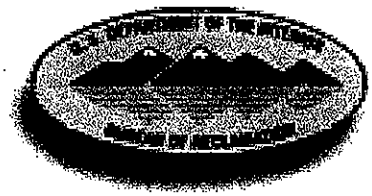
Auburn State Recreation Area
Annual Fire Prevention Plan



By
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(6-29-02)

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INTRODUCTION

The United States Bureau of Reclamation is responsible for the management of the Auburn Dam and Reservoir Project lands, a project originally authorized by Congress in 1965. The total acreage within the project boundary is 42,000 acres. Of this, Reclamation has ownership for approximately 26,000 acres. The remaining acreage is owned by BLM, the United States Forest Service, and private parties. California State Parks and Recreation (CSP) and California Department of Forestry and Fire Protection (CDF) have management authority over all Project lands through cooperative agreements with Reclamation. The total lands are known as the Auburn State Recreation Area (ASRA) and are operated by the State of California as a state recreation area.

The California Department of Forestry and Fire Protection has provided fire prevention and suppression services at the Auburn Dam and Reservoir project lands since 1979. Elements identified in the contract as a part of fire prevention and suppression services involve: 1) plan for fire suppression, 2) patrol the designated areas, 3) operate heavy equipment to construct and maintain fire roads, breaks and to reduce fire fuel, and 4) improve wildlife habitat.

This document will guide the activities of CDF personnel and act as a plan to accomplish fire prevention and pre suppression activities in the Auburn State Recreation Area.

STRATEGY

The strategy involved with identifying fire prevention activities in the ASRA is similar to that of developing a battalion fire prevention plan. The process begins by evaluating historic and potential ignition locations and causes. Identifying the assets at risk from wildfire within and immediately adjacent to Reclamation lands. Evaluating fire history, and evaluating fuels hazards throughout. An additional component involves an assessment from Department of Parks and Recreation resource ecologists to identify ecosystem conditions and what prescribed fire's role would effect.

After combining and evaluating the factors listed, prefire management activities or a prescription will be established in order to mitigate the identified threats, hazards of wildfire ignition, and protect assets at risk from wildfire.

An approach using, "target areas" may be used to assist with focussing efforts, however, as of the time of this document creation, it is not necessary.

VISION STATEMENT

It is important to describe the, "Ideal Condition" of the Reclamation lands receiving fire prevention service. This statement provides the "light at the end of the tunnel", and is the condition which to focus activities towards.

A setting where accomplished fire prevention activities mitigate wildfire ignition and wildfire effect involves: 1) Fuel breaks adjacent to resource and property assets threatened by fire on Reclamation lands, 2) maintained fire roads with safety zones in strategic locations, 3) handline constructed around day use areas/picnic areas throughout the ASRA, 4) maintenance of established fuel breaks 5) fire prevention signage at all use areas throughout the fire season, 6) coordinated forest and fire law enforcement and patrol in all areas of ASRA, 7) establishment of industrial operations guide for industrial operators on Reclamation lands, with enforcement of the regulations within the guide and, 8) continued aggressive fire suppression of wildfires within the ASRA under CDF's operating procedures.

GOAL

To protect life and both public and private resources by reducing the risk and hazard of wildland fire within the Auburn State Recreation Area by implementing management strategies that promote the preservation and restoration of natural resources and protection of cultural resources.

FIRE PLAN ASSESSMENTS

Fire plan assessments influence the prioritization and selection of fire prevention activities. These factors are the proof or statistics supporting prioritization. Not all projects are prioritized based on the assessments, other influences guide projects as well, such as: Politics, past practice, cost and ethics.

Fire Ignition History and Potentials

The leading number of ignitions in the ASRA are categorized as "miscellaneous" causes. Statistically, this information is not of much assistance to the planner, however, the following is. Arson is the second highest cause. Many fires are unidentified, which can be translated to either arson or vehicle caused fires. See Ignitions Map and Cause maps for distribution by cause.

VEHICLES

There are several thoroughfares within the ASRA, Hwy 49, Forest Hill Rd, Yankee Jims Rd, Ponderosa Way, and Auburn Foresthill Rd. These roads provide the highest potential from which, fires may start. The fire ignitions originate from vehicle exhaust, vehicle fires, and arson.

Other vehicle fire potential stems from the recreational vehicle use at Mammoth Bar and traffic leading to it. It is imperative that recreational vehicle exhaust systems be checked for compliance and limited to designate areas. Additionally, it must be mentioned, there has not been a recorded fire starting from a recreational vehicle within the Mammoth Bar OHV area. This displays the effectiveness of managed recreational use and adequate engineering to prevent fires from the OHV area.

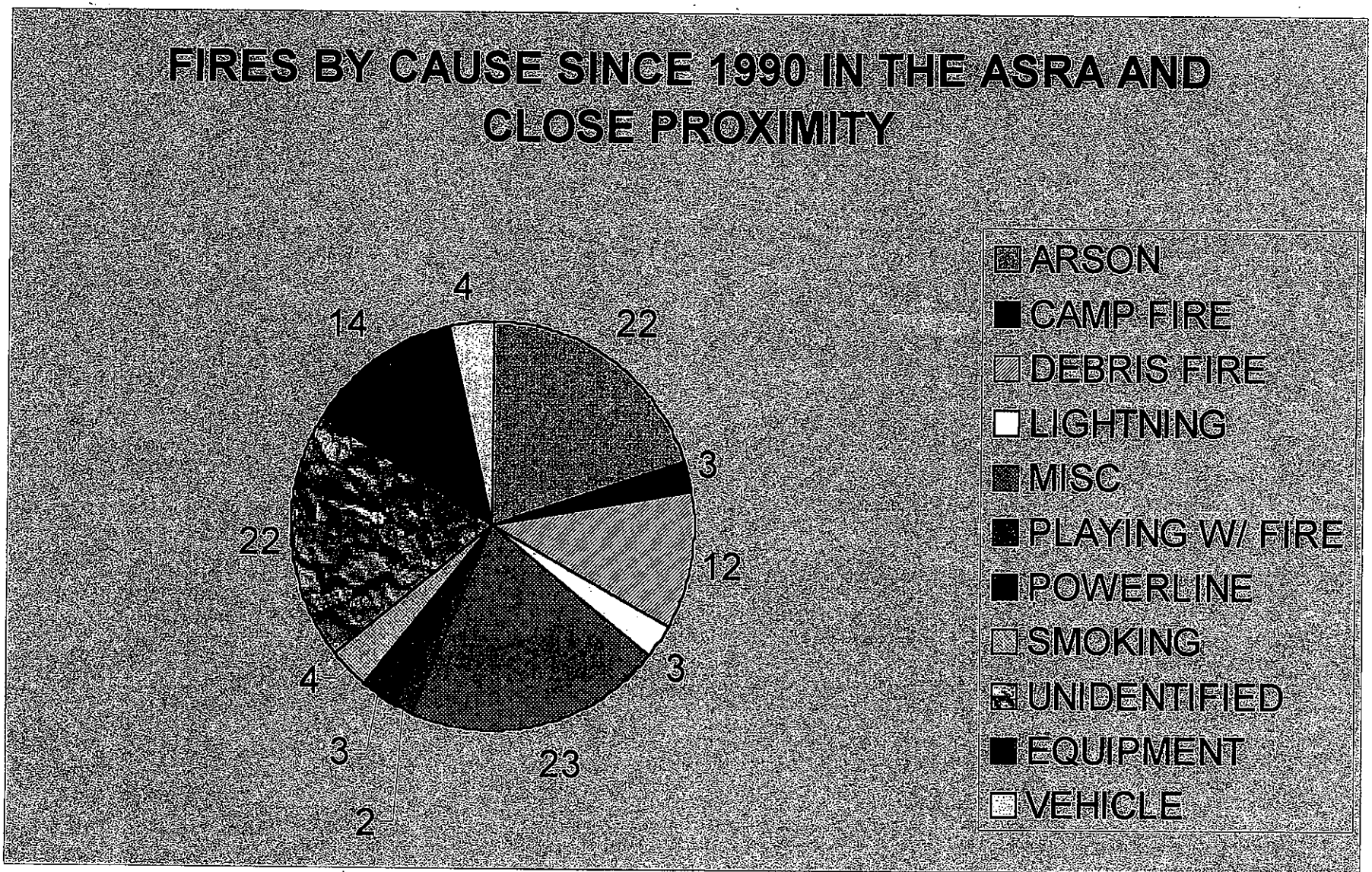
POWERLINES

Another potential ignition source exists from power line system within the ASRA. 3% of fires in the ASRA has been a result of powerline caused fires, however, these fires contribute a high percentage of acres, relatively, to the overall acres burned over the last twenty years. The ASRA contains both transmission and distribution lines, which must be inspected annually.

RECREATIONAL

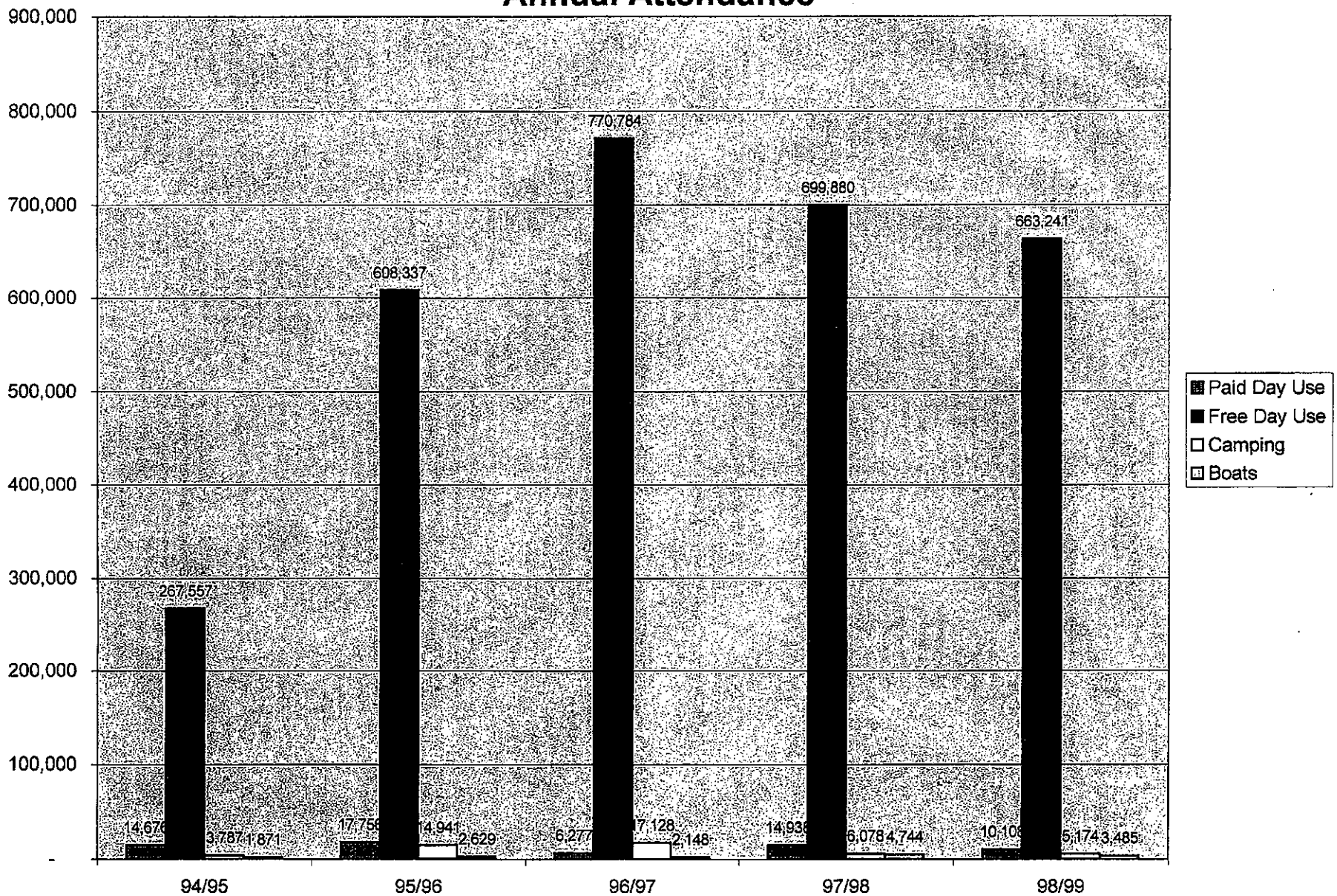
Wherever there are human activities, the potential for fire exists. The ASRA provides recreation opportunities, which enable people to venture into the wildland by vehicle, foot, and other non-conventional means. Although, there is not a high quantity of fires starting from people hiking, fishing, bike riding, horse back riding and rafting, uneducated people burning toilet paper, sparks from horseshoes striking rocks, and illegal warming fires create the potential for fire

FIRES BY CAUSE SINCE 1990 IN THE ASRA AND CLOSE PROXIMITY



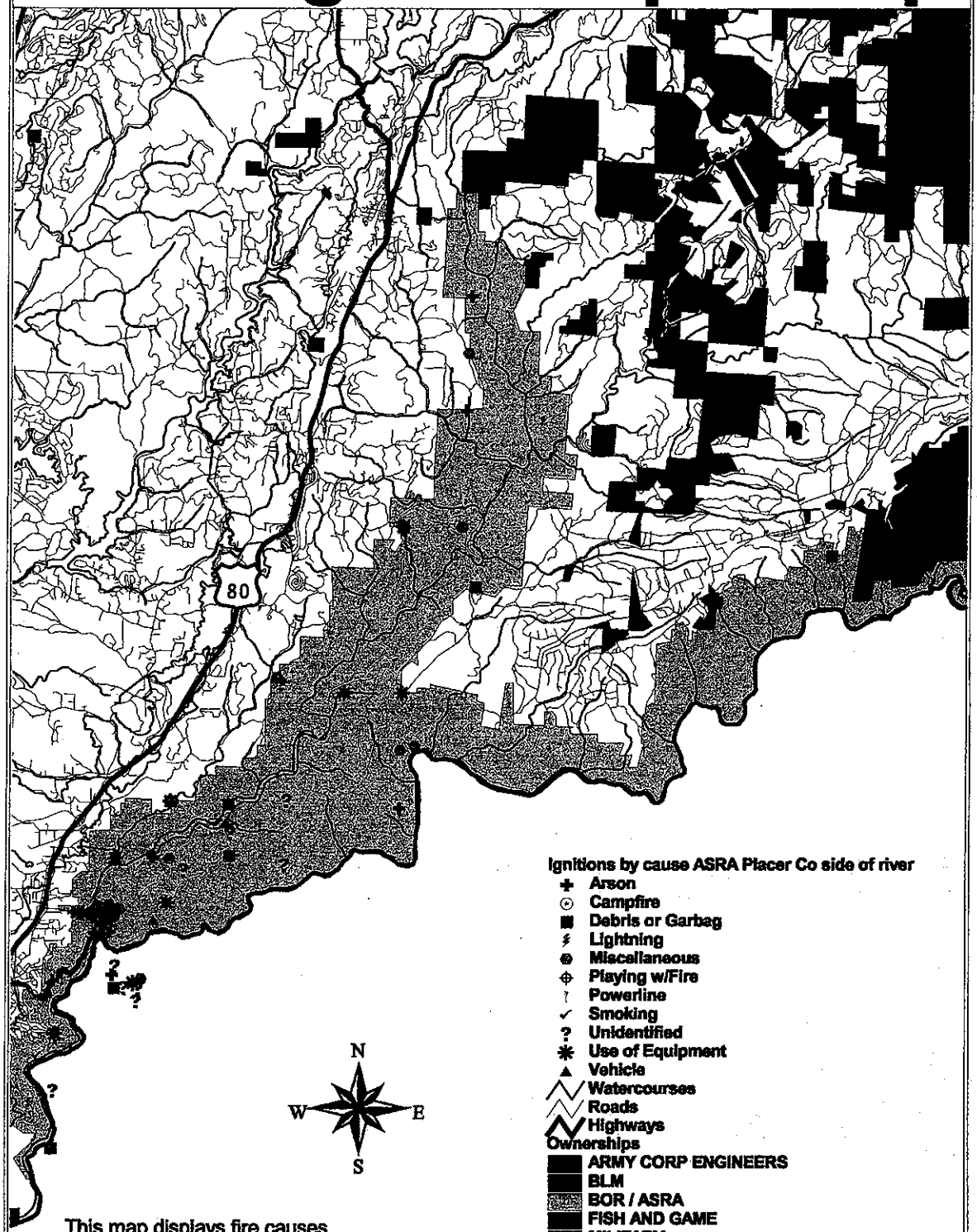
It is important to note, these figures are skewed high, as these numbers reflect many fires outside of the Auburn State Recreation Area. Technological issues prohibit more accurate details. These figures are relatively close, and are generalities.

Auburn State Recreation Area
Annual Attendance



98/99 does not include May or June, average of past years is 151,572 added to current figure will bring total to 814,813

ASRA Ignition Spot Map



Ignitions by cause ASRA Placer Co side of river

- Arson
- Campfire
- Debris or Garbag
- Lightning
- Miscellaneous
- Playing w/Fire
- Powerline
- Smoking
- Unidentified
- Use of Equipment
- Vehicle
- Watercourses
- Roads
- Highways

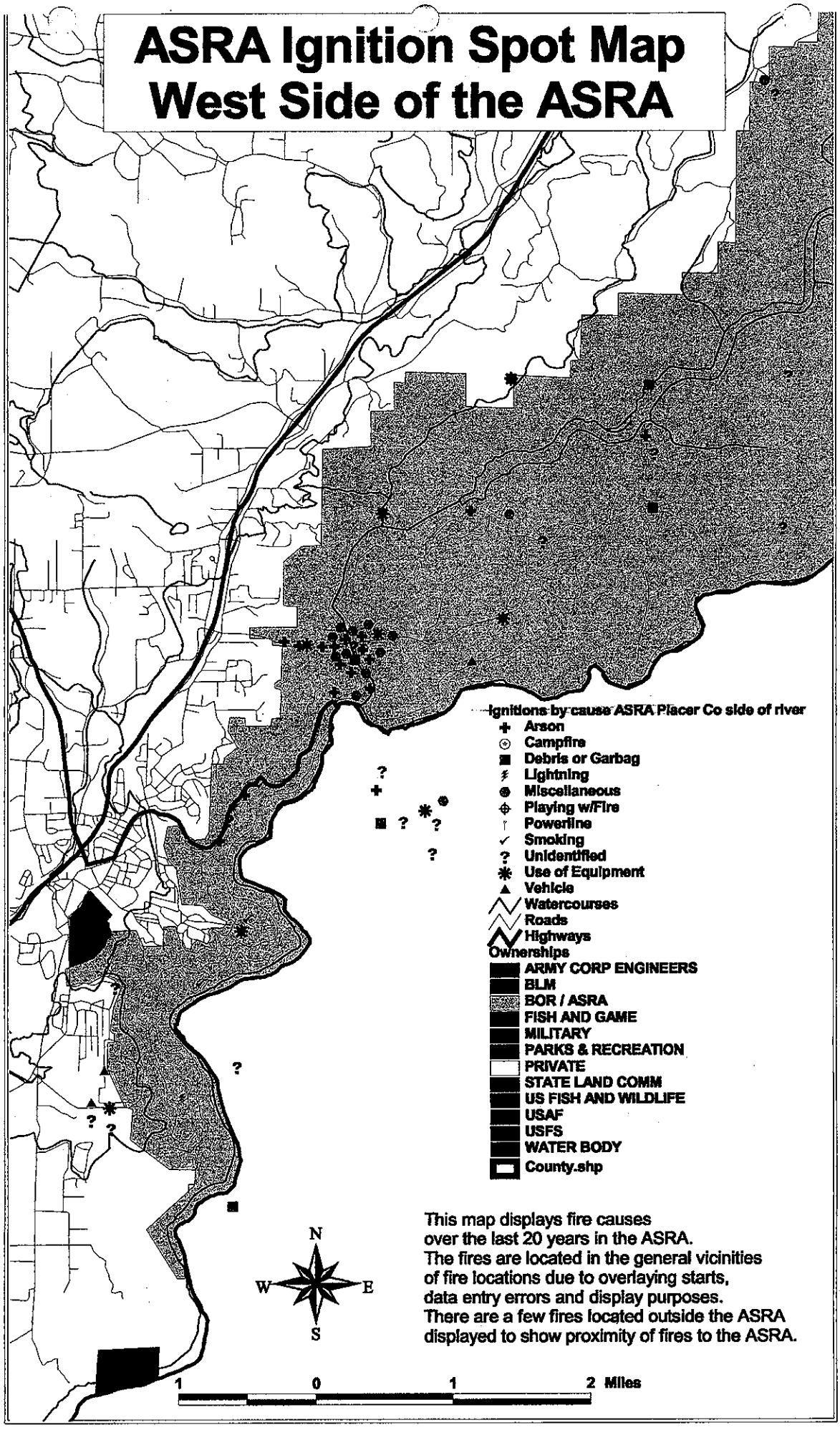
Ownerships

- ARMY CORP ENGINEERS
- BLM
- BOR / ASRA
- FISH AND GAME
- MILITARY
- PARKS & RECREATION
- PRIVATE
- STATE LAND COMM
- US FISH AND WILDLIFE
- USAF
- USFS
- WATER BODY
- County.shp

This map displays fire causes
over the last 20 years in the ASRA.
The fires are located in the general vicinities
of fire locations due to overlaying starts,
data entry errors and display purposes.
There are a few fires located outside the ASRA
displayed to show proximity of fires to the ASRA.

4 0 4 8 Miles

ASRA Ignition Spot Map
West Side of the ASRA



This map displays fire causes
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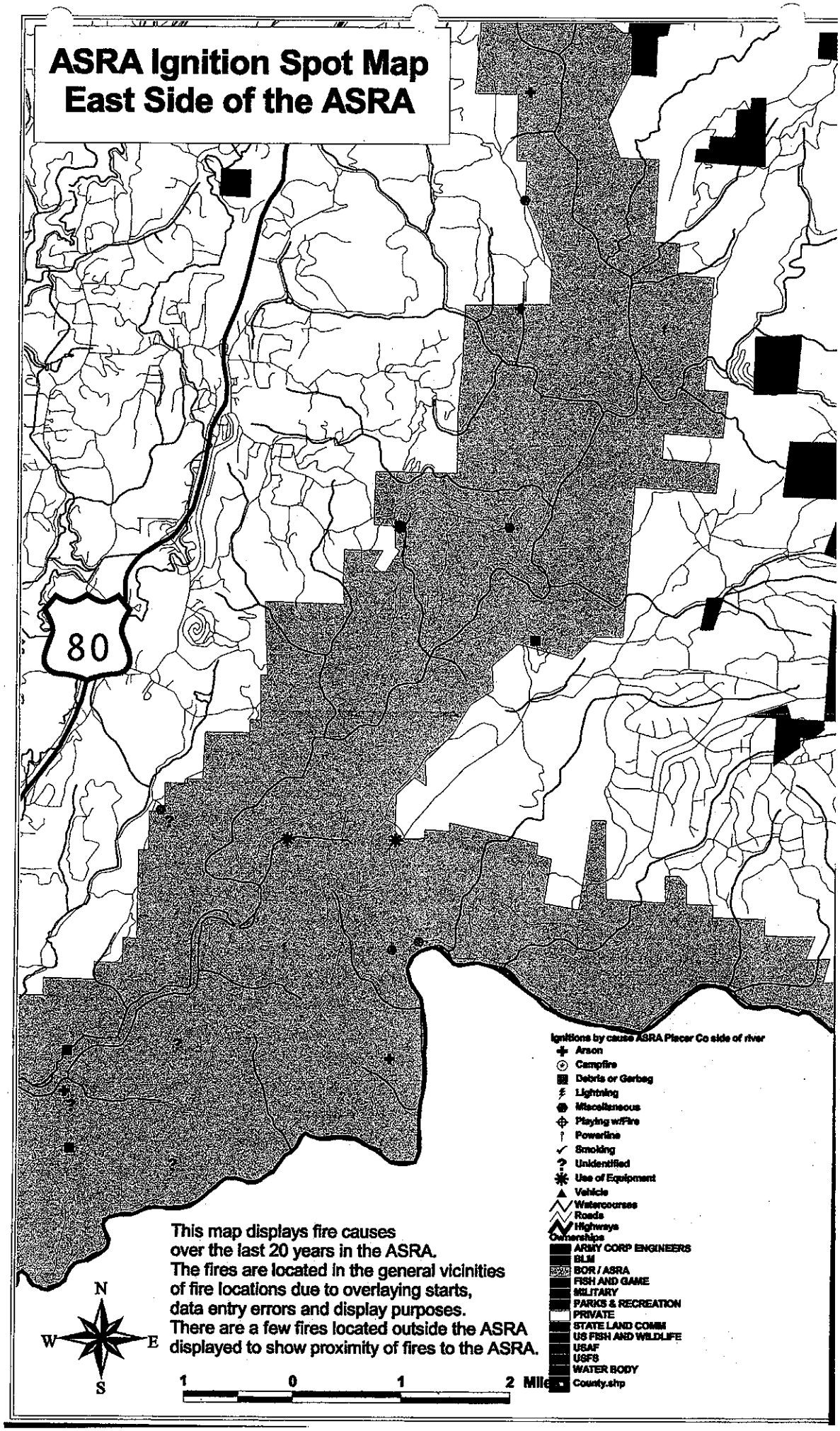
There are a few fires located outside the ASRA
displayed to show proximity of fires to the ASRA.

ASRA Ignition Spot Map
East Side of the ASRA



This map displays fire causes
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The fires are located in the general vicinities
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There are a few fires located outside the ASRA
displayed to show proximity of fires to the ASRA.

ignitions. Fires started by these sources may be difficult to access by firefighting personnel, thus the fires get to extended attack and major status. The Ignitions Spot Map displays the pattern of fire causes and their relative location. It is obvious that many fires originate around the "confluence" and the Forest Hill Bridge. These areas will receive, as they have in the past, high fire prevention attention.

It is important to note that since 1990 there have been approximately 100 fires in the ASRA, while the ASRA has received extremely high visitation. The ASRA received 287,891 visitors in fiscal year 1994-1995 and has steadily increased to 987,971 visitors in fiscal year 2000-2001. The ratio of fire starts to visitors is very low. Much of this success is related to managed recreational use and steady fire prevention efforts. (See Ignition Spot Map).

Assets at Risk

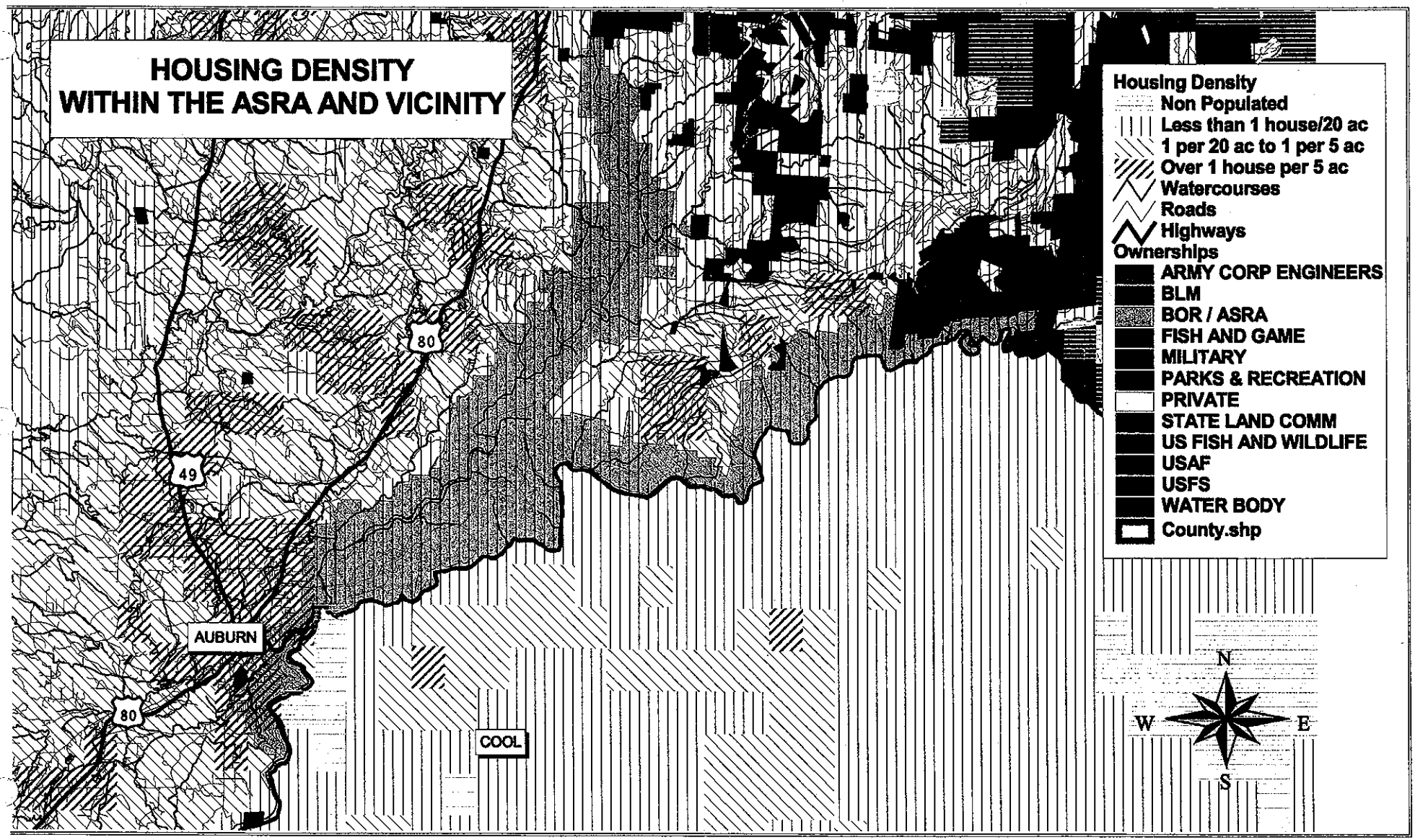
Assets at risk in the ASRA involve natural resources and private properties in the form of residential structures and the lives of the people living in them. Structures located within the ASRA and whose residential properties adjoin the property with Reclamation lands are threatened by fire originating from the ASRA. On the other hand, natural resources are threatened by fires originating from those same structures. These interface lands create a significant management issue and will be addressed later in this document (see Housing Density Map). Reduction and quick control of unwanted fires protects these assets.

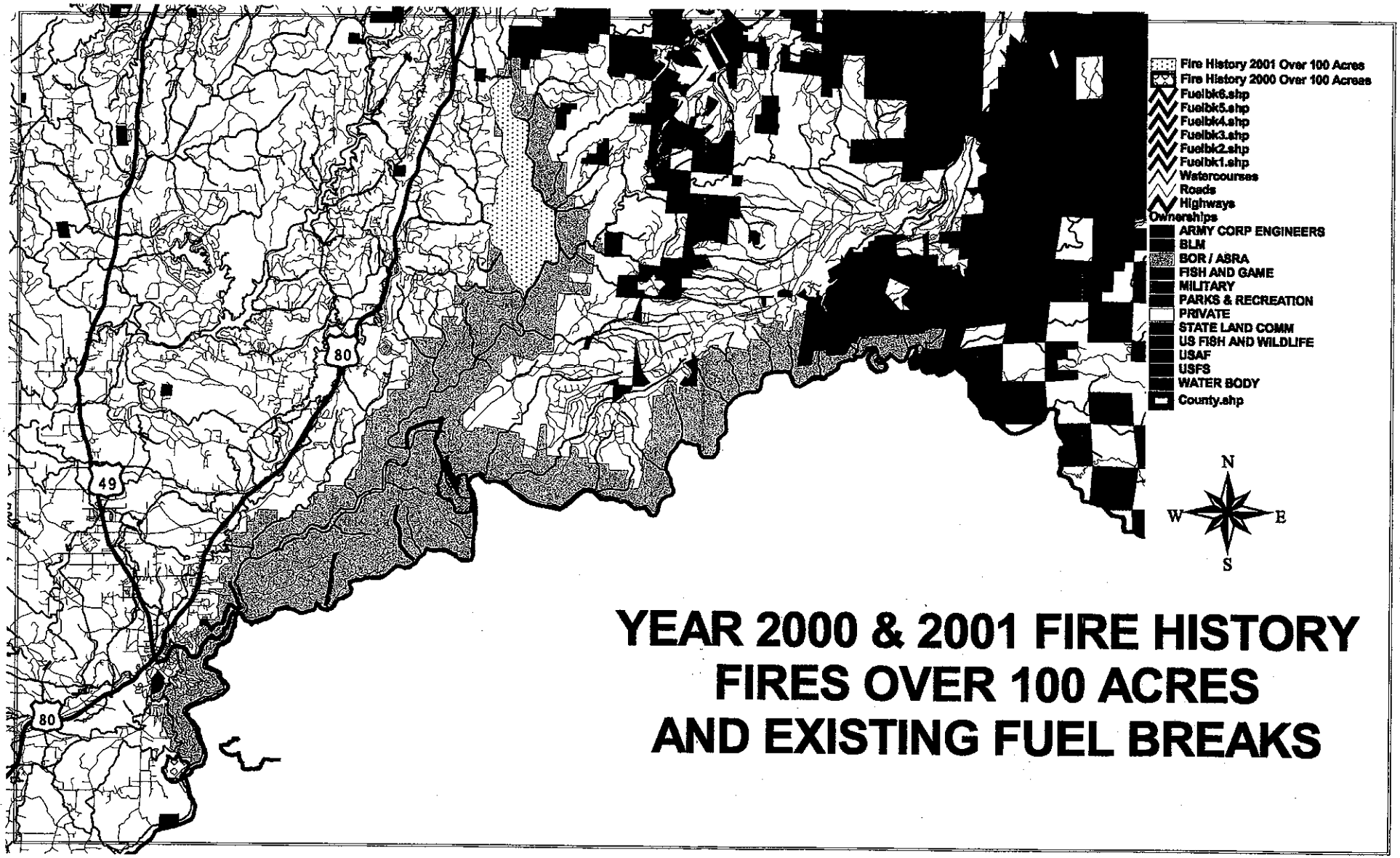
The location of highest structural risk involves the structures on the canyon rim in the City of Auburn and unincorporated areas down canyon and up canyon of the City. These residential properties share boundaries with the Reclamation lands and thus are directly influenced by wildfire originating on Reclamation lands.

The location of second highest priority involves the interface at the community of Cool in El Dorado County. This community has a moderate housing density and is also an exposure to wildfire burning out of the ASRA and into the community as does the threat from fire burning into the ASRA from the community. There is a process of further developing and maintaining a fuel break on the canyon rim adjacent to Cool primarily being performed by the CDF battalion chief in Amador –El Dorado Unit who has the Cool are in his/her battalion.

Wildfire History

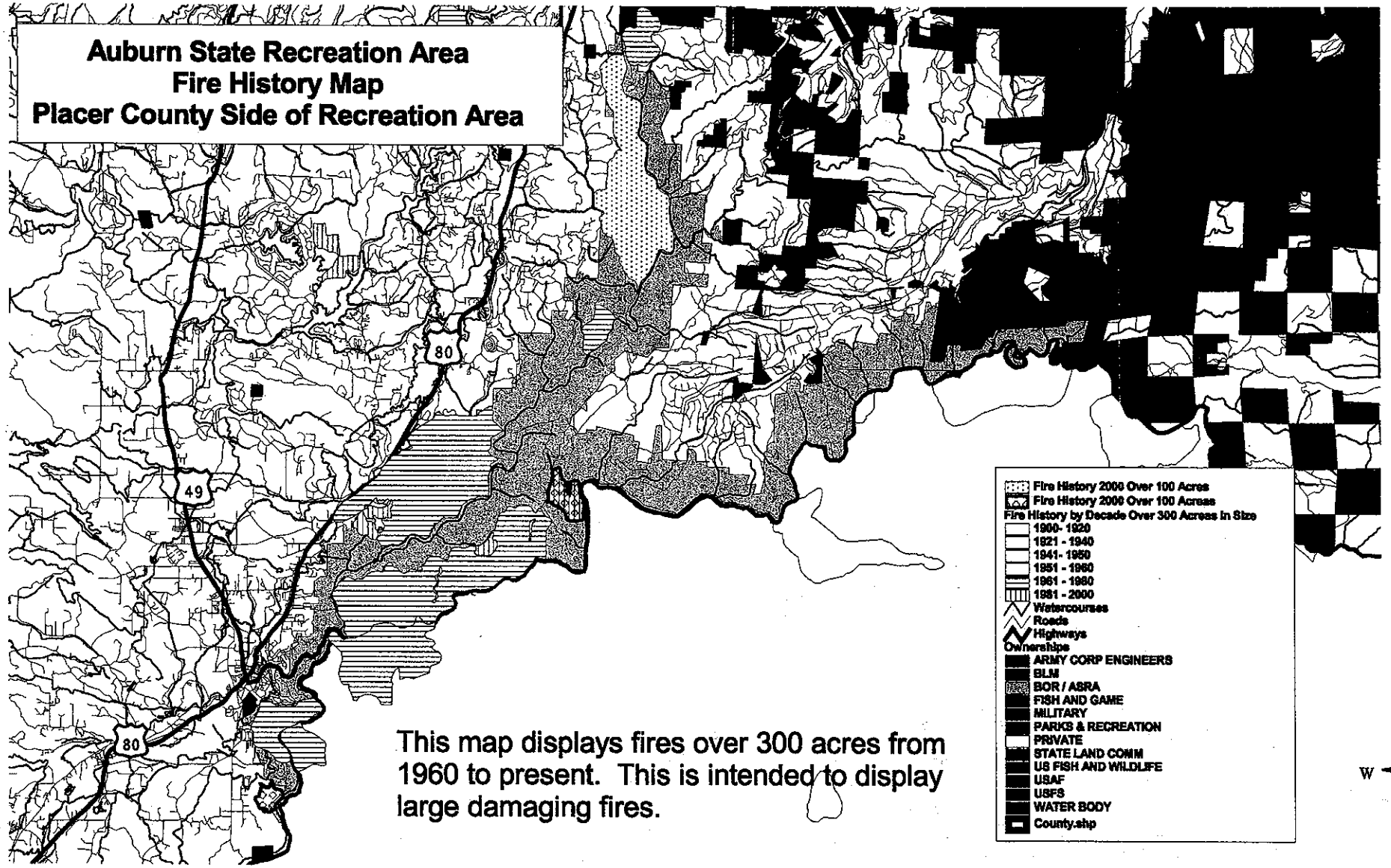
Unfortunately, the fire history map in this document includes fires over 300 acres in size, however, the ignition spot map may be used to identify fire frequency. The benefit of the fire history map relates to the frequency of large damaging wildfires in the ASRA. Another aspect of the map reveals where fire has not


HOUSING DENSITY
WITHIN THE ASRA AND VICINITY
Housing Density
Non Populated
Less than 1 house/20 ac
1 per 20 ac to 1 per 5 ac
Over 1 house per 5 ac
Watercourses
Roads
Highways
Ownerships
ARMY CORP ENGINEERS
BLM
BOR / ASRA
FISH AND GAME
MILITARY
PARKS & RECREATION
PRIVATE
STATE LAND COMM
US FISH AND WILDLIFE
USAF
USFS
WATER BODY
County.shp
80
49
AUBURN
80
COOL
N
W
E
S



YEAR 2000 & 2001 FIRE HISTORY FIRES OVER 100 ACRES AND EXISTING FUEL BREAKS

Auburn State Recreation Area
Fire History Map
Placer County Side of Recreation Area



This map displays fires over 300 acres from 1960 to present. This is intended to display large damaging fires.

occurred, which identifies the build up of fire fuels, which identifies the potential for large damaging fires. Another aspect of the map reveals the dependence that fire suppression resources put on stopping fires at the ridge tops. This information is useful while interpreting future and existing fuels management projects to other agencies and citizens.

Fuel Hazard

The Fuel Hazard map displays fuel hazard status to the nearest 450 acres. Although, this map does not reflect fuels management activities, it can display the current status over the general area and show what the vegetation potential is. The last fires to burn in the ASRA having significant vegetation impacts were in the 1960s, yet the fuels status are high and very high. If correlated with the fire history map, the amount of fire fuels build up from a lack of fire is also evident.

Wildlife Habitat

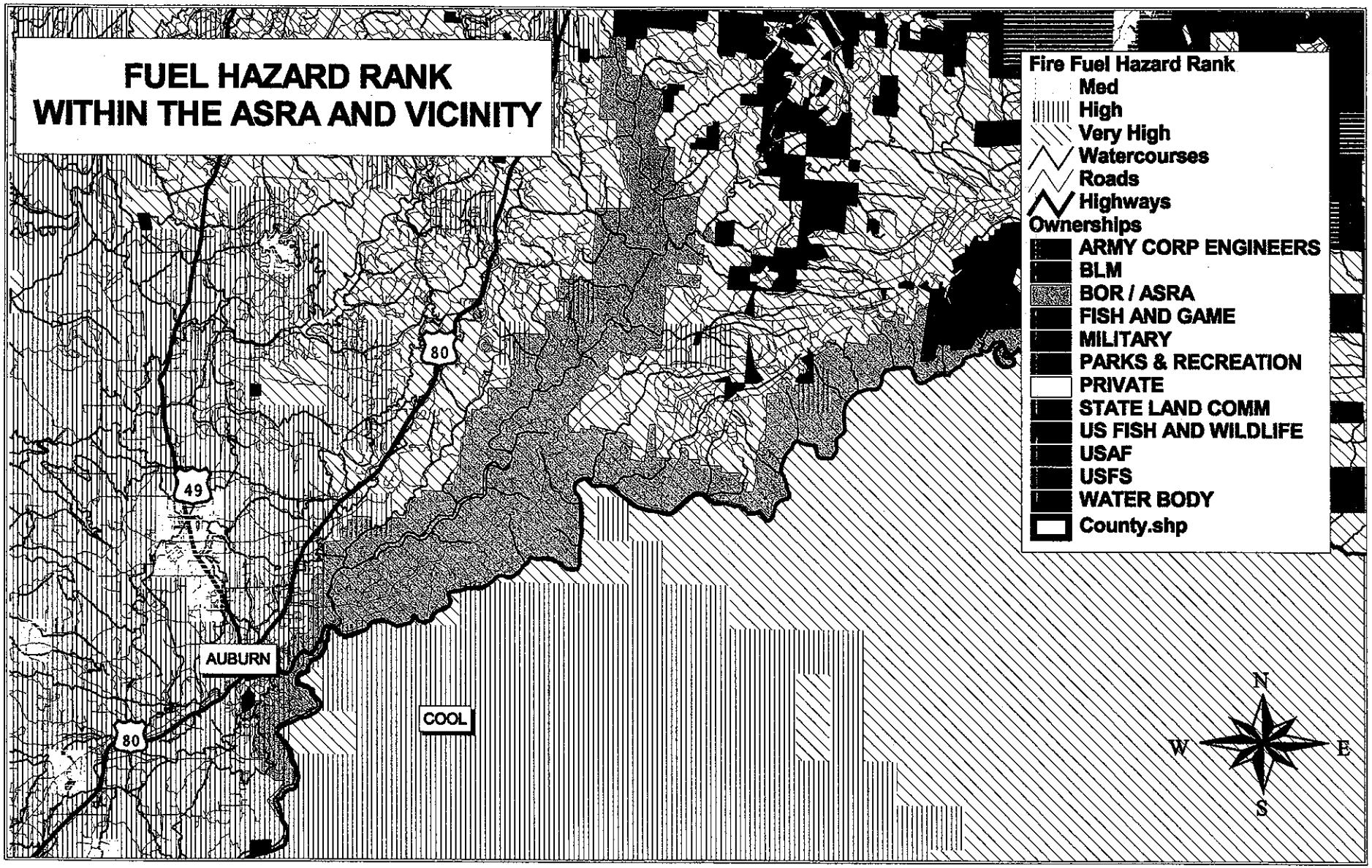
The most effective method of restoring the ecosystem to its original state is to reintroduce fire into the ecosystem. This creates edge, diversity, and reestablished native plant and animal species. The additional benefit is a reduced fuel load assisting fire suppression forces during wildfire events. Identify on map. State Parks resource ecologists have been consulted to provide information regarding potential projects involving prescribed fire and any favorable locations to burn. Although, a response to my request for input for relating to potential controlled burn locations has not been received, coordination efforts will me continued with CSP resource ecologists.

LAW ENFORCEMENT

There will be a continuous effort to enforce the Public Resources Code in the ASRA for both planned activities and patrol. Additional laws will be enforced as encountered by the Captain Specialist, such as Penal and Fish & Game Codes. Federal codes may be enforced in the ASRA as the lands are federal.

The Fire Captain Specialist will perform routine patrol of day use areas and popular visitation areas throughout the park. This will be accomplished through aircraft, vehicle, off road vehicle and foot access. Close coordination will occur with State Parks Personnel during many contacts with violators and law enforcement operations.

As per the Industrial Fire Prevention Guide established by the Captain Specialist, all commercial, recreational and industrial projects will be reviewed for fire prevention standards. Inspections of industrial and recreational equipment will


FUEL HAZARD RANK
WITHIN THE ASRA AND VICINITY
Fire Fuel Hazard Rank
Med
High
Very High
Watercourses
Roads
Highways
Ownerships
ARMY CORP ENGINEERS
BLM
BOR / ASRA
FISH AND GAME
MILITARY
PARKS & RECREATION
PRIVATE
STATE LAND COMM
US FISH AND WILDLIFE
USAF
USFS
WATER BODY
County.shp
80
49
AUBURN
COOL
80
N
W
E
S

be conducted and documented. Red tags will be used to put equipment out of service, if necessary.

Recreational vehicles are subject to inspection, and will be a target of inspection. The Mammoth Bar OHV area is a managed OHV area that receives much attention form state park rangers. Coordination for vehicle inspection is necessary, as to not duplicate efforts and to maintain efficient law enforcement.

Private lands within the ASRA are subject to PRC regulations. Enforcement of the PRC will be a priority on those private lands within the boundaries of the ASRA. The goal is to reduce fire threats to the ASRA wildland.

ENGINEERING

Fire prevention engineering is the most influencing factor relating to protecting assets at risk from wildfire. Engineering involves the creation of fuel breaks, fire breaks, fire road construction, and other fuels management activities. *CDF's primary prefire engineering fuel break strategy involves two objectives: Protect assets at the canyon rims, and inhibit fire from spreading up and down the river canyons.* There is an existing system of fuel break throughout the ASRA (see Fuel Break Map), which are designed behind this philosophy. They are listed below. Both shaded and unshaded fuel breaks are evaluated for condition and need on an annual basis. The establishment of new fuel breaks is also an evolving process, which is paced by resource availability and future maintenance capabilities. There are two wildland-urban interface shaded fuel breaks proposed in the ASRA. The Auburn Shaded Fuel Break is proposed to stretch along the canyon rim adjacent to the City of Auburn, and the Auburn Lake Trails Fuel Break is proposed to rest along the canyon rim and adjacent to the community of Auburn Lake Trails. Work on the Auburn Fuel Break is scheduled to start in May of 2002 while the Auburn Lake Trails Fuel Break is proposed to begin in 2003.

Fire roads are also an integral part of prefire engineering. The fire road system in the ASRA is intended to provide access for fire suppression crews to areas difficult to access. Additionally, the fire road system provides, to a lesser extent, fire break benefits when applicable. The fire roads are incorporated into wildfire preplanning and tactics while fighting wildfire. Fire roads within the ASRA are maintained by CDF, and are evaluated annually. The fire roads within the ASRA are listed below. (See Fire Road Map for correspondence)

Prescribed burning is another tool used as a prefire engineering mechanism, which modifies fuels into a less hazardous loading and provides wildlife habitat conditions favorable to early stage succession. With the exception of the, "Bridge Burn" controlled burn planning is evolving. In terms of strategic planning

for prescribed burns, effort will focus on wildlife habitat improvement, exotic weed control and fire fuels reduction. With the evolution of this document, future editions will identify the strategic use of controlled burning.

FUEL BREAKS IN THE ASRA (Does not include trails)

NAME	LOCATION	NUMBER
Long Point Fuel Break	Upper end of Lake Clem, South of river	1
Drivers Flat	Drivers Flat road area south of Long Point	2
Brushy Mtn	Along Brushy creek down to Middle Fork	3
Mammoth Bar	Connects Forest Hill Rd & Mammoth Bar	4
Auburn Shaded Fuel Break	Along canyon rim/ Auburn City	5
Auburn Lake Trails Fuel Break	Along canyon rim/ Auburn Lake Trails	6

FIRE ROADS

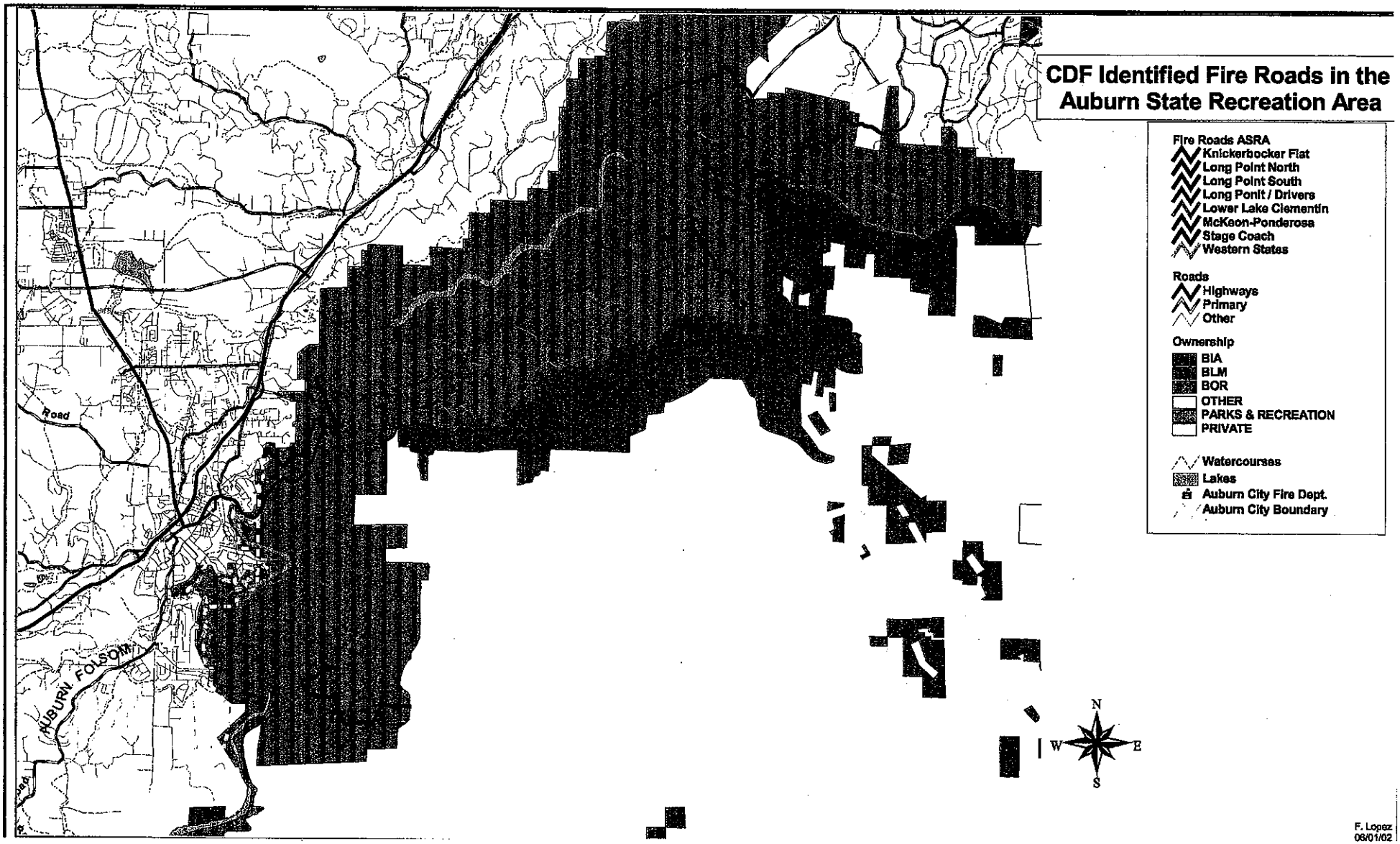
NAME	LOCATION	NUMBER
Stage Coach	Under Forest Hill Bridge	1
Drivers Flat	Drivers Flat to river canyon	2
McKeon- Ponderosa	Middle fork to Ponderosa Rd	3
Lake Clementine Access	Lower Lake Clem Rd to middle of Lake	4
Knickerbocker Flat	Olmstead Loop trail, Cool	5
Long Point South	Forset Hill Rd to Mid Fork Am Rvr	6
Long Point North	Forset Hill Rd to N. Fork Am River	7
Western States	Hwy 49 under Robie Point	8

INFORMATION/EDUCATION

Information and education is a necessary tool to the prevention of fire within the ASRA. CDF will be proactive in attempts to reach visitors to the ASRA. The primary method of information will come form sign posting. Non traditional sign locations will be identified and posted. The public contact made by the fire captain specialist will be a major educational component, and when necessary, media releases will be made through radio and newspapers.

MAPS

Ignition Spot Maps
Housing Density Map
Fuel Hazard Map
Fire History Map
Fuel Breaks
Fire Access Roads
Auburn State Recreation Area Trails Map


CDF Identified Fire Roads in the Auburn State Recreation Area
Fire Roads ASRA
Knickerbocker Flat
Long Point North
Long Point South
Long Ponit / Drivers
Lower Lake Clementin
McKeon-Ponderosa
Stage Coach
Western States
Roads
Highways
Primary
Other
Ownership
BIA
BLM
BOR
OTHER
PARKS & RECREATION
PRIVATE
Watercourses
Lakes
Auburn City Fire Dept.
Auburn City Boundary
Road
AUBURN FOLSOM
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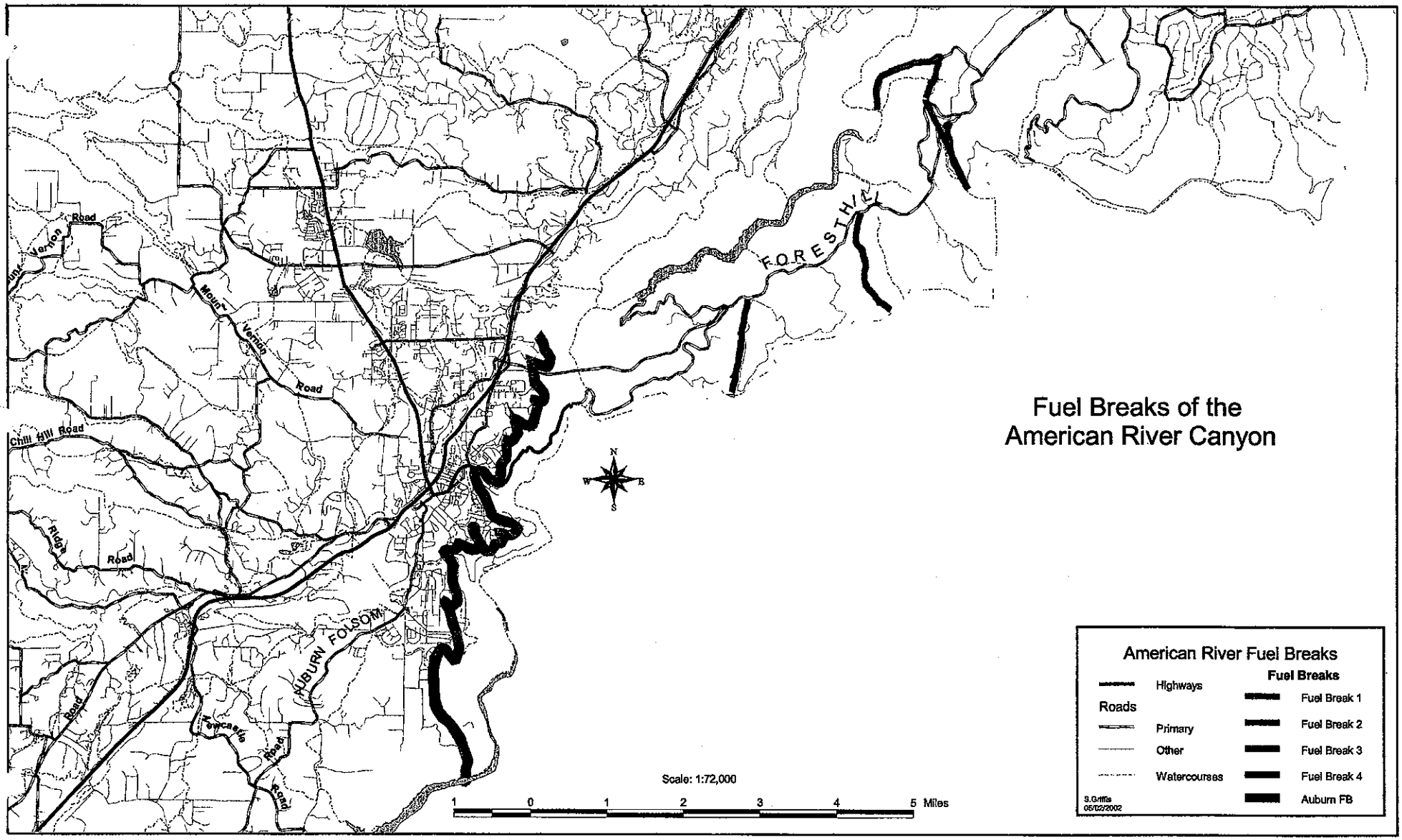
Fuel Breaks of the
American River Canyon
FORESTHILL
AUBURN FOLSOM
Mount Vernon Road
Chili Hill Road
Ridge Road
Road
Scale: 1:72,000
1 0 1 2 3 4 5 Miles
N
W
E
S
American River Fuel Breaks
Roads
Highways
Primary
Other
Watercourses
Fuel Breaks
Fuel Break 1
Fuel Break 2
Fuel Break 3
Fuel Break 4
Auburn FB
S.Griffa
05/02/2002

YEAR 2002
FIRE PREVENTION PLAN

There are four elements of wildfire fire prevention: Law Enforcement, engineering, education, and volunteerism. This plan will categorize activities within these four elements.

LAW ENFORCEMENT

PATROL

Law enforcement patrols will occur throughout the ASRA, although, high priority areas will receive more frequent patrol, all areas of the park will be patrolled. High priority patrol areas include: **River confluence, Lake Clementine (upper and lower), down river of confluence, and Mammoth Bar.** These areas receive the majority of visitation during the summer and have a history of fires.

Priority
H__X__
M_____
L_____

There will be coordinated patrol efforts between state park rangers and CDF (P2323). Often the need arises for hike in contacts or high-risk contacts, where back up and more officers are necessary to make contact with violators. As these situations arise without notice, the mutual aid efforts are developed as needed.

There is intent to have 4th of July patrols throughout the recreation area, with the high use/priority areas receiving the majority of attention. Law enforcement operation will involve surveillance and high visibility patrols. This effort will be coordinated with other law enforcement agencies.

Priority
H__X__
M_____
L_____

INSPECTIONS

There will be a meeting between PG&E and CDF to identify distribution and transmission lines throughout the ASRA. These lines will be inspected for PRC 4292 and 4293 compliance. All lines on private lands within the ASRA will also be subject to inspection. Violations will be documented and handled throughout the fire prevention bureau's notification or citation process.

Priority
H__X__
M_____
L_____

There will be inspections of all commercial, industrial and recreational projects within the ASRA for PRC compliance and compliance with the requirements identified in the Fire Prevention Requirements for Industrial, Commercial, and

Priority
H__X__
M_____
L_____

Recreational guide for the ASRA. Equipment will be inspected on all such operations. (Refer to Guide for additional information).

All structures on private lands within the ASRA will be inspected in accordance with PRC 4291 as will the code be enforced on such properties.

Priority
H__X__
M_____
L_____

A non-law enforcement inspection will be conducted of all activities within the ASRA to determine if fire prevention has been addressed as a condition of implementation. For example, to identify any potential fire risk as a result of river rafting events in the river canyons. There are BBQ fires allowed in areas along the river resulting from river rafting, this issue has always been allowed without regulation or recommendation.

Priority
H__X__
M_____
L_____

ENGINEERING / PLANNING

Develop a plan that allows CDF the opportunity to review industrial, commercial nd recreational projects to provide fire safe guidelines. Provide, in the document, fire prevention standards for planners to use in planning and constructing such projects.

Priority
H__X__
M_____
L_____

Develop a Fire Prevention Plan (This Document) that identifies goals and objectives for managing the wildfire risk in the ASRA. This plan will have annual prioritized fire prevention activities identified by the Capt. Specialist and implemented by him/her. This document will fit into the Unit Fire Plan and will be structured similar to a battalion fire prevention plan.

Priority
H__X__
M_____
L_____

FUEL BREAKS

The Auburn Shaded Fuel Break is scheduled to begin in May of 2002. This work will span into 2003. My (P2323) intent is to hire a retired annuitant as a project manger to oversee on-the-ground operations for the Auburn Shaded Fuel Break on federal property. This fuel break is designed to be a defensible space fuel break extending approximately 300' into the wildland from the structures along the rim of the river canyon, and along the city of Auburn.

Priority
H__X__
M_____
L_____

A shaded fuel break will be created around the State Parks Headquarters on Hwy 49. This will, for the first time, bring the facility up to PRC 4291 standards and provide a defensible space around the facility. The distance of fuels modification will range between 30'-100'.

Priority
H__X__
M_____
L_____

A shaded fuel break will be created around the BOR building at 471 Maidu Road to accomplish PRC 4291 compliance, and serve as a demonstration site for the Auburn Shaded Fuel Break.

Priority
H__X__
M_____
L_____

Planning is ongoing for the Cool Fuel Break. Battalion 4512 is moving towards securing funds and resources to revisit the fuel break.

Priority
H_____
M__X__
L_____

FIRE ROADS

The following fire access roads will be graded this year:

Stage Coach	Hwy 49 to Robie point	Priority H__X__ M____L_____
Long Point	Drivers Flat to river canyon	Priority H____ M__X__L_____
McKeon- Ponderosa	Middle fork to Ponderosa Rd	Priority H____ M__X__L_____
Lake Clementine Access	Lower Lake Clem Rd to middle of Lake	Priority H__X__ M____L_____
Knickerbocker Flat	Olmstead Loop trail, Cool	Priority H__X__ M____L_____

There will be a fire access gate purchased out of my budget and located on Maidu Rd at the trailhead on the south side of Maidu. This will result from the Auburn Shaded Fuel Break.

Priority
H__X__
M_____
L_____

HAND LINE CONSTRUCTION

There are locations in the ASRA that allow BBQ fires and or campfires. Handline fire breaks will be constructed around each area where fire is permitted, if necessary. Theses include:

GROUND FIRES ALLOWED
Iowa Hill Campground
Drivers Flat Campground
Kelleher Campground
Lake Clementine Boating Access Camps

Priority
H__X__
M_____
L_____

BBQS ALLOWED
Yankee Jims Parking
Ponderosa Way Parking area
Upper Lake Day Use area

Priority
H__X__
M_____
L_____

PRESCRIBED FIRE

The confluence of the North and Middle forks of the American River will be burned prior to July 4th. This are has historically been an area of high fire ignitiOon frequency due to arson. The burn has been called, "The Confluence Burn".

Priority
H__X__
M_____
L_____

INFORMATION / EDUCATION

Ensure fire prevention signing is posted throughout ASRA and that signs are in good condition. Make repairs or replace as needed.

Priority
H__X__
M_____
L_____

Year End Reports

This section is intended to report on progress or non-progress relating to activities, which were proposed for the year. The information contained here may be used for a myriad of issues, however, the intent of this section is to provide for effective planning and to allow subsequent personnel holding the auburn dam patrol position to plan for the future by learning from the past.