			258.0
Crane Meadows NWR	4	561.0			561.0
Desoto NWR	6	66.6			66.6
Detroit Lakes WMD	10	1,693.0			1,693.0
Driftless Area NWR	2	63.2			63.2
Fergus Falls WMD	42	4,256.0			4,256.0
Great River NWR	7	344.0			344.0
Hamden Slough NWR	9	411.0			411.0
Horicon NWR	6	407.0			407.0
Leopold WMD	27	1,193.6	16.5		1,210.1
Litchfield WMD	17	2,685.0			2,685.0
MN Valley NWR	17	647.4	64.4		711.8
Morris WMD	18	2,464.0			2,464.0
Neal Smith NWR	14	1,146.8			1,146.8
Necedah NWR	2	271.0			271.0
Port Louisa NWR	16	2,086.0	70.0		2,156.0
Rice Lake NWR	4	1,056.0			1,056.0
Seney NWR	7	1,320.0			1,320.0
Sherburne NWR	3	2,924.9			2,924.9
Shiawassee NWR	2	158.0			158.0
Squaw Creek NWR	8	227.0			227.0

St Croix WMD	1	75.0			75.0
Swan Lake NWR	4	339.0			339.0
Tamarac NWR	9	1,301.5			1,301.5
Trempealeau NWR	2	25.0			25.0
Union Slough NWR	5	386.0			386.0
Upper MS Riv Natl Wildl Rfg	3	123.1			123.1
Windom WMD	32	3,353.0			3,353.0
Total	315	48,969.1	150.9	0.0	49,120.0

TREATMENTS (Non-WUI) by Refuge - R4

<u>Refuge</u>	<u>Number</u>	<u>RX Acres</u>	<u>Mech Acres</u>	<u>Other Acres</u>	<u>Total Acres</u>
Ace Basin NWR	2	930.0			930.0
Alligator River NWR	7	6,655.0			6,655.0
Arthur R Marshall Lox NWR	1	2,395.0			2,395.0
Blackbeard Island NWR	2	550.1			550.1
Bon Secour NWR	1	309.0			309.0
Carolina Sandhills NWR	7	2,620.0			2,620.0
Currituck NWR	2	384.0			384.0
Darbonne NWR	4	190.0			190.0
Eufaula NWR	1	300.0			300.0
Felsenthal NWR	1	60.0			60.0
Grand Bay NWR	3	673.2			673.2
Harris Neck NWR	1	419.0			419.0
Lacassine NWR	8	8,104.5			8,104.5
Lake Ophelia NWR	1	1,003.0			1,003.0
Lake Woodruff NWR	8	865.0			865.0
Lower Suwannee NWR	14	1,660.0			1,660.0
Mackay Island NWR	6	1,434.0			1,434.0
Mattamuskeet NWR	1	48.0			48.0
Merritt Island NWR	22	14,586.0			14,586.0
MS Sandhill Crane NWR	8	2,147.0	163.0		2,310.0
Noxubee NWR	14	1,896.0			1,896.0
Okefenokee NWR	24	8,954.0			8,954.0
Pea Island NWR	1	1,674.0			1,674.0
Pee Dee NWR	1	710.0			710.0

Piedmont NWR	23	9,549.4			9,549.4
Pinckney Island NWR	1	13.0			13.0
Pocosin Lakes NWR	3	103.6			103.6
Sabine NWR	5	3,844.0			3,844.0
Santee NWR	2	380.0			380.0
Savannah Costal Refuges	1	100.0			100.0
Savannah NWR	3	444.0			444.0
St Marks NWR	29	8,967.6			8,967.6
St Vincent NWR	2	661.0			661.0
Yazoo NWR	2	201.0	393.0		594.0
Total	211	82,830.4	556.0	0.0	83,386.4

TREATMENTS (Non-WUI) by Refuge - R5

<u>Refuge</u>	<u>Number</u>	<u>RX Acres</u>	<u>Mech Acres</u>	<u>Other Acres</u>	<u>Total Acres</u>
Back Bay NWR	1	375.0			375.0
Chesapeake Marshlands NWRC	26	1,133.0	6.9	5.0	1,144.9
Chincoteague NWR	2	55.0			55.0
Eastern MA NWR Complex	1		2.0		2.0
Erie NWR	1	45.0			45.0
Great Bay NWR	1		80.0		80.0
Great Dismal Swamp NWR	1	47.0			47.0
Iroquois NWR	2	35.0			35.0
Long Island NWR Complex	1	36.0			36.0
Missisquoi NWR	2	94.0			94.0
Montezuma NWR	4	65.0			65.0
Moosehorn NWR	4	114.8	93.0		207.8
Petit Manan NWR Complex	1	24.0			24.0
Potomac River NWR Complex	1	100.0			100.0
Prime Hook NWR	3	2,210.0		3,000.0	5,210.0
Rachel Carson NWR	3	15.5	65.0		80.5
Rhode Island NWR Complex	2	34.0	133.0		167.0
Stewart B Mckinney NWR	1	0.0	10.0		10.0
Sunkhaze Meadows NWR	6	86.0			86.0
Supawna Meadows NWR	1	0.0		50.0	50.0
Total	64	4,469.3	389.9	3,055.0	7,914.2

TREATMENTS (Non-WUI) by Refuge - R6

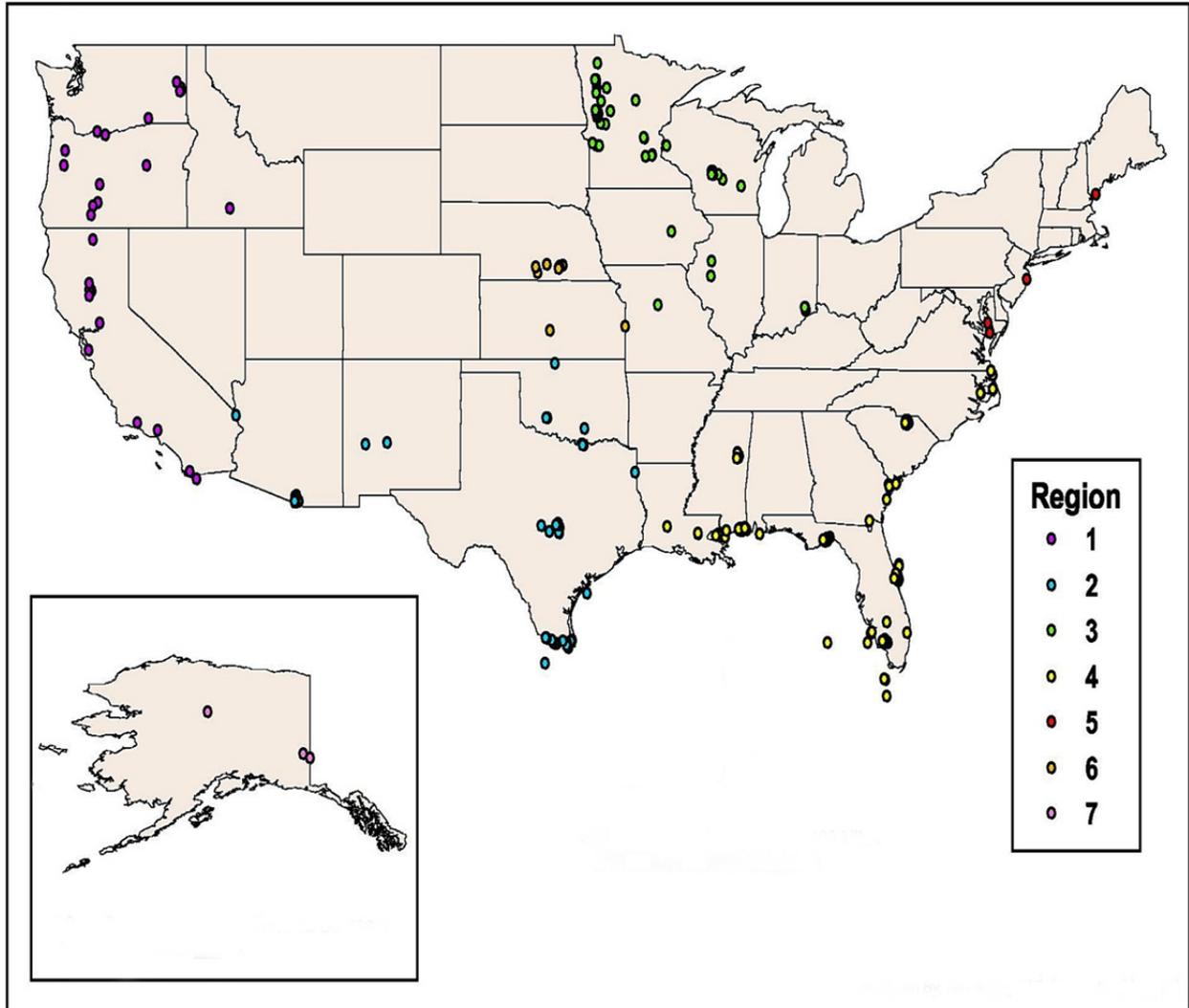
<u>Refuge</u>	<u>Number</u>	<u>RX Acres</u>	<u>Mech Acres</u>	<u>Other Acres</u>	<u>Total Acres</u>
Arrowwood NWR	10	1,237.0			1,237.0
Audubon NWR	22	1,955.7			1,955.7
Bowdoin NWR	1	91.0			91.0
Boyer Chute NWR	6	321.0			321.0
Crescent Lake NWR	9	287.2			287.2
Crosby WMD	1	75.0			75.0
Des Lacs NWR	7	1,478.5			1,478.5
Devils Lake WMD	18	1,425.0			1,425.0
Fish Springs NWR	1	200.0			200.0
Flint Hills NWR	27	1,448.7			1,448.7
Huron WMD	8	235.0	121.0		356.0
J Clark Salyer NWR	15	2,695.0			2,695.0
Kirwin NWR	2	420.0			420.0
Kulm WMD	3	384.0			384.0
Lacreek NWR	6	384.0			384.0
Long Lake NWR	5	866.0			866.0
Lostwood NWR	4	4,244.0			4,244.0
Lostwood WMD	2	1,049.0			1,049.0
Madison WMD	3	21.0			21.0
Marais Des Cygnes NWR	15	472.0			472.0
Medicine Lake NWR	7	552.0			552.0
N Platte NWR	2	0.2			0.2
National Elk Refuge	1	32.0			32.0
Quivira NWR	15	7,656.0			7,656.0

Rainwater Basin WMD	15	1,543.0			1,543.0
Rocky Mtn Arsenal NWR	4	275.0			275.0
Tewaukon NWR	10	787.0			787.0
Upper Souris NWR	6	560.0			560.0
Waubay NWR	2	220.0			220.0
Total	227	30,914.3	121.0	0.0	31,035.3

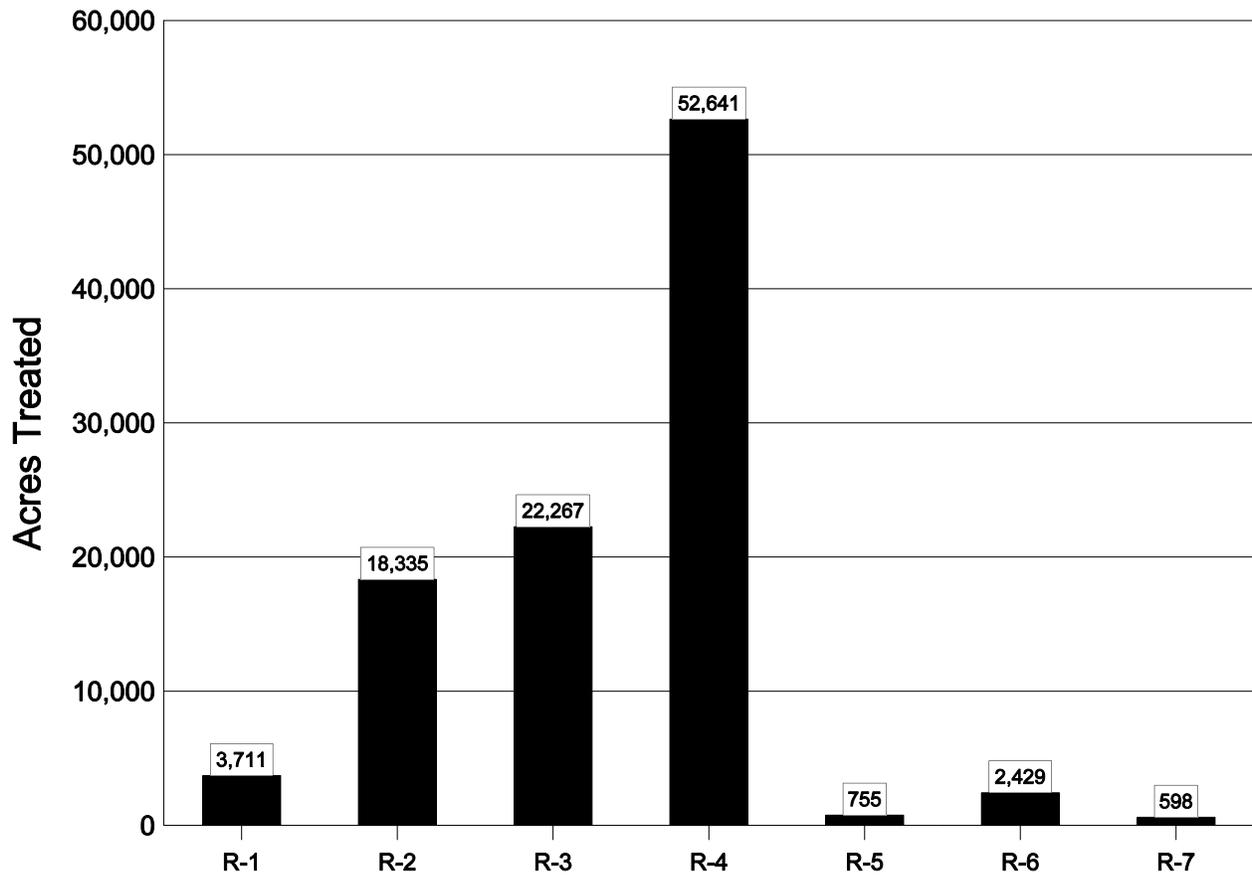
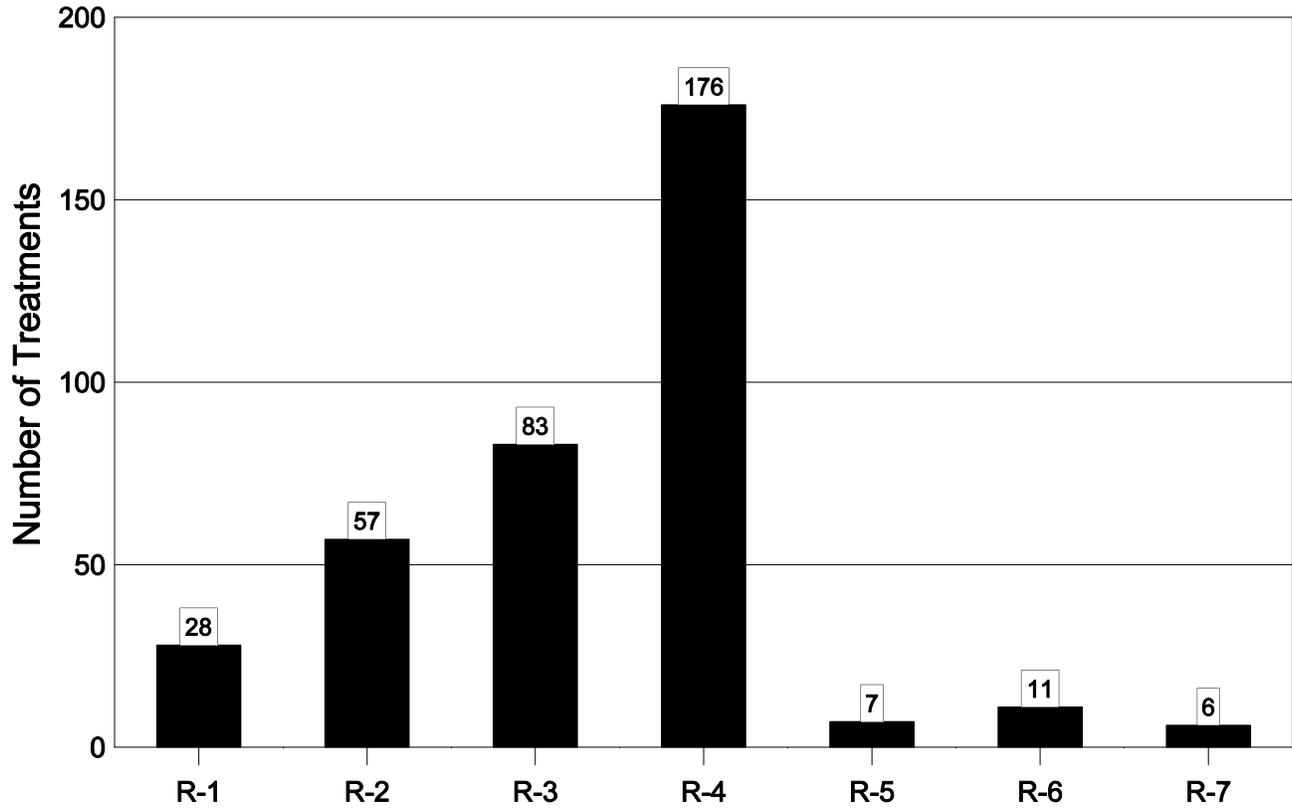
TREATMENTS (Non-WUI) by Refuge - R7

<u>Refuge</u>	<u>Number</u>	<u>RX Acres</u>	<u>Mech Acres</u>	<u>Other Acres</u>	<u>Total Acres</u>
Kenai NWR	2	21.0	88.0		109.0
Tetlin NWR	1	60.0	60.0		120.0
Total	3	81.0	148.0	0.0	229.0

WUI TREATMENTS 2003



WILDLAND URBAN INTERFACE TREATMENTS - 2003



WUI Treatments by State 2003

<u>Refuge</u>	<u>Number</u>	<u>RX Acres</u>	<u>Mech Acres</u>	<u>Total Acres</u>
Alabama	2	596.0		596.0
Alaska	6	100.0	498.0	598.0
Arizona	10	10,009.0		10,009.0
California	12	1,446.0		1,446.0
Florida	71	21,250.1		21,250.1
Georgia	3	689.0		689.0
Idaho	1	5.0		5.0
Indiana	12	9,907.0		9,907.0
Iowa	1	9.0		9.0
Kansas	2	430.0	15.0	445.0
Louisiana	7	1,058.0		1,058.0
Maine	1	10.0		10.0
Maryland	5	672.0		672.0
Minnesota	48	6,493.2		6,493.2
Mississippi	27	7,271.0		7,271.0
Missouri	1	3.0		3.0
Nebraska	9	1,984.0		1,984.0
New Jersey	1	53.0	20.0	73.0
New Mexico	3	812.0		812.0
North Carolina	7	3,314.2		3,314.2
Oklahoma	6	2,076.0		2,076.0
Oregon	8	1,485.0	20.0	1,505.0
South Carolina	59	18,463.0		18,463.0
Texas	38	5,095.7	342.0	5,437.7

Washington	7	754.5		754.5
Wisconsin	21	4,957.1	897.5	5,854.6
Total	368	98,942.8	1,792.5	100,735.3

WUI TREATMENTS by Refuge - R1

<u>Refuge</u>	<u>Number</u>	<u>RX Acres</u>	<u>Mech Acres</u>	<u>Total Acres</u>
Baskett Slough NWR	1		10.0	10.0
Bear Valley NWR	2	310.0		310.0
Bitter Creek NWR	1	45.0		45.0
Conboy Lake NWR	1	400.0		400.0
Don Edwards SF Bay	1	211.0		211.0
Franz Lake NWR	1	250.0		250.0
Hagerman NFH	1	5.0		5.0
Hopper Mtn NWR Complex	1	10.0		10.0
Klamath Marsh NWR	3	425.0		425.0
Malheur NWR	1	750.0		750.0
McNary NWR	1	0.5		0.5
Sacramento River NWR	5	589.0		589.0
San Diego NWR Complex	2	560.0		560.0
Stone Lakes NWR	2	31.0		31.0
Turnbull NWR	4	104.0		104.0
William L Finley NWR	1		10.0	10.0
Total	28	3,690.5	20.0	3,710.5

WUI TREATMENTS by Refuge - R2

<u>Refuge</u>	<u>Number</u>	<u>RX Acres</u>	<u>Mech Acres</u>	<u>Total Acres</u>
Aransas/Matagorda Island NWR	1	728.0		728.0
Balcones Canyonlands NWR	14	1,957.0	342.0	2,299.0
Bosque Del Apache NWR	3	812.0		812.0
Buenos Aires NWR	9	9,734.0		9,734.0
Caddo Lake NWR	1	64.0		64.0
Hagerman NWR	5	2,311.0		2,311.0
Havasu NWR	1	275.0		275.0
S. TX Refuges Complex	17	35.7		35.7
Salt Plains NWR	1	611.0		611.0
Tishomingo NFH	2	69.0		69.0
Wichita Mtns Wildlife Refuge	3	1,396.0		1,396.0
Total	57	17,992.7	342.0	18,334.7

WUI TREATMENTS by Refuge - R3

<u>Refuge</u>	<u>Number</u>	<u>RX Acres</u>	<u>Mech Acres</u>	<u>Total Acres</u>
Agassiz NWR	1	2.0		2.0
Big Muddy Natl Fish and Wildl Rfg	1	3.0		3.0
Big Oaks NWR	12	9,907.0		9,907.0
Big Stone NWR	2	180.0		180.0
Detroit Lakes WMD	8	1,429.0		1,429.0
Fergus Falls WMD	17	1,203.0		1,203.0
Horicon NWR	1	206.0	26.0	232.0
Leopold WMD	1	62.0		62.0
MN Valley NWR	4	42.8		42.8
Morris WMD	2	586.0		586.0
Necedah NWR	18	4,194.1	871.5	5,065.6
Port Louisa NWR	1	9.0		9.0
Rydell NWR	10	184.0		184.0
Sherburne NWR	4	2,866.4		495.0
St Croix WMD	1	495.0		2,866.4
Total	83	21,369.3	897.5	22,266.8

WUI TREATMENTS by Refuge - R4

<u>Refuge</u>	<u>Number</u>	<u>RX Acres</u>	<u>Mech Acres</u>	<u>Total Acres</u>
Alligator River NWR	2	1,058.0		1,058.0
Arthur R Marshall Loxahatchee NWR	1	1.0		1.0
Big Branch Marsh NWR	1	87.0		87.0
Bogue Chitto NWR	1	4.0		4.0
Bon Secour NWR	2	596.0		596.0
Carolina Sandhills NWR	55	17,503.0		17,503.0
Cedar Island NWR	1	876.0		876.0
Currituck NWR	1	0.1		0.1
Florida Panther NWR	18	8,788.0		8,788.0
Grand Bay NWR	4	599.0		599.0
Harris Neck NWR	1	500.0		500.0
J N Ding Darling NWR	13	29.0		29.0
Lacassine NWR	1	334.0		334.0
Lake Woodruff NWR	6	167.0		167.0
Mackay Island NWR	1	0.1		0.1
Matlacha Pass NWR	1	3.0		3.0
Merritt Island NWR	9	8,186.0		8,186.0
MS Sandhill Crane NWR	13	3,631.0		3,631.0
National Key Deer Refuge	3	168.0		168.0
Noxubee NWR	10	3,041.0		3,041.0
Okefenokee NWR	1	114.0		114.0
Pinckney Island NWR	1	500.0		500.0
Pocosin Lakes NWR	2	1,380.0		1,380.0
Savannah Coastal Refuges	3	225.0		225.0

Savannah NWR	1	310.0		310.0
SE Lousianna Refuges	4	633.0		633.0
St Marks NWR	20	3,908.1		3,908.1
Total	176	52,641.3	0.0	52,641.3

WUI TREATMENTS by Refuge - R5

<u>Refuge</u>	<u>Number</u>	<u>RX Acres</u>	<u>Mech Acres</u>	<u>Total Acres</u>
Chesapeake Marshlands NWRC	5	672.0		672.0
Edwin B Forsythe NWR	1	53.0	20.0	73.0
Rachel Carson NWR	1	10.0		10.0
Total	7	735.0	20.0	755.0

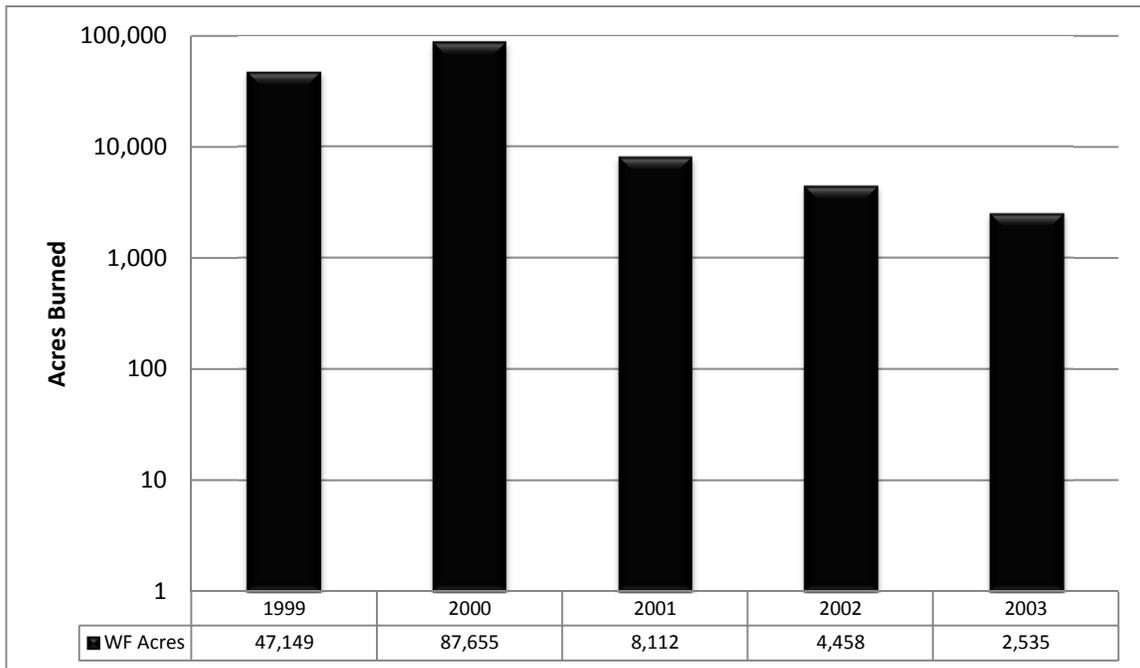
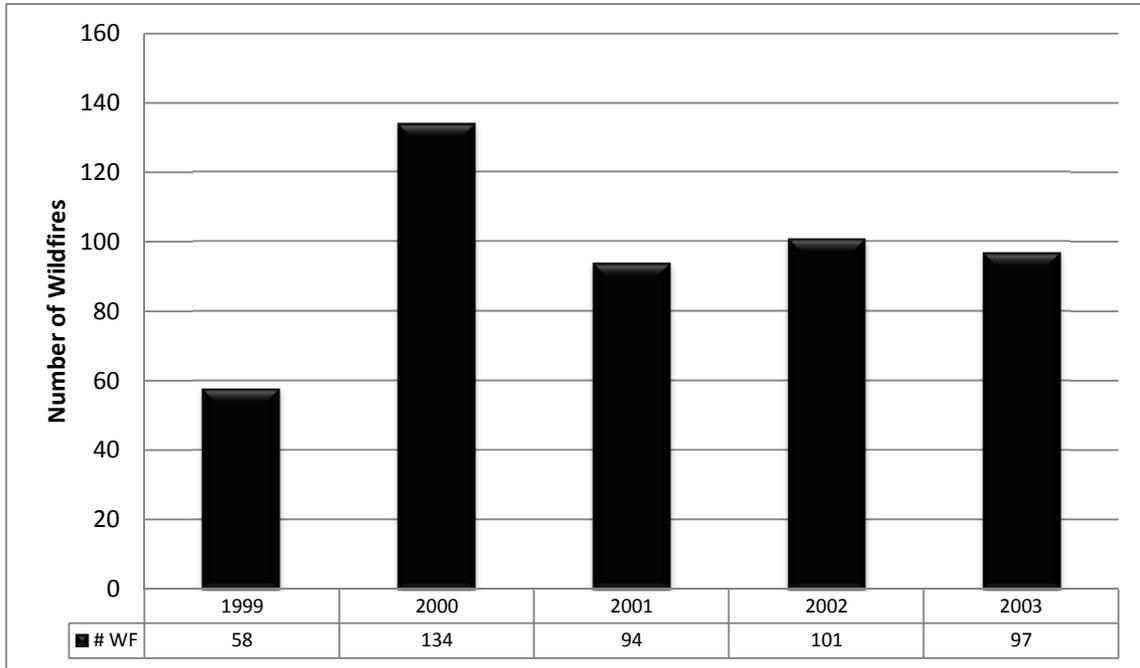
WUI TREATMENTS by Refuge - R6

<u>Refuge</u>	<u>Number</u>	<u>RX Acres</u>	<u>Mech Acres</u>	<u>Total Acres</u>
Marais Des Cygnes NWR	1	15.0	15.0	30.0
Quivira NWR	1	415.0		415.0
Rainwater Basin WMD	9	1,984.0		1,984.0
Total	11	2,414.0	15.0	2,429.0

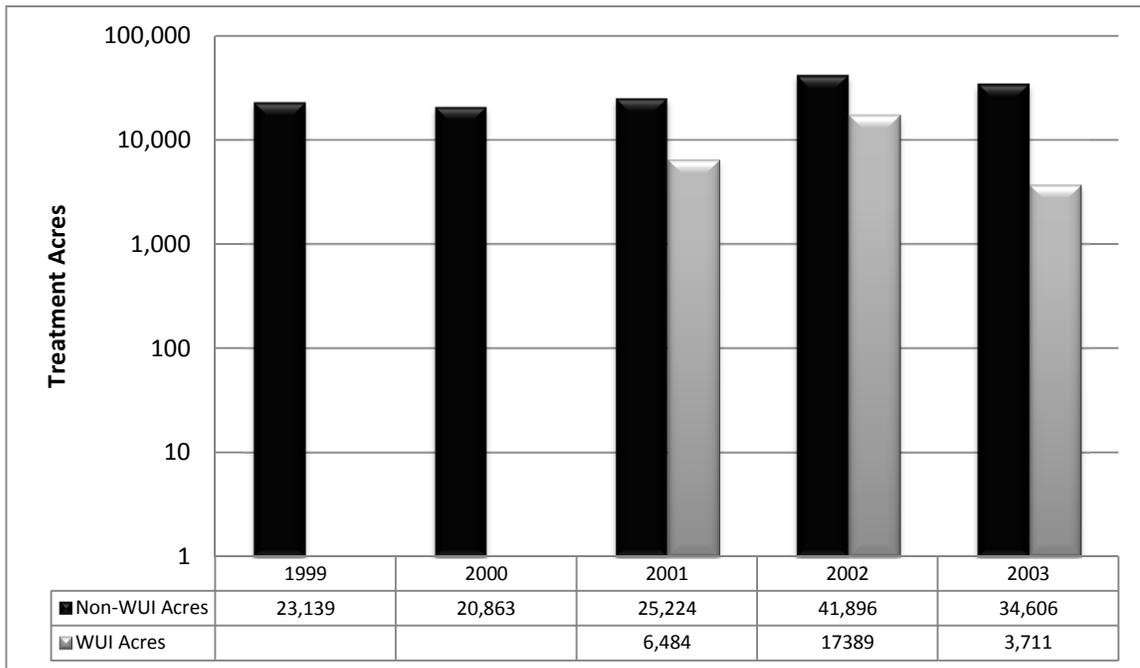
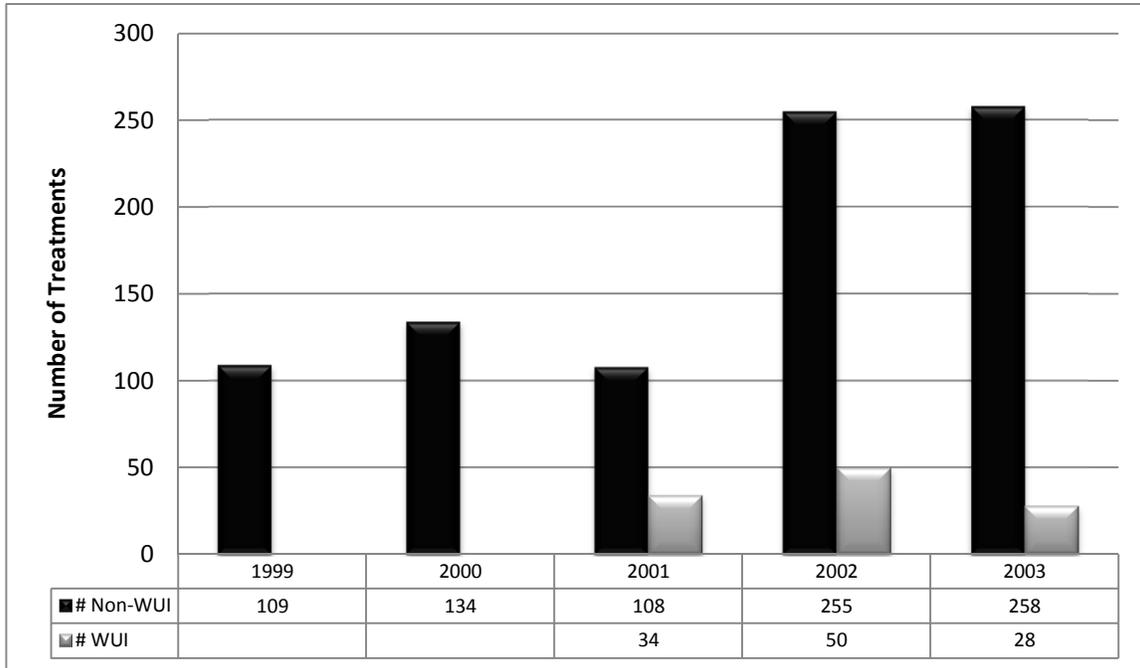
WUI TREATMENTS by Refuge - R7

<u>Refuge</u>	<u>Number</u>	<u>RX Acres</u>	<u>Mech Acres</u>	<u>Total Acres</u>
Kanutu NWR	2	35.0	70.0	105.0
Kenai NWR	1	0.0	310.0	310.0
Tetlin NWR	3	65.0	118.0	183.0
Total	6	100.0	498.0	598.0

REGION 1 WILDLAND FIRES 1999-2003

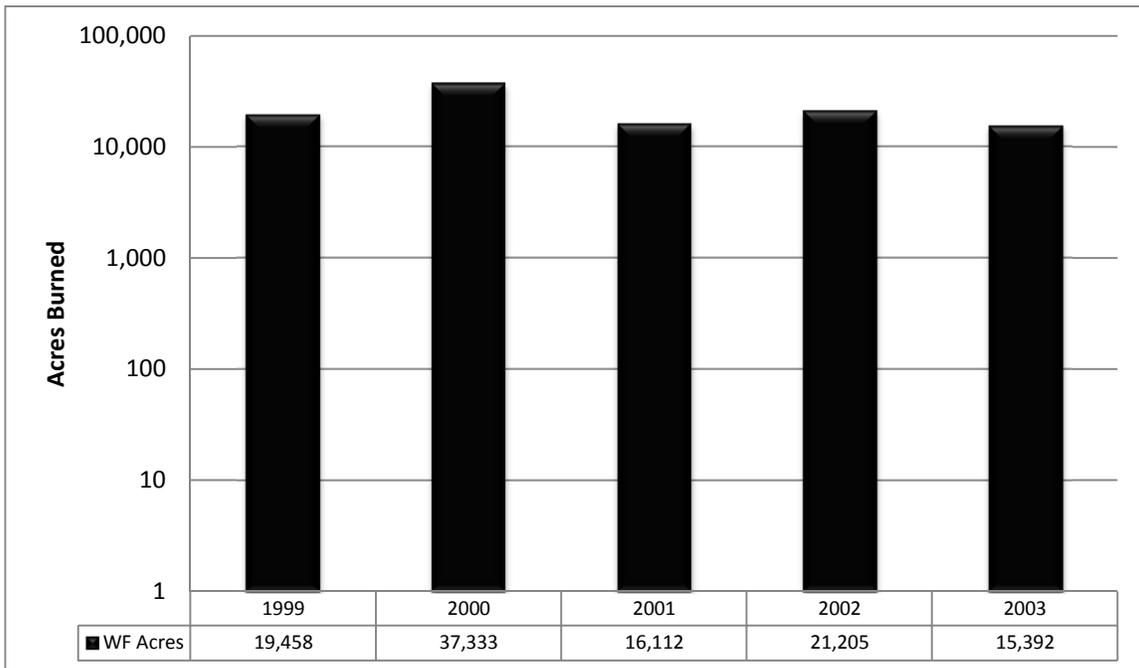
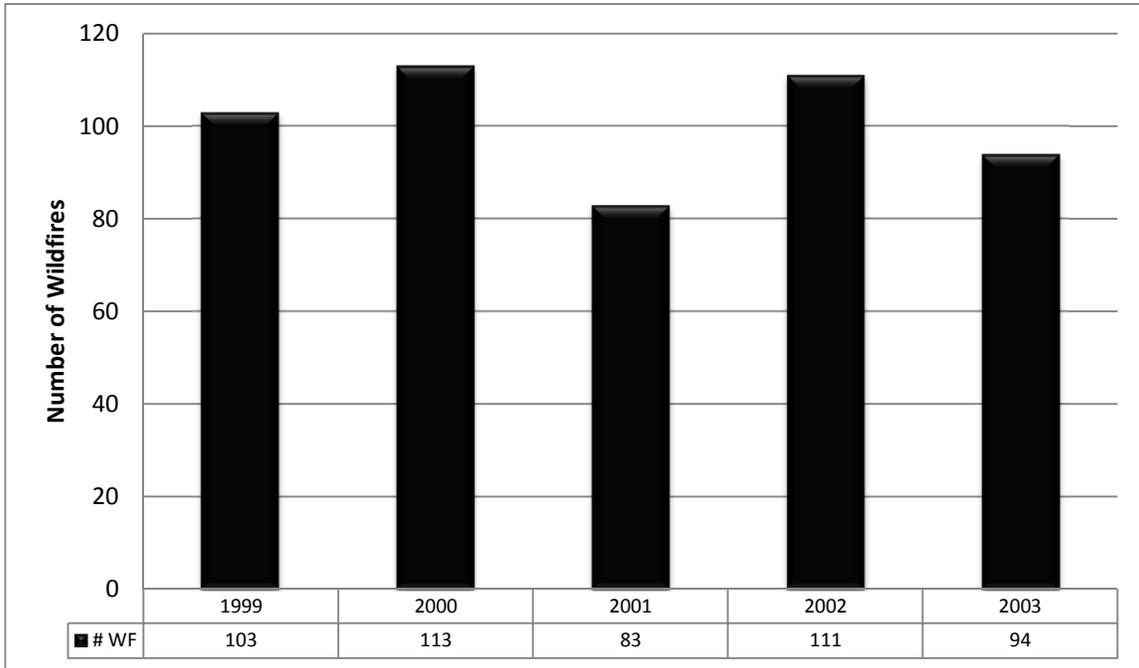


REGION 1 TREATMENTS 1999-2003

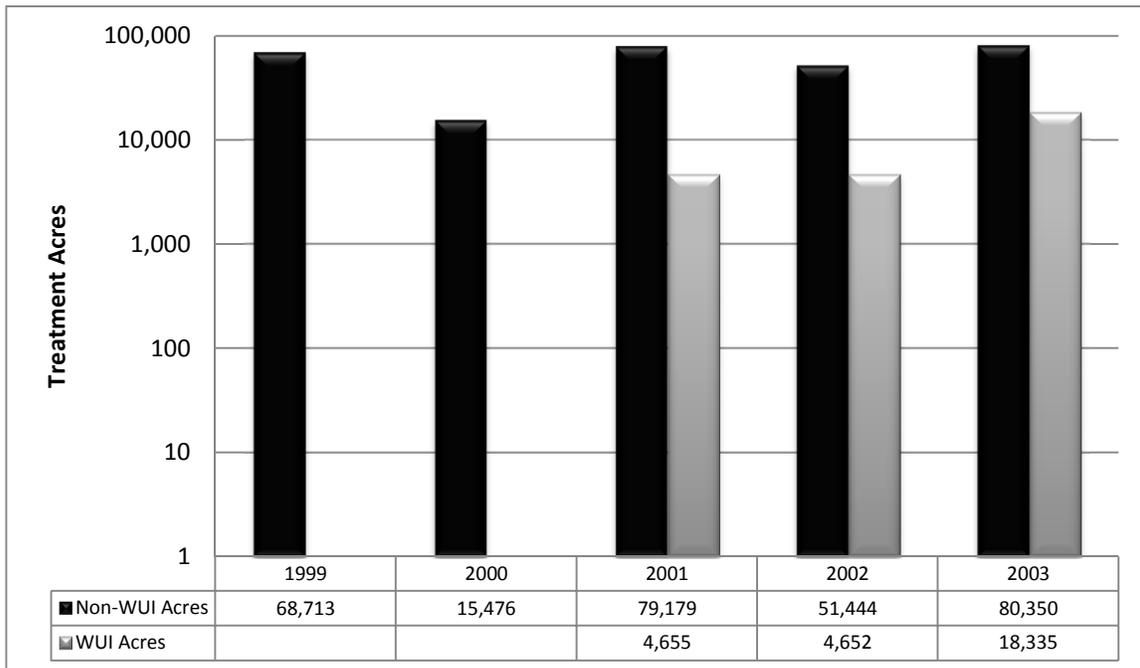
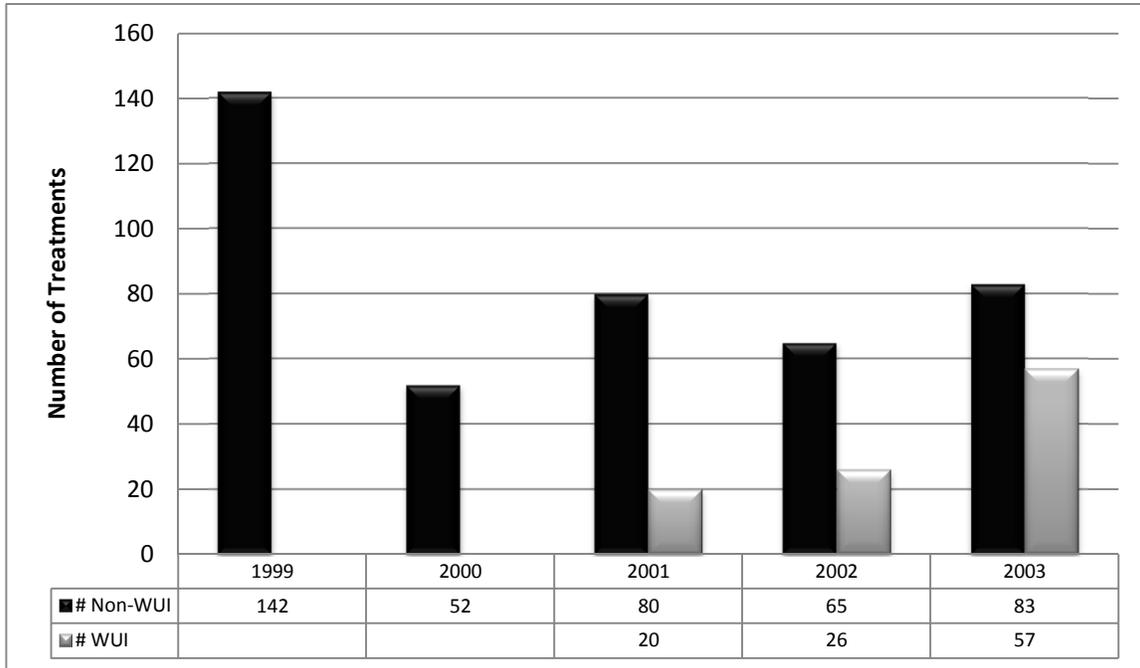


WUI = Wildland Urban Interface

REGION 2 WILDLAND FIRES 1999-2003

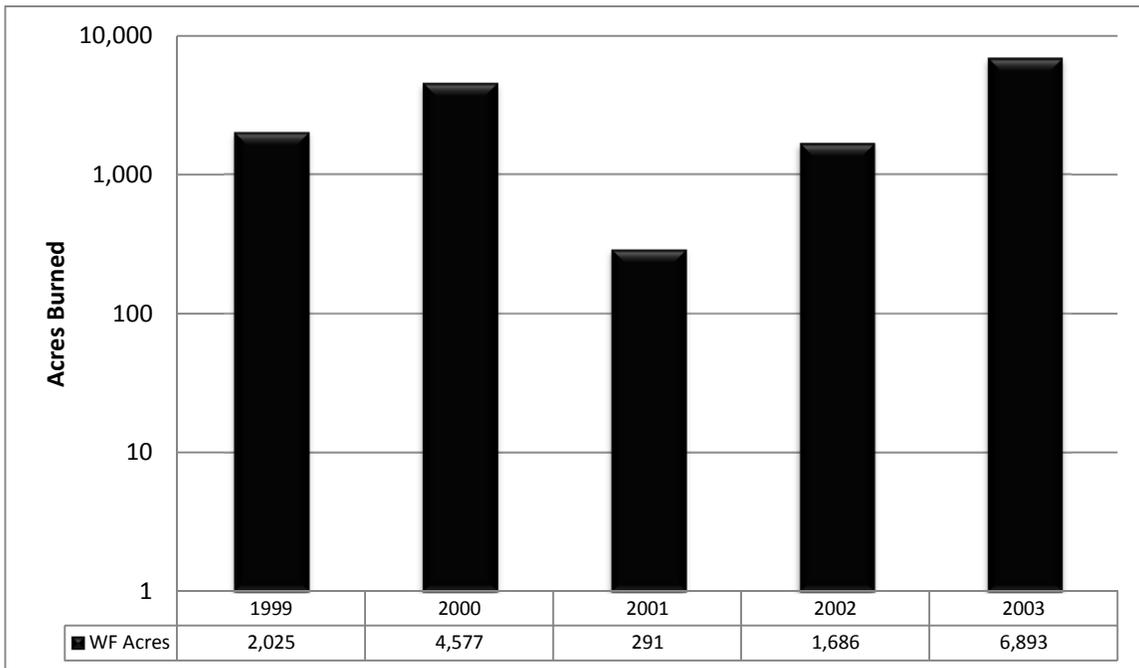
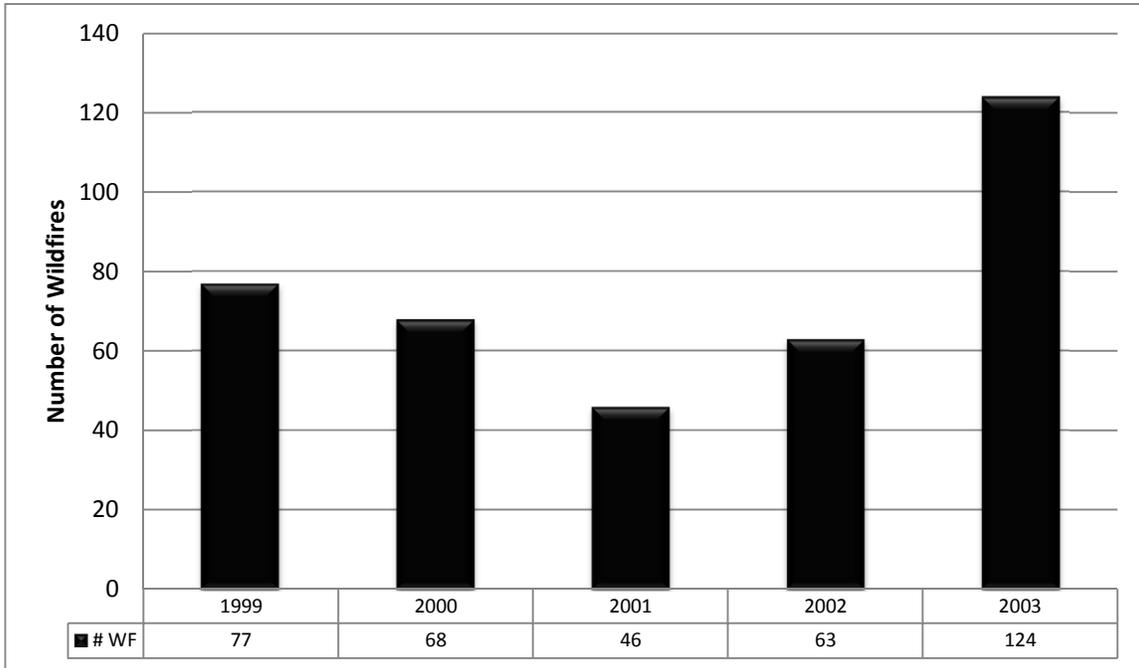


REGION 2 TREATMENTS 1999-2003

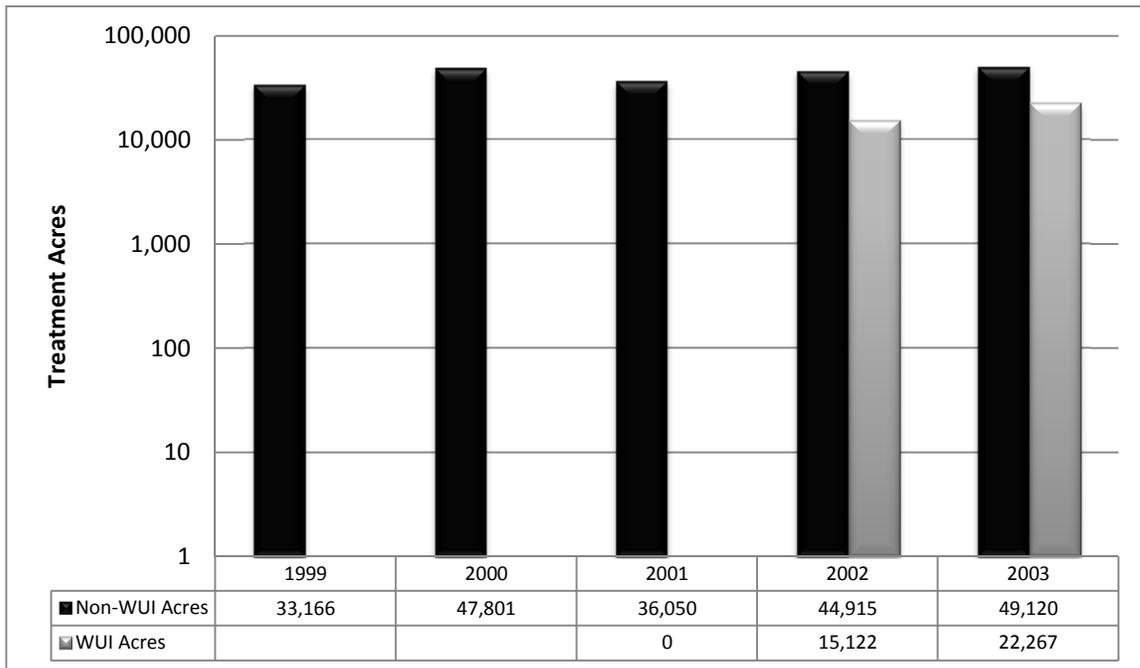
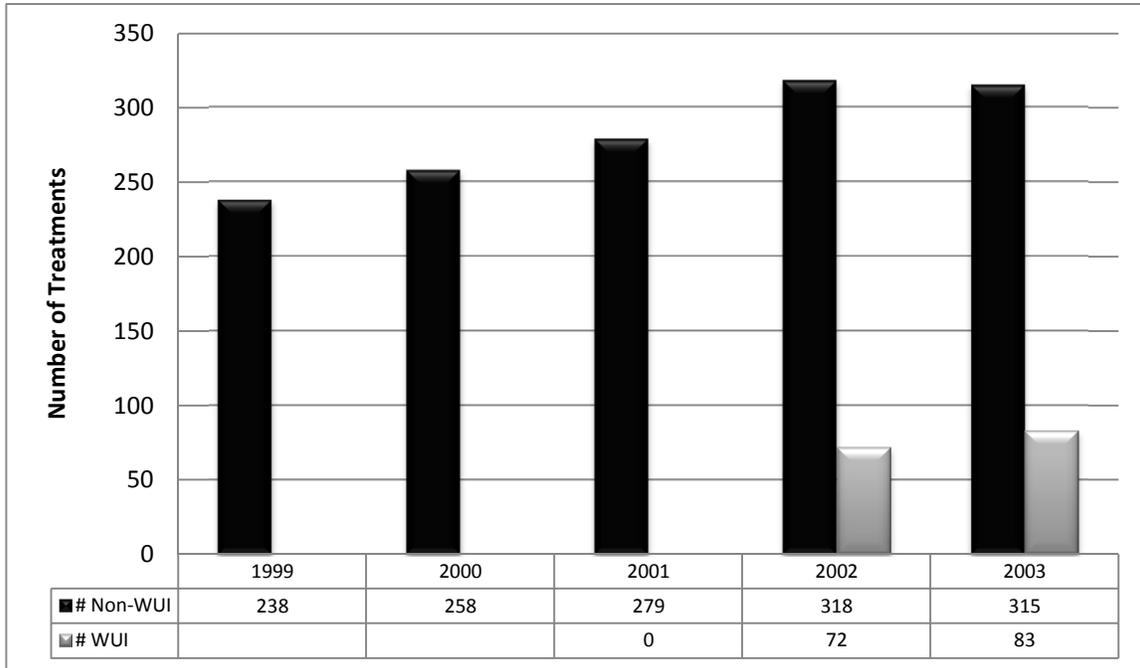


WUI = Wildland Urban Interface

REGION 3 WILDLAND FIRES 1999-2003

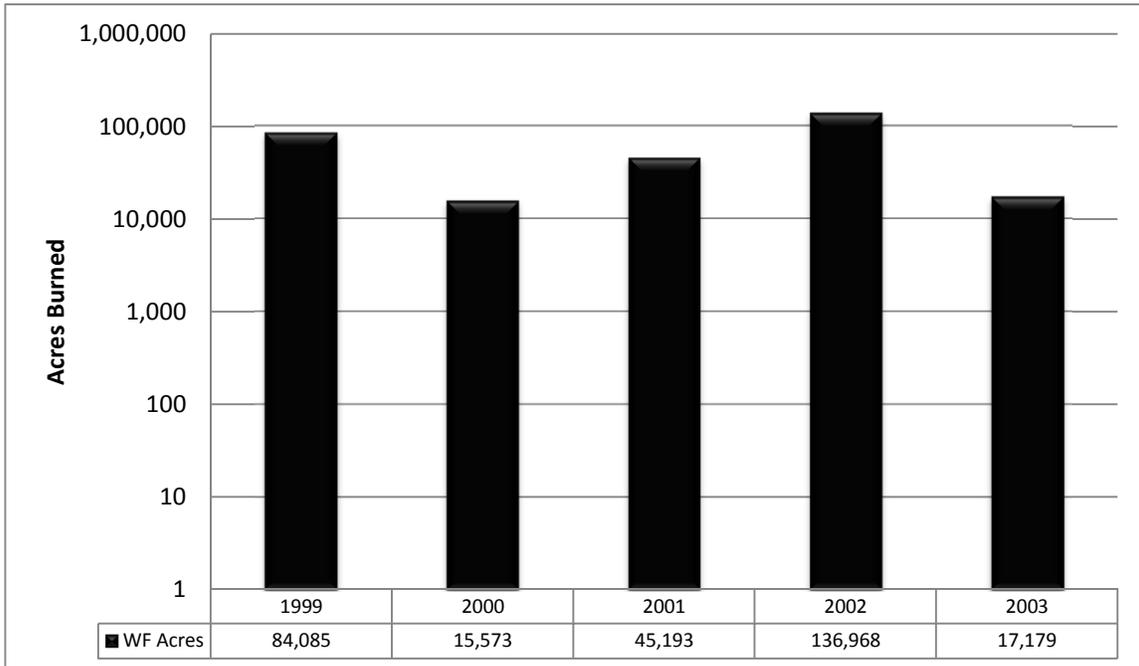
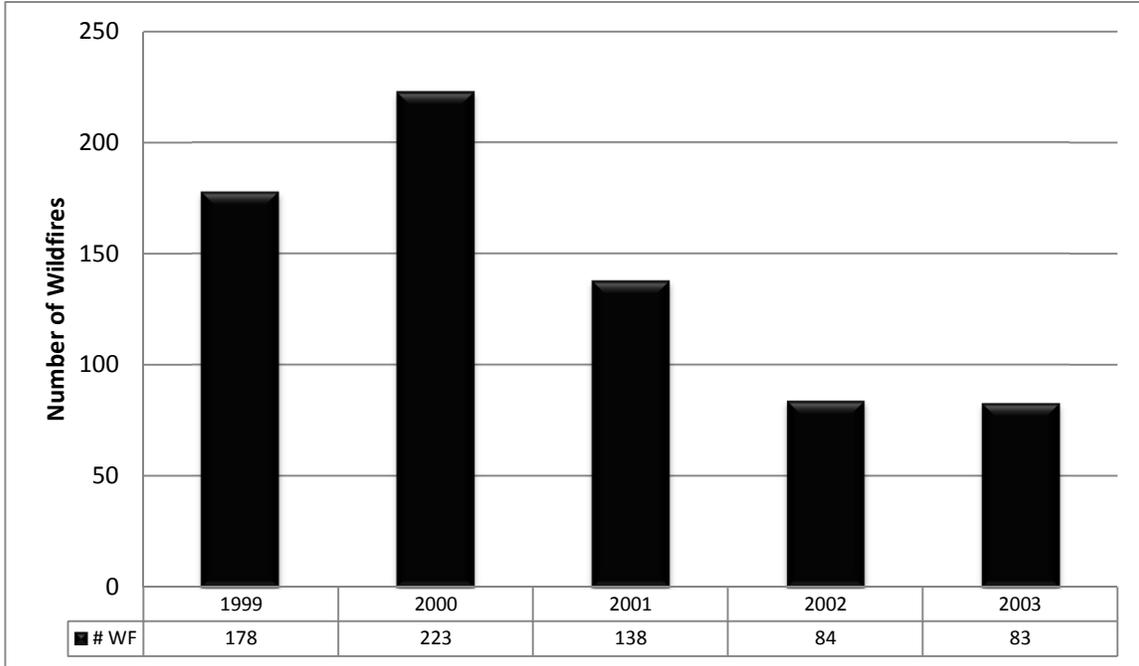


REGION 3 TREATMENTS 1999-2003

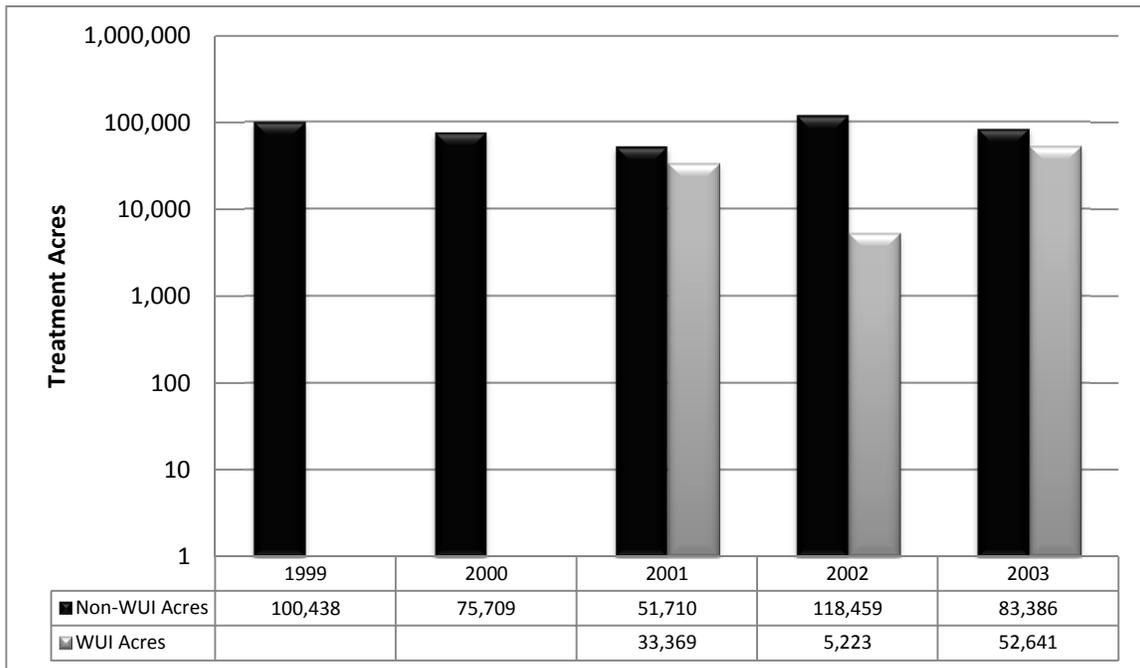
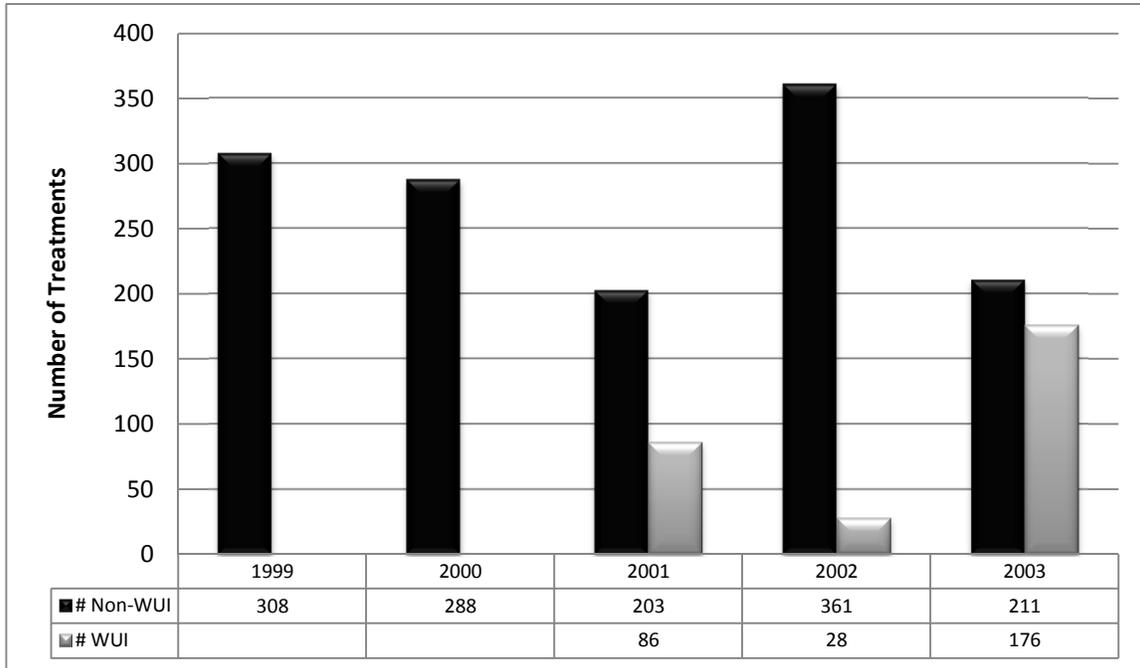


WUI = Wildland Urban Interface

REGION 4 WILDLAND FIRES 1999-2003

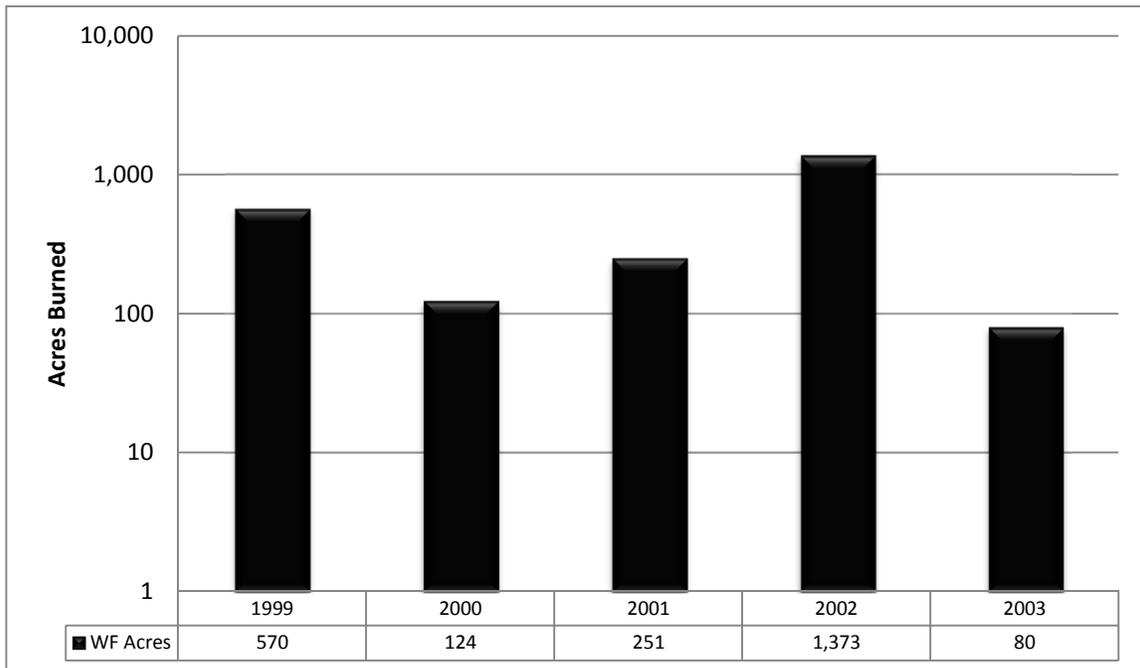
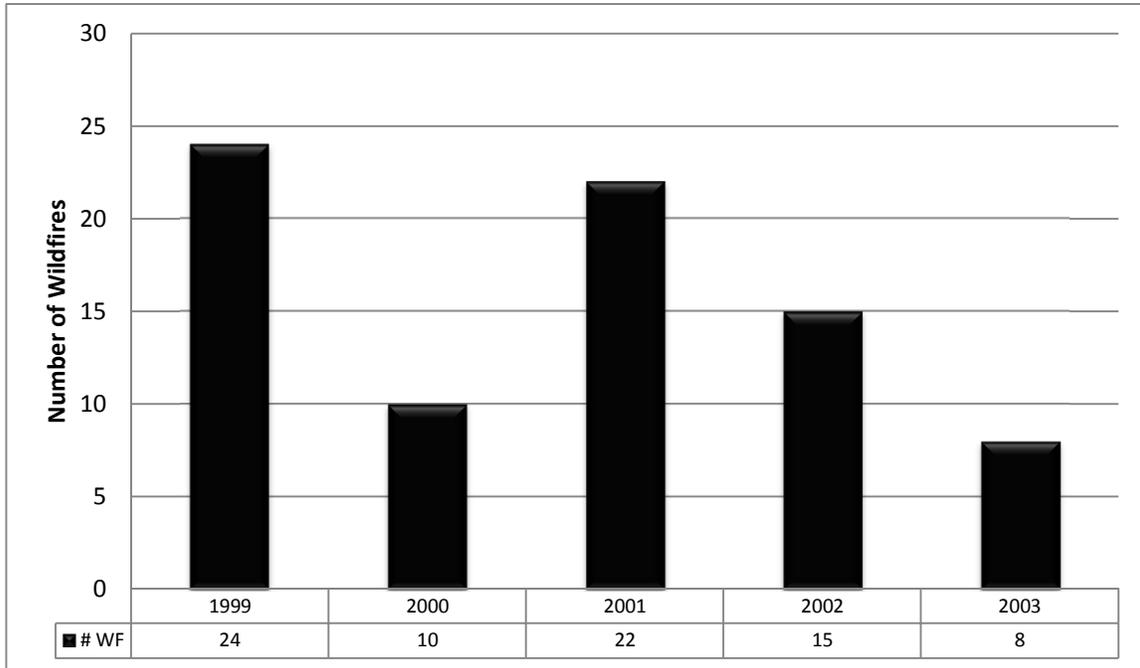


REGION 4 TREATMENTS 1999-2003

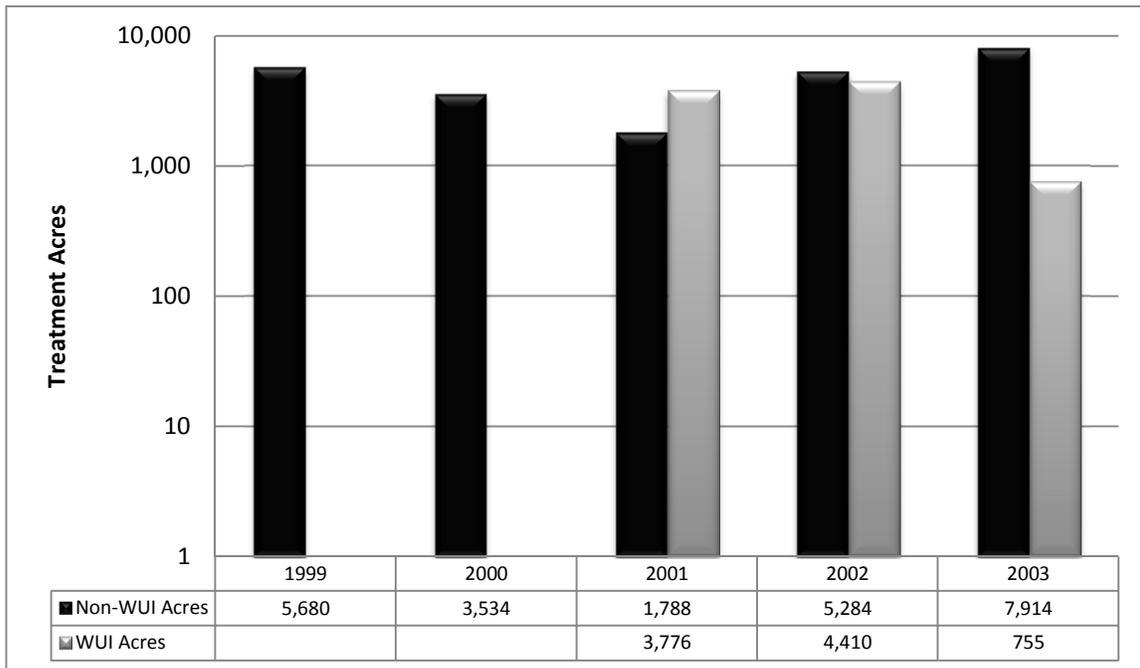
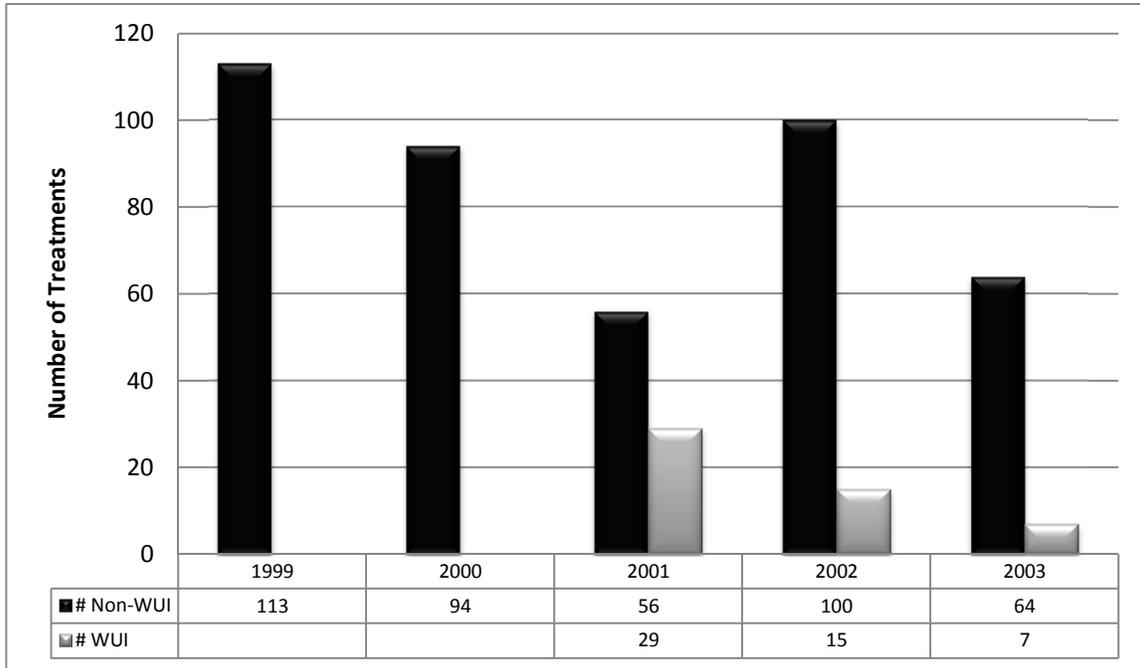


WUI = Wildland Urban Interface

REGION 5 WILDLAND FIRES 1999 - 2003

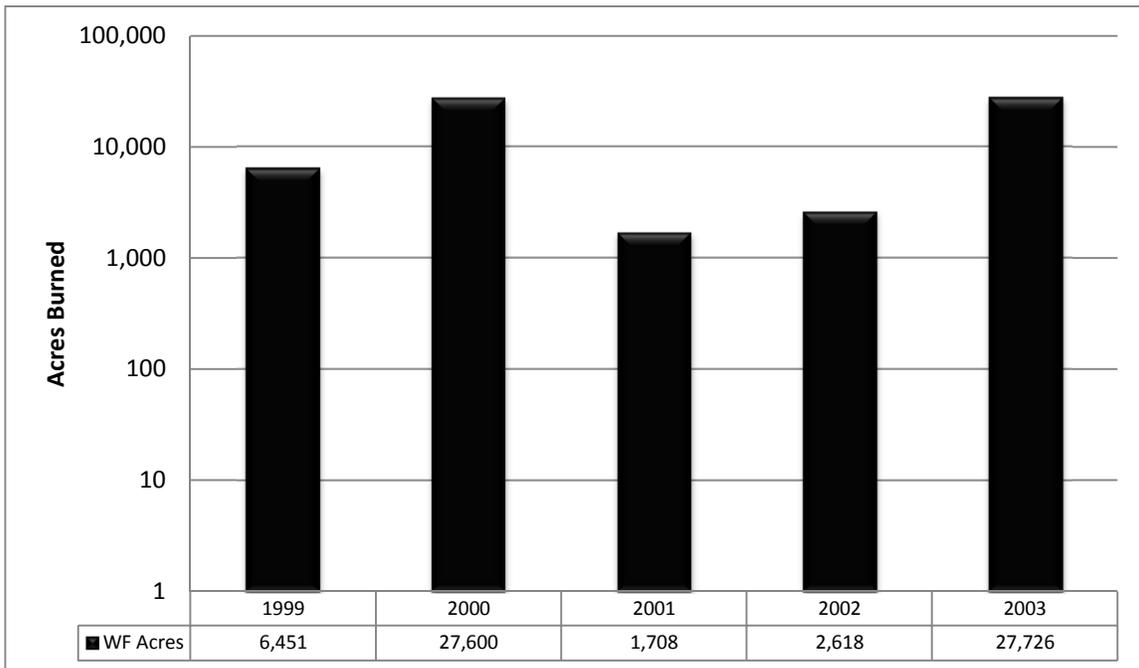
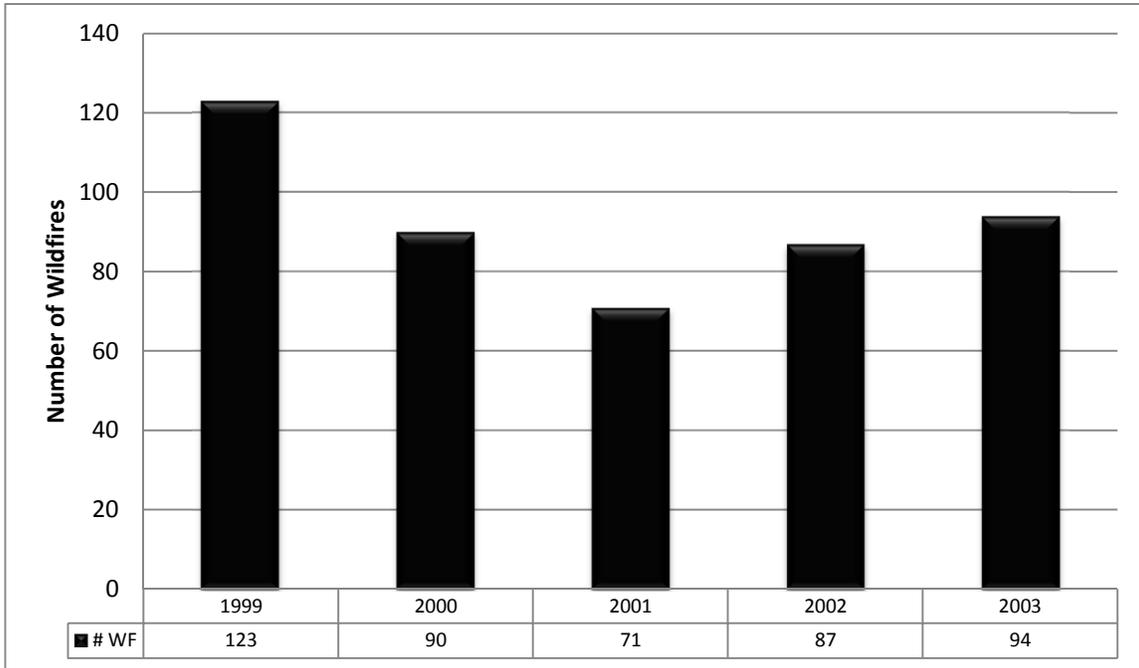


REGION 5 PRESCRIBED FIRES 1999 - 2003

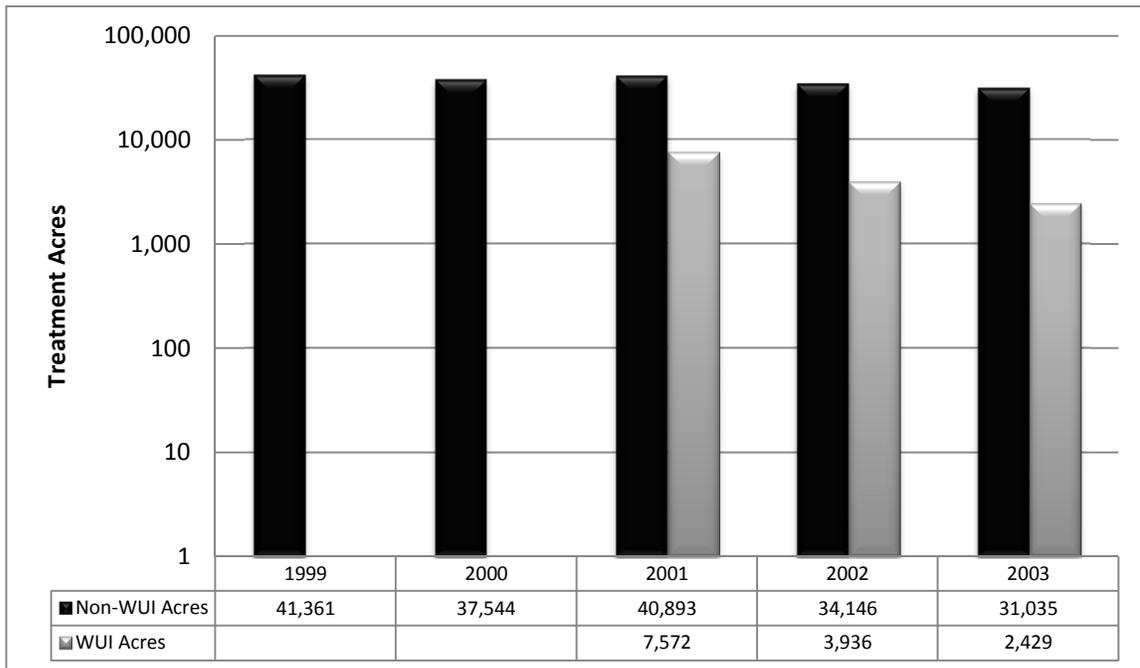
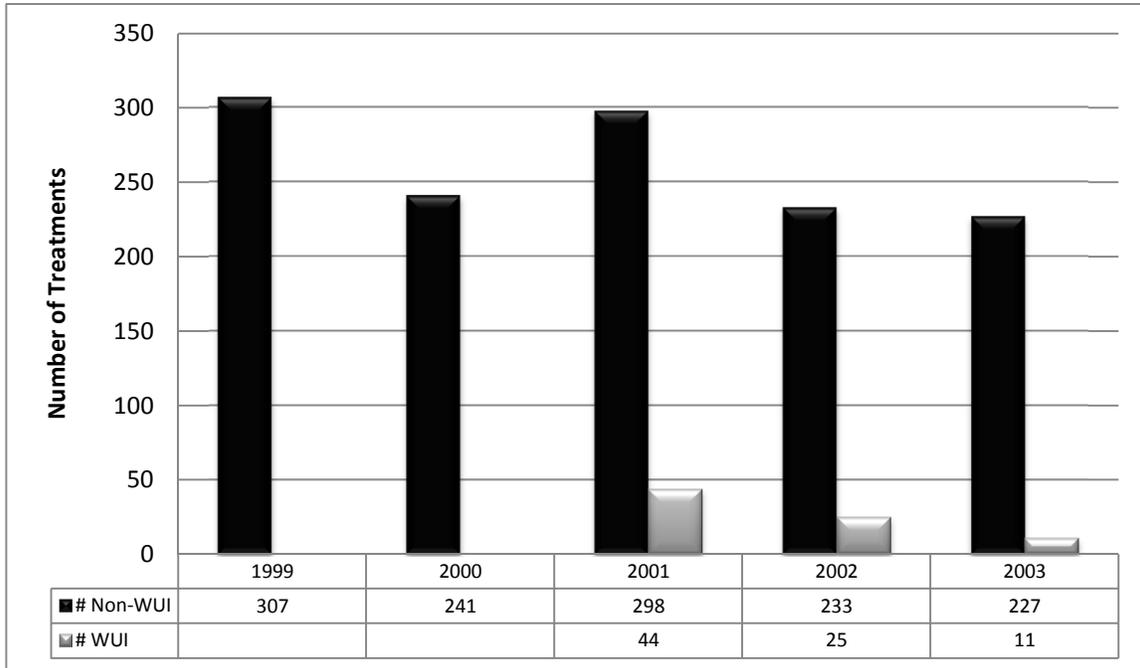


WUI = Wildland Urban Interface

REGION 6 WILDLAND FIRES 1999-2003

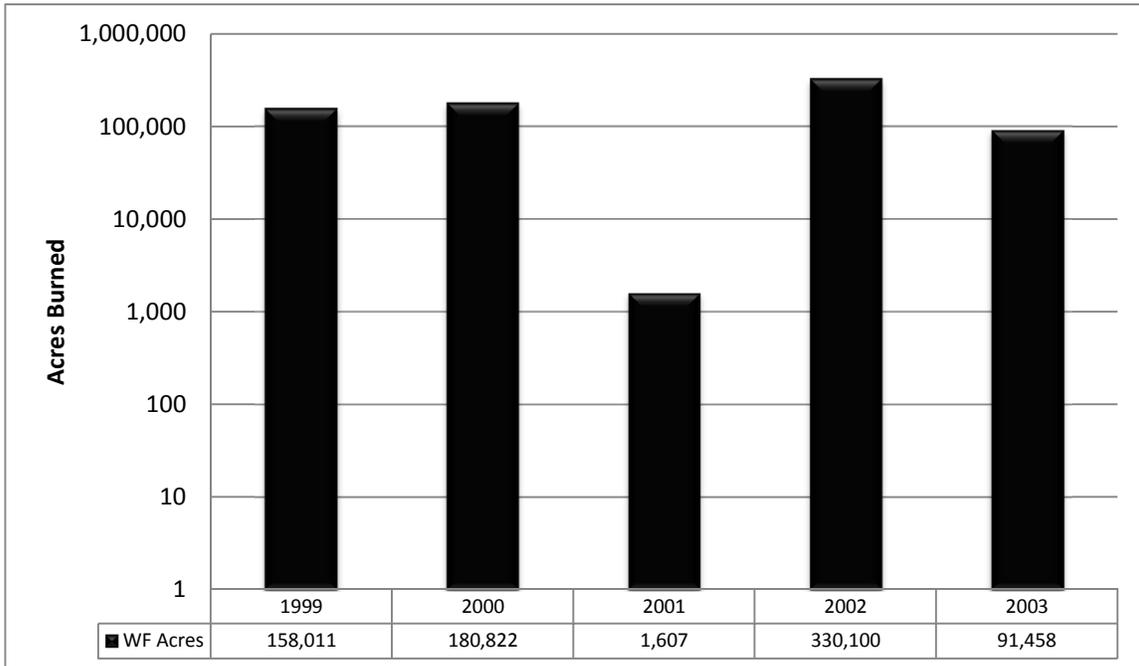
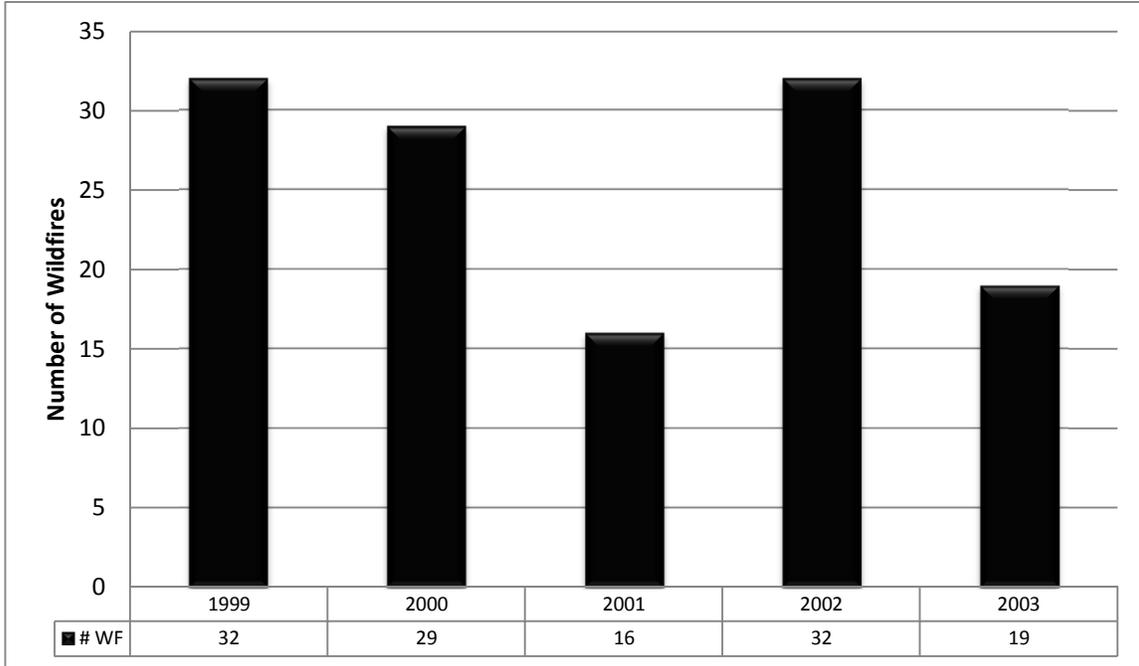


REGION 6 PRESCRIBED FIRES 1999-2003

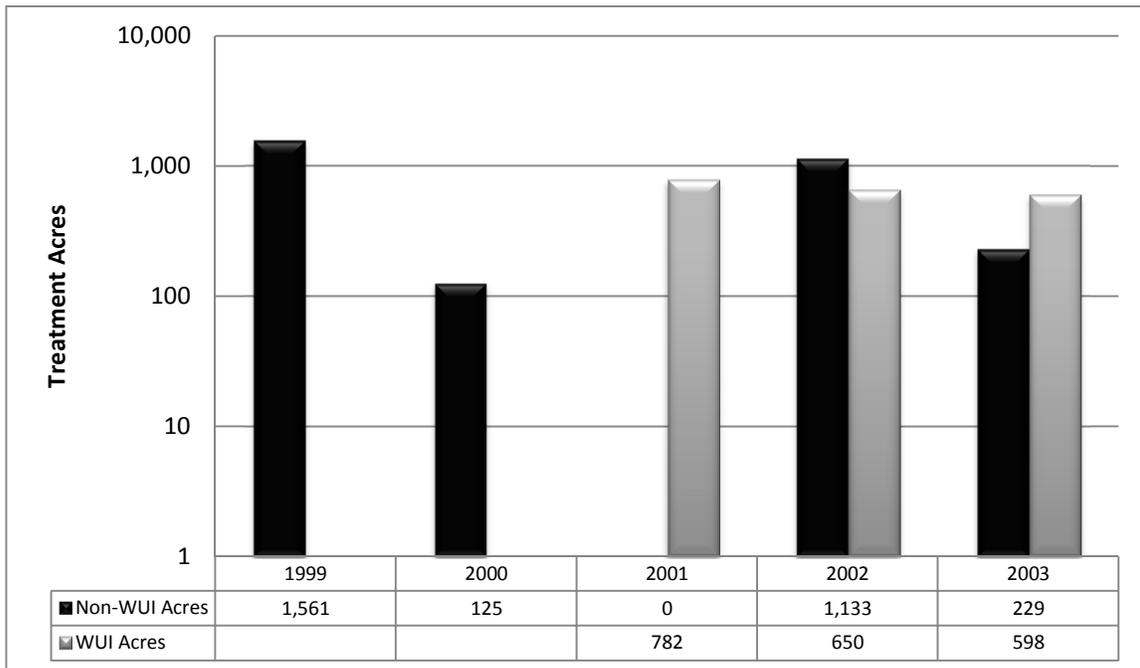
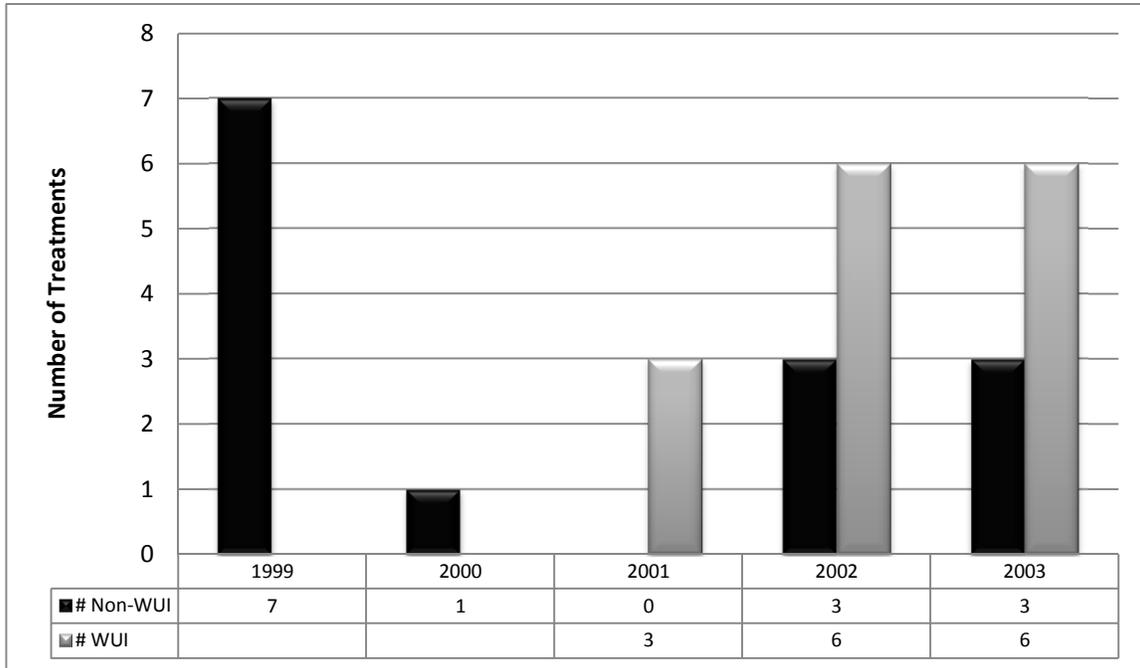


WUI = Wildland Urban Interface

REGION 7 WILDLAND FIRES 1999-2003



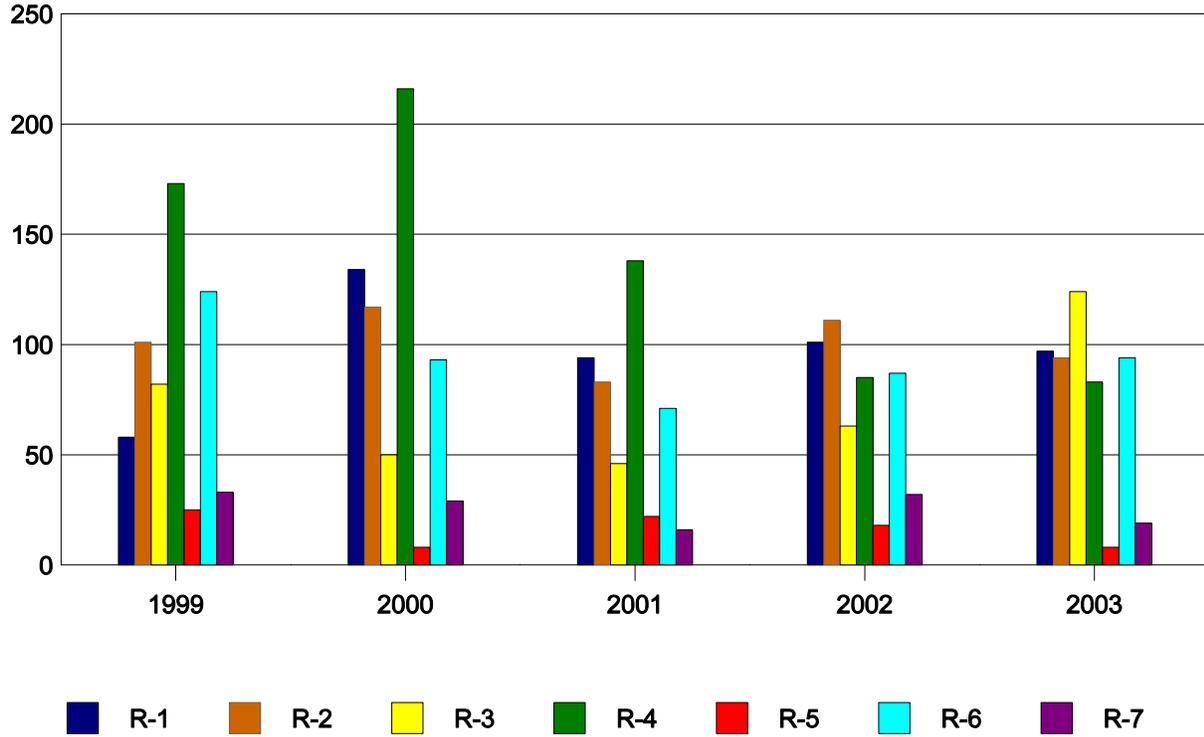
REGION 7 PRESCRIBED FIRES 1999-2003



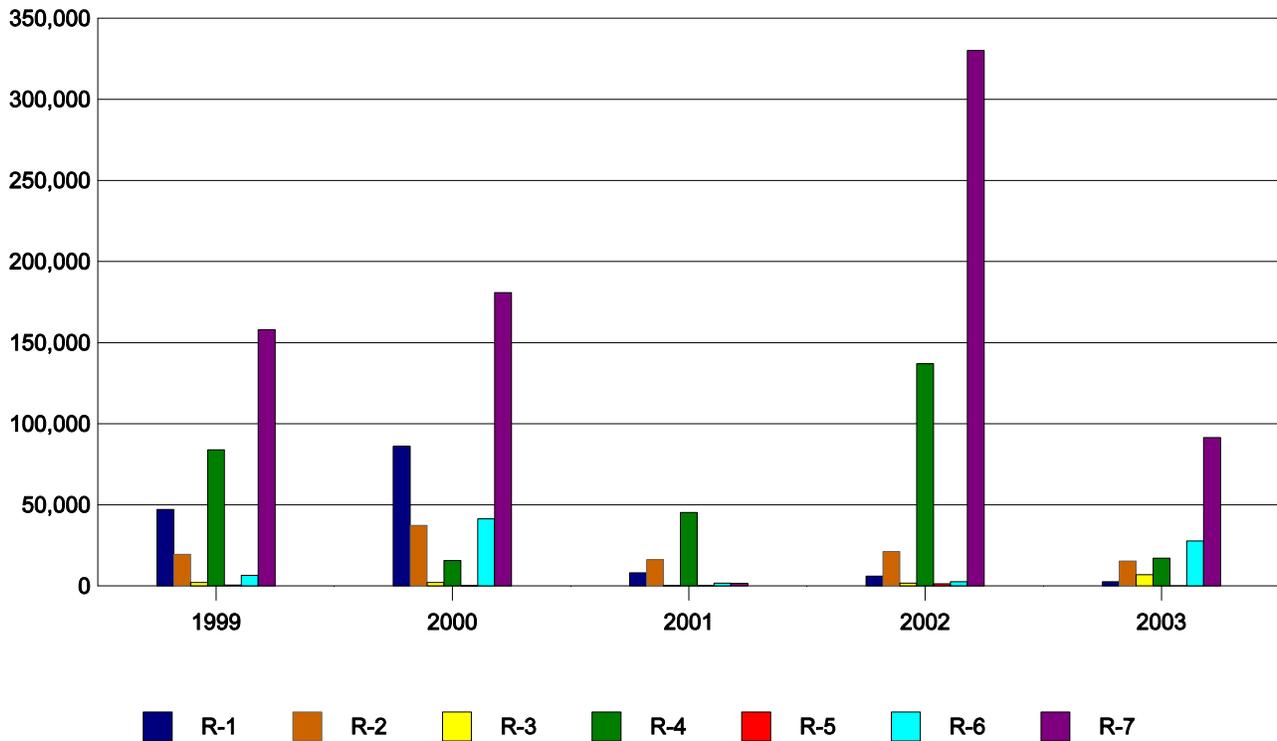
WUI = Wildland Urban Interface

WILDLAND FIRES 1999 - 2003

Number of Wildland Fires

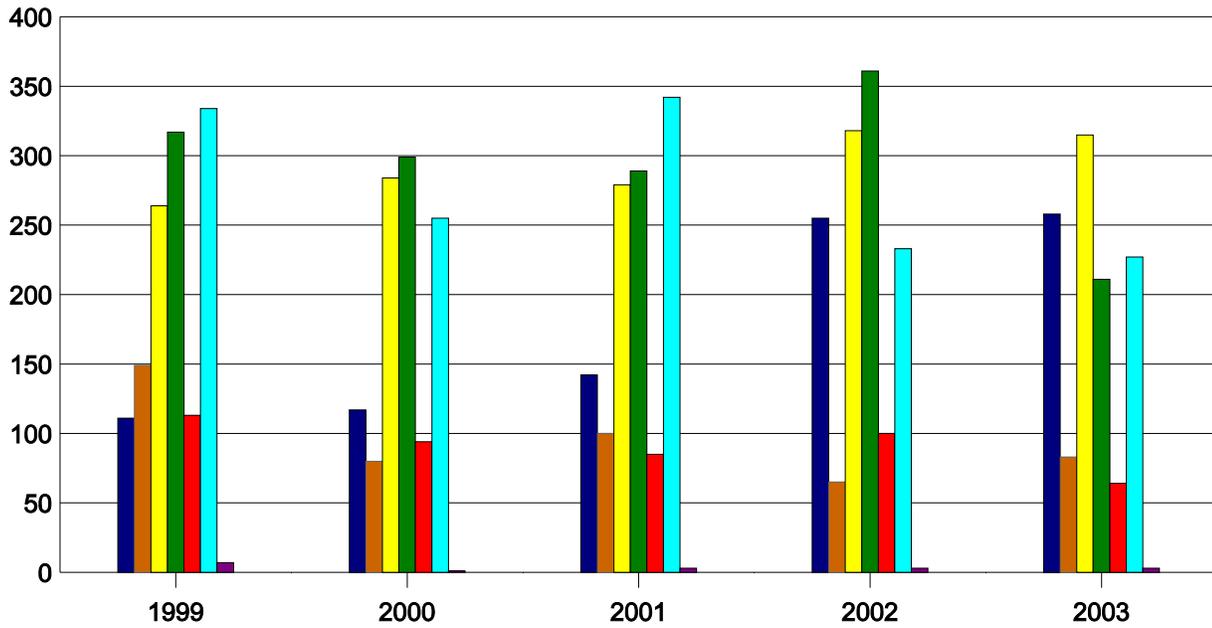


Number of Acres Burned



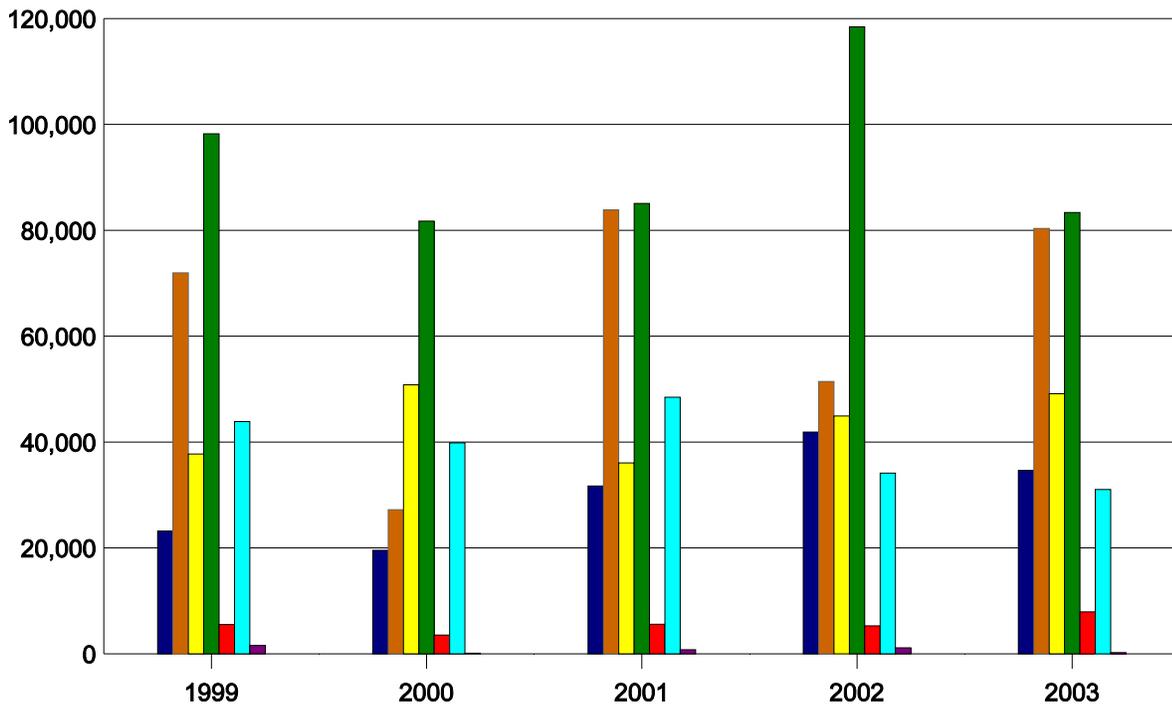
TREATMENTS (Non-WUI) 1999 - 2003

Number of Treatments



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

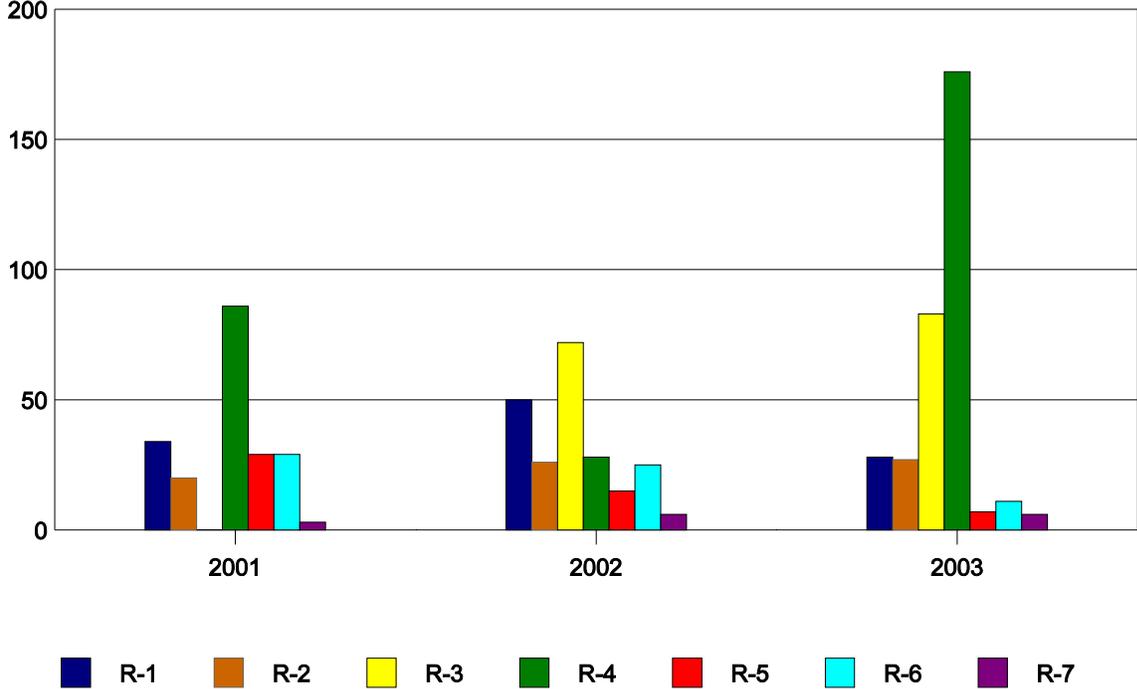
Number of Acres Treated



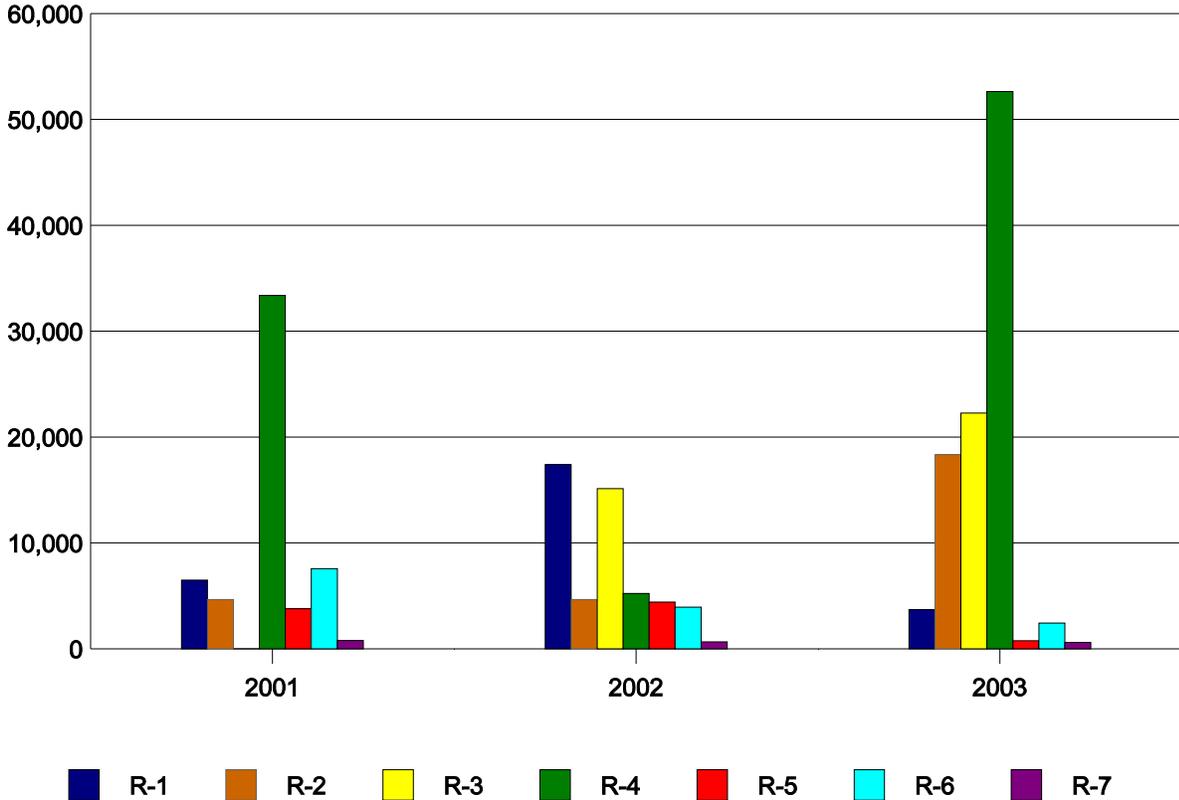
■ R-1
 ■ R-2
 ■ R-3
 ■ R-4
 ■ R-5
 ■ R-6
 ■ R-7

WUI TREATMENTS 2001 - 2003

Number of Treatments

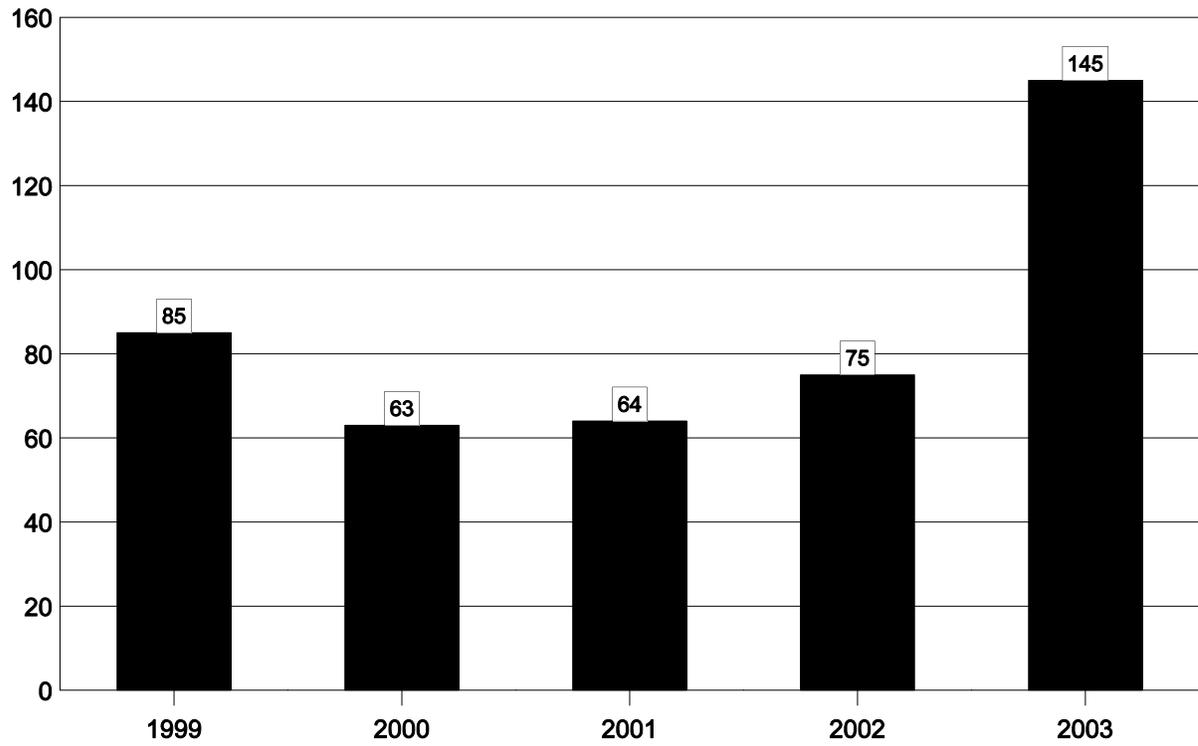


Number of Acres Treated

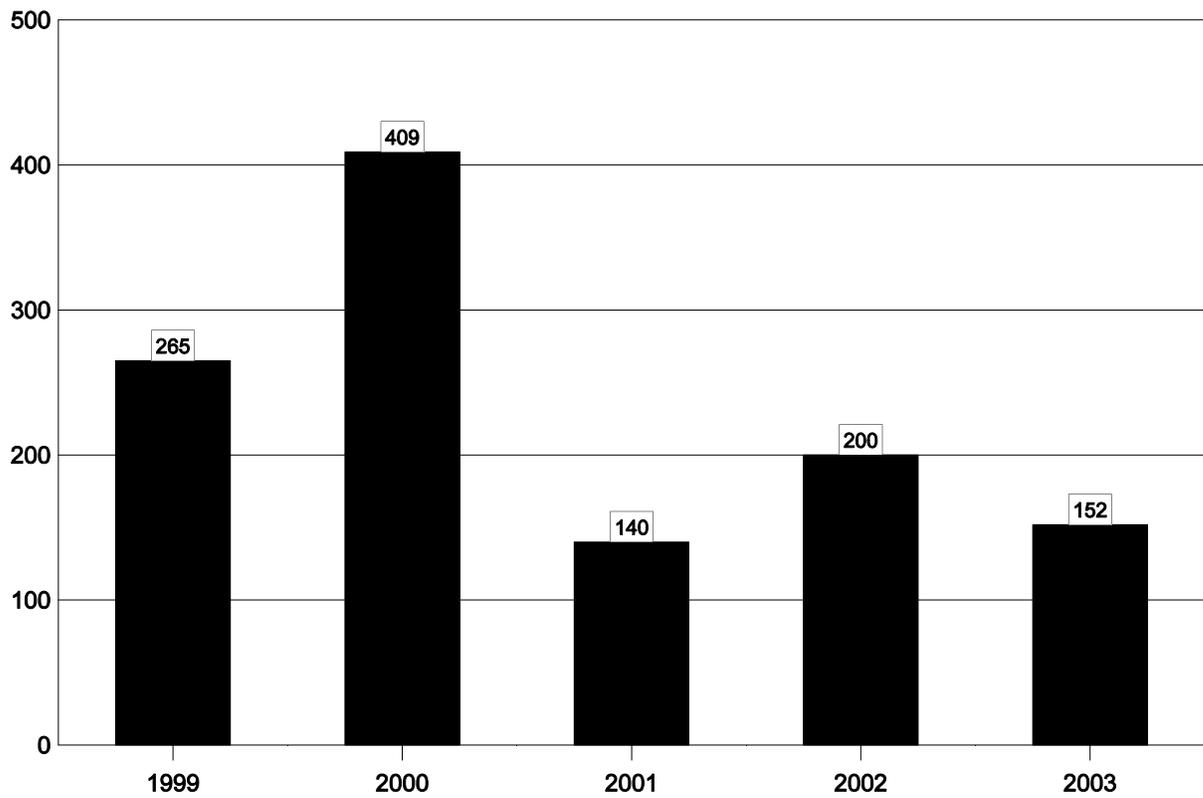


REGIONS 1 - 7

FALSE ALARMS 1999 - 2003

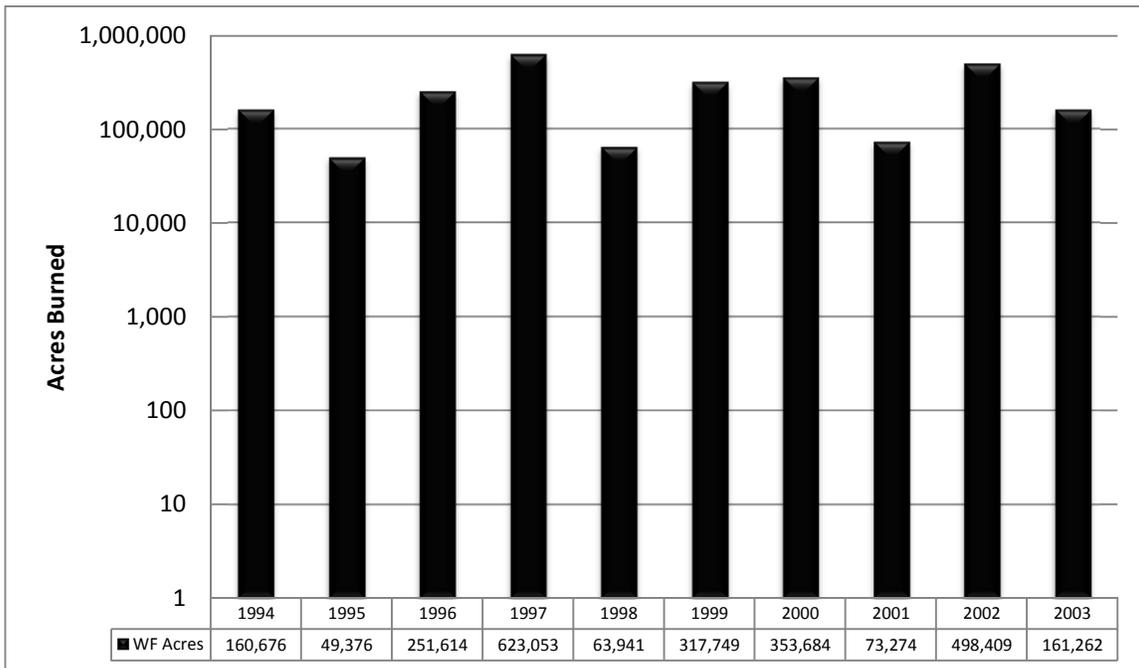
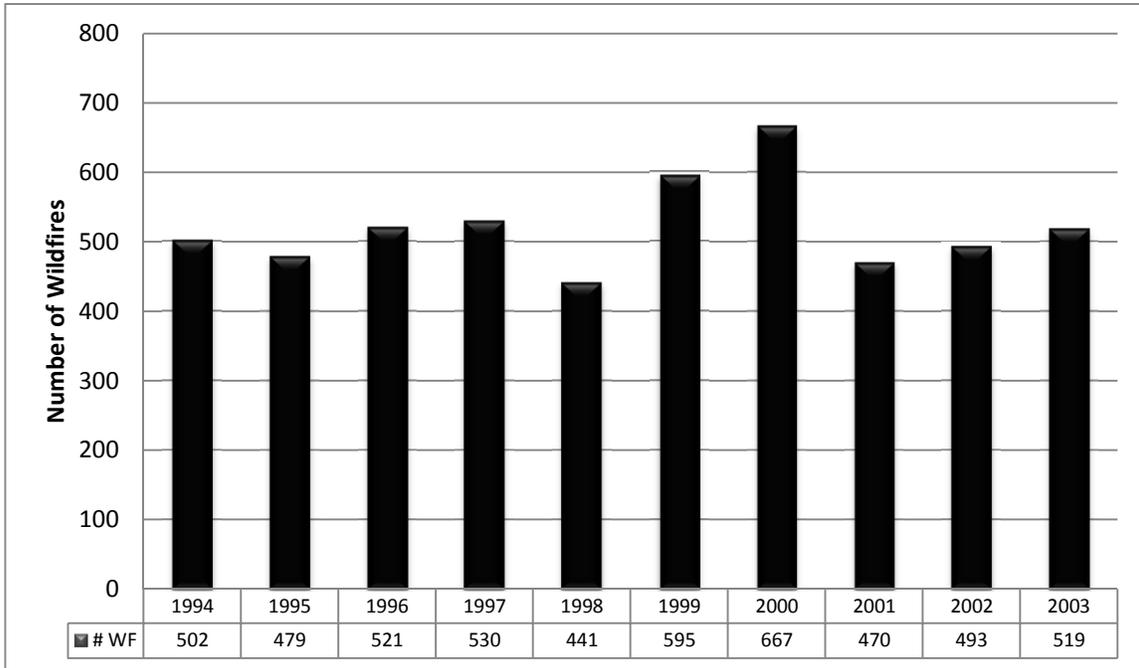


SUPPORT ACTIONS



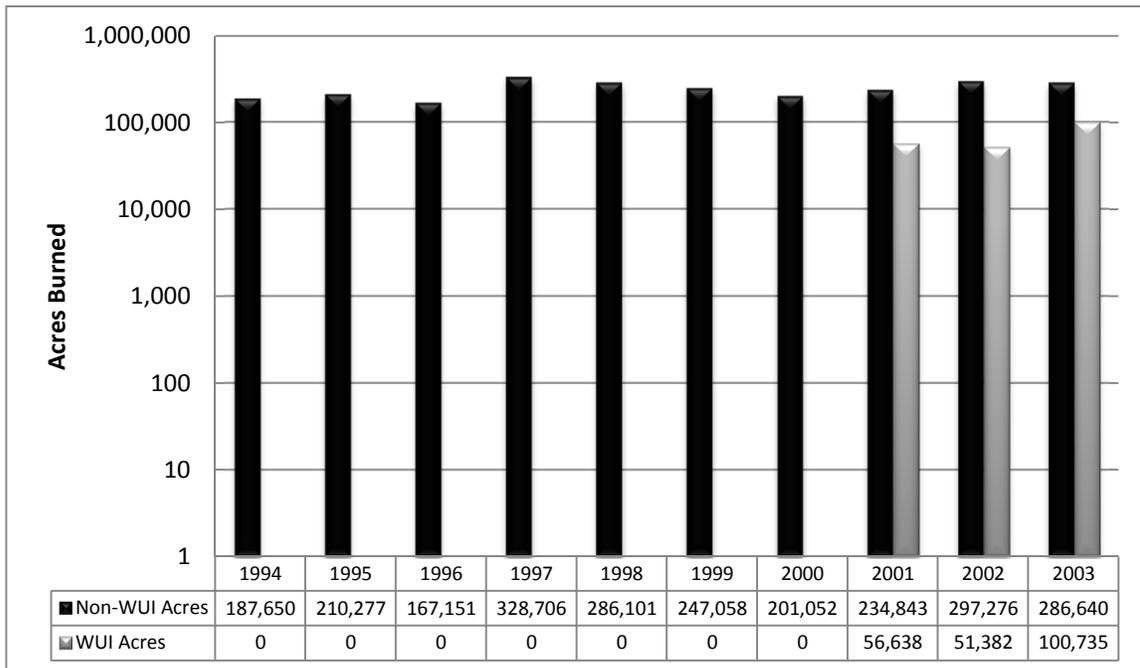
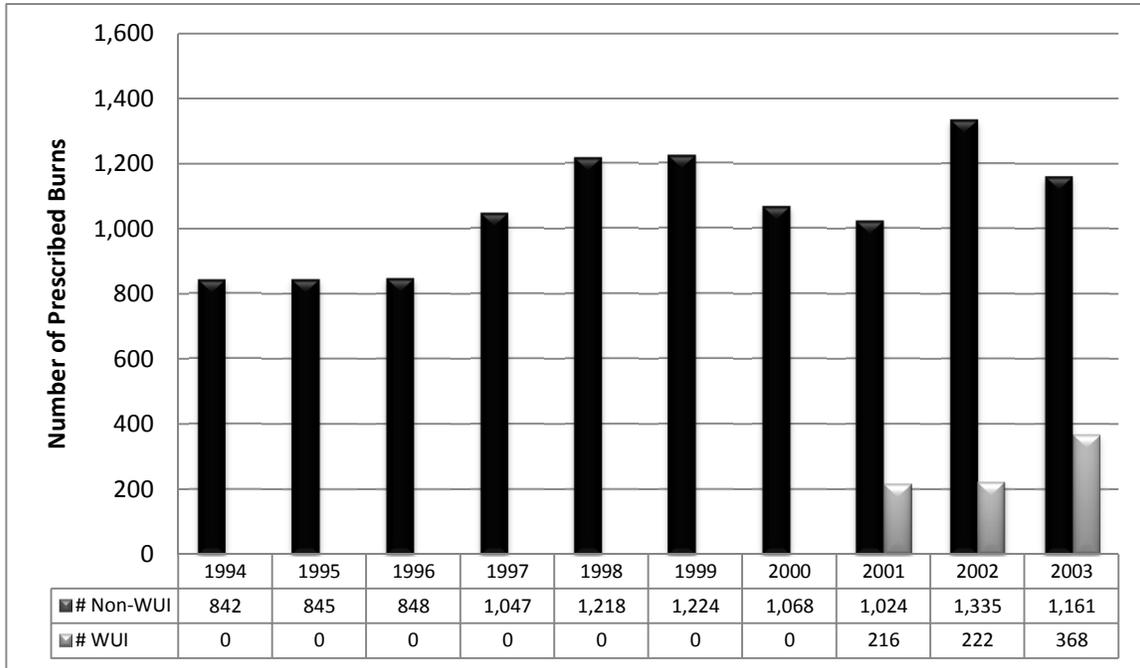
WILDFIRES

1994 - 2003



TREATMENTS

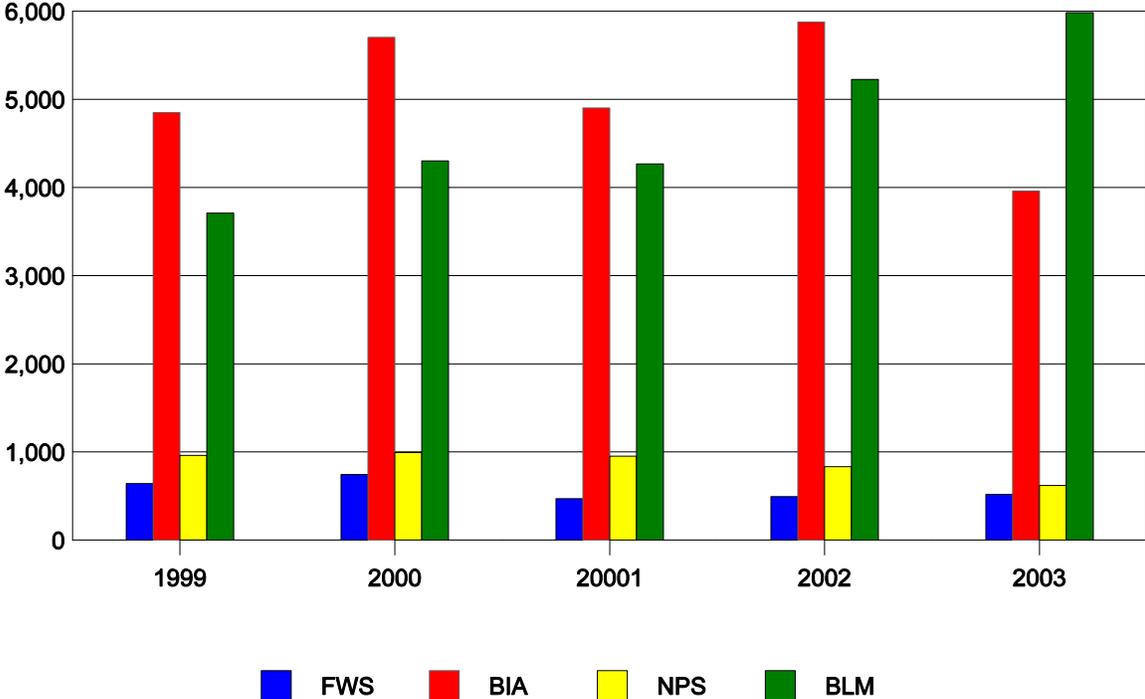
1994 - 2003



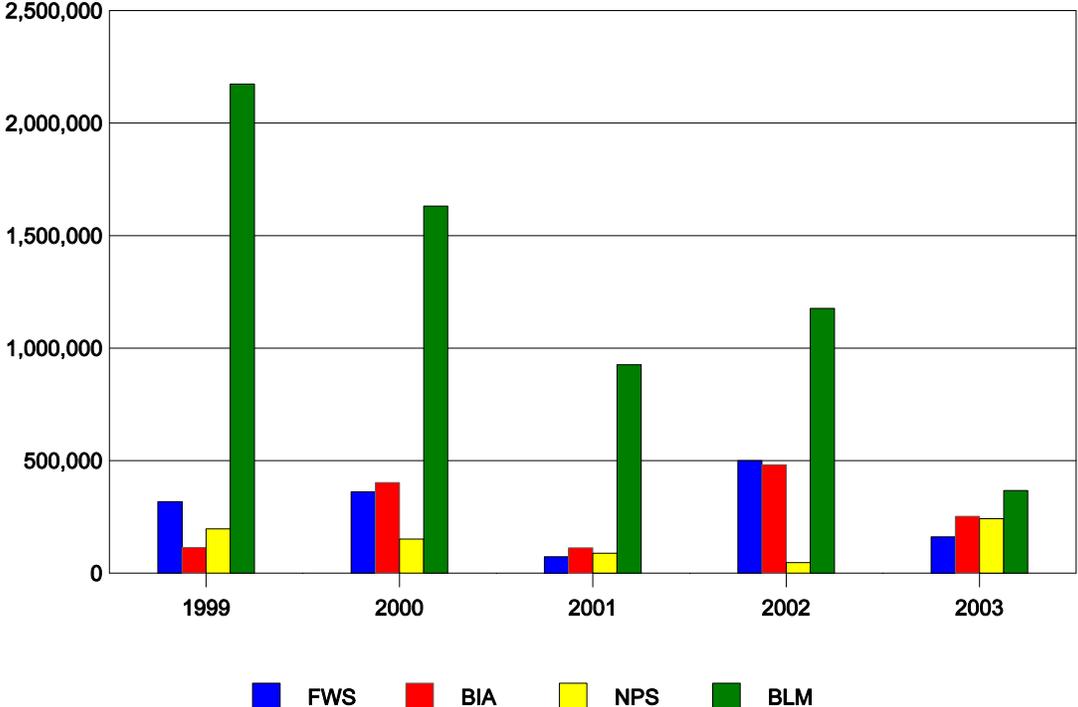
WUI = Wildland Urban Interface

DEPARTMENT OF THE INTERIOR 1999 - 2003

Number of Wildland Fires

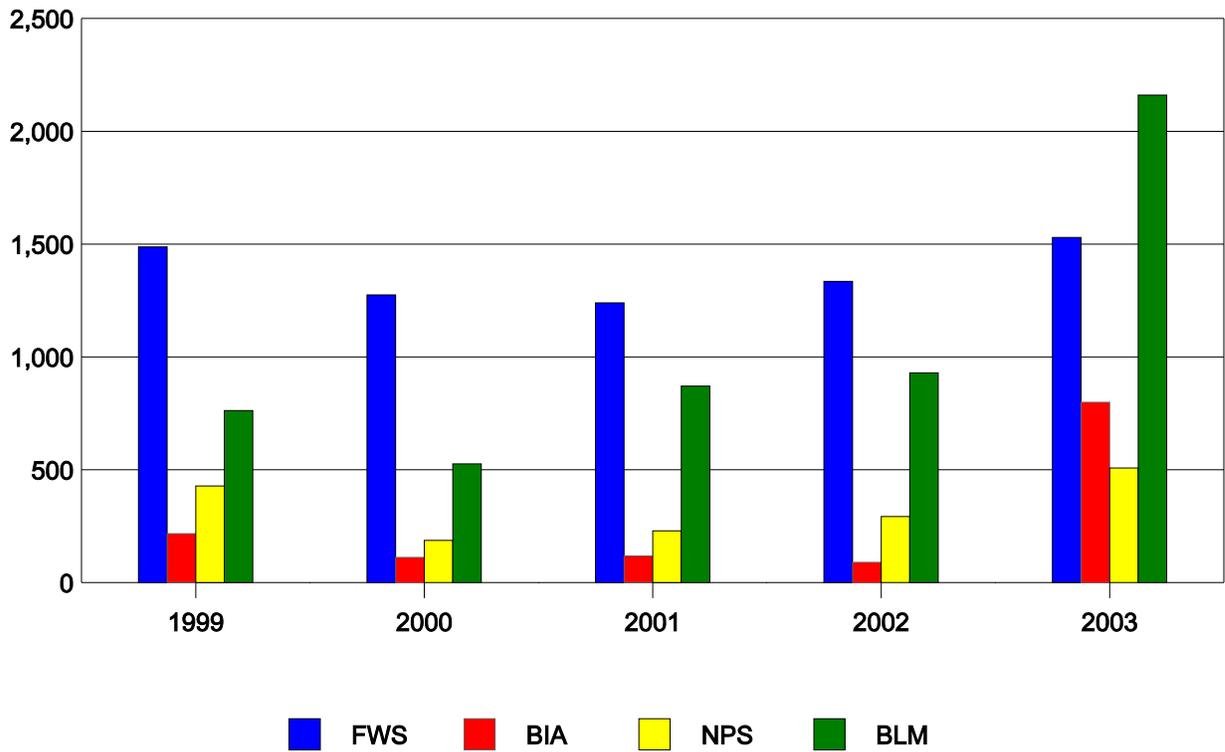


Number of Acres Burned



DEPARTMENT OF THE INTERIOR 1999 - 2003

Number of Treatments



Acres Treated

