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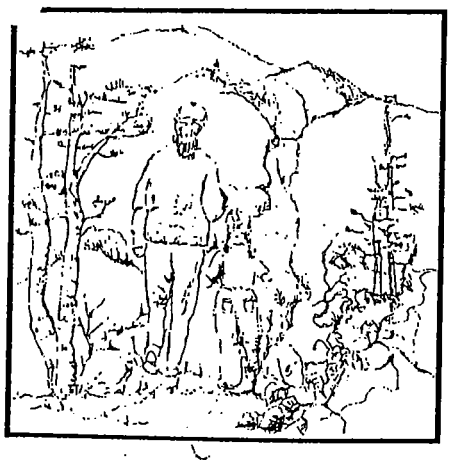
Doug Heiken 96

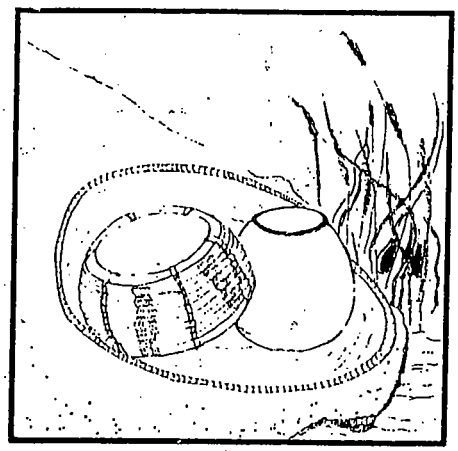
United States Department of the Interior
Bureau of Reclamation

Auburn

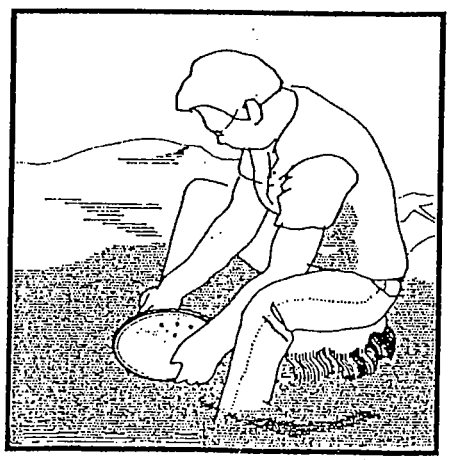
State Recreation Area

Interim Resource Management Plan





September 1992



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Summary

In the Sierra Nevada foothills, approximately halfway between the Sacramento Valley and Lake Tahoe, lies Auburn State Recreation Area (Auburn SRA). The Auburn SRA, which includes 41,000 acres within the Auburn Dam and Reservoir project takeline, was designated as a State recreation area in 1979. Two large river drainages, the North Fork and Middle Fork of the American River, have carved over 50 miles of canyons which run through the heart of the SRA lands. Adjacent to the rivers, atop the canyon rims, are rolling oak toplands and conifer forests. This setting offers a multitude of cultural, natural, and scenic resources, where diverse recreational opportunities abound.

Twenty-five thousand acres within the Auburn Dam and Reservoir project takeline are under the jurisdiction of the U.S. Bureau of Reclamation (Reclamation). California Department of Parks and Recreation (Parks), through an interim management agreement with Reclamation, manages the public use of Reclamation lands in the Auburn SRA. The remaining 16,000 acres of project lands are under the jurisdiction of the U.S. Bureau of Land Management (BLM), U.S. Forest Service, and private landowners.

A general plan for the Auburn Dam and Reservoir project lands was developed in 1978 and was designed to manage the area as a reservoir-based SRA, following completion of the proposed Auburn Dam and Reservoir. A series of complications has put construction of this facility on hold for an indefinite period until Congress makes a determination as to whether or not a dam will be constructed. Prior to this study, there was no comprehensive management plan to guide use of the Auburn SRA in its status as a river-based recreation area. Thus, an interim resource management plan (IRMP) is needed to guide the use, development, and management of the Auburn SRA during this tentative period.

Due to the diversity of both the resource and the recreational uses within Auburn SRA, development of the IRMP required a broad analysis of the area—its resources, uses, problems, and potentials. This analysis was accomplished by field studies and a literature search. From this analysis, an inventory of the Auburn SRA's resources and problems was developed. The general conclusions reached were that Auburn SRA currently supports and has potential for unique and diverse recreational opportunities. Many of these uses have been occurring with insufficient health and safety measures in place. Lack of sanitation facilities at popular use areas creates a public health hazard as uncontained garbage and human waste are deposited throughout the area. Continued use of Auburn SRA without resource protection measures is resulting in environmental degradation such as erosion and vegetation damage. Insufficient parking has resulted in congestion and pedestrian hazards at some use areas. Increasing whitewater use on the

North and Middle Forks of the American River has made a management program necessary to regulate use. These, and additional concerns, were further analyzed throughout the planning process.

While previous reports served as the main data base for a resource inventory, extensive public and agency participation was an integral part of this process. Through public meetings and review of public and agency comments, the problems, concerns, and desires of the public and agencies were noted and evaluated. The problems and concerns were listed into 13 broad categories: commercial land use, facilities and sanitation, funding, grazing, hunting and fishing, interpretation, recreational mineral collection, natural resource management/environmental concerns, off-highway vehicles, operations and maintenance, trails/use conflict, viewshed, and whitewater use.

The public's concerns and desires, as well as those of interested institutions and administrators, were analyzed and resulted in development of the following three broad planning goals:

1. To provide for the health and safety of the public.

2. To minimize and correct environmental damage caused by recreational use and development.

3. To allow and encourage active volunteerism for projects or programs where feasible.

In addition to the planning goals stated above, various constraints were defined and considered throughout the planning process. The main constraints are summarized as follows:

Interim nature of the plan: As the future of the Auburn project lands is not clear, it is Reclamation's intent to not encourage additional public use during this interim period or to construct permanent facilities which would be inundated or could be affected should a dam and reservoir project be built.

Financial/budgetary: Due to the present monetary limitations and the interim nature of this plan, only those facilities or programs needed for the public's health and safety or for resource protection are of the highest priority.

Resource protection: Since the biological, natural, cultural, and visual resources are valuable and integral components to the Auburn SRA and the surrounding area, they should be protected to the extent possible when various facilities, improvements, or projects occur.

Legal/jurisdictional: Various segments of the lands in the Auburn SRA are under the jurisdiction of multiple public agencies as well as owned by private individuals. As a result, consolidation and uniformity of the rules and regulations, which are applicable to Auburn SRA, are not consistent across the whole SRA. Additionally, broad management

guidelines established under Public Law 89-161 direct the public use of the Auburn Dam project lands, thus setting parameters that must be adhered to by subsequent plans involving land use.

A prioritization system was developed during the formulation of alternatives developed to address the planning goals in consideration of funding limitations. This system prioritized the facilities and programs developed as features of alternative two into three levels of priority. Additionally, this system was designed to assist the administrative and managing agencies in decisionmaking. Priority one includes facilities and programs necessary to maintain a minimum level of visitor health and safety and resource protection. Priority two includes facilities and programs necessary to meet existing visitor use and to rehabilitate resources. Priority three includes facilities and programs which would enhance recreational use of the area.

Additionally, in consideration of funding limitations and the need to address the most pressing resource management concerns first, each of the 16 subareas throughout the Auburn SRA has been ranked into one of three levels based on user demand and the diversity of recreation opportunities. Integrating the three priority levels with the three ranking levels, each of the proposed facilities and programs resulted in prioritizing while identifying the areas to be funded first. These areas are those most used and/or which offer a greater diversity of recreational opportunities. For example, a facility or program at "priority one-rank one" area is of the highest overall priority and would receive funding first. A facility or program at "priority one-rank two" area would receive funding second, and on through the list. A facility or program at "priority three-rank three" area would be of the least overall priority level and would be considered last for funding.

Two alternatives were developed. Alternative one, the no action, was not selected as the recommended plan because it did not meet the planning goals. Alternative two, the IRMP, includes proposals for construction of various facilities and the development of guidelines and programs which would provide for public health and safety, resource protection, volunteerism, and recreation enhancement. This alternative met the planning goals identified during the planning process and was selected as the recommended plan.

The IRMP includes a broad management guideline conceived early in the planning process. This guideline was established as a standard by which to determine policies and future courses of action. This guideline encompassed and adopted Public Law 89-161, the enabling legislation for the construction of Auburn Dam, which reads:

"Any land use proposal made prior to the completion of Auburn Dam shall meet one of the following four criteria:

1. It is directly associated with the authorized construction of Auburn Dam or the California State Parks' Auburn Reservoir Project General Plan.

2. It is for the purposes of fish and wildlife mitigation or enhancement.

3. It provides for cultural or historic preservation or interpretation.

4. It provides for safe public use and recreational opportunities associated with the resource."

Further, the facilities and program proposals described in alternative two required well-defined guidelines to ensure proper implementation. Thus, specific management guidelines were developed. These guidelines address such items as allowable land use, facilities design and construction standards, special events, camping, resource management, recreational mineral collection, and whitewater recreation.

As this plan identifies the construction of various facilities, the likelihood of the environmental impacts resulting from these actions had to be considered. It is anticipated that implementation of priority one facilities will not result in significant impacts to environmental resources. Compliance with the National Environmental Policy Act (NEPA) for the priority one facilities implementation has been fulfilled using a categorical exclusion from Reclamation's list of categorical exclusions (*Department of Interior Manual*, 516 DM6, Appendix 9, 9.4(c)(3).

The actions occurring as part of the priority one facilities implementation (not including the off-highway vehicle (OHV) area) involve minor construction activities associated with an authorized project which correct unsatisfactory environmental conditions and are included within existing facilities. The priority one facilities implementation actions for the OHV area, although not considered minor construction activities in this management plan, also correct unsatisfactory environmental conditions and arrest continuing degradation. Their implementation actions are also covered in the categorical exclusion. The categorical exclusion checklist, signed by appropriate officials, can be found in appendix A.

Although most of the management needs have been addressed by the various facility and program proposals and guidelines included in the IRMP, several issues have not been fully resolved by this plan, and others will be reviewed on an ongoing basis. The issues remaining unresolved are:

Funding: the extent of future funding is undetermined at this time. The time and the degree to which the various recommendations of this plan are to be enacted is dependent upon when funding becomes available.

OHV: the continuation of OHV use at Mammoth Bar (one of the subuse areas in the riparian corridor of the Middle Fork) is uncertain at this time. Various alternatives have been proposed to address this use.

Other recreational uses: the extent to which other recreational uses will be allowed in the area will be determined on a case-by-case basis. These other uses must be consistent with the guidelines set forth in this plan; and the appropriate funding and/or resources must be available to meet the safety, environmental, and other established guidelines.

Metal detecting: metal detecting will be allowed in the area during a 2-year study period where potential resource damage will be monitored. Continued use after the 2-year study period will be dependent upon the results of the study. (This use may be discontinued at any time during the 2-year study period should it be necessary to halt significant resource damage immediately).

Knickerbocker Flat: the extent to which Knickerbocker Flat (an oak topland subuse area) will be opened to multiple uses, and where in Knickerbocker Flat those uses will be allowed has yet to be determined.

Jurisdictional: the consolidation of the various public agencies' rules and regulations for lands within and adjacent to Auburn SRA is needed.

The study conclusions note that throughout the future, the Auburn SRA will continue to present complex management problems as a result of increasing use demands, cumulative impacts from previous and future activities, and emerging recreational pursuits. Though the selected plan addresses many of the Auburn SRA's problems and needs, unfortunately no plan can adequately predict future needs and demands. The sometimes mutually exclusive demands of users upon management and resource protection present complex problems.

Through the implementation of the Auburn SRA IRMP and periodic revision, the protection of natural, scenic, and cultural resources, and the opportunity for diverse recreational activities can be provided. However, it will be necessary to continually evaluate the effectiveness of the selected plan and to revise the IRMP, if necessary. Public involvement in this continued evaluation is critical and is needed to address onsite issues and develop workable solutions. This dynamic process will ensure that the concerns of the agencies and the public will be addressed while maintaining the Auburn SRA's resources.

Study conclusions are to implement alternative two, the IRMP guidelines, as of September 1, 1992. As soon as funds are available, implementation of priority one facilities and programs should begin, which will provide for public health and safety, resource protection, and volunteerism within Auburn SRA. Additionally, to adequately administer the public health and safety plan features, the maintenance staff should be increased by one full-time worker and two seasonal workers. Also, the visitor service staff should be increased by one full-time ranger and one seasonal ranger. Implementation of priority two and priority three measures is also desirable, once they are determined to be environmentally acceptable. However, given Reclamation's funding restrictions, other means of funding and/or implementation should be considered for these measures.

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Chapter One

Introduction

Purpose and Scope

Since 1977, the Bureau of Reclamation (Reclamation) and the California Department of Parks and Recreation (Parks) have worked together to manage Auburn State Recreation Area (Auburn SRA). The Auburn SRA is managed in conjunction with the Folsom SRA. The Auburn-Folsom complex forms a chain of State parks that reaches from Sacramento to above Placerville. Management of this 50-mile stretch of the American River by Parks is advantageous from a management perspective. Responsibility for the lands and enforcement of regulations are easier for the recreating public to understand with one agency managing the lands.

Both the North Fork and the Middle Fork of the American River have formed deep canyons as they flow through the Auburn SRA. Areas along the American River in the Auburn SRA have been under investigation by the Federal Government as potential sites for a dam with multiple or single purposes. Should a dam be built, from 4,500 to 10,000 acres of land in Auburn SRA could be inundated, either occasionally with a single purpose "dry" dam or permanently with a multipurpose dam.

A general plan for the Auburn project lands, developed by Parks and adopted in 1978, would guide the administration and management of the lands and the reservoir under conditions of a multipurpose dam and reservoir being built. However, because this plan addresses the needs of project lands with the dam and reservoir in place, there still remains the need for an interim resource management plan to guide the management and administration of the lands and resources in their interim status. In addition, since Auburn SRA serves as a major recreational resource for the Sacramento metropolitan area and for several outlying counties, there is the need for a resource management plan that will respond to the expected rapid growth in user demand for recreational opportunities during the interim period.

Reclamation contracted with Parks to investigate the resource management needs of the Auburn SRA during the interim period and to develop a management plan that would address health and safety needs, resource protection, and administrative concerns. This report documents the analysis of these needs and concerns and presents the results of this investigation. Included in the analysis are problems and resource protection needs observed during field inspections, public concerns and desires, the desires of the Auburn SRA administrators, and the planning constraints developed during the study. The report develops an interim resource management plan (IRMP) alternative, as well as a no action alternative, as a means of determining a viable plan for implementation. The costs associated with the IRMP alternative are estimated. Further, the important issues which remain unresolved and the major conclusions drawn from the study's findings are discussed. Lastly, recommendations are made for implementing an IRMP during the interim period.

The IRMP includes proposals for new management guidelines, facilities, and programs which could be implemented during the interim period. Guidelines for resource utilization and protection, to be implemented by the Auburn SRA managers in their administration and management of the SRA during the interim period, are also developed in this plan.

Relevant Background and Prior Reports

This study has involved an investigation into the background of the area and a review of affiliated literature. This investigation showed that many studies and reports have been completed on the lands and resources currently within the Auburn Dam and Reservoir project area (including Auburn SRA). These efforts were done in conjunction with and after the 1965 Congressional authorization of the Auburn Dam and Reservoir project. The following is a discussion of the events and reports on the Auburn project lands found most relevant to this study. For a more comprehensive list of the studies, reports, and other literature used in the preparation of this report, refer to appendix F.

1965-1966

The Auburn Dam project was authorized by Congress in 1965 as part of the Auburn-Folsom South Unit of the Central Valley Project (Public Law 89-161). Reclamation approached the State of California to determine the State's interest in managing project lands and reservoirs for recreation and fish and wildlife enhancement purposes.

1967-1975

One of Governor Edmund G. Brown's last acts in office was to sign the 1966 Federal-State agreement for Parks to construct and operate recreational and fish and wildlife enhancement facilities at the Auburn-Folsom South Unit Project. In 1966, Federal acquisition of the required Auburn Dam project lands began.

In 1967, construction of an access road to the dam construction site began. As construction continued, it was met with a number of delays as a result of environmental issues and funding problems. In 1971, the *Auburn Dam Environmental Impact Study* was completed by Kennedy Engineers and Jara Applied Sciences, Inc., of San Francisco. In 1972, Reclamation completed the *Auburn-Folsom South Unit Environmental Statement.* In 1974, the *Amendment to the Final Environmental Statement and Supplement on Auburn-Folsom South Unit,* Volumes 1 and 2, were completed and subsequently approved by the court. Basic elements of the original project were changed, including the location of the dam, the location of new highways and a bridge, and the location of the project boundary. Construction of the foundation of the dam commenced in 1974. The construction tempo was dampened by an earthquake in Oroville on August 1, 1975.

1976-1978

The Oroville earthquake was a significant event because it raised questions as to the safety of building dams within the foothill fault zone, especially given the possibility of reservoir-induced seismic activity.

Because the Auburn Dam site was located on geologic faults within the foothills fault zone, a multiagency review of the proposed dam's seismic safety was conducted during 1976-1980. In fiscal year 1977, funding for the construction on the dam was halted.

In 1976, planning for the recreational component of the Auburn-Folsom project was initiated by Parks at the request of Reclamation. The primary goal was to develop a plan that would provide guidelines for optimum management and public use of the lands for the next 20 years. *The General Plan for the Auburn-Folsom South Unit* was the product of that planning process.

During the development of the general plan, Parks coordinated its planning efforts with the many public agencies which were cooperating on the Auburn project. The principal Federal agencies

involved included Reclamation, U.S. Fish and Wildlife Service (FWS), U.S. Forest Service, and the U.S. Bureau of Land Management (BLM). The other principle State agencies involved in the planning included the Department of Fish and Game (DFG) and the Department of Navigation and Ocean Development. Input was also received from the counties of El Dorado, Placer, and Sacramento, and the cities of Auburn and Folsom.

In 1977, Parks entered into an interim management agreement with Reclamation and assumed responsibility for the management of the public use and resource protection on Reclamation lands in the Auburn project area. The State of California later incorporated the lands into the State park system as Auburn State Recreation Area.

From 1977 to 1980, delay in the construction of Auburn Dam resulted from renewed investigations and studies which centered on the 1975 seismic activity in the Sierra Foothill region. The U.S. Department of the Interior's seismic investigation by Reclamation regarding the safety of the dam was completed and reviewed by an independent team of seismic consultants. The results indicated that a change in the design of the dam was necessary to meet the maximum credible earthquake of 6.5 on the Richter Scale with a foundation displacement of 9 inches. It was expected that the construction of the dam would resume.

A State of California Resources Agency task force (consisting of Parks, DFG, and Water Resources) studied the project; prepared a report in 1978 titled *Auburn Reservoir Project, Folsom Lake State Recreation Area General Plan*; and recommended State management of the recreational lands.

1979

Reclamation adopted the *Auburn Reservoir Project, Folsom Lake State Recreation Area General Plan.* This general plan would guide the development and management of the Auburn SRA should an Auburn Dam be constructed and the reservoir filled.

1980

Supplement No. 2 to the environmental statement was issued. Though focusing on seismicity and dam safety, it also updated the previous documents. Land acquisitions, trail construction, the State recreation plan, and cultural resource study results to date were described.

1983

The need for an interim management plan was recognized by both Parks and Reclamation. At the request of State Assemblyman Lloyd Connelly, Parks prepared a preliminary IRMP for Auburn SRA.

1986

In February, a record flood in the American River basin renewed the interest in the construction of an Auburn Dam.

1987-1989

In 1987, Reclamation's *Draft Whitewater Management Plan* for the North Fork American River and Middle Fork American River was completed and released. This document set forth various guidelines and management tools needed for the evaluation of the program and its administration.

Reclamation requested the allocation of funds to prepare resource management plans for projects considered to be priorities throughout the Western United States. Auburn was a high priority since it would require at least an additional 10-year period for construction of a dam and inundation of the Auburn Reservoir. It was determined that an IRMP was needed to address the management needs of the Auburn SRA lands as they currently exist.

Since Parks had been operating Auburn SRA as a State park system unit for 12 years without any cohesive plan specific to the existing unit, Reclamation asked Parks to prepare a proposal for an IRMP. Parks accepted the request, prepared the proposal, and was authorized by Reclamation to prepare the IRMP once plan funding was appropriated by Congress in fiscal year 1990.

1990-1991

The United States Department of the Interior's appropriations bills for fiscal years 1990 and 1991 included funds for the preparation of an IRMP for the Auburn SRA.

The American River District of Parks began preparation of the IRMP in December 1989.

In 1991, BLM released its *National Recreation Area Study for the American River*. This study was a result of Congress passing Public Law 101-121 on October 3, 1989. The bill authorized BLM to conduct a feasibility study for the possible designation of 81,000 acres of the American River basin in California as a national recreation area (NRA). The study area included the Auburn project

lands both with and without the multipurpose dam. It found that all of the Auburn SRA lands, as well as other segments of the NRA study area,

> fully met all the NRA eligibility criteria. . .they have an abundance of outstanding natural and cultural features, and offer a wide variety of recreational opportunities. They lie within and adjacent to a fast-growing metropolitan area of more than a million people and within a short drive of many more millions. They provide the types of recreation most in demand by local residents, while at the same time offering qualities to attract visitors from a distance. They have the potential to provide even more public benefits under an NRA designation.

In April 1991, the U.S. Army Corp of Engineers' (Corps) *Draft American River Watershed Investigation Feasibility Report* was released. The basic authority for the study is the Flood Control Act of 1962 (Public Law 87-874). Additional authority is contained in the Fiscal Year 1987 Appropriations Act and the Fiscal Year 1988 Continuing Appropriations Act. These acts instruct the Corps of Engineers to:

- Study alternative means for flood control in the American River watershed, in Natomas, and in the Dry Creek watershed.
- Assume that the multipurpose Auburn Dam, as previously authorized, will not be constructed.
- Evaluate incidental water, power, and recreation benefits as they relate to a peak-flow flood control facility on the North Fork American River upstream from Folsom Dam.
- Analyze current projected water demands for the American River basin.

The report presents the results of studies on flooding problems along the American and Sacramento Rivers in the greater Sacramento area. It identifies a tentatively selected plan to resolve the problems which recommends a 400-year flood retention dam on the North Fork of the American River at Reclamation's Auburn Dam construction site which is within Auburn SRA.

The Planning Process

The planning process for the development of the IRMP for Auburn SRA consisted of the following 10 major steps:

1. Initial scoping sessions were held with the public and interested agencies to gather background information, concerns, and suggestions regarding the Auburn SRA.

2. Planning goals and constraints were identified.

3. Meetings were held with a newly formed advisory task force, agencies, and general public to gather further information, suggestions, and concerns. Additional comments were received throughout the scoping and public comment period.

4. A resource inventory of the study area was prepared.

5. Problems, needs, and opportunities of the study area were identified.

6. Two plan alternatives were formulated: a no action plan and an IRMP providing for guidelines, programs, and facilities to be implemented during the interim period. Additionally, special considerations were formulated.

7. The impacts were evaluated.

8. An alternative was selected.

9. Unresolved issues were identified.

10. Conclusions were developed for implementing an IRMP.

Study Participation/ Coordination

During the study, public involvement and coordination served the purpose of identifying the public's perception of the problems, needs, and opportunities that could be addressed through various facility improvements and programs.

Individual meetings were held among planning staff and public agencies and the general public wishing to express concerns, ideas, or suggestions relative to the plan. Through this process, concerned individuals and over 24 members of various public agencies were contacted and their comments noted. (Refer to appendix E for a complete list of these agencies).

Public involvement on a continuous basis served in a dynamic fashion and as an important component in developing the specific needs of an IRMP. Involvement was gained through a series of public meetings, the formation of a task force advisory committee, compilation and evaluation of public comment, and direct and indirect solicitation of comments from user groups who frequent the Auburn SRA. Details on the various programs for public involvement are provided below:

Public Meetings

A series of public meetings was presented in order to accomplish two general things:

1. Inform the public as to the background, purpose, goals, and progress of this study.

2. Solicit the public's concerns, opinions, and ideas regarding the use, development, and management of Auburn SRA.

Public notification and advertisement of these meetings were accomplished through a number of ways. First, a mailing list of over 500 individuals was compiled from county assessor's tax rolls, previous mailing lists from the General Plan for Folsom Lake State Recreation Area, and the Auburn Reservoir project (compiled in the late 1970's); a list of all commercial whitewater boating outfitters currently running the North and Middle Forks of the American River; lists of mountain bikers and equestrians; and from contacts with various private individuals, special interest groups, and public agencies. Newsletters were sent to those on the mailing list informing them of the background and purpose of the study and of upcoming meetings. Second, advertisements and press releases in 10 newspapers throughout the municipalities surrounding the Auburn SRA also alerted the public to upcoming meetings.

Public opinion was initially gathered at a series of three public meetings (scoping sessions) held in Auburn, Old Sacramento, and

Placerville. These public meetings were held on March 5, 6, and 12, 1990, and received good attendance. Additional concerns and comments were gathered by speaking with representatives of the various recreational user groups of the Auburn SRA.

Popular comments and concerns voiced by the public concerning the Auburn SRA are included in Chapter Four, **Need for Action and Planning Goals**. The planning team, in conjunction with the task force (discussed below), developed various alternatives and possible solutions in response to those comments and concerns. These were presented to the public in a public meeting held on March 5, 1991.

After consideration of further public comments, a draft IRMP was developed and released to the public on April 22, 1991. Two public meetings presenting the findings of the draft report were held on April 25, 1991, and May 30, 1991. Planning staff were available at the meetings to answer questions and solicit comments from the public. After a 45-day comment period following the release of the draft, compilation and consideration of the additional comments were incorporated into the final report.

Task Force

In order to resolve issues raised at the public meetings, the American River planning team solicited volunteers to serve in an advisory capacity. A task force, consisting of a broad array of users and interested parties was formed which assisted in resolving issues by creating and refining the study alternatives. The planning team provided the task force committee with a statement of purpose and goals which were defined:

- To review issues developed thus far.
- To identify any additional issues.
- To identify alternatives to resolve issues.

Public Involvement in the Development of the Whitewater Management Program

As already noted, private and commercial whitewater boating are allowed on both the North Fork and the Middle Fork of the American River which flow through Auburn SRA. Because of the increased use (through the 1970's and the early 1980's) and the problems associated with this use, an extensive planning process was begun in 1984 by Parks and Reclamation.

During the 1984 and 1985 use seasons, field surveys were conducted which resulted in recommending a *Proposed White Water Management Plan* (PWWMP). This PWWMP developed management approaches, interagency agreements, carrying capacities, and appropriate use levels for whitewater boating use.

To further develop the proposed plan, from June through September 1986, Parks conducted 14 meetings with an advisory task force. The objective of the task force was to review the findings and recommendations of the PWWMP and to develop alternative approaches and recommendations. This task force formulated recommendations substantially different from the management approach recommended in the PWWMP.

Following the advisory task force meetings, Parks engaged in a recreation management planning process using the observations and recommendations of both the PWWMP and the task force meetings. In 1987, a new document, the *Draft Whitewater Management Plan* (DWWMP) was completed. The DWWMP has been the guiding document to the present and has been modified and adjusted throughout the years as needed through the cooperative efforts of the advisory task force and Parks. The guidelines and standards developed for the DWWMP have been adopted to be finalized as part of the IRMP. (Refer to chapter five, special considerations, for a review of this program).

Report Organization

The formulation of this plan has been a very dynamic process–from its beginning to its completion–gathering, processing, and evaluating the concerns, ideas, and suggestions of the public and other agencies.

This report is organized into six chapters which correspond to the general sequence of the planning process used by the planning team. A summary of these chapters is presented below:

Chapter One, **Introduction**, introduces the study effort and provides a discussion on the study purpose and scope; relevant background and prior reports; the planning process; and study participation and coordination.

Chapter Two, **The Study Area**, presents the study area which includes the extended zone, impact counties, and the Auburn SRA.

Chapter Three, **Environmental Setting**, discusses the natural, cultural, and visual resources found in the Auburn SRA. These resources become the basis for the evaluation of the environmental impacts associated with implementing the alternative plans.

Chapter Four, **Planning Goals and Need for Action**, discusses the regional recreational demand for the Auburn SRA, agency and public concerns, and the planning goals and constraints developed during the study process.

Chapter Five, **Plan Formulation and Selection**, presents the plan formulation rationale, a discussion of the prioritization of facilities and programs and the ranking of the Auburn SRA recreation subareas, the alternative plans developed to address the planning goals, evaluation of the environmental impacts associated with the alternative plans, and plan selection.

Chapter Six, **Unresolved Issues, Major Findings, and Conclusions**, identifies the significant resource management and protection concerns not addressed by the selected plan, summarizes the major findings of the study, and presents the conclusions developed by the study team.

Chapter Two

The Study Area

The social, geographic, and economic setting of the Auburn State Recreation Area (SRA) can be organized into two areas of influence: the extended zone and the impact counties, (plate 1, appendix B). A significant amount of the demand placed on the Auburn SRA recreational resources originates from these two areas. The impact counties consist of El Dorado and Placer, while the extended zone is comprised of outlying counties with a more urban population, such as Alameda, Contra Costa, Sacramento, San Francisco, San Joaquin, San Mateo, Santa Clara, Solano, and Yolo.

The effects which influence recreation development in the Auburn SRA flow in two directions. The actions and policies of the SRA influence the impact counties and the extended zone. The concerns and recreation needs of the residents of both these areas in turn influence the development of the Auburn SRA into specific recreational activities. Additionally, as the populations in the impact counties and extended zone grow, the demands on the Auburn SRA increase. As rapidly developing rural areas which surround the Auburn SRA begin to move toward urbanization and lose open space, the need for the SRA to serve as a recreation resource, providing a natural setting, will be increasingly felt. A discussion of these two areas of influence follows.

Extended Zone

The extended zone consists of outlying urban regions of California which lie within a 150-mile radius of the Auburn SRA and which use the Auburn SRA for recreation. Thirty-seven counties are located within the 150-mile radius, but not all of them influence the Auburn SRA because many have their own comparable recreation area attractions. Socioeconomic factors affecting the extended zone, such as increased urbanization and population growth, will in turn affect the impact counties (Placer and El Dorado), as populations and demands shift.

The extended zone has demographic characteristics more like the State of California than the impact counties. Like the State, none of the counties in the extended zone has rapid population growth rates equal to those found in the impact counties. However, unlike the impact zone, the extended zone counties of San Francisco and Solano have comparable or lower proportions of persons in the under-18 age group than the State. San Francisco County has considerably higher proportions of people over 65 than either the State or the remaining parts of the extended zone and serves as a large source of immigrants who retire and settle in the impact counties.

The extended zone counties ranged from 70-98 percent urban in the 1970's. The trend is that the extended zone will become more urbanized through the 1990's. Increasing urbanization is one of the main reasons why people leave the extended zone and move to the impact counties. Urbanization is also a motivating force compelling people to travel to the Auburn SRA for outdoor recreation opportunities that are not available closer to home.

Projected total population of California counties and annual average percent change, 1990-2005:

Extended zone counties	1990	1995	2000	2005	Percent change
Alameda	1,282,400	1,358,800	1,420,000	1,475,500	1.0
Contra Costa	810,300	903,700	1,178,200	1,047,900	2.0
Sacramento	1,051,400	1,222,300	1,382,200	1,533,100	3.1
San Francisco	723,900	712,200	680,500	632,300	-0.8
San Joaquin	483,800	555,600	621,700	686,300	2.8
San Mateo	652,100	688,300	712,700	726,900	0.8
Santa Clara	1,502,200	1,608,400	1,716,800	1,822,500	1.4
Solano	345,700	414,300	471,900	529,200	3.5
Yolo	142,500	160,400	174,400	187,100	2.1

Impact Counties

The impact counties are the two counties in which the Auburn SRA is located–Placer and El Dorado. A discussion of the social and economic influence of these two counties on the Auburn SRA is provided in the following paragraphs.

In Placer County, the area of influence includes land within the cities of Auburn (the county seat) and Colfax, and the communities of Foresthill, Weimar, Applegate, Clipper Gap, Bowman, Meadow

Vista, Newcastle, and Ophir. The cities of Lincoln, Loomis, Rocklin, and Roseville are within 20 miles.

In El Dorado County, the Auburn SRA is near the communities of Georgetown, Cool, Pilot Hill, Greenwood, and Volcanoville. Within 20 miles lie the communities of Placerville (the county seat), Pollock Pines, Camino, Cameron Park, El Dorado Hills, Shingle Springs, Rescue, Diamond Springs, Eldorado, Coloma, Lotus, and Garden Valley. The eastern suburban Sacramento metropolitan area is also within 20 miles of the study area.

Social Factors

The population of the impact counties has grown rapidly in the last decade, especially when compared to the State as a whole. As reflected by the statewide situation, both natural increases and immigration contribute to this population growth. Joining longtime residents of the impact counties is a new population composed of retirees, exurbanites, and commuters.

The impact counties have a higher proportion of their population over the age of 65 and a lower ratio under 18 than the State as a whole. The impact counties also have a relatively small ethnic minority population when compared to either the State or the Nation, with the significant minority groups being American Indian and Hispanic.

Projected total population of California counties and annual average percent change, 1990-2005:

Impact counties	1990	1995	2000	2005	Percent change
El Dorado	128,200	151,400	174,300	197,400	3.6
Placer	175,600	209,900	238,700	267,400	3.5

Economy

The area immediately surrounding the Auburn SRA consists of four census tracts: North El Dorado, Auburn, Colfax-Summit, and Foresthill-back country. These census tracts are found within the impact counties of El Dorado and Placer.

All four census tracts are characterized by a rural setting, which is predominantly nonfarm (where most of the land is used for low density-single family dwellings, agricultural, or ranch land). From a regional perspective, the communities adjacent to the Auburn SRA are bedroom community/rural area/ranch country. As the

Sacramento region grows, these areas will be affected and possibly changed from low-density developments and isolated communities to an extension of either the Sacramento urban area or El Dorado and Placer Counties' growing urban areas.

The major industries in the impact counties are government, retail trade, services, and manufacturing. Retail trade and services include employment for tourism and recreation. The manufacturing industry, which includes wood products, is important to the local economics of the communities where mills are located or where other job opportunities are limited.

Per capita incomes in the impact counties are lower than those of the extended zone and the State average, with the median annual income of the census tract communities being approximately $18,000. The percent of families below the poverty level in the impact counties is comparable to or slightly higher than the State average. The percentage of social security recipients is proportionately higher in the impact counties than the State average, reflecting a higher number of seniors. Crime rates are lower in the impact counties than the State average.

Land Use and Zoning

In the lower foothills of the Sierra, the cities of Auburn and Placerville serve as commercial and industrial centers, characterized by high-density residential use. Other communities in these portions of the Placer and El Dorado Counties (Foresthill, Colfax, Georgetown, Lotus, etc.) have limited commercial areas, little industrial use, and a moderate residential density. The rural areas are characterized by low-density residential use, along with the traditional uses of mining (now limited mainly to a few mineral materials) and agriculture (limited by a scarcity of suitable land to some grazing, irrigated pasture, and raising of orchard/vineyard crops). In these lower foothill areas are found the majority of the two counties' populations, most of which are in the category of "rural nonfarm." Publicly-owned land in this area is dominated by the 25,000 acres acquired for the Auburn Dam project, but scattered Bureau of Land Management- (BLM) administered lands are also present.

The growing of commercial timber is the principal land use in the upper foothills at the eastern margin of the Auburn SRA. Residential use is slight, and commercial land use is small. Although some of the timber land is in private ownership, the

majority of the land is part of the Tahoe and El Dorado National Forests and is administered by the U.S. Forest Service.

Both Placer and El Dorado Counties are in the process of updating their county general plans. Currently, there is no comprehensive description of land use and goals. Individual general and area plans have been developed to serve the interim planning needs of townships while the county general plans are undergoing revision.

These plans will be summarized to provide a general picture of land use and direction of the counties.

El Dorado County

Farming is of considerable importance in El Dorado County, but the acreage used for crops has been reduced by urban expansion. The main crops are pears, apples, and irrigated pasture. Livestock is produced in the western part of the area where forage is abundant. Woodland crops are produced in the eastern portion of the county.

The El Dorado land areas immediately adjacent to the Auburn SRA are predominantly zoned as open space-conservation. Where not zoned as such, tracts of rural residential agriculture exist. Water supply for these areas is provided by the Georgetown Divide Utilities District.

The general plans of Cool/Pilot Hill, Greenwood, and Georgetown are presented here in summarized form, in order to provide a representative look at El Dorado County land use surrounding the Auburn SRA. A summary of the major land use and development policies of these communities is provided below.

Cool/Pilot Hill

The towns of Cool and Pilot Hill are located just southeast of Auburn SRA on Highway 49. Agricultural lands make up a large percentage of the area. Approximately 13,331 acres are currently zoned exclusive agriculture and are under the Williamson Act Contract status. Twenty-four percent is in nonrenewable status. Soils are suitable for grape growing; and local crops include hay and irrigated pasture, vegetables, landscape, nursery, apples, olives, and walnuts.

Public land comprises 8,800 acres of the area. These lands lie within Folsom State Park, along the Middle Fork of the American River, county property, Northside Fire District sites, and areas owned and managed by BLM.

A large housing development, which would substantially increase present population levels, is proposed in the Cool/Pilot Hill area. In about 10 years, increased development will begin to compromise the reliability of existing water supplies in the area.

Development Goals and Policies

Development policies reflect the desire of the communities to protect the rural country lifestyle and environment of the area. Policies relevant to the Auburn SRA include the following:

1. The State Highway 49 scenic corridor will be maintained, and views will be protected. A 100-foot building setback from the right-of-way or property line for new construction will be established along existing and adopted State Highways 49 and 193.

2. Within the plan zone adjacent to the limestone quarry (adjacent to Highway 49), there will be a designated nonbuilding buffer area located on the west and east sides of the mineral resource zone. No residential structures will be permitted within the buffer area so long as the mineral reserve exists.

3. "Strip" commercial development outside of the "core" areas and adjacent to State Highways 49 and 193 will not be allowed.

Greenwood Area Plan

The small rural town of Greenwood, comprising 13,023 acres, lies adjacent to State Highway 193 in the northwest section of El Dorado County and just south of the Middle Fork of the American River.

The Greenwood area is representative of the middle foothill zone of the Sierra Nevada range, both in its physical and vegetative qualities, with vegetation ranging from oak and grassland into an oak-pine mix at the middle elevations and

coniferous forest at the highest elevations. The ground surface and open areas are generally covered with manzanita and scotch broom, with a few meadows. All timber represents second growth.

Development Goals and Policies

1. A rural atmosphere will be maintained.

2. Strict controls on water pollution, nuisance-noise, and air pollution will be maintained.

3. Land in or proposed to be in Government ownership and lands currently zoned unclassified should be classified as agriculture or estate residential with 5- to 10-acre minimum lot sizes.

4. Commercial and residential developments in the community center area should be strongly encouraged to retain and reflect a Gold Rush/Victorian architectural style in keeping with the historical character of the community. Additionally, existing county sign ordinances should be revised to more closely control and guide onsite and offsite advertisements to retain the rural and open-character of the Greenwood community area and the county.

Georgetown

Georgetown, once the home of an estimated 20,000 prospectors, is a rural area resting precisely on the divide that bears its name, between the Middle and South Forks of the American River.

Today Georgetown is supporting heavy city migration. This influx has caused large tracts of land to be divided into smaller acreage. However, the majority of the Georgetown area consists of large acreage parcels with rural residential land uses. Occasional commercial use areas are located along State Highway 193 and Wentworth Springs Road, with the townsite of Georgetown retaining most of the business activity within the plan area. Extending out from the road corridors are the land uses which reflect a downgrading of intensity, influenced by lack of services, access, topography, and historical land use.

Development Goals and Policies

1. The rural atmosphere will be retained and the natural environment preserved.

2. Strict controls on pollution, visual, and noise nuisances will be maintained.

3. Low-density residential developments will be fostered and maintained.

4. High-density home developments and mobile home parks and subdivisions will be discouraged.

5. Existing and new commercial developments will be encouraged to conform to the Gold Rush/Victorian type architecture.

6. Intensive land uses will be located in the town center, with progressively larger parcels outward to provide transition to the outlying low density areas.

7. Development of membership type campgrounds will be discouraged.

8. Highway 193, Main Street, and Wentworth Springs Road will be protected from development of incompatible buildings or signs, junk yards, or unsightly uses.

9. As Georgetown expands, increasing population and services will be accommodated without sacrificing its traditional values of open space, privacy, and forested surroundings.

Placer County

Placer County has 650,000 acres of designated agricultural and timber croplands. The land is suitable for a wide variety of agricultural enterprises, including fruit and nut crops, field crops, livestock and poultry, nursery products, and apiary products. Livestock and poultry products have been the major agricultural industry in the county for the past 15 years, accounting for 47 percent of total sales from 1970-1985. The timber harvest has been steadily rising, with a $10 million harvest income reported in 1987.

Much of the Placer County land bordering the North Fork of the American River is zoned for agriculture, at 10- and 20-acre timber cropland parcels. Any agricultural zoning located on the Middle Fork is 20-acre timber cropland parcels.

The general plans of Auburn, Foresthill, Colfax, Weimar/Applegate/Clipper Gap, and Bowman will be summarized to provide a representative look at surrounding land use in Placer County.

Auburn

The historical gold mining town of Auburn is located approximately 35 miles from the State capitol in Sacramento on Interstate 80 and just west of Auburn SRA. It is currently being discovered by more and more people as a desirable location to live, primarily due to its attractiveness in being close to employment centers such as Roseville and Sacramento, while still providing a rural environment in which to reside. In order to preserve this rural atmosphere, the general plan designates areas outside existing service areas for 2.3- to 20-acre minimum parcel sizes.

There is currently an increasing demand for housing in the Auburn area, primarily for single-family dwellings. This demand is partially generated by people migrating into the area with primary employment in the Sacramento region. A 1975 Placer County Special Census indicated that approximately 25 percent of all residents in the Auburn area worked in Sacramento County. This trend is expected to increase.

The major thrust of the Auburn general plan is "phased zoning," designed not to reduce the rate of growth, but rather to encourage higher-density development closer to the city core. As higher residential densities are permitted further from the central city area, the growth tends to jump out to the furthest areas. This situation puts a strain on Auburn's poor traffic circulation system.

Long-term productivity of agricultural lands will be maintained by the retention of large-lot zone districts outside of the existing service areas. The proposed plan would commit approximately one-third of the plan area to urban usage, thereby eliminating subsequent alternative types of land uses.

Development Goals and Policies

1. Growth will be directed into areas where the least amount of environmental impact will occur.

2. Residential, commercial, and industrial land will be overlaid with agricultural/residential type zoning.

3. Growth inducement will generally be decreased. Holding capacity will be reduced, and extent of development will likewise decrease.

Foresthill

Foresthill, located approximately 12 miles northeast of Auburn, between the North and Middle Forks of the American River, can be categorized as a rural, mountain-foothill community. Residential and commercial development has historically been concentrated in and around the townsite area, which is comprised of a retail commercial area interspersed with single-family dwellings. On either side of the townsite are two large mills, the American Forest Products Mill and the Bendix Mill.

There are few multiple-family dwelling units at present. There are approximately 230 mobile homes located in six mobile home parks in the area. The primary housing type is the single-family residence.

A large portion of Foresthill is commercial timberland, some of which is in timber preserve zoning and some of which is under Federal ownership through the U.S. Forest Service and BLM.

Development Goals and Policies

The future goals and policies of Foresthill focus generally on preserving the rural character of the area and maintaining and where possible, increasing forestry activities, including future expansion of industrial areas.

Colfax

Colfax, characterized as a small rural town located approximately 15 miles north of Auburn on Interstate 80 and just west of the most northern terminus of Auburn SRA, is

anticipating growth acceleration in the near future. Future growth will come primarily from increases in the retirement population, new working families employed in the growing industrial complexes near Roseville and Auburn, and those attracted by new employment in Colfax. Seasonal homes, while not adding directly to the permanent population, will contribute to overall economic growth by creating local employment opportunities.

Development Goals and Policies

1. The existing downtown will be retained as the community shopping center. Modernization and expansion, including off-street parking, are recommended.

2. Over 100 acres of industrial land will be reserved for future needs. A variety of uses including warehousing, distributing facilities, and light manufacturing should be acceptable in this area.

3. New school sites, consistent with modern standards, will be constructed to meet the projected population.

Weimar/Applegate/Clipper Gap

The Weimar-Applegate-Clipper Gap general plan includes an area of approximately 32 square miles located in the foothills. The boundaries of the area are the Weimar Cross Roads to the north, Placer Hills Road and Interstate 80 to the west, and the North Fork of the American River to the east and south.

Generally, the existing land use of the area reflects the rural character of the community. The majority of this area has scattered housing in areas of mixed brush and woodlands. There is also a mobile home park, a mobile home subdivision, school, and public utility building in the plan area.

The primary housing unit in the plan area is the single-family dwelling. The projected housing mix in the area is anticipated to remain heavily single-family units due to the rural character of the area.

Development Goals and Policies

Goals and policies guiding future development patterns focus on preserving and enhancing the rural character of the area,

including increasing agricultural activities on appropriate lands. Commercial and industrial growth will be limited, while requiring strict design control. Growth will be directed into areas where the least environmental damage will occur. The overall holding capacity will be reduced to 11,000 population; therefore, the extent of development will also decrease.

Bowman

Bowman is an area of over 5 square miles in the foothills of the Sierra Nevada, approximately 2 miles north of Auburn on Interstate 80. The population of Bowman is expected to grow from between 1,100 to 1,500 people by the year 1995.

Generally, the existing land use of the Bowman area is consistent with the rural character of the community. The majority of the area has scattered housing on grasslands; however, there are several clustered areas of housing units, reflecting existing subdivision and concentrated lot splits.

Development Goals and Policies

1. The rural character of the Bowman area will be preserved.

2. A sufficient mix of neighborhood and highway commercial areas will be provided to serve the residents of the Bowman community as well as those visiting and recreating in the area.

3. The development of industrial areas will be limited to suitable land where services are available and minimal conflicts with adjacent land uses will occur.

4. Continued and increased agricultural activities on lands conducive to agricultural uses will be encouraged.

The Auburn SRA Study Area

Location

The Auburn SRA is within 2 to 3 hours travel time of the San Francisco Bay area and is within 40 minutes travel time of the Sacramento metropolitan area, both of which are located in the extended zone. The Auburn SRA is located approximately 30 miles northeast of Sacramento, between the towns of Auburn, Colfax, Foresthill, and Georgetown. The main access roads to the Auburn SRA are Highway 49 and Interstate Highway 80 (figure 1).

The Auburn SRA boundary encompasses 41,000 acres, encircled by both Placer and El Dorado Counties. Its southern boundary is located approximately 2 miles southeast of the city of Auburn. From here, the Auburn SRA extends up the North Fork of the American River to Iowa Hill Bridge and up the Middle Fork of the American River to Oxbow Powerplant. Throughout this region, the Auburn SRA encompasses approximately 50 miles of river corridor and most of the surrounding canyons up to near their ridgelines. A comprehensive description of the Auburn SRA and its surrounding region will follow in this chapter.

Circulation/ Transportation

Auburn SRA is located east of Interstate Highway 80 and is divided in its southwestern end by State Highway 49 (figure 1). Foresthill Road runs east-west along a ridge through the Auburn SRA, roughly bisecting it. Auburn SRA is served by a network of local and regional roads. The principal east-west road is Interstate Highway 80. State Highway 49 is the main north-south highway to the Auburn SRA. This route can be characterized as commuter, commercial, and recreational. During weekdays, traffic is mainly commuter and commercial oriented, with only minor amounts of recreational congestion. However, during weekends and holidays, and during the peak recreation season, these routes experience considerable increases in recreational use.

South of Auburn, State Highway 49 winds down to the bottom of the North Fork Canyon, where it crosses the North Fork immediately downstream of its confluence with the Middle Fork of the American River. The road then climbs out of the canyon to the town of Cool on the Georgetown Divide and continues southward through the town of Coloma toward the city of Placerville.

The Auburn-Foresthill Road begins near Interstate 80 just outside of Auburn. It then crosses the North Fork of the American River over the Foresthill Bridge upstream of the confluence and continues eastward along the top of the Forest Hill Divide to the town of Foresthill. Another alternate route, the old Foresthill Road, connects Highway 49, near the confluence, with the Auburn-Foresthill Road on the Forest Hill Divide. These two roads provide the only all-weather access to the Forest Hill Divide.

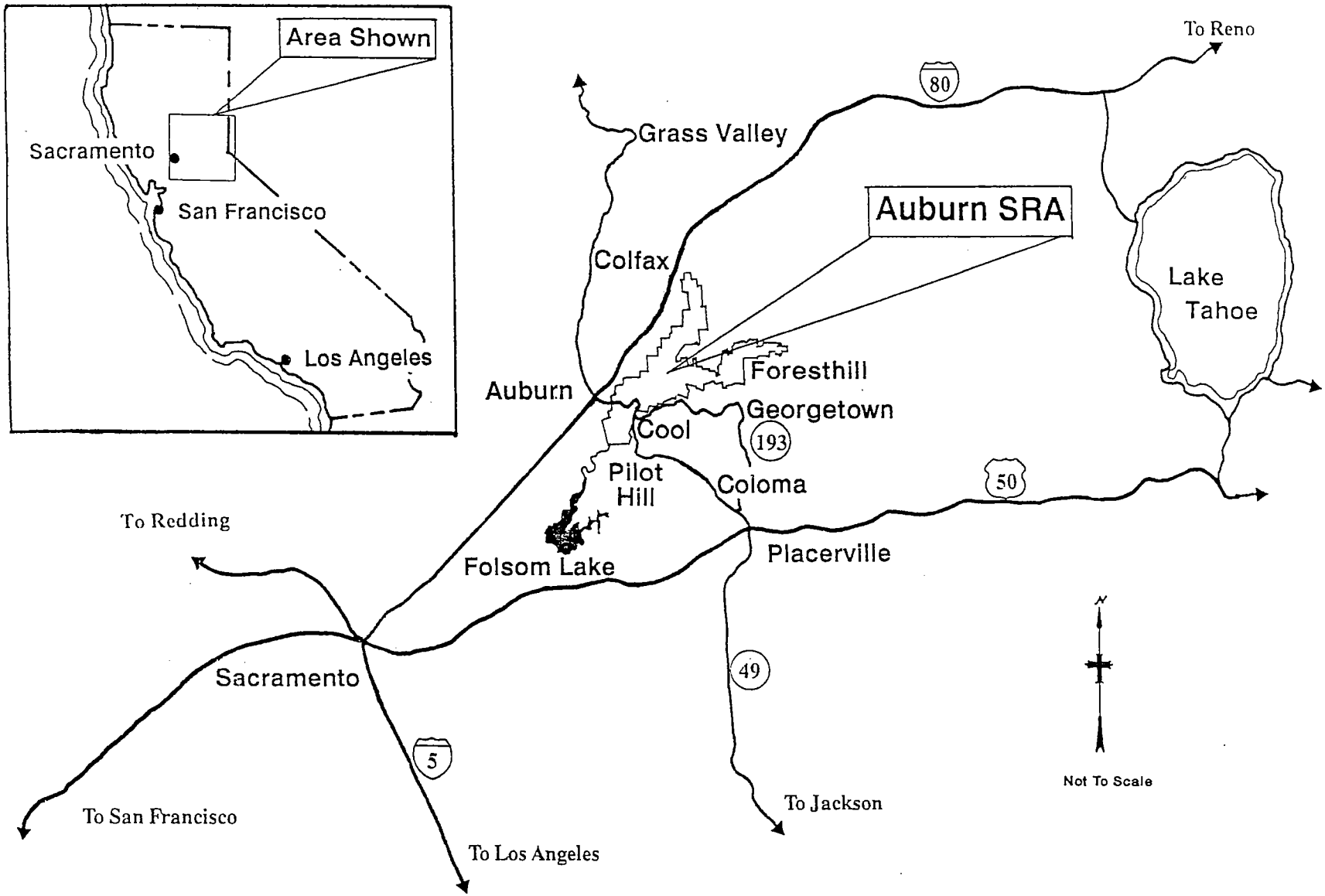


Figure 1

Road Location Map

In addition to Auburn-Foresthill Road, old Foresthill Road, and Highway 49, there are three roads which cross the North Fork of the American River in the Auburn SRA. These roads are of restricted widths, steep grades, many nonpaved sections, and numerous sharp curves.

The first road, a Forest Service road identified as Ponderosa Way, extends southeasterly from Weimar into the North Fork Canyon, where it crosses the river on a one-lane truss-type bridge. It climbs up to the Forest Hill Divide and continues down towards the Middle Fork.

The second road is Placer County's Yankee Jim Road. This road extends southeasterly from old U.S. 40 southwest of Colfax down Bunch Canyon to the bottom of the North Fork Canyon. It crosses the river near the mouth of Shirttail Canyon on a one-lane suspension bridge, then climbs eastward to the town of Foresthill.

The last road is Placer County's Iowa Hill Road. This road originates in Colfax off Interstate 80 and crosses the North Fork on a one-lane suspension bridge, providing the primary access to the community of Iowa Hill (plate 4 in appendix B shows these smaller roads).

On the Middle Fork, there are no roads which currently cross the river in the Auburn SRA. Drivers' Flat Road previously was the only road to cross the Middle Fork over Greenwood Bridge; however, this bridge was destroyed by a flood in 1964 and has never been rebuilt.

The recreational use of the highways is not considered a critical issue because the time that people use the roads for recreational use does not correspond to the peak commute hours. However, emergency evacuation on the divide, such as could be necessary due to forest fires, is considered a critical issue because of the limited number of exit routes and a relatively long time needed to accomplish the evacuation.

Land Ownership/ Management

A number of governmental bodies, including Federal, State, county, and municipal as well as private landowners are found within and

around the 41,000-acre Auburn project takeline. A description of the relationship of these entities to Auburn SRA follows.

Federal:

U.S. Bureau of Reclamation (Reclamation)

Reclamation has jurisdiction of 25,000 acres of public land in Auburn SRA.

U.S. Bureau of Land Management

BLM currently has jurisdiction of approximately 7,800 acres in Auburn SRA as well as additional lands outside of the Auburn SRA.

U.S. Forest Service

The Tahoe and El Dorado National Forests have a common boundary within the Auburn project takeline along 3 to 6 miles of the Middle Fork of the American River. Their holdings within the Auburn SRA amount to 2,400 acres. The Forest Service has transferred administrative control of that part of the Oxbow subarea used as the whitewater put-in for the Middle Fork of the American River to Reclamation.

During the planning process, an attempt was made to bring the policies and regulations used by the three Federal agencies into compliance with one another. These agencies have different policies and regulations relative to mineral extraction, off-road vehicles, camping, and other visitor-related activities. To accomplish this, inconsistencies between California Department of Parks and Recreation's (Parks), Reclamation's, and the Forest Service's regulations were identified; and a set of proposed unified regulations were developed. However, the Forest Service decided that it would maintain and enforce its own regulations. Although the Forest Service chose not to comply with the proposed unified regulations, it did express an interest in cooperating more closely with Parks and Reclamation concerning law enforcement in the river corridor. BLM rules still govern withdrawn BLM lands.

State

California Department of Parks and Recreation

Through a 1977 agreement, Reclamation has contracted annually with Parks to manage public recreation on the Auburn Dam project lands. Parks has designated the area as Auburn State Recreation Area. Parks maintains a staff of State park rangers and maintenance workers who manage the resources and the lands for public use and resource protection. It is Reclamation's responsibility to make major land use decisions. Through a different arrangement, Parks also patrols the 7,800 acres of BLM lands within the takeline.

Currently, Parks has six rangers on staff who patrol the various locations in the Auburn SRA. The number of rangers patrolling at any one time varies, with all areas being more heavily patrolled during the main use season in the summer months. The Confluence and Lake Clementine are generally patrolled more frequently than other areas, due to heavier use and potential user conflicts. Road maintenance and toilet facility maintenance is contracted out. One maintenance worker and several seasonal park aids are responsible for general maintenance and litter pick-up.

California Department of Forestry

The California Department of Forestry (CDF) oversees fire prevention and suppression programs in Auburn SRA under contract with Reclamation. As part of its prevention program, CDF assists in wildlife mitigation.

The Federal Fish and Wildlife Coordination Act requires Federal agencies who develop water resource projects to seek the advice of U.S. Fish and Wildlife Service (FWS). To mitigate interim impacts to wildlife habitat in the Auburn SRA as a result of construction activities associated with the multipurpose Auburn Dam project, FWS has advised Reclamation to use fire and crushing to initiate regrowth of palatable forbes and shrubs and to open up the dense chaparral for wildlife. As these activities are also effective fire prevention measures, they are conducted by CDF.

California Department of Fish and Game

The California Department of Fish and Game (DFG) administers both dredging permits for miners, streambed alteration permits, and hunting and fishing licenses. DFG wardens patrol Auburn SRA to make sure that miners and hunters comply with regulations and have valid permits.

County

The two counties adjoining the Auburn SRA, Placer and El Dorado, are responsible for the maintenance of the county roads which run through the area, public health, adjacent zoning and subdivisions, and general law enforcement.

The county sheriffs, together with Parks and CDF, are responsible for search and rescue efforts in the Auburn SRA and eradication of illegal garden activities.

Placer County

The Middle Fork of the American River separates Placer County to the north and El Dorado County to the south.

The most common zoning for parcel size of the unacquired lands within the Auburn SRA is 20 acres, although there are some zoned at 10 acres and others zoned at 160 acres. Some residual development exists on unacquired private lands within the Auburn SRA.

El Dorado County

There is some residential development on unacquired private lands within the Auburn SRA.

Municipal

The Auburn SRA boundary includes some lands within the city and community limits of Auburn, Colfax, Weimar, Cool, Pilot Hill, and Todd Valley Estates near Foresthill. Most of these lands have been acquired by Reclamation for the Auburn Dam project.

Private

There are approximately 6,700 acres of unacquired private lands within the boundaries of the Auburn SRA. These isolated

in-holdings vary in size from 1-acre to approximately 1,100-acre parcels. Where access to these lands exists, it must continue to be provided by the Federal Government.

Commercial/ Permitted Uses

There are several commercial and permitted uses occurring within the Auburn SRA bounds. These include commercial whitewater rafting, grazing, a concession agreement with the Auburn Boat Club, and timber harvesting. These activities will be described briefly in this chapter.

Whitewater Rafting

Commercial whitewater rafting activity is a permitted use on both the North and Middle Forks of the American River. This is an active program strictly regulated through the guidelines set forth in the Draft Whitewater Management Plan of 1987. These guidelines have been incorporated into the Whitewater Management Program found in the IRMP developed during this study. In 1991, 37 permits were issued to whitewater outfitters.

Grazing

Grazing has always been an allowed use on certain parts of the Auburn SRA. Lands which are currently grazed were grazed before the Auburn Dam was authorized and before these lands were included as part of the State park system. Grazing primarily occurs on Knickerbocker Flat; although in the past, land for grazing has been leased on the Forest Hill Divide.

Grazing is administered by Reclamation through a bidded lease on a yearly program not to exceed 5 years, with Reclamation having an option to extend the lease for successive additional periods of 1 year each.

Currently, there are four leaseholders grazing cattle on Knickerbocker Flat and none on the Forest Hill Divide.

Auburn Boat Club

The Auburn Boat Club, which has a concession contract with Parks, operates a 50-slip marina on Lower Lake Clementine.

Timber

The U.S. Forest Service manages lands along the Middle Fork of the American River that are adjacent to and within Auburn SRA. The lands north of the Middle Fork are operated by Tahoe National Forest; the lands south of the Middle Fork are managed by El Dorado National Forest. Both national forests have timber management strategies.

Tahoe National Forest

Opposite the El Dorado National Forest, and bordering the Middle Fork of the American River, is a 1,596-acre National Forest Service Management Area of the Tahoe National Forest referred to as Queens. Narrow strips of commercial timber occur in some of the area. There are no wetlands in this area, and there are 350 acres of unsuitable productive forest land. No logging has been done within the Queens Management Area.

Emphasis is on fire prevention and watershed protection. The timber resource present within the Queens Management Area is unsuited for regulated timber production. The desired future condition of the entire Queens Management Area would not change from the present.

El Dorado National Forest

The El Dorado National Forest borders the Middle Fork from Oxbow put-in to Bottle Hill. Most of the area immediately adjacent to the river is classified as general forest–lands that are most favorable for growth and harvest of commercial conifer species. Lands in this status are the most intensively managed areas in the forest. The widest range of activities and the most changes in the landscape occur in the general forest zone.

Between Otter Creek and Kanaka Gulch, along both sides of the Middle Fork of the American River and within the Auburn SRA, is a spotted owl and goshawk habitat area. The area is classified as a wildlife area and managed to maintain viable populations of spotted owls and goshawks. The habitat management goal for these sensitive species is to provide suitable nesting and foraging ground to perpetuate their existence.

The resource management emphasis is to protect and manage mature timber stands that provide suitable habitat for late successional wildlife species, particularly the spotted owl. It must meet National Forest Management Act requirements for maintaining viable populations of threatened, endangered, and sensitive wildlife species.

A large timber harvest is scheduled to be completed by 1995 in what is referred to as the Brushy Crater Cable Area in the El Dorado National Forest/Georgetown Ranger District. The harvest will be in close proximity to the river.

Private land ownership exists within the canyons of the Middle and North Forks, so additional harvesting can occur, even though the affects may be adverse. Therefore, the potential exists for degradation of environmental resources.

Recreation Areas

This report describes Auburn SRA as having six major use areas and 16 subuse areas. These areas have been determined by the diversity of both the recreational and natural resources, specific points of access throughout the area, and various points of concentrated use.

The six major recreational use areas are as follows:

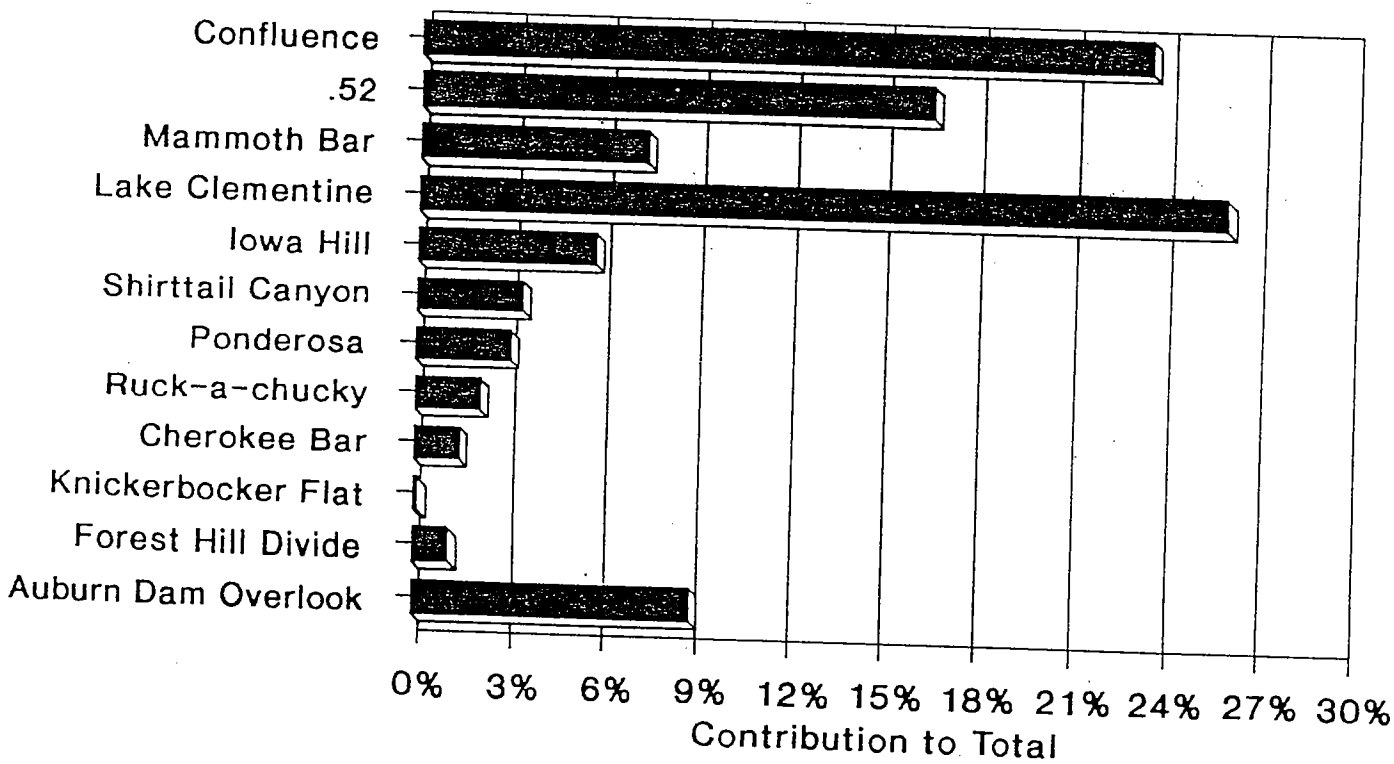
1. The Highway 49 Corridor
2. Lake Clementine
3. North Fork of the American River
4. Middle Fork of the American River
5. Knickerbocker Flat
6. Rim Areas

These areas, (plate 2 in appendix B), have been further subdivided, and will be referred to throughout this report as they are listed and described below. The percentage of use for each of the major recreation areas in the Auburn SRA is given in figure 2.

The Highway 49 Corridor

The Highway 49 Corridor, located in the southeastern portion of the Auburn SRA, covers approximately 400 acres along roughly 3 miles of river, where Highway 49 and the Old Foresthill Road cross the

Distribution of Attendance
By Selected Area and Subarea Sites
Auburn State Recreation Area



Source : California Department of Parks and Recreation
Based on 1988 Attendance Data

Figure 2
Recreational Use Chart

North and Middle Fork Canyons. Parking and access is available along either of these roads at various pull-outs and at a parking area at the bottom of a dirt road off Old Foresthill Road.

Throughout this general area, dispersed recreational activities take place. Hikers, equestrians, mountain bikers, and anglers can be found on almost any stretch of the river, as well as others seeking solitude and the benefits of a river/canyon environment.

One of the main attractions to the area is the multiuse trails which reach from the Highway 49 Corridor area to various points such as the cities and towns of Auburn, Cool, Foresthill, and Georgetown, and to other recreational use areas such as Folsom Lake, Lake Clementine, Knickerbocker Flat, and the river canyons of the North Fork and Middle Fork. A portion of the Western States Trail, a federally designated national trail, is located along the Middle Fork of the American River in the Auburn SRA. This historic trail, which originally stretched from Sacramento to Utah, is heavily used by hikers, runners, and equestrians. The Sierra Crest portion of the trail, once blazed by Paiute and Washoe Indians and later used by fur traders, settlers, and then miners, is now the route of two world-famous, 100-mile endurance races–one race for runners called the Western States Endurance Run and one for equestrians called the Tevis Cup Race.

The Western State Trail runs from Auburn down the North Fork Canyon and crosses the river just below the actual confluence of the two forks, at the historic Old Mountain Quarries Railroad Bridge (No Hands Bridge). The Western States Trail then passes the confluence and continues along the very scenic Middle Fork of the American River. The trail eventually rises up the north side of the Middle Fork Canyon to the town of Foresthill, and then onward in an easterly direction over the Sierra Nevada range. The popularity of this trail in Auburn SRA, aside from its historical significance, is attributed to the fact that this trail is the "backbone" of the Middle Fork trail system, interlinking many of the other trails in the area.

The Highway 49 corridor can be divided into three subareas: the Confluence, .52, and Mammoth Bar. A discussion of the recreational use of these areas follows:

Source : California Department of Parks and Recreation
ed on 1988 Attendance Data

The Confluence

The Confluence, consisting of a large rock, gravel, and sandy beach area where the North and Middle Forks of the American River meet, receives the second greatest amount of visitation in the Auburn SRA. This open area is accessed by Highway 49 to the southwest and Old Foresthill Road to the northeast. There are significant daily river flow fluctuations year-round at the Confluence area. This is due to releases from the dams upstream on the Middle Fork of the American River and seasonal flow fluctuations affected by natural runoff on the North Fork segment. The stream channel ranges from low gradient gravel bar rapids to relatively deep runouts. Strong currents occur both on and below the water surface in some places, and in others, the currents slow and deep channels and pools occur.

The ease of access, large beach areas, attractive canyon scenery, and dynamic water features are the main attractions in the Confluence area. Swimming, hiking, fishing, and sunbathing are the main activities; and the proximity of shady hillsides to cool waters lures hikers and other users to this area even in the heat of summer. Photo 1 shows a portion of the Confluence subarea.

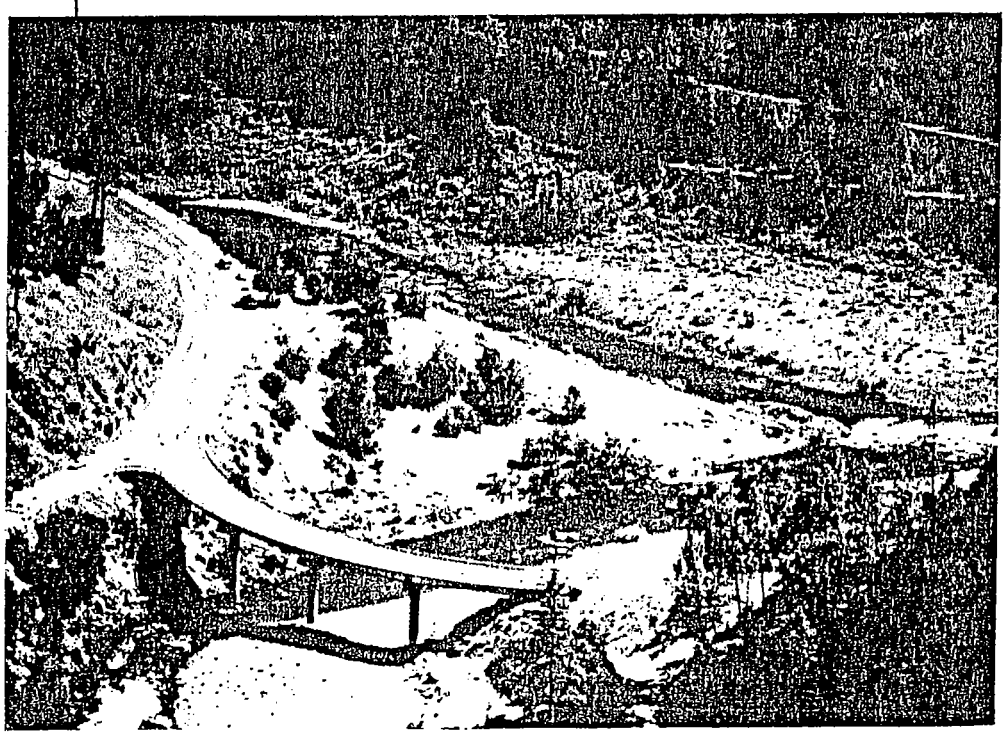


Photo 1–The Confluence subarea.

One of the more popular multi-use trails in the Confluence area is the Old Quarries Railroad Trail (a segment of the Western States Trail) which crosses at the Confluence and extends easterly along the Middle Fork of the American River beyond Murderers' Bar and westerly over No Hands Bridge toward Auburn. The width, gentle gradient, and proximity to the river make this trail popular with hikers, runners, mountain bikers, and equestrians.

The Confluence receives most of its use (56 percent) in the summer months (June through September), with the most popular month being July. Due to the relatively mild climate during spring, fall, and winter, the area continues to experience use throughout the year.

.52 Subarea

Half a mile downstream of the Confluence, on the North Fork, just downstream of the Highway 49 bridge, is an area referred to as .52. This subarea is the third most heavily used in Auburn SRA and is situated in a canyon environment where the river features are dominated by deep, slow moving pools, small sandy beaches, and rocky ledges. The area is ideal for swimming, sunbathing, and picnicking. The steep canyon walls provide an atmosphere of seclusion and privacy (see photo 2)

Access to .52 is via a short steep hike down the north side of the canyon from Highway 49 or by the Western States Trail which crosses the river at .52 via No Hands Bridge.

Although .52 receives use year round, the heaviest use occurs in the summer months (44 percent for the period of June through August), with the most popular month being July.

Mammoth Bar

Approximately 1-1/2 miles upstream from the Confluence, on the north side of the Middle Fork of the American River, is a 900-acre subarea referred to as Mammoth Bar. Located on a level gravel/sand bar with easy access to the river shore, Mammoth Bar is used by recreationists such as swimmers, sunbathers, picnickers, and bank fishermen. Easy vehicular

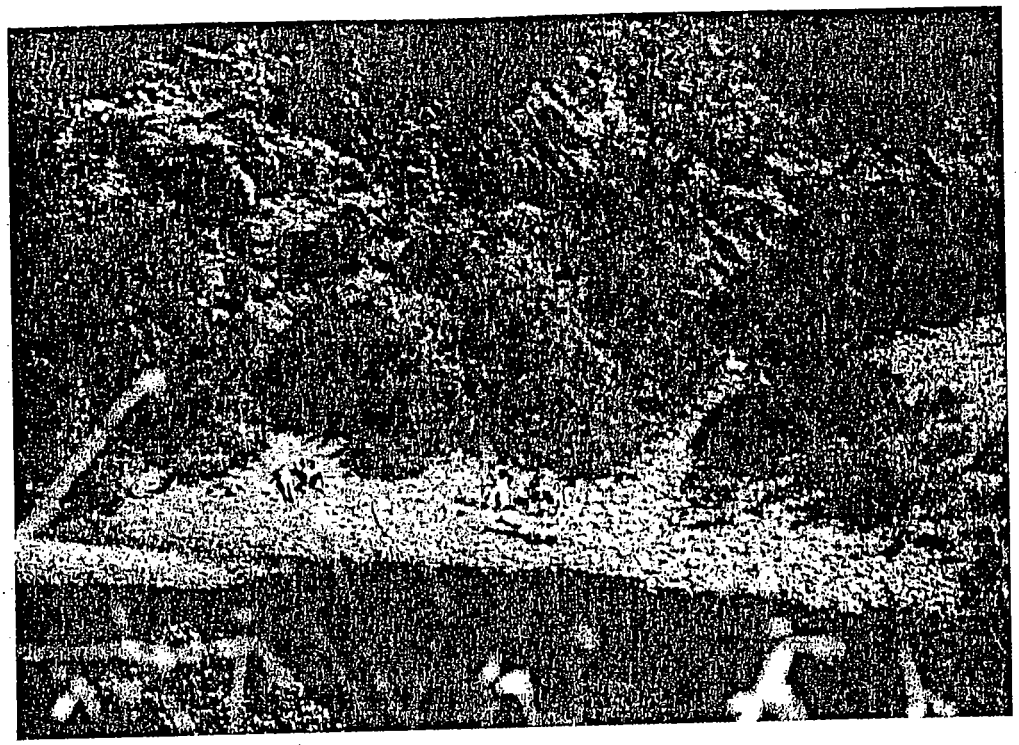


Photo 2–The .52 subarea.

access to the water also makes this area an occasional take-out site for the Mammoth Bar rafting run on the Middle Fork of the American River (see photo 3).

The primary recreation in this area is off-highway vehicle (OHV) use such as motorcycles, all terrain vehicles, and jeeps. This activity was originally condoned due to the "interim" nature of the resource base, as the area was to be permanently inundated by the waters of the Auburn Dam and Reservoir project.

Use patterns at Mammoth Bar are distributed fairly evenly throughout the year as compared to the other areas and subareas in Auburn SRA. The month of September experiences the most use, accounting for 14 percent of the annual total. The remaining months each experience between 4 and 10 percent of the total.

Lake Clementine

Lake Clementine is roughly 4 miles long and one-eighth of a mile wide, covering approximately 642 acres. The reservoir is located on

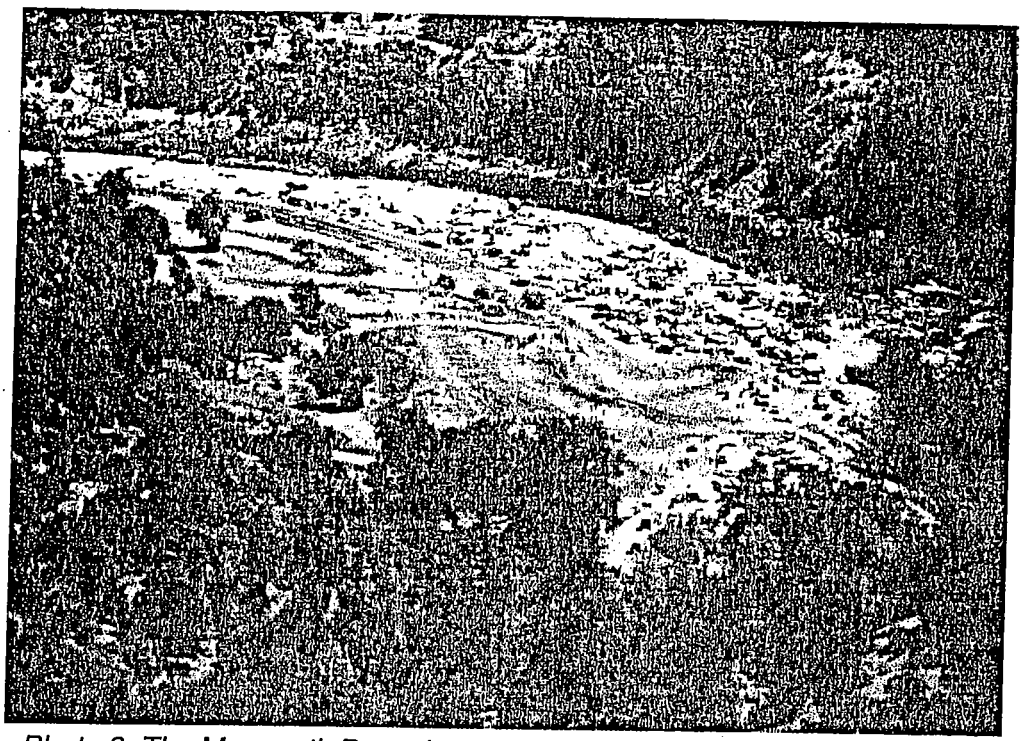


Photo 3–The Mammoth Bar subarea.

the North Fork of the American River approximately 2 miles upstream and northeast from the Confluence area.

The waters of Lake Clementine are impounded by the North Fork Dam (see photo 4). The dam was built in 1939 by the U.S. Army Corps of Engineers (Corps) for the sole purpose of retaining debris and sediment, a result of prior and anticipated upstream mining activities which did not materialize. As the waters of the reservoir freely spill over the top of this debris containment dam, the lake maintains a stable water level at an elevation of 715 feet throughout the year, thus enabling lush riparian vegetation to grow to the lakes edge. This, in turn, creates a thriving habitat for fish and other wildlife and has resulted in a reservoir which is visually more attractive than most manmade impoundments.

On the steep canyon wall of Lake Clementine's northern shore is nestled a prominent limestone outcropping known as Robbers' Roost, or Lime Rock. This outcropping is a dominant landscape feature of this highly scenic area.

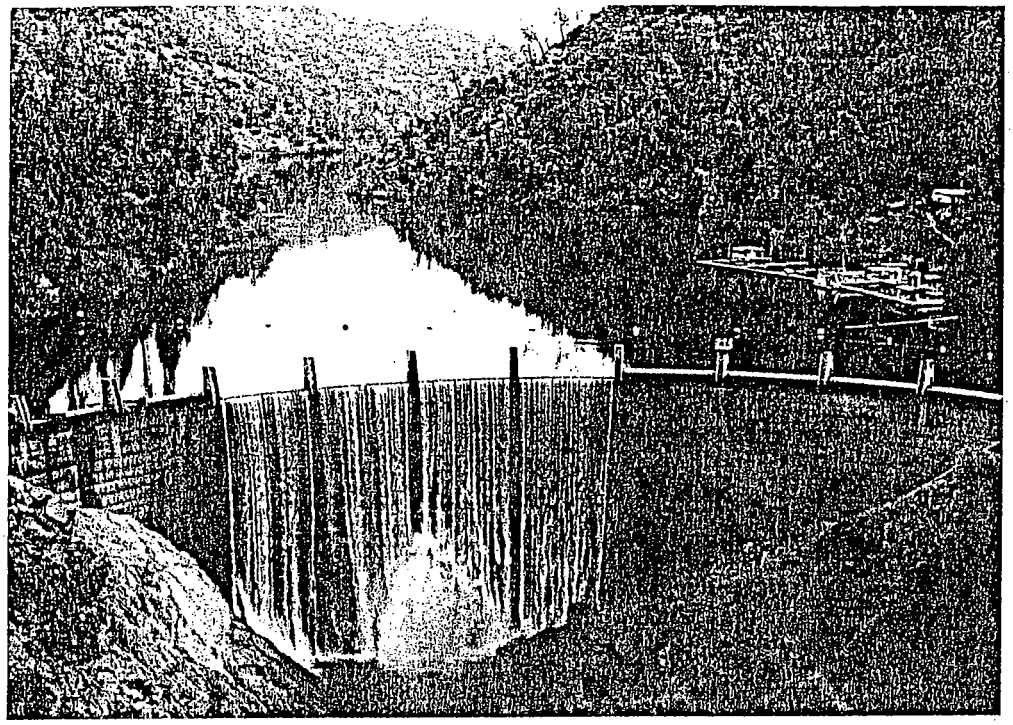


Photo 4–Lower Lake Clementine subarea.

The combination of a flatwater area reflecting a very picturesque setting promotes a variety of recreational opportunities, including fishing, waterskiing, canoeing, and both boat-in and drive-in camping.

Lake Clementine is the most popular use area in the Auburn SRA. It receives the heaviest use in the summer months, with 65 percent of the use occurring between the months of June through August and less than 5 percent of the use occurring between the months of November through February.

Lake Clementine can be divided into two subareas: Lower Lake Clementine which is nearest to the dam and Upper Lake Clementine.

Lower Lake Clementine

The lower portion of Lake Clementine can be accessed via the North Fork Dam Road, which is open year round. This lower portion offers opportunities for waterskiing and warm-water sport fishing in the summer months. On the lake is a single-lane boat launch ramp, courtesy dock, and a private club with a 50-boat marina and public fuel sales.

Upper Lake Clementine

The upper end of Lake Clementine can be reached via a dirt road, open from spring to late fall, and closed during the rainy winter season. The road terminates at a gravel bar near the lake's edge where there is a parking area, picnic area, and 15 primitive drive-in campsites. Due to the shallow nature of the lake at its upper end, this area is closed to motorized boats. Visitors to this end of the lake enjoy more passive lake activities such as canoeing, swimming, flatwater kayaking, and water play.

The campsites at Lake Clementine, both boat-in and drive-in, are also located at the upper end of the lake (see photo 5). The boat-in campsites are primitive and located on three separate sandbars at the upstream end of the lake. The primitive nature of the area is considered by users to be a positive attribute.

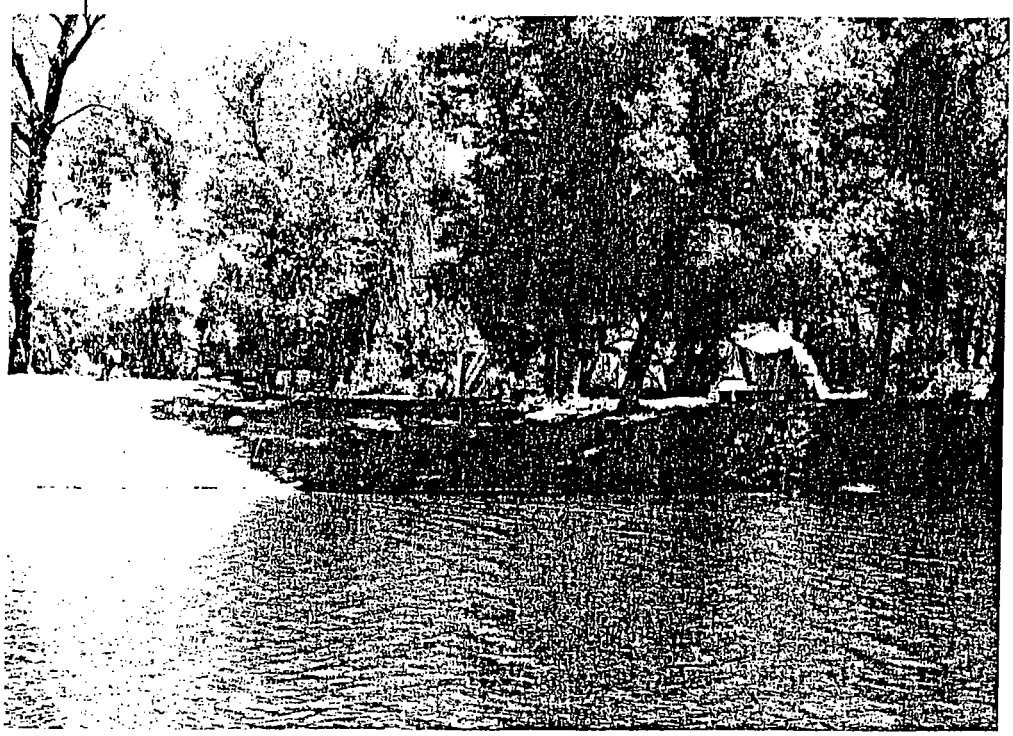


Photo 5–Upper Lake Clementine subarea.

North Fork of the American River

The North Fork use area lies above Lake Clementine between the Forest Hill Divide to its southeast and the Interstate 80 corridor to its northwest. The area extends 13 miles from the downstream limit of the existing wild and scenic river segment of the North Fork (near the Iowa Bridge) to Lake Clementine.

Swimming, hiking, fishing, hunting, camping, recreational mineral collecting, equestrian activity, mountain biking, picnicking, whitewater boating, and a variety of other dispersed recreational endeavors occur throughout the North Fork of the American River.

The esthetic quality of both the forested canyon and this 13-mile stretch of river are exceptional. With no upstream dams, the North Fork of the American River above Lake Clementine is one of the last remaining free flowing rivers in California.

Smaller tributaries and creeks, such as Indian, Shirttail Canyon, Bunch Canyon, and Codfish flow into this stretch of the river and are popular stopping points for hikers or boaters who wish to explore the waterfalls, cool pools, and riparian vegetation found along these smaller canyons.

Throughout the upper third (first 5 miles) of the North Fork stretch, the river channel is narrow. The waters of the river flow alternatively between boulder-choked rapids and deep, clear pools.

In the lower two-thirds (last 8 miles) of the North Fork stretch, the river canyon widens, and the river bed gradient begins to level off to a lesser degree, making this stretch ideal for intermediate level canoeists and rafters. Along this forested segment, hillsides of pine and oak add to the scenic beauty and supply habitat for abundant wildlife.

The length of the use season for boating activity varies, depending on the water content of the snowpack in the drainage and the beginning of spring runoff. Typically, the boating season runs from May to mid-June. Some winter boating takes place but is limited in numbers.

Because of the unpredictable nature of the North Fork's season and the limited number of commercial boating permits allowed for the North Fork, the commercial interest in running it is lessened.

Because commercial boating is less on this fork than either the South or Middle Forks of the American River, a more peaceful yet technically challenging, whitewater experience for noncommercial boaters is available.

There are two whitewater runs along this section of river. Beginning at Iowa Hill Road and extending to Shirttail Canyon, a 4.5-mile run provides a challenging class IV run. From Shirttail Canyon to Ponderosa Way, a 5-mile run, the gradient lessens and is considered class II–III. The remaining 3 miles to Lake Clementine are rarely utilized by whitewater boaters but are ideal for canoeists and others interested in floating a mild and exceptionally scenic section of the river canyon.

As this is an undammed river, water flows are greatest during the spring runoff, and it is during this period of the year when the predominate user group of the area is the whitewater enthusiast. As the streamflows subside in June and the water and air temperatures rise, whitewater boating use decreases and a marked increase occurs in other recreational uses, such as swimming, recreational mineral collection (i.e., gold panning, dredging, etc.), and waterplay activities.

Within the North Fork of the American River are three subareas: Iowa Hill, Shirttail Canyon, and Ponderosa. A discussion of the recreational use of these areas follows.

Iowa Hill Bridge

Colfax-Iowa Hill road, which runs generally east to west from Iowa Hill to Colfax, crosses the North Fork of the American River on the Iowa Hill Bridge. The Iowa Hill Bridge area marks the northern terminus of the Auburn SRA, and is located just downstream (less than 1,000 feet) from the wild and scenic stretch of the North Fork of the American River. The area is focused primarily upon river related activities and contains Mineral Bar Campground located on the east bank of the river (see photo 6). Both sunny and shady riverside locations allow for a variety of uses, including recreational mineral collection, fishing, hiking, camping, swimming, and picnicking. The Mineral Bar Campground also serves as an access point for private boaters.

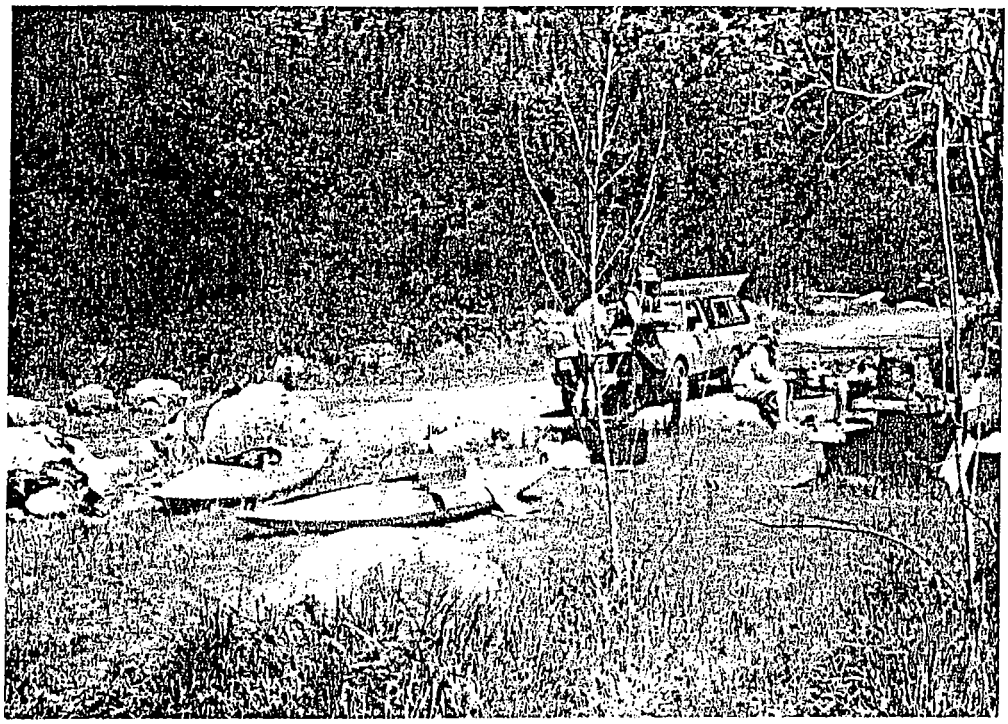


Photo 6–Mineral Bar Campground, Iowa Hill subarea.

Camping at Mineral Bar Campground is limited by the number of campsites, which reach capacity in the summer. Pit toilets and vault toilets are located on the east side of the river near the campground. Commercial whitewater rafting outfitters access the river on the west side.

Shirttail Canyon

Shirttail Canyon, a year round drainage, enters the North Fork on its eastern side and is located 4-1/2 miles downstream from the Iowa Hill Bridge. Yankee Jim Road (which runs approximately east to west from Foresthill to Weimar/Colfax) is the primary access road to the Shirttail Canyon area and crosses the North Fork via an old suspension bridge at the confluence of these two drainages (see photo 7). There is parking available near both ends of the bridge for day use, and remote camping is allowed in the area with the appropriate permits.

There are several popular hiking trails in the Shirttail Canyon area and along the North Fork. Dredging and other recreational mineral collecting also occur in the area. Because

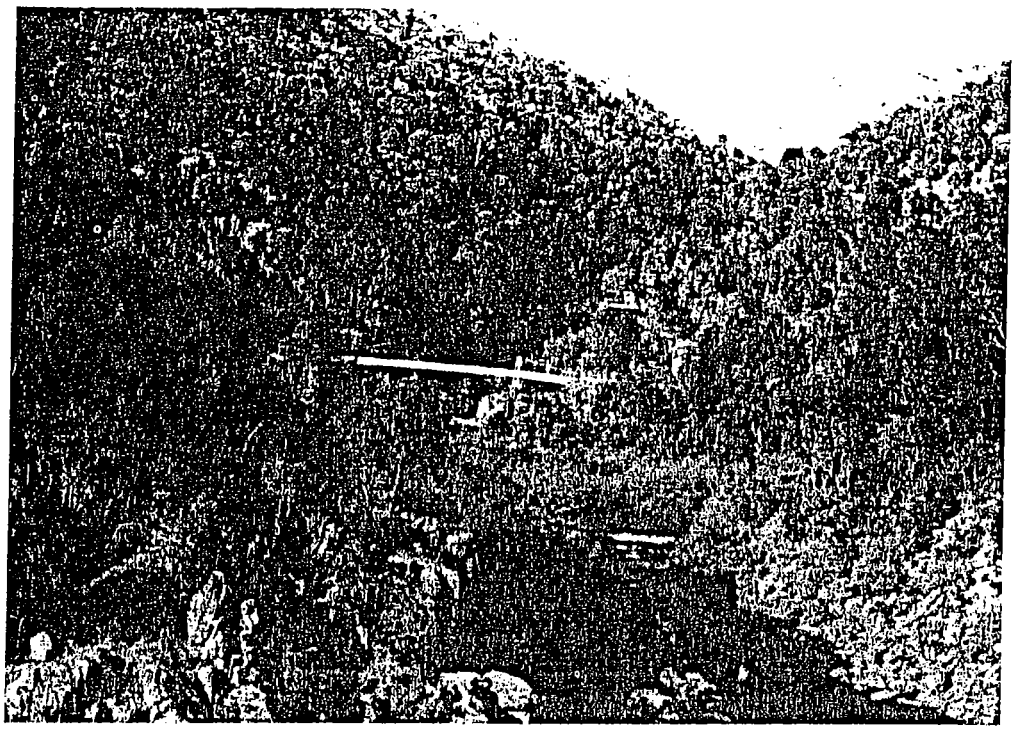


Photo 7–Shirttail Canyon subarea.

there is no commercial whitewater boating access permitted in the Shirttail Canyon area, it tends to be more peaceful and oriented towards family use.

For noncommercial (private) rafters on the North Fork, the take-out trail at Shirttail Canyon is difficult and strenuous. While kayakers can negotiate the steep, narrow trail to the road with less difficulty, rafters find it burdensome enough to usually opt to travel the extra 5 miles downstream to the next river access point at Ponderosa Road Bridge.

Ponderosa

Similar to the other two subareas in the Upper North Fork, the Ponderosa area's main attractions include the river and the surrounding canyon sides above. Dispersed day-use activities such as swimming, sunbathing, recreational mineral collecting, fishing, and hiking are very popular. Several large, deep pools, slower currents, and a large sandy beach attract users to this area in the heat of the summer.

The Ponderosa area is located 9 miles downstream from the Iowa Hill Bridge on the North Fork of the American River. It

The Ponderosa area is located 9 miles downstream from the Iowa Hill Bridge on the North Fork of the American River. It is accessed by Ponderosa Road, which runs from Weimar down the northwest side of the North Fork Canyon, where it crosses the river at Ponderosa Road Bridge. From this point, the road travels back up the southeast side of the canyon where it joins the Auburn-Foresthill Road at a point approximately 4-1/2 miles west of Foresthill.

As there are few road access points along the river, the Ponderosa area is well used as a take-out access point for those boating the Chamberlain Falls run (the 9-mile stretch from Iowa Hill Bridge downstream to Ponderosa).

Middle Fork of the American River

The Middle Fork area extends from just downstream of Oxbow Powerplant to the eastern edge of Mammoth Bar downstream 22 miles. This forested river canyon lies south of the Forest Hill Divide and north of the communities of Cool and Georgetown.

Recreational use and opportunities in the Middle Fork area are similar to those of the North Fork area with hiking, fishing, hunting, camping, recreational mineral collecting, equestrian riding, mountain biking, picnicking, running, and whitewater boating being the more popular recreational activities pursued (see photo 8).

A segment of the nationally registered historical Western States Trail runs along the Middle Fork of the American River after descending from Foresthill to the Ruck-a-Chucky subarea and is a main artery from which additional trails branch out to other areas.

As with the North Fork use area, the Middle Fork has various tributaries and streams which flow into its waters. The North Fork of the Middle Fork, Dardenelles Creek, Otter Creek, Canyon Creek, and American Canyon are some of the more popular side tributaries which flow year round, supplementing the Middle Fork use area with recreational diversity featuring riparian vegetation, refreshing pools, and waterfalls. These creeks and canyons are accessed via the river or by the trail network and add another dimension to the resources in the area.

The nature of the Middle Fork of the American River differs from the North Fork of the American River relative to channel size,

Photo 8–A rider on the Western States Trail in the Middle Fork subarea.

gradient, season, and magnitude of water flow. The channel is wider, and the rapids are generally longer and flatter with a few significant exceptions. The watershed of the Middle Fork is almost twice the size of the North Fork (614 square miles verses 342 square miles), which produces a greater runoff for the Middle Fork. However, the spring runoff is stored in upstream reservoirs on the Middle Fork, resulting in peak flows on the Middle Fork being generally more moderate than on the North Fork. The stored waters, released at a constant moderate level throughout the year, enable whitewater boating year round.

Because of this regulated streamflow volume, the Middle Fork sees the greatest amount of commercial whitewater boating in the Auburn SRA. The boating season usually begins in late May and extends into September, reflecting the desire for boating during the warmer summer months (97 percent of the full year's whitewater use occurs during this time).

There are three distinct whitewater runs on this river: the Tunnel Chute Run is a class IV with one class V rapid and a portage. This stretch runs from below the Oxbow Powerplant to the old Greenwood Bridge site. The Mammoth Bar Run is a class II and

runs from the old Greenwood Bridge site to Mammoth Bar. The Murder's Bar Run, a class IV with one class V rapid, runs from Mammoth Bar to the Confluence, ending just above the Highway 49 bridge.

The Middle Fork of the American River is reported to have been the greatest placer (river based) gold bearing river in the Nation. There is abundant evidence of the past historical mining, as shown by some of the remaining artifacts, historical sites, and topographic changes which can be seen along the river's edge, in the canyon, in side tributaries, and in nearby communities. Even today, the desire to obtain the elusive "yellow stuff" drives the modern day recreational mineral collector to work the sediments and deposits in the very same places as did the "Forty-Niners" over 140 years ago.

There are five major subareas located along the Middle Fork: Oxbow Powerplant, Ruck-a-Chucky, Cherokee Bar, Cherokee Flat, and Maine Bar. A discussion of each of these areas follows.

Oxbow

The Oxbow area, located on Forest Service property, is not within Reclamation's jurisdiction. However, as the put-in access point and staging area for the whitewater run of the Middle Fork are located just below the Placer County Water Agency's Oxbow Powerplant on Forest Service land, Reclamation has made a special agreement with the Forest Service for Parks to manage and patrol the put-in and staging area.

The main use at the Oxbow area is associated with commercial whitewater rafters. A difficult shuttle and extensive commercial activity keep the level of noncommercial boating low. Lack of lush vegetation, steep access to the river, and lack of beach area make the Oxbow area unattractive to most recreationists.

Facilities at the Oxbow Powerplant area include a seasonal vault toilet (operated cooperatively by commercial whitewater rafting companies), garbage cans, and a nearby primitive Forest Service campground.

Ruck-a-Chucky

Fifteen miles downstream of Oxbow Powerplant, lies the secluded and highly scenic Ruck-a-Chucky area (see photo 9). As the relatively wider stream with its long slow moving pools narrows into a carved bedrock gorge, the constricted waters of the Middle Fork cascade over Ruck-a-Chucky Falls and continue through rapids choked with house-size boulders and drops. After a mile of rapids, the gradient of the gorge decreases and the river slows and flows through deep clear pools. Ruck-a-Chucky Campground borders these pools at a site where the old Greenwood Bridge once spanned the river gorge.

The Ruck-a-Chucky area is accessed by the river, the Western States Trail, and by Driver's Flat Road which descends the northside of the canyon from the older Auburn-Foresthill Road. Easy access to the river, available campsites, and the lazy pace of the water below the rapids make this a popular area. The area is also used as a whitewater boating access take-out point for the Tunnel Chute run and as a put-in point for the Mammoth Bar run.

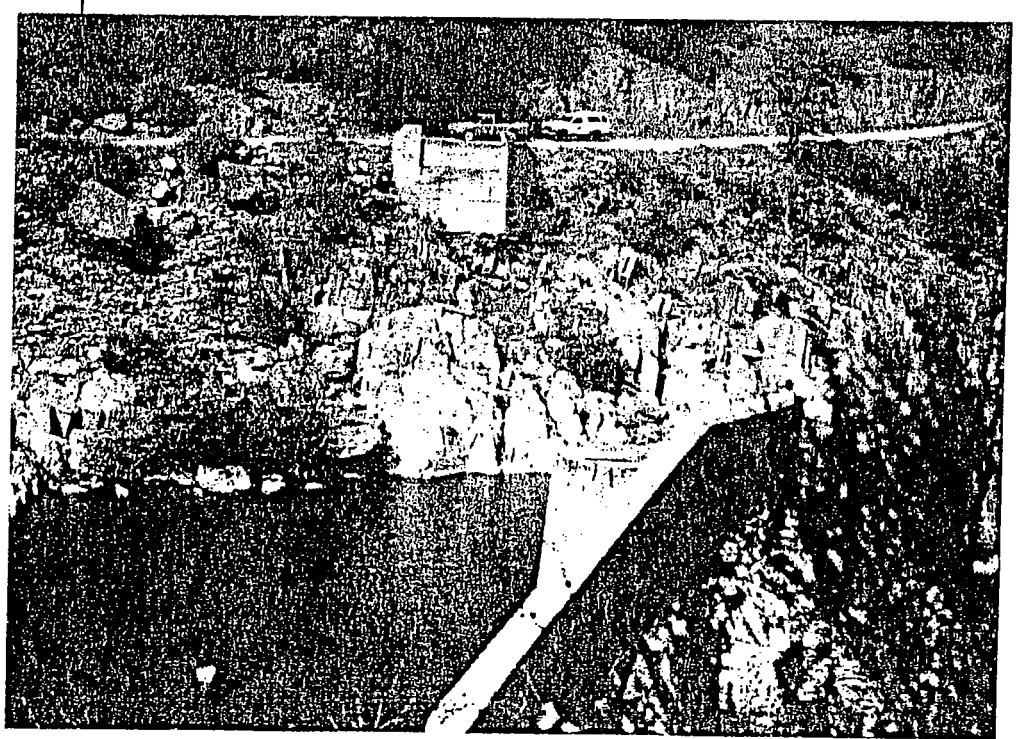


Photo 9–The Ruck-a-Chucky subarea on the Middle Fork of the American.

Facilities at Ruck-a-Chucky include pit toilets, parking, and camping. Camping (there are 10 assigned spaces) and parking are limited; and in the summer, visitors and campers at Ruck-a-Chucky often exceed the available facilities.

Ruck-a-Chucky receives most of its use in June (26 percent), with 48 percent occurring throughout the summer months and 30 percent occurring in the spring months. Little use occurs in the winter months, possibly due to the occasional closure of Driver's Flat Road when the rains cause it to become slick and muddy, making this steep, narrow and rough road too difficult or impossible to navigate. Other factors accounting for decreased use of the area during the winter months are the seasonal nature of recreational mineral collection and whitewater rafting.

Cherokee Bar

Cherokee Bar is located along the Middle Fork, downstream and across the river from Ruck-a-Chucky. This mile-long area, with large sandy beaches, provides good access for water oriented activities (see photo 10). The wide gravel bar is one

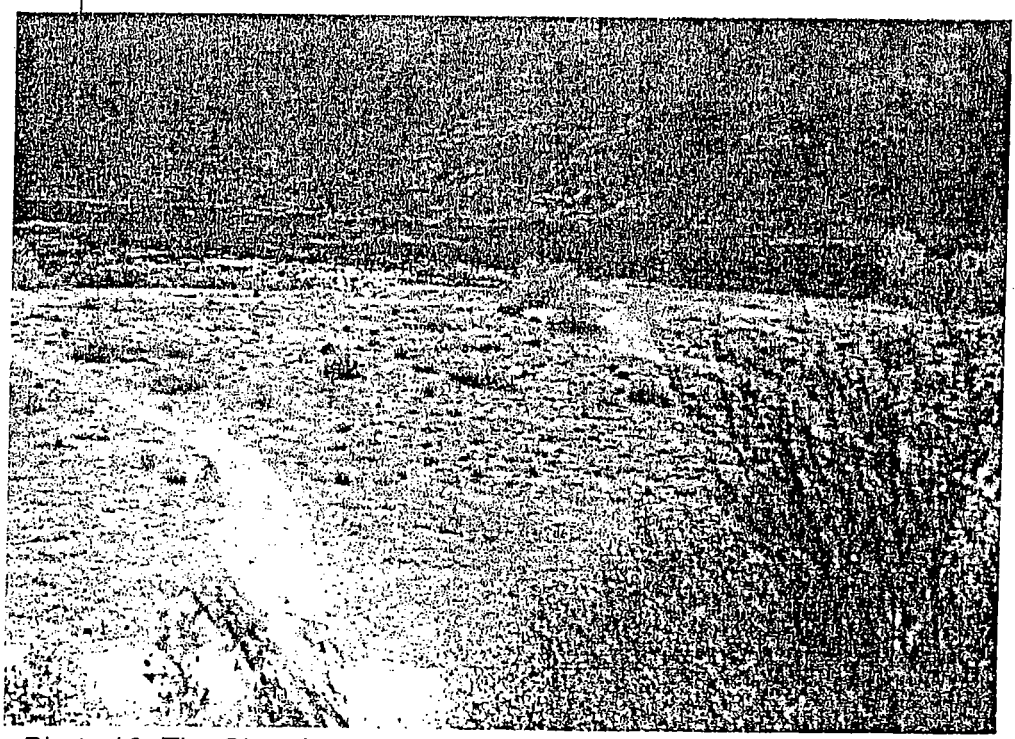


Photo 10–The Cherokee Bar subarea on the Middle Fork of the American.

of the few large, flat areas accessible by vehicles in this section of the canyon. Most of the recreational use here is by typical day users and campers engaging in a variety of activities such as fishing, swimming, sunbathing, picnicking, horseback riding, recreational mineral collecting, nature study, and camping.

The Cherokee Bar subarea is accessed by the river, by trails, and by Sliger Mine Road, which drops steeply into the east side of the Middle Fork Canyon from the little community of Spanish Dry Diggins and nearby larger communities of Greenwood and Georgetown.

As with many of the other water-oriented use areas, Cherokee Bar receives its greatest monthly use in July (20 percent), with 47 percent of its overall use occurring in the summer months, 40 percent in the spring months, and negligible use occurring in the winter months.

Cherokee Flat

Perched on the side of Summit Hill, overlooking the Middle Fork of the American River near Cherokee Bar, is Cherokee Flat. Views of the subarea from Sliger Mine road, (the main access road to the area), show that the broad and sunny 20-acre area slopes very gently towards the river. Near where the area reaches the river, it drops off sharply; and it is near this edge where one may enjoy superb views of the Middle Fork Canyon.

Cherokee Flat's level topography and proximity to hiking and equestrian trails make this subarea an ideal location as a staging area for the trails along the Middle Fork of the American River. Because of its seclusion and the good views of the river and canyon, this area is also an ideal spot for picnicking (see photo 11).

Maine Bar

Accessible only by trail or river, Maine Bar is located along the Old Quarry Road multiple use trail and lies approximately 5 miles northeast of the Confluence subarea. Miles from any paved road, Maine Bar offers a quiet, flat, shady spot along the river's edge where trail users can refresh themselves before heading out to their destination.

Photo 11–The Cherokee Flat subarea on the Middle Fork of the American.

Maine Bar is centrally located along the Middle Fork trail network. With four trails converging at this subarea and others nearby, it is a major crossroad for visitors on an extended hike or trail ride. From Maine Bar, one can ride upstream or downstream along the Middle Fork of the American River, up Brown's Bar Canyon, Maine Bar Canyon, American Canyon, or Hoboken Canyon, towards Cherokee Flat, or towards Greenwood. Two restrooms are currently available for public use.

Knickerbocker Flat

The Knickerbocker Flat use area is comprised of 2,000 acres lying southeast of both the Confluence and the .52 use areas, bordered to the northeast by Highway 49. The area is quite different from most of the other use areas in Auburn SRA as it is located on a plateau near the canyon rim. Visually distinct from the steep topography and riparian and forested vegetation which exist in the river canyons, the Knickerbocker Flat use area occupies a wide, rolling topland with a character similar to the oak woodland savanna which surrounds many of the lower foothill communities in the region (see photo 12).

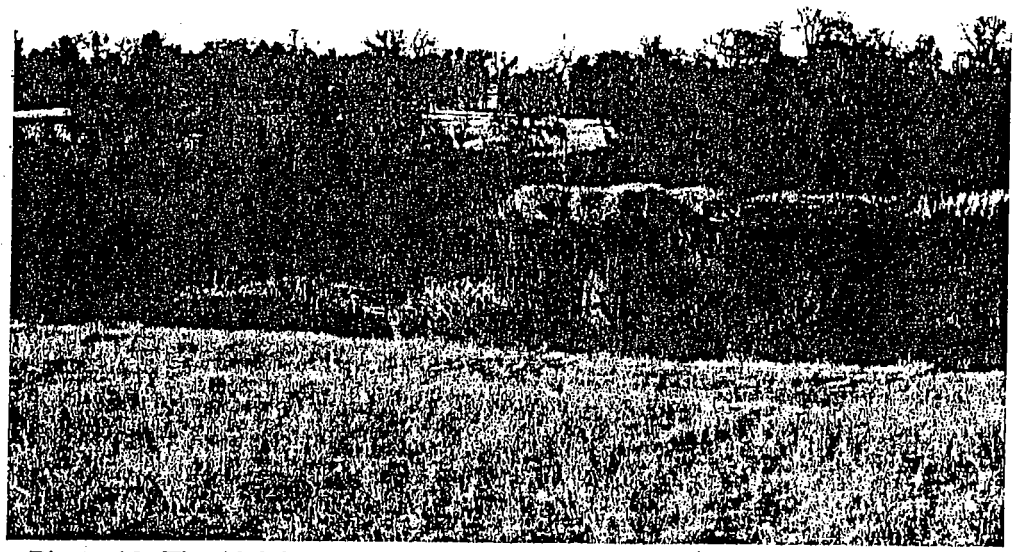


Photo 12–The Knickerbocker Flat use area.

The Knickerbocker Flat use area, because of its size, self-containment, scenic views, and visual diversity, is very popular with equestrians, hikers, and runners. The area is characterized by rolling topography with open savanna, ponds, narrow riparian woodlands along creek canyons, oak woodland on rolling to moderately steep topography, and pine and oak-studded ridgetops which feature long views into the river canyons.

Spectacular views may be seen from the Knickerbocker Flat use area. From a single vantage point at Panorama Point, one can see Mount Diablo on the coastal range, the Sutter Buttes in the Sacramento Valley, and the Crystal Range of the Sierra Nevada crest. There are four very popular hiking and equestrian trails which run throughout the area enabling users the opportunity to enjoy the resources which are found in the area.

Rim Areas

On the canyon brow are areas of land within the Auburn SRA which offer magnificent views into the deep river canyons of the North Fork and Middle Fork of the American River. Panoramas of the surrounding communities as well as more distant areas within

100 miles or more are also provided by these vantage points. These areas, known as the Rim Areas, are described below.

Forest Hill Divide

The Forest Hill Divide subarea, occupying the ridgetop between the Lake Clementine use area and the Middle Fork use area, is distinct in the Auburn SRA because of its significant amount of ridgetop lands. The area contains the Auburn-Foresthill Road which runs the length of the Forest Hill Divide and connects Auburn to Foresthill, crossing the North Fork American River Canyon on the new Foresthill Bridge.

Much of the land in the Forest Hill Divide is rolling topland covered with pine and oak, adding to the diversity of the lands throughout the Auburn SRA. Most of the ridge is secluded and provides a peaceful environment for a variety of dispersed recreational activities. Although there is little trail development and few parking spaces (approximately 40), some of the more popular activities such as hiking, horseback riding, hunting, mountain biking, nature study, and sightseeing do occur here.

The steep and broken hills on the edge of this area divide the views from Auburn-Foresthill Road into pockets of chaparral, oak thickets, and grassy clearings punctuated by long views into and around the North Fork and Middle Fork river canyons. Auburn-Foresthill Road, running through the Forest Hill Divide, provides an ideal travel corridor of high scenic quality.

Auburn Staging Area

The Auburn Staging Area is located within the city limits of Auburn, in the southeast section of the city. This staging area is adjacent to industrial buildings in the city of Auburn and close to the Auburn fairgrounds. The trailhead for the Western States Trail, which leads down into the forested southern portion of the Auburn SRA, is located in the staging area.

Hikers occasionally use the area, but equestrian use is predominant. Hitching posts, trailhead signs, and a watering trough accommodate these users.

Auburn Dam Overlook

The Auburn Dam Overlook is within the Auburn city limits and was constructed to provide the public with a facility from which to view construction of Auburn Dam (see photo 13). A permanent visitor center was never built. The site is perched on the edge of the American River Canyon and provides views of the canyon from an accessible location. The temporary visitor center and restrooms have been removed. The parking lot, remaining open to the public, is very developed with island plantings and sidewalks. The accessibility of the area to urban Auburn, the high quality of the existing parking facility, and the view and the surrounding natural vegetation make this area attractive for use.

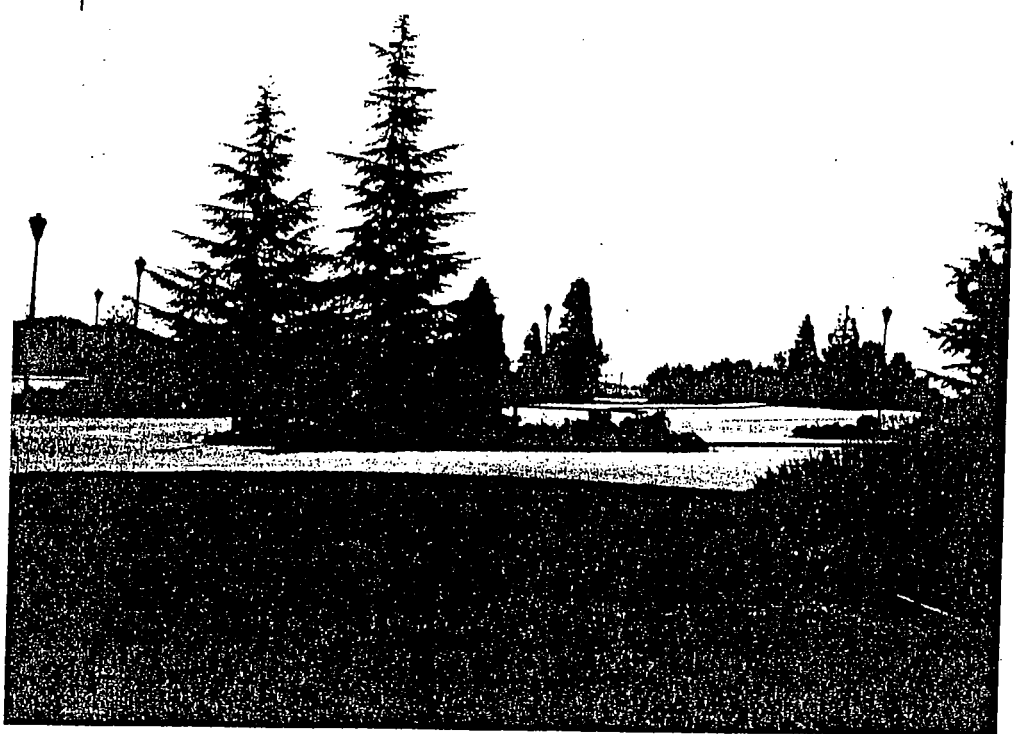


Photo 13–The Auburn Dam Overlook subarea.

Chapter Three

Environmental Setting

The 41,000 acres of land within the Auburn State Recreation Area (SRA) cover a topographical expanse ranging from steep canyon walls and coniferous forest in upper elevations to the rolling toplands and valley grasslands of the Knickerbocker Flat area in its southernmost tip. Supported by the ecologic multiplicity associated with this transition, a large variety of vegetation and wildlife species inhabit the Auburn SRA. The environmental setting, including the topography, flora, fauna, climatic features, soil types, hydrology, and water quality composing the Auburn SRA will be described in this chapter.

In addition to the biotic wealth of the Auburn SRA, the canyons and ridgetops are rich in history. Present data indicate that the Auburn SRA was heavily occupied during Native American times. More recently, the Auburn SRA, located in the heart of the Motherlode, was heavily occupied by prospectors during the California Gold Rush. The cultural/historic resources known to exist within the Auburn SRA will also be discussed in this chapter.

An inventory of the area's existing resources was an integral part of the planning process. This information was gathered using previous studies, such as the Bureau of Reclamation's (Reclamation) *Final Environmental Statement, Auburn - Folsom South Unit, Central Valley Project California* (1972), the California Department of Parks and Recreation's (Parks) 1979 *Auburn Reservoir Project, Folsom Lake State Recreation Area General Plan*, and other studies as listed in chapter one. Further information was verified by ground checks in the field. The discussions on natural resources and cultural resources in this chapter were based on these findings. Visual resource findings were based on independent field work. An analysis of socioeconomic factors was written based on previous studies, census information, and individual area plans for various communities, cities, and townships (see chapter two).

Natural Resources

The natural resources found within the Auburn SRA are vegetation and wildlife, fisheries, rare and endangered species, climate, soils, topography, hydrology, and water quality. A discussion of these resources follows.

Vegetation and Wildlife

The lands within the Auburn SRA encompass a large vegetational transition area from valley grassland, through oak-woodland in the foothills, and into the coniferous forest of the mountains. The vegetation found throughout the Auburn SRA has been categorized into five major natural communities: foothill woodland, valley grassland, chaparral, ponderosa pine forest, and streamside woodland.

These communities, together with the wildlife associated with them, are described below.

Foothill Woodland

Evergreen and deciduous trees dominate the foothill woodland community, with some live oak, blue oak, and digger pine patchworked throughout. Chaparral shrubs occur in some areas, and chaparral may be predominant on many south facing slopes.

The foothill woodland ecosystem is abundant with birds, amphibians, reptiles, and a number of mammals such as the mule deer, raccoon, opossum, California mole, California ground squirrel, deer mouse, and pocket gophers. Predatory mammals include the gray fox, bobcat, and coyote.

Bird life includes the scrub jay, great blue heron, red-tailed hawk, turkey vulture, acorn woodpecker, yellow-billed magpie, California quail, western bluebird, Oregon junco, redwing and Brewer's blackbirds, and numerous other species.

Amphibians and reptiles in the grasslands include the tiger salamander, California newt, western spadefoot toad, California toad, California alligator lizard, Pacific gopher snake, and kingsnake.

Valley Grassland

Grasses found within the Auburn SRA extend from the valley, through the foothill woodlands and chaparral, and into the ponderosa pine forest, where they cluster between chaparral or oak woodland.

The most common foothill grasses are annuals, including wild oat, soft chess, common foxtail, and red brome. An important feature of the grasslands within the Auburn SRA is the numerous species of wildflowers in bloom throughout the year.

Mammal species characteristic of the valley grassland ecosystem are the opossum, ornate shrew, black-tailed hare, California mole, California ground squirrel, deer mouse, pocket gopher, several bat species, coyote, gray fox, bobcat, and others.

Common birds found here are the turkey vulture, white-tailed kite, red-tailed hawk, sparrow hawk, California quail, mourning dove, horned lark, red-winged and Brewer's blackbirds, and others.

Chaparral

Chaparral can be described as dense masses of evergreen shrubs—short, thick, bushy, and dry. In higher elevations, ponderosa pine forest species are often intermingled; and in lower elevations, blue oak and digger pine are common.

A number of mammals are found in the chaparral ecosystem, such as the ringtail cat, long-tailed weasel, gray fox, bobcat, California ground squirrel, black-tailed hare, brush rabbit, dusky-footed wood rat, mule deer, and others.

Avian species include the red-tailed hawk, California quail, scrub jay, wrentit, California thrasher, Bewicks's wren, bushtit, brown towhee, white-crowned sparrow, and others.

Amphibians and reptiles commonly found include the arboreal salamander, alligator lizard, fence lizard, horned lizard, kingsnake, and California striped racer.

Ponderosa Pine

The ponderosa pine forest is found only in the upper elevations of the North and Middle Fork Canyons. Where the ponderosa pine forest, grasslands, and foothill woodland plant communities meet, the ecotome formed in the marginal zones is highly favorable for wildlife. The oaks supply acorns and numerous insects for birds and tree-climbing mammals, including the band-tailed pigeon, gray squirrel, acorn woodpecker, and pygmy owl. Other inhabitants include various mammals, birds, reptiles, and amphibians.

Streamside Woodland

Riparian areas, with their thick cover, shade, and water, support a wealth of insects, as well as numerous insect feeders and other animals. Many animals from adjacent chaparral and foothill woodland ecosystems frequent the streamside woodland. Mammals found here include the mink, badger, coyote, gray fox, beaver, muskrat, and mule deer. Many birds can be seen, including the great blue heron, tree swallow, common crow, common bushtit, robin, and others. In addition, a number of amphibians and reptiles inhabit this plant community.

Fisheries

Fishing activities have historically been limited in the Auburn SRA area. One significant reason for this has been gold mining activities which are not compatible with fishing activities. Gold dredging in the streams has taken place as recently as post-World War II. Warm water temperatures also limit fish production.

Year-round residents of the North Fork include several warm-water species, among them bullhead and sunfish. Many pools and riffles with gravels suitable for cold water species such as trout and smallmouth bass exist in the river; however, low summer flows and high water temperatures greatly reduce the use of this habitat by these species.

Historical records of fish resources in the Middle Fork are limited. In the past, rainbow and brown trout have been stocked. Construction of the Placer County Water Agency's Middle Fork American River Project in 1962 resulted in cooler water for resident and stocked cold water species, including rainbow and brown trout.

Fish and Wildlife Service surveys in 1989 revealed the following species in the Middle Fork: brown and rainbow trout, Sacramento hitch, Sacramento sucker, Sacramento squawfish, and riffle sculpin. Lake Clementine has similar fish species.

Rare and Endangered Animal Species

Based on the California Department of Fish and Game's Wildlife Habitat Relationship System, the Auburn SRA has the possibility of containing several species of mammals, raptors, and reptiles considered rare and endangered, or of concern. The species are: the osprey, the southern bald eagle, the golden eagle, the northern goshawk, American peregrine falcon, spotted owl, ringtail-cat, horned lizard, red-legged frog, badger, black-shouldered kite, and blue grouse. They range in status from rare to federally endangered. All of these species have been identified within Placer and El Dorado Counties. Identical habitats within the Auburn SRA could possibly house the above species; however, positive sightings of nesting pairs of most of these species have not been confirmed. It is both the State of California and Federal policy that species identified in the wildlife habitat relationship system, even though not positively sighted, be assumed to exist within the said area.

The southern bald eagle and peregrine falcon have been positively identified as visiting in Auburn SRA; however, there has been no confirmation that they reside within the Auburn SRA.

The peregrine falcon may be seen in the Auburn SRA on its winter migration to Central and South America. Peregrine habitat includes nesting sites, hunting sites, and migration and winter areas. Peregrines may travel up to 17 miles from nesting cliffs to hunting areas. Preferred hunting habitats include cropland, meadows, river bottoms, marshes, and lakes.

The bald eagle, *Hiliaetus leucocephalus*, is a significant visitor to the area and is listed as endangered.

The golden eagle, *Aquila chryaetos*, is fully protected. The eagle feeds on squirrels and rabbits in grassland areas.

The ringtail, *Bassariscus astutus*, is fully protected and seldom seen due to its slight population and nocturnal habits. The ringtail

subsists mainly on mice and other small rodents; but like the raccoon, it varies its diet with fruits of madrone, cascara, berries, and sometimes acorns. The ringtail is never found far from water, and an adequate water-cover relationship is important for its continued existence.

The badger, *Taxidea taxus*, is found from the valley floors to the alpine zone but prefers the sandy flats where there are numerous burrowing rodents. Badgers subsist on rodents such as gophers and ground squirrels.

The horned lizard, *Phrynosome coronatum*, commonly called the "horny toad" is a reptile which could possibly reside in the Knickerbocker Flat area.

Positive Sightings of Endangered Species

As directed by section 7(c) of the Endangered Species Act, the Fish and Wildlife Service prepared a list of endangered species that may occur in the Auburn SRA. The California Natural Diversity Base, published by the California Department of Fish and Game (DFG), has positively identified several endangered or threatened species as inhabiting the Auburn SRA, together with species which are candidates for Federal protection.

These following fields refer to the legal status of the species. If the legal status fields are blank, the species is not currently listed by either the State of California or the Federal Government.

Status	Definition
Fed: Endangered	Federally listed endangered
Fed: Threatened	Federally listed threatened
Fed: Candidate 1	Candidate for federal listing, category 1
Fed: Candidate 2	Candidate for federal listing, category 2
Fed: Candidate 3	Candidate for federal listing, category 3
Calif: Endangered	California listed endangered
Calif: Threatened	California listed threatened
Calif: Rare	California listed rare

The following species have been positively identified within the project boundaries:

Ammonitella yatesi
Yates snail
Status: Candidate 2
Habitat: Associated with limestone; found in humus around limestone outcroppings; favors north facing slopes. A relict genus, possibly on the way to extinction, though common at present, where found; endangered from possible over-collecting
Location: Auburn; Pioneer Cave near limestone quarry
T12N R9E S7 SW of SE Merid:M

Rana aurora draytoni
California red-legged frog
Status: Candidate 2
Location: Michigan Bluff, approximately 4 miles E/NE of Foresthill.
T14N R11E S21

Rhyacophila spinata
spiny rhyacophilan caddisfly
Status: Candidate 2
Habitat: Little is known of the ecology of this specie. In general, it prefers cool, running water.
Location: Foresthill; Ladys Canyon
T14N R11E S32

Cypseloides niger as of 2001
black swift DFG: CSC
Status: Rare FWS: ←
Habitat: Arrives in mid-May for nesting. Nest only on steep cliffs adjacent to or behind waterfalls. Lays a single egg each breeding season.
Location: Foresthill
T14N R10E S35

Plecotus townsendii pallescens
pale big-eared bat
Status:
Habitat: Hanging around in caves, crevices, hollow tree holes.
Location: Auburn
T12N R 8E S10

Rare and Endangered Plant Species

The following plant specie has been positively identified within the Auburn SRA:

Arctostaphylos nessenana
missenan manzanita
Status: Candidate 3
Location: Georgetown
13N R10E S23

Climate

The climate of the Auburn SRA is typically known for cool, wet winters and hot, dry summers. Weather systems generally move eastward from the Pacific Ocean and are modified at the foothill level where precipitation drops. For every 1,000-foot increase in elevation, the temperature decreases about 3 degrees Fahrenheit (°F), and precipitation increases about 10 inches.

In the winter, storms moving inland from the Pacific are the primary source of precipitation. There is considerable variance in the amount of total annual precipitation, but most (90 percent) falls from November to April, with nearly half received during a 60-day period in winter. Annual precipitation totals are estimated to be 35 inches at Auburn, 40 inches at Placerville, and 50 inches at Foresthill. January is the wettest month, and July is the driest. Snow occasionally flurries in the winter months, with little or no accumulation. Fog frequently fills the canyon areas on winter mornings. Temperatures range from record lows of 17 °F to highs above 110 °F. The mean annual temperature is 60°. The July mean temperature is 93 °F, and the January mean minimum is 36 °F.

Wind is a strong moderator of temperature during the summers. The prevailing wind direction is from the south or southwest during the summer and winter. The southwest summer wind generally blows up the Sacramento Delta, cooling temperatures 10 to 20 degrees in the foothills. Wind speeds vary with topography and frontal conditions, causing slight climate variations within the Auburn SRA. Canyon areas and ridgetops will generally have high winds, while other areas are often protected from the winds by the winds being directed off tree groves or small ridges.

Soils

A soil association is a landscape that has a distinctive proportional pattern of soils. It normally consists of one or more major soils and at least one minor soil. The association is named for the major soils. The soils in one association may also occur in another but in different patterns. Each association is separated according to differences in slope, erosion, surface texture, and drainage.

The soils within the Auburn SRA have been inventoried and evaluated in terms of recreational suitability. The majority of soils composing the Auburn SRA were determined to be of severe suitability for recreational/trail development, due to erosion caused by both the soil properties and the slope. Trails that are constructed on these soil conditions will require special design and intensive maintenance (refer to the *Auburn Reservoir Project Folsom Lake State Recreation General Plan* for information regarding soil type location, sensitivity, and suitability for trail and recreational development).

Topography

The topography in the Auburn SRA is the result of geologic upheaval and subsequent weathering and stream erosion. Through these processes, the American River drainage has been carved into a tilted fault block that slopes gently from east to west, resulting in a gently rolling upland dissected by deep, steep-sided, V-shaped canyons. Two-thirds of the Auburn SRA lands exceed a slope of 40 percent. While the canyons running down the river are very steep, gently rolling hills are the predominant topography in the lower foothill areas such as found at Knickerbocker Flat.

Major erosion channels are the deeply cut North and Middle Forks of the American River. Between these steep canyons are the gently sloping to moderately steep uplands and ridges of the Forest Hill and Georgetown Divides.

Hydrology

The North Fork American River Watershed, in which Auburn SRA is located, is generally mountainous with elevations varying from a few feet above sea level in the Sacramento Valley to about 8000 feet at the extreme upper elevations of the Sierra Nevada. This watershed, extending from the foot to the crest of the Sierra Nevada, is essentially a tilted fault-block, sloping from east to west. The boundary of the Auburn SRA lies in the western portion of the fault block, near its dip beneath the sediments of the Central Valley. The

principal streams in the watershed, the North Fork, the Middle Fork and the Rubicon Rivers, originate along the eastern edge of the basin above the 7000-foot level. The combined drainage area which would produce the water supply for Auburn Reservoir exceeds 980 square miles in area.

Precipitation to this watershed comes in the form of rainfall and snow. Nearly 50 percent of the annual precipitation occurs during a 60-day period in the winter season. Summers, by contrast, receive less than 1 percent of annual precipitation. This results in markedly low natural flow rates in the river system during late summer and early autumn. Melting snow contributes an estimated 40 percent of the annual runoff in the American River basin.

Surface runoff in the American River basin is influenced by snowmelt, which extends the spring runoff beyond the winter season into late spring and summer. This information is based on stream gauging stations, most of which are located at bedrock; thus, their data are probably representative of total surface and subsurface runoff in the watershed.

Surface water is the principal source of supply in domestic water systems in the surrounding area, although many individual residences in low population density areas rely on wells. The Forest Hill Divide within the study area is served by the Sugar Pine Dam, Reservoir, and pipeline system constructed as part of the Auburn-Folsom South Unit, Central Valley Project. Colfax, Weimar, Meadow Vista, Christian Valley, Auburn, Newcastle, Loomis, and some other areas of Placer County are served by the Placer County Water Agency, which receives most of its supply from Pacific Gas and Electric Company's Lake Spaulding through a canal system originally developed for gold mining purposes. On the Georgetown Divide, water supplies are obtained from Stumpy Meadows Reservoir, from local streams, and from wells.

Many reservoirs have been built in or adjacent to Auburn SRA. The following table lists data concerning these reservoirs in the American River basin.

Existing reservoirs in the American River basin

Reservoir	Stream	Owner	Storage capacity (acre-feet)	Drainage area (square miles)
Folsom Lake	American River	Reclamation	1,010,000	1,875
Lake Natoma	American River	Reclamation	8,760	–
Lake Valley[1]	North Fork of the North Fork, American River	PG&E[2]	8,127	4.7
Lake Aloha	Pyramid Creek	PG&E	5,068	3.4
Caples Lake	Caples Creek	PG&E	1,300	0.8
Silver Lake	Silver Fork, American River	PG&E	11,800	14
Chili Bar	South Fork of the American River	PG&E	3,700	597
French Meadows[1]	Middle Fork of the American River	Placer County Water Agency	133,700	47
Hell Hole[1]	Rubicon River	Placer County Water Agency	208,400	112
Oxbow[1]	Middle Fork of the American River	Placer County Water Agency	2,800	429
Rubicon Diversion[1]	Rubicon River	SMUD[3]	1,450	27
Loon Lake[1]	Gerle Creek	SMUD	76,500	8
Union Valley	Silver Creek	SMUD	271,000	84
Ice House	South Fork of Silver Creek	SMUD	46,000	28
Slab Creek	South Fork of American River	SMUD	16,600	497
Gerle Creek	Gerle Creek	SMUD	1,200	24
Stumpy Meadows[1]	Pilot Creek	Georgetown Divide Public Utility District	20,000	15
Lake Clementine[1]	North Fork of the American River	Corps of Engineers	14,600	343

[1] These reservoirs are in the watershed above the Auburn Dam site.

[2] Pacific Gas and Electric Company.

[3] Sacramento Municipal Utility District.

Water Quality

Historical water quality data for the North Fork and the Middle Fork watershed are sparse. In more recent years, Reclamation has conducted a monitoring program at several sites on the North Fork and the Middle Fork. The program includes monthly sampling for pH, turbidity, and nutrients at three sites, two above the confluence on the North Fork and Middle Fork and one below the Auburn Dam construction site on the North Fork.

A total of 20 waste water sources are located either next to, or serve as tributaries to the drainage area of the Auburn SRA. Three of the sources are sewage treatment plants located near the Auburn Dam construction site on the west side of the American River. They discharge their effluent into Auburn ravine, which drains into the Sacramento River. Two sawmills are located at Foresthill. One is on a tributary to Devil's Canyon and the North Fork of the American River, and the other is in the Middle Fork American River watershed.

Cultural Resources

The Auburn SRA is rich in cultural resources. A discussion of previous archeological surveys, prehistoric resources, and Euro-American resources follows.

Previous Surveys

Historic sites within the unit were not recorded on site records, and records are generally inadequate. Most of the historic sites need to be recorded by current standards so that the resources can be assessed for significance.

The first archeological survey of the lands near the Auburn SRA was conducted by Frank Rackerby for Adam Treganza of San Francisco State for the Placer County Water Agency's Middle Fork of the American River Project.

The next cultural resource studies were conducted by the National Park Service for Reclamation's *Final Environmental Statement, Auburn - Folsom South Unit, Central Valley Project, California.* Subsequent investigations were conducted, the most significant of which was an extensive, 20-volume study by Dr. D.L. True, et al. This study was a general reexamination of the cultural resources in the Auburn Reservoir basin and adjacent lands subject to impact as a result of the Auburn Dam project. The studies were area specific

and were done during the period 1975 to 1979. To date, over half of the Auburn SRA has been surveyed for archeological resources. The number of archeological sites, both historic and prehistoric, number greater than 1,000. For the most part, the archeological studies consist of site locations with limited evaluation of significance to eligibility for the National Register of Historic Places.

Categories of Cultural Resources

The survey work initiated in the 1970's is utilized in this document. Cultural resources have been placed into one of two categories, depending on their characteristics and associated management concerns. These categories, listed below, are not congruent with current law and regulation (36 CFR 800).

Category 1

Native American middens.

Small town or village sites characterized by four or more structures or structure foundations close to each other.

Euro-American and Native American sites found in close association with one of the above.

Sites eligible for inclusion in the National Register of Historic Places.

Category 2

Isolated bedrock mortars or unassociated features (see photo 14).

Isolated structures or structure foundations.

Bridge and bridge abutments.

Arrastras.

Dump areas.

The discussion presented below is based on available data from previous reconnaissance studies, interviews, archival research,

Photo 14.–Bedrock mortars such as these can still be found within the SRA.

reports from Dr. D.L. True, et al., reports from David Frederickson (1973) and A.L. Kroger (1925), and spot checks at various locations within the Auburn SRA boundaries. A two-volume *Cultural Resources Inventory* (December 1976), on file with Parks, provides detailed site information and locations.

Prehistoric Resources

It is not known how many years humans have occupied the American River region. Some artifacts suggest that human occupation dates back 6,000 years. Present data indicate that the Auburn SRA was heavily occupied during Native American times.

Ethnographic Summary

Native American sites include villages, seasonal gathering camps, quarrying stations and workshops, and grinding rocks. One site, known as the Hawver Cave, was discovered on the Middle Fork of the American River in the 1880's. Based on the materials found with human remains, the site has been attributed to the Martis Complex (3500 B.C. to A.D. 1000), and once contained the oldest human remains known in the region. The cave has since been destroyed by limestone quarrying.

At the time of the first European contact, the area was occupied by members of the Penutian-speaking southern Maidu, who called themselves Nishinan or Nisenan. Though the Nisenan are spoken of as a uniform block, there were many dialectic differences in their speech. The Nisenan people were hunter-gatherers, subsisting primarily on seeds, bulbs, acorns, fish, mussels, insects, an occasional mammal, and other similar food items. Their villages were located along the rivers and on ridgelines, generally corresponding to areas of plentiful food and water.

They inhabited the whole of the American River drainage, in addition to the Bear and Yuba River drainages, and generally lived on the ridges that separate the parallel streams, either on the crests or the knolls. The social organization of the Nisenan was the same as the Maidu, which involved a group occupying a certain territory in common, knowing themselves as a group, acting largely as a unit, but actually residing in several settlements. The Maidu lived in either large semisubterranean earth-covered structures, usually entered through the roof, or lean-to's built of bark or brush, with a door at ground level. Their culture was considerably altered by the discovery of gold at Coloma (on the South Fork of the American River) in 1848.

European-American

Activities associated with the Gold Rush era are prevalent throughout the Auburn SRA, and the period is significant to the history of the State. The discovery of gold in 1848 brought settlers and wealth to the vicinity and provided the catalyst for California's admission to the Union. Other points of significance are economics and technology. The economic exploitation of the region by mining activities made it a source of wealth for the Nation. This production, and the resultant distribution and consumption of wealth, made

California an integral part of the United States economy. Technology rapidly followed discovery in the gold fields. The diversion of water to wash the gold-laden gravels, and the harnessing of water power for use in industry, were engineering feats unlike any seen in the State before that time. In a matter of months, an area which had been traversed by only a relative handful of people was crisscrossed with transportation routes for all types of travel. Many of these early avenues of transportation, such as roads, trails (often leading to ferries), bridges, and stage stops are visible in the Auburn SRA (see photo 15).

Adding to the significance of the Auburn SRA are the structures and building remnants which represent residential, commercial, and industrial activities. The remains of such settlements can still be found at Auburn. Numerous cabin foundations, house and tent pads, and building footings remain, along with their associated features. Besides residences, it is known that many of the camps had their own dry goods stores, bakeries, saloons, and hotels. At Maine Bar, located on the Middle Fork of the American River, a cellar has been located which may be from the Fandango House. This structure, constructed in circa 1858, was the miner's dance hall. On both San

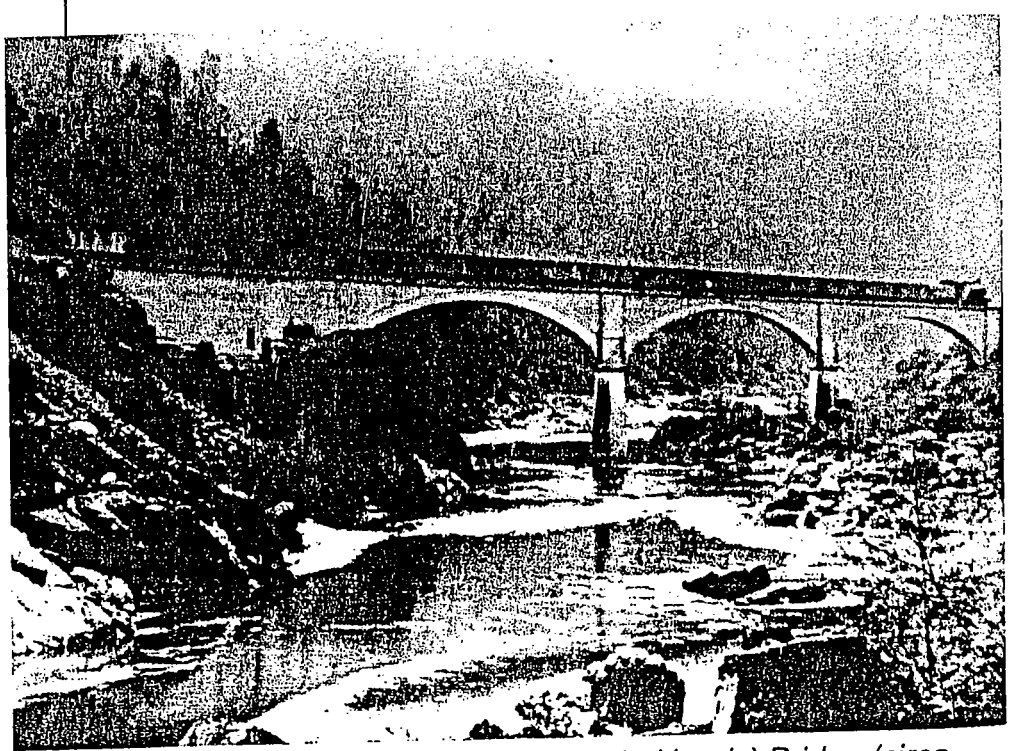


Photo 15.–Mountain Quarries Railroad (No Hands) Bridge (circa 1915) is now part of the Western States Trail.

Francisco Bar and Cherokee Bar, also on the Middle Fork, remains of large doodle-bug dredges can be seen, which once floated on the river excavating the river bottom gravels for gold.

Another commercial structure is the Grizzly Bear House. Once a tavern and inn along the road from Auburn to Foresthill, it is now a State Point of Historical Interest. Representing industries associated with gold production are remnants of such mining operations as Lukens's Mine, the Mammoth Mining Company, and the Grit Mine. Tailings piles, mine shafts, building and cabin foundations, and mine pits can still be seen at the site of Luken's Mine. In addition to this site, there are similar types of features throughout the unit.

Scenic Resources

The Auburn SRA is an area of rugged scenic beauty with complex topographic forms and a diversity of natural vegetation. Significant wildlife populations and the presence of abundant water in the landscape contribute to the scenic resources of the Auburn SRA.

Visually, the Auburn SRA is primarily characterized by the North and Middle Forks of the American River and surrounding steep hillsides. The rivers, alternating patterns of tumbling rapids and deep, slow moving pools, carve through the V-shaped river canyons. These river canyons are steep and thickly wooded from river level to their ridgelines, which loom over a thousand feet above the canyon floor. Many tributary streams run into the two forks of the American River, sometimes at a very steep gradient, creating small cascades and waterfalls.

Inside the river canyons, most of the viewshed is within the boundary of the Auburn SRA. The river banks alternate between gravel bars, granite benches, and large granite boulders. The banks are vegetated with typical riparian species, including willows, white alders, Fremont cottonwood, sycamore, and Oregon ash.

From the canyon ridges are views of the river, the Sierra Nevada Crest to the east, and the Central Valley to the west. The consistency of the hillside vegetation gives a very uniform visual texture to the canyon walls, which is broken up in autumn by the changing colors of the leaves.

California an integral part of the United States economy. Technology rapidly followed discovery in the gold fields. The diversion of water to wash the gold-laden gravels, and the harnessing of water power for use in industry, were engineering feats unlike any seen in the State before that time. In a matter of months, an area which had been traversed by only a relative handful of people was crisscrossed with transportation routes for all types of travel. Many of these early avenues of transportation, such as roads, trails (often leading to ferries), bridges, and stage stops are visible in the Auburn SRA (see photo 15).

Adding to the significance of the Auburn SRA are the structures and building remnants which represent residential, commercial, and industrial activities. The remains of such settlements can still be found at Auburn. Numerous cabin foundations, house and tent pads, and building footings remain, along with their associated features. Besides residences, it is known that many of the camps had their own dry goods stores, bakeries, saloons, and hotels. At Maine Bar, located on the Middle Fork of the American River, a cellar has been located which may be from the Fandango House. This structure, constructed in circa 1858, was the miner's dance hall. On both San

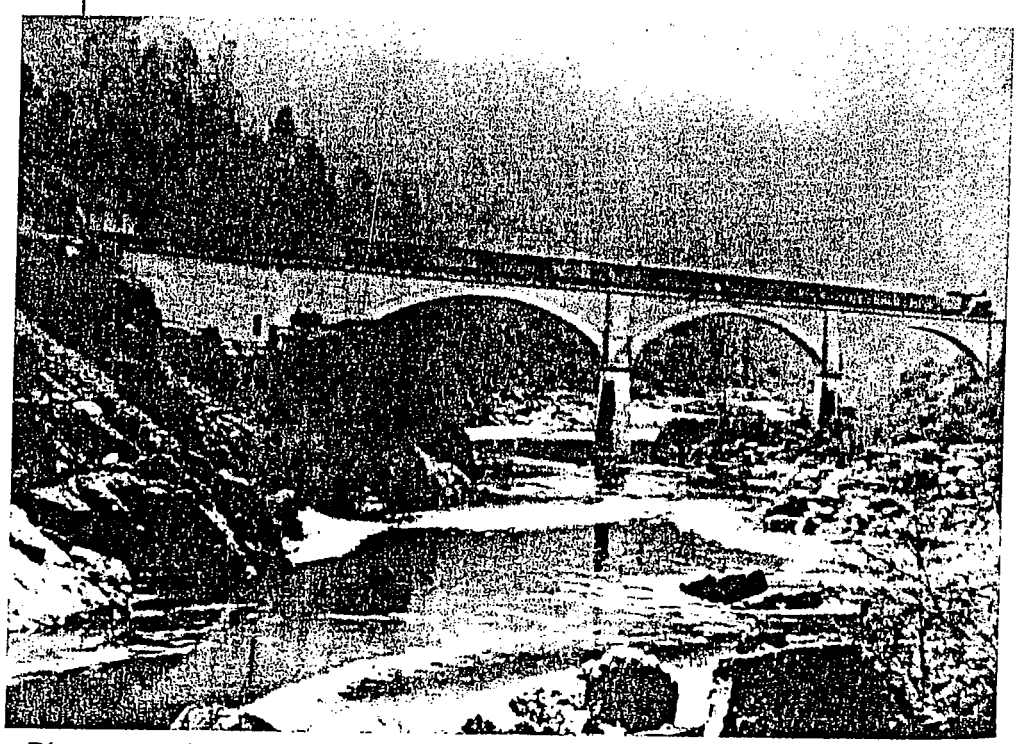


Photo 15.–Mountain Quarries Railroad (No Hands) Bridge (circa 1915) is now part of the Western States Trail.

Francisco Bar and Cherokee Bar, also on the Middle Fork, remains of large doodle-bug dredges can be seen, which once floated on the river excavating the river bottom gravels for gold.

Another commercial structure is the Grizzly Bear House. Once a tavern and inn along the road from Auburn to Foresthill, it is now a State Point of Historical Interest. Representing industries associated with gold production are remnants of such mining operations as Lukens's Mine, the Mammoth Mining Company, and the Grit Mine. Tailings piles, mine shafts, building and cabin foundations, and mine pits can still be seen at the site of Luken's Mine. In addition to this site, there are similar types of features throughout the unit.

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There are two significant areas within the Auburn SRA which are visually distinct from the steep canyon landscape–Knickerbocker Flat and the Forest Hill Divide.

Knickerbocker Flat lies in the southern part of the Auburn SRA, east of the Auburn Dam construction site. The area is characterized by rolling topography and open savanna with ponds and three creeks which empty into the American River. Small side canyons flourish with riparian vegetation. Long views, both into the canyon and to areas outside the Auburn SRA, can be seen from the area. From Panorama Point, one can view Mount Diablo, Folsom Lake, Pilot Hill, the Sutter Buttes, and the Crystal Range of the Sierra Nevada Crest.

The Forest Hill Divide occupies the ridgetop which runs between the North and Middle Forks of the American River. The Auburn-Foresthill Road lies along this ridgetop and is a highway travel corridor with high scenic quality. The steep and broken hills in this area divide the views from Foresthill Road into pockets of chaparral, oak thickets, and grassy clearings, allowing views into and around the river canyon. Foresthill Road provides an ideal scenic route throughout much of the Auburn SRA.

Many areas of scenic interest are found in the Auburn SRA. Among the more significant landmarks is Robbers Roost, also known as Lime Rock, a large limestone monolith perched above Lake Clementine (see photo 16). This rock served as a lookout for highwaymen terrorizing the Auburn-Foresthill Turnpike during the early 1860's. Another significant landmark is the North Fork Dam at Lake Clementine, where spray from the water sheeting over the spillway often creates multiple rainbows over the dam. Lake Clementine, although in the North Fork Canyon, offers scenic variety from the two rivers with its flat water setting.

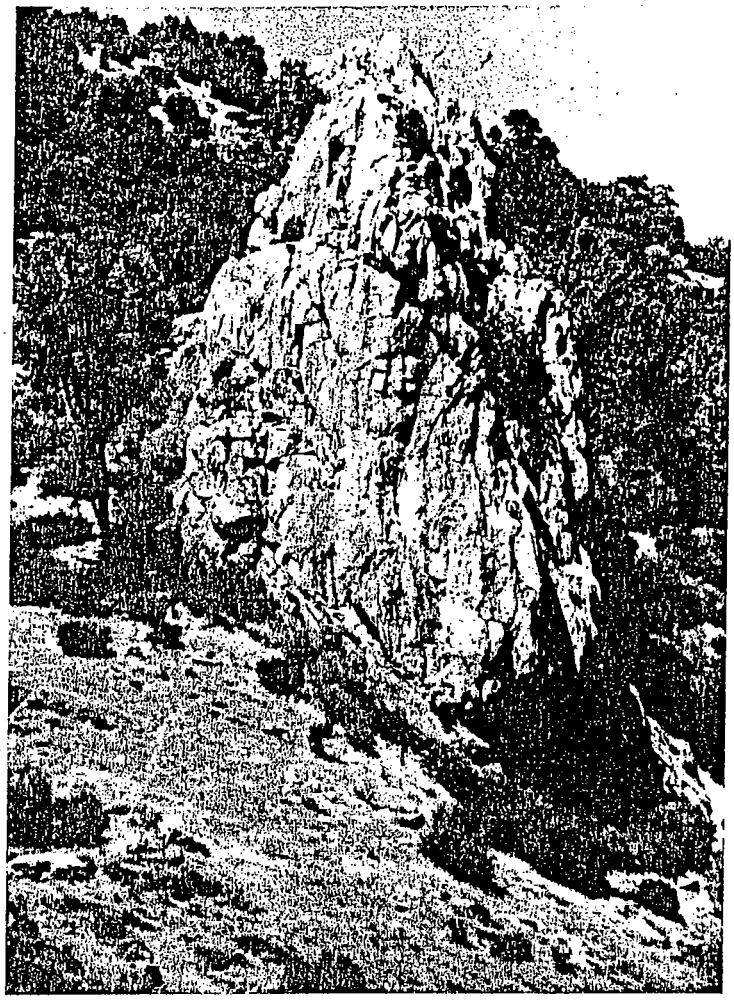

Photo 16.–Lime Rock on Lake Clementine.

Chapter Four

Planning Goals and Need for Action

In developing this interim resource management plan (IRMP) for the Auburn State Recreation Area (SRA), the recreational demand for the area and the concerns of the public, the Auburn SRA administrators, and various agencies were considered. Through the planning process, various planning goals were established, and a plan was developed within specific constraints and limitations. The regional recreational demand for the Auburn SRA, various agency and public concerns, planning goals, and the planning constraints are addressed below.

Regional Recreational Demand of the Auburn SRA

The proximity of the Auburn SRA to major population centers, together with its diverse recreational base and expansive viewsheds, accessibility, high scenic quality, excellent whitewater, and the canyons and rim areas of the North and Middle Forks of the American River make the Auburn SRA a significant recreational resource in northern California.

Although other recreational areas, such as the Lower American River Parkway, receive far more use than the Auburn SRA (5 million verses 500,000), the Auburn SRA is regionally a very important recreational resource for the Sacramento metropolitan area. Because it is within a 20- to 50-minute drive for most Sacramento residents, the cool waters of the Auburn SRA are an attractive natural feature when temperatures in the Sacramento area increase during the summer months (see photo 17).

Throughout the Auburn SRA, 46 percent of the use occurs in the summer months of June, July, and August. The most popular month of use is July, with 20 percent of the total annual use occurring. Recreational use of the area tapers off in fall and winter but increases once again in spring.

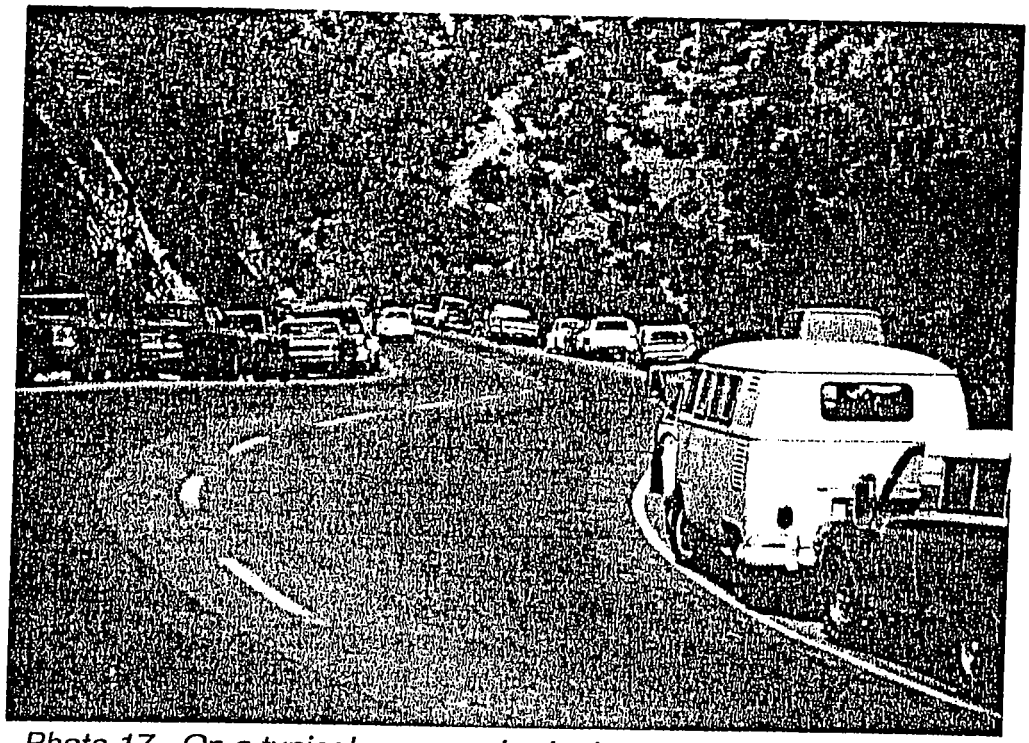

Photo 17.–On a typical summer day in the Auburn SRA, the parking spaces fill quickly.

The surrounding region is becoming one of the fastest growing areas in both the United States and California. Based on the 1990 census, the population levels within a 150-mile radius of the Auburn SRA have reached over 10 million. Within a 100-mile radius of the Auburn SRA, or within approximately 2 hours driving time, there is a population of over 6.5 million. And within a 50-mile radius of the Auburn SRA, or within approximately a 1-hour drive, is a population of over 1.7 million. Commensurate with this growing population base will likely be an increase in use of the Auburn SRA. The rates of population growth for the two counties within the Auburn SRA, Placer and El Dorado, have each been 47 percent for the 10-year period of 1980 to 1990. Placer and El Dorado Counties, respectively, are ranked as the sixth and seventh fastest-growing counties in California. The Sacramento metropolitan area is ranked as the sixth fastest-growing metropolitan area in the country.

Local interest in outdoor recreation is significant, and the Auburn SRA offers an area where many diverse recreational interests may be met. Among the recreational activities pursued at Auburn SRA are:

Camping
Fishing
Flatwater boating
Hiking
Historical and cultural exploration
Horseback riding
Hunting
Mountain biking
Nature study and appreciation
Off-highway vehicle (OHV) use
Photography
Picnicking
Power boating
Recreational mineral collecting
Sunbathing
Swimming
Water skiing
Whitewater boating (rafting, kayaking, and canoeing)

Bicycling has increased dramatically in the area, both for local transportation and recreation. There is continued demand for equestrian trails, as per capita ownership of horses in the region is among the highest in the State. Boat registration in the area is twice the Statewide average. As a whole, given the current use and expected continued population growth, demand for outdoor recreation in the region is likely to increase.

Some qualities of the Auburn SRA are sufficiently significant to draw visitors from afar. Participant origin data gathered from competitive equestrian and mountain running events along the Middle Fork indicate that the Auburn SRA holds regional and national importance for these events. The Tevis Cup (endurance trail ride) and the Western States Endurance Run (footrace) are both 1-day, 100-mile events which use the historic Western States Trail. These events draw entrants from all over the country, as well as internationally.

The historical Middle and North Forks of the American River offer unique opportunities. There are few existing river segments within a 2-hour drive of a major metropolitan area comparable to these rivers and canyons. Both forks offer overnight camping opportunities, hiking trails, natural observation sites, hundreds of historical and cultural sites, and a diversity of difficulty in whitewater rapids

(meeting beginning to advanced boating skill levels). Recent interviews with commercial outfitters indicate that use on the North and Middle Forks is comprised of approximately 30 percent from southern California, 50 percent from San Francisco Bay area, 15 percent from the local three-county area, and the remaining 5 percent from elsewhere in California and out-of-state.

Agency and Public Concerns

Public input was an integral part of the study process. The concerns, opinions, and knowledge of various users about the area were actively sought. Public scoping meetings were held on March 5, 6, and 12, 1990, and general public meetings were held on March 5, April 25, and May 30, 1991. Those attending voiced their desires for improved management of the Auburn SRA as well as increased facilities and programs. Additionally, through discussions with the California Department of Parks and Recreation (Parks), the Bureau of Reclamation (Reclamation), and other agency staff, the Auburn SRA management issues were discussed. The combined concerns and issues of both the public and agencies were divided into the following 13 broad categories:

1. Commercial land use
2. Facilities and sanitation
3. Funding
4. Grazing
5. Hunting and fishing
6. Interpretation
7. Recreational mineral collection
8. Natural resource management
9. Off-highway vehicles
10. Operations and maintenance
11. Trails
12. Viewshed
13. Whitewater recreational use

A summary of these concerns follows.

Commercial Land Use

Use of public lands in the Auburn SRA for commercial interests was felt to be inappropriate. It was expressed that the only construction projects permitted in the Auburn SRA should be those related to recreation, wildlife enhancement, and for the authorized Auburn Dam project purposes.

Facilities/ Sanitation

There are many concerns about the need to provide better facilities and sanitation for resource protection and public health and safety. An immediate desire for more and improved facilities, such as parking areas, picnic areas, staging areas (for equestrian, hikers, whitewater boaters, etc.), and restrooms was expressed.

Additional garbage cans throughout the park, together with "pack-in/pack-out" signs were felt to be a partial solution to much of the sanitation problem (see photo 18). Sanitation rules for campers are not being enforced, and more frequent patrols would be beneficial.

Funding

There was a great deal of concern expressed over the lack of funding for many needs. The need for more staff was identified by management agencies such as Parks as well as by the public, but no source of funding has been identified. Those present expressed their desire for Reclamation to make a larger financial commitment to the Auburn SRA.

Since there is no commitment of funds for additional development of the Auburn SRA, financing of the facilities recommended by this IRMP is uncertain. There exists a pressing need for facilities improvement necessary to meet a minimum level of health and safety for the Auburn SRA visitors at existing use levels. To pay for these new facilities, some felt that user fees should be imposed on those directly benefitting from the facilities. Others felt that Federal and State funding should be found. A third suggestion to accomplish facility development was the use of volunteers, which was considered to be a means through which construction costs could be offset.

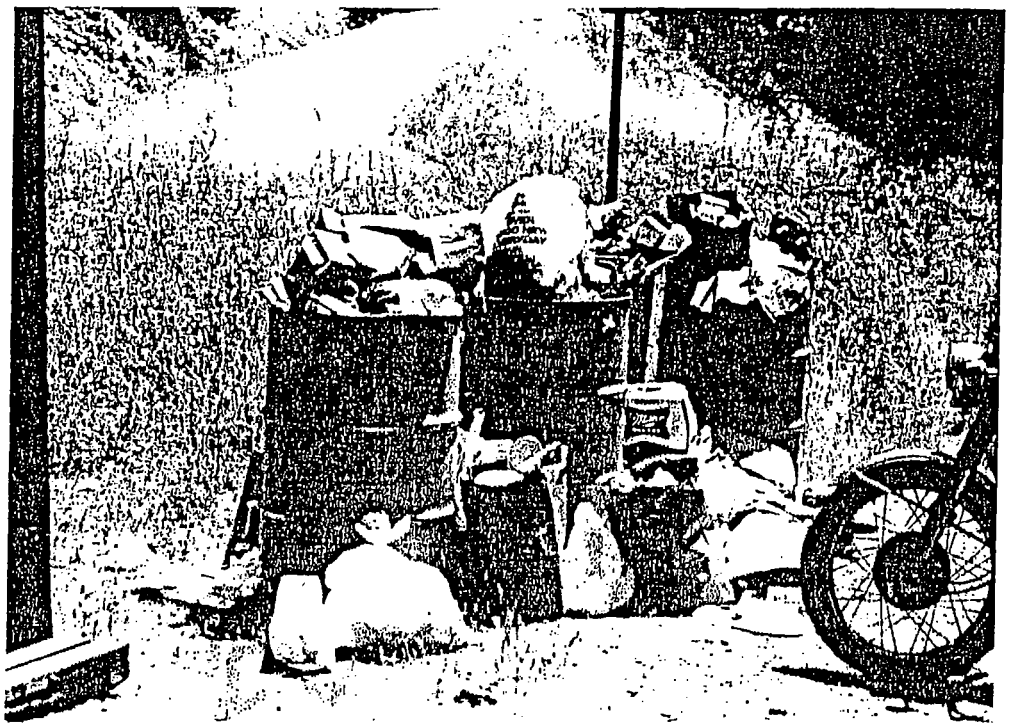

Photo 18.–The public felt that additional garbage cans were a necessity in the SRA.

Grazing

The incompatibility of grazing with public recreation and resource protection (e.g., for native species regeneration, such as for oaks) was stated as a concern by some. Others supported the grazing practice as a means of reducing fire hazard. Some felt that it was incompatible with recreational use and should be eliminated or confined to the off season. Others supported the multiple use concept of grazing and trail use. In their view, public access through grazing leases was acceptable to all concerned.

It was also suggested that if grazing continued, the leases should be monitored to determine their environmental impacts, and fees collected from cattle leases should be dedicated to restoration and revegetation of areas near the leased lands. Concern was also expressed over the condition of fences. It was felt that lessees should be held to a predetermined standard for their cattle pens, fences, and gates.

Hunting/ Fishing

There were many requests to stock fish in the waterways throughout the Auburn SRA such as at Lake Clementine, the North Fork and Middle Fork, and the ponds at Knickerbocker Flat.

There were conflicting concerns regarding hunting in the Auburn SRA. Some users suggested that all of the Auburn SRA should be open to hunting, while others felt that hunting should be prohibited throughout the area. It was suggested that with more restrictive guidelines, the Auburn SRA could remain open to hunting. It was also stated that private inholdings should not be trespassed and that hunters should be kept at a safe distance from the private inholdings.

Interpretation

As the Auburn SRA is rich in cultural, historical, and natural resources, outside assistance for an interpretational program, such as a docent program or a university internship program, was suggested since funding for this type of program is not likely in the near future.

Areas for interpretation, both written or presented, could address the Native American Indians who resided throughout these lands for thousands of years. Interpretation of the massive gold-mining operations and early settlements throughout what is now the Auburn SRA and their important influences upon this region and in the development of California and the Western United States following the Gold Rush of 1849 could also be enhanced.

Study and interpretation of the diverse wildlife and natural resources found throughout the Auburn SRA have also been expressed as a desired program.

The use of interpretation has been expressed as a management tool for the protection of the cultural and natural resources of the area.

Recreational Mineral Collection

Public concern for allowing the continued practice of recreational mineral collection in the Auburn SRA was expressed. Some individuals cited environmental degradation, excessive noise, and litter as undesirable by-products of recreational mineral collection (especially the larger scale operations) and suggested complete

prohibition of the activity. Others suggested restricting recreational mineral collection to certain use areas, off-season periods, and/or limiting the size of equipment and the length of stay at any given spot.

To enforce camping time limits and clean-up policies, more frequent patrol of popular recreational mineral collection areas was suggested.

A need to monitor the effects of dredging and other recreational mineral collecting on natural resources was identified.

Natural Resource Management

The need to protect and preserve the natural resources of the Auburn SRA during this interim period was expressed. The implementation of a recreation impact monitoring system, designed to target unacceptable resource damage, was suggested as a means to ensure this.

Concern was also voiced over the need to protect the Auburn SRA from the threat of fires through monitoring and burn control. It was also suggested that as use of Auburn SRA increases, fire risk will increase, requiring more active fire management.

Management of the Auburn SRA must take into account the various rare and endangered species which inhabit it.

Off-Highway Vehicles

The major concern relative to the Mammoth Bar OHV area is the lack of management operations associated with its use. At current staffing levels, maintenance and patrol of the area have been inadequate. This has resulted in uncorrected erosion and other resource damage, safety issues, lack of enforcement, and lack of physical boundaries (such as fences).

Additional staffing, increased maintenance, resource rehabilitation, better signage, and more definitive and effective boundary barriers were expressed as needs for the area.

Operations/ Maintenance

At the public meetings, the need for additional patrols throughout the Auburn SRA was loudly voiced. User conflicts are a common occurrence in some areas, particularly at high-use areas such as the Confluence. These conflicts have created uncomfortable conditions for users. Much of the area is subject to vandalism. Signs and other facilities are destroyed soon after installation (see photo 19).

Photo 19–Ranger patrols in the Auburn SRA can help deter crime.

Maintenance needs were also cited. The public felt that access roads such as Driver's Flat Road and Ponderosa should be serviced more frequently and that garbage removal should be more frequent.

Trails

Trails were a common subject raised at the public meetings. A desire for more nonmotorized trails such as equestrian, hiking, biking, and for the disabled was frequently voiced. The public also requested improvements on existing trails, including signs, consistent maintenance, and access for the disabled (see photo 20).

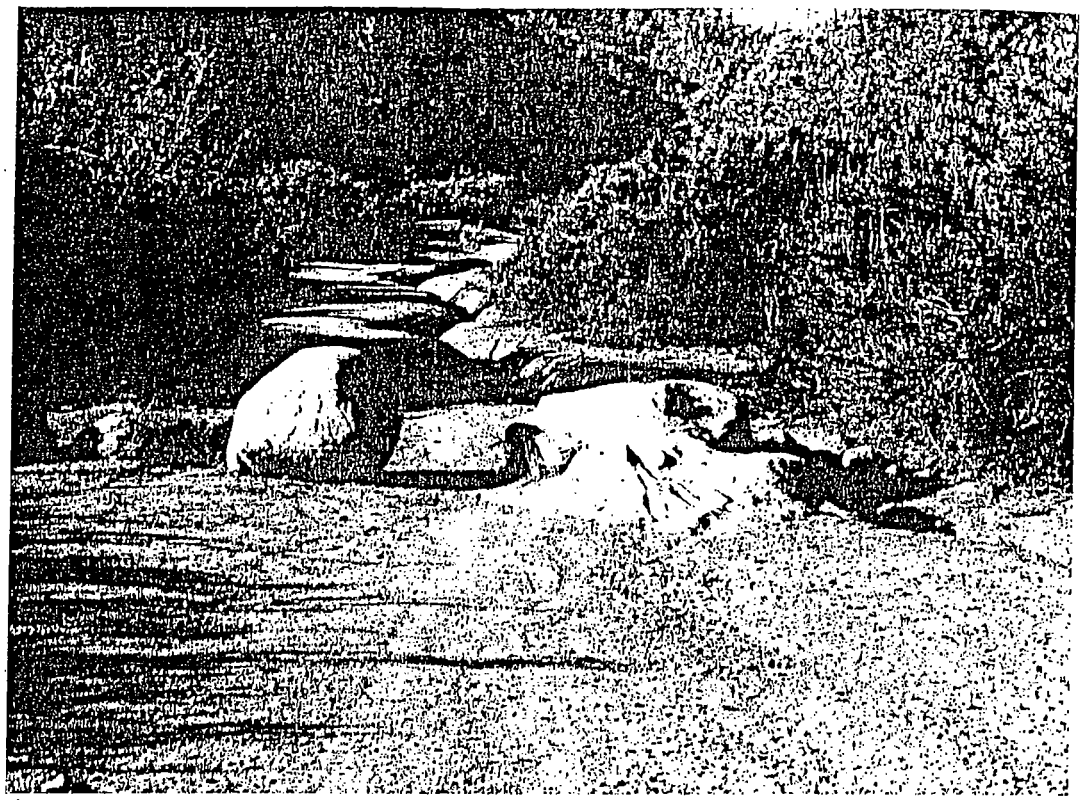

Photo 20.–Trail erosion has been a problem in the SRA.

Implementation of trail design standards was suggested to regulate items such as trail width, slope, use of water bars, and other drainage devices. Connections with other trails were important. Loop trails were requested as were linkages to the El Dorado County trails and the National Forest Service trails.

Trail use conflicts were a common complaint. Separating users spatially or chronologically, providing wider trails, and/or educating various trail users were suggestions to ease conflicts. The public suggested the enlistment of volunteer staffing to assist in trail-related activities, noting that current staffing levels appear insufficient.

Viewshed

Members of the public felt that Reclamation and Parks should not permit any project, such as radio and microwave towers, which might damage the scenic viewshed.

Whitewater Recreational Use

Whitewater recreational use on the North Fork and the Middle Fork of the American River was very light through the 1960's and into the 1970's but increased dramatically through the 1980's, making these rivers important regional resources. The increase of use on these rivers is due to an increase in population of the area, increased popularity of whitewater recreational activities, and the development of the Placer County Water Agency's Middle Fork American River Project, which greatly lengthened the rafting season on the Middle Fork through controlled releases of water. Another factor is the decreased availability of other western rivers due to dams and water projects. Although there have been increases in noncommercial use, the largest increases in activity on the North Fork and Middle Fork have been a result of commercial operations.

The sudden increase in use and the changes in the local recreational use patterns created real and perceived management problems and conflicts between recreational users and local residents. Historically, the main use problems on the North Fork and Middle Fork were associated with congestion at specific locations and reaches of the river during narrow hour ranges of the day. The areas of congestion included: off-site traffic and parking, put-ins and take-outs, on-river points of constriction, and campgrounds.

These congestion problems were a function of the user patterns and facility and physical capacities and translated into: on-river crowding in a wilderness/primitive river setting, use conflicts between commercial operations, use conflicts between commercial and noncommercial river recreational users, some conflict between river recreational users and other recreational users, conflicts between on-river recreational users and the residents of Foresthill and other neighboring communities, and reduced environmental quality of the resource which reduced the value of the user's experience.

Problems and Concerns Specific to Subareas

Various problems and concerns specific to the subareas throughout the Auburn SRA have been noted and are listed below.

The Highway 49 Corridor

The Confluence

The Confluence has no developed facilities, aside from one parking area and various pull-outs which can accommodate approximately 150 automobiles. Due to the increasing recreational use of the area, the need for parking spaces is often exceeded causing both parking and traffic problems. The need for proper sanitation facilities (i.e., restrooms) has also become increasingly apparent. Also, because of the variety of activities simultaneously occurring, user conflicts frequently occur.

.52

Problems at .52 include lack of toilet facilities, steep hillsides cut with de facto trails leading to increased erosion, and inadequate parking. Most of the parking for the area is located across a winding section of Highway 49 on a few turnouts which creates unsafe conditions for pedestrians crossing the highway enroute to .52.

Mammoth Bar

Compared to other off-highway vehicle areas in the California State Park System, the OHV area at Mammoth Bar is relatively small. Because of the high potential for increased resource damage and increased user conflicts, Reclamation and Parks have not expanded the Mammoth Bar OHV area.

OHV use of the area has resulted in numerous nondesignated trails and informal "race courses" which take advantage of the various washes and changing topography. Some of the OHV users have illegally made trails outside the established boundaries. These trails lead up the adjacent canyon walls and, because of intense use, have resulted in resource damage.

Other problems associated with the area are a lack of sanitary facilities, continued environmental damage due to a lack of vegetation, and soil rehabilitation.

Lake Clementine

Lower Lake Clementine

Problems associated with Lower Lake Clementine stem from the recreational demand exceeding the capacity of the visitor facilities, inadequate parking, too few restrooms, a small boat ramp size, and the need for an entrance kiosk to regulate the amount of use in the area.[1]

Upper Lake Clementine

The problems associated with Upper Lake Clementine are that the access road is closed during winter months, that unauthorized vehicles park on the beach, that there are no distinctions between day-use areas and overnight camping areas, and the lack of a kiosk at the top of the access road to regulate the amount of use in the area.

North Fork

Iowa Hill Bridge

At Mineral Bar Campground in the Iowa Hill Bridge area, problems are associated with user conflicts between noncommercial whitewater boaters and campers. The noncommercial access is located in the campground. User conflicts occur during the peak whitewater boating season when the level of whitewater activity on weekends tends to create a sense of crowding for the campground users.

Problems at the commercial put-in area on the west side of the river occur mainly because parking and restroom facilities are inadequate during the peak season demand period when the commercial use of the area increases.

[1] Since the initial study was completed, funding was provided to Reclamation by the California Department of Boating and Waterways for a contract to reconstruct an improved modern boat ramp.

Shirttail Canyon

For noncommercial (private) rafters on the North Fork, the take-out trail at Shirttail Canyon is difficult and strenuous. While kayakers can negotiate the narrow, steep trail with less difficulty, rafters usually travel 5 miles downstream to the next river access point at Ponderosa Road Bridge where the take-out is easier to manage. This results in additional parking and traffic congestion at the Ponderosa take-out area which the commercial whitewater companies use as their main take-out area.

Ponderosa

The primary problems in this area are associated with commercial rafting activity which occurs during the spring and early summer. The narrowness of Ponderosa Road in conjunction with limited parking areas creates serious congestion during peak use periods. An abundance of ex-school buses and other vehicles used by commercial whitewater outfitters crowd the area and affect the traffic flow along Ponderosa Road. Individuals and groups exiting the area from the whitewater boating trips create traffic in the immediate area that displaces other day-users from the early afternoon into evening. User conflicts associated with this displacement are common. Additionally, lack of sanitary facilities at this area creates a health hazard.

Middle Fork

Oxbow

One problem at Oxbow is the steepness and narrowness of the whitewater boating put-in trail from the staging area to the water. Congestion at the put-in pool occurs because of limited usable area both in and out of the water. To complicate matters, occasional delayed morning water releases from the upstream reservoir and afterbay cause a backlog of rafts at both the staging area and the put-in pool and result in delaying the departure of rafting groups.

Ruck-a-Chucky

The problems associated with the Ruck-a-Chucky subarea are that the limited number of parking spaces do not meet the demand, existing pit toilets are not sufficient to service the entire area, causing sanitation and health concerns, and heavy rains during the winter months decrease the functionality of the only access road, Driver's Flat Road.

Cherokee Bar

Problems with the Cherokee Bar subarea are associated with access. Sliger Mine Road, the main access road, is narrow, steep, and rough. As a consequence, during the rainy season it is often slippery and muddy, necessitating closure.

Cherokee Flat

The problems presented by Cherokee Flat are similar to those presented for Cherokee Bar. Additional problems in this subarea are no formal public parking and no signs directing trail users.

Knicker-bocker Flat

The equestrian loop in Knickerbocker Flat has only recently been opened to the public, and chronic problems have not yet been noted. However, desires for improvements, such as better signage, improved gates (for trails passing through leased grazing lands), and improved staging areas were voiced by the public.

Rim Areas

Forest Hill Divide

Problems associated with the Forest Hill Divide subarea include lack of restroom facilities, parking spaces, and trail signage. As a consequence, appropriate trail uses are unclear, potential users are turned away due to lack of parking, and human waste is not properly disposed of.

Auburn Staging Area

Problems associated with the Auburn Staging Area include the need for additional parking and restroom facilities.

Auburn Dam Overlook

Problems associated with the Auburn Dam Overlook are the need for restroom facilities, picnic areas, and equestrian trailer parking. Lack of trailer parking results in congestion and inadequate staging room.

Planning Goals

The Auburn SRA continues to be utilized as a valuable natural resource and recreation experience. As a result of this use, and the potential for increased future use, there is the need for an IRMP that will guide the continued use of the Auburn SRA until a decision is made by the Federal Government as to whether or not to construct a dam at Auburn.

Consideration of the various public concerns, agency needs, and administrative concerns determined that there is need to provide for the protection, management, and preservation of the resources in Auburn SRA while providing for public health and safety.

Through the public involvement process and the task force meetings, Parks and Reclamation developed the following planning goals for this study:

- To provide for the health and safety of the public during the interim period.
- To minimize environmental damage caused by recreational use and development, and to restore, where possible, those areas which have been damaged by recreational use.
- To allow and encourage active volunteerism for trail construction, trail maintenance, facilities construction, interpretation, and other projects or programs, where feasible.

Planning Constraints

In addition to the formulation of the planning goals, six categories of constraints were identified. Once identified, the constraints were considered throughout the development of the alternative plans. In conjunction with the above-stated goals, these two categories, goals and constraints, were the foundational structure upon which the IRMP alternative (presented in chapter five) was formed. The constraints are as follows:

Interim Nature of the Plan

As the future of the Auburn project lands is not clear, it is Reclamation's intent not to encourage additional public use during this interim period, or to construct permanent recreation facilities which would be inundated or could be affected should a dam and reservoir project be built. Any improvements or facilities recommended as part of this plan must take these factors into account.

Financial/ Budgetary

Congress has not provided Reclamation with any recent commitment of funds for improvements for the Auburn SRA. Therefore, due to the lack of available funds and the interim nature of this plan, only those improvements needed for the health and safety of the public or resource protection will be addressed in this plan. Facilities or programs designed to address other concerns, needs, or desires are considered lower priority. However, if these facilities or programs are inexpensive or could be constructed using volunteers or should additional funding become available, they could be implemented.

Resource Protection

Natural and Biological Resources

In the planning process, consideration was given to natural and biological factors such as the sensitivity of possible wetland damage, disturbance or damage to rare and endangered species habitat, and water quality and vegetation maintenance (see photo 21).

Photo 21.–Wetlands are productive habitats that should be preserved where possible.

Geological, topographic, and soil limitations are important planning considerations for almost any form of recreation improvement which might occur in the Auburn SRA such as roads, trails, parking, buildings, and facilities.

Cultural Resources

Over 1,000 archeological sites have been noted to date in the Auburn SRA, and any improvements proposed for the area must take these sites into consideration. These sites are often very sensitive to any disturbance. Thus, to be certain that no archeological sites are located in the specific improvement area, cultural resource inspections are necessary before any proposed improvement is undertaken. Although extensive location mapping of archeological sites has occurred previously, the recording and evaluation of sites is not complete, and further information is required for protection of the cultural resources in the Auburn SRA.

Prior to any actions that might affect cultural resources, compliance with section 106 of the National Historic Preservation Act (NHPA) will be met. Management of cultural resources (section 110, NHPA) will be through a cultural resources management plan developed in consultation with the State Historic Preservation Officer.

Visual Resources

Since the visual resources of the Auburn SRA are valuable and an integral part of the resource as a whole, they should be protected to the extent possible and should be considered when various facilities, improvements, or projects are proposed.

Legal/ Jurisdictional

Land Ownership and Management

Only 25,000 acres of the 41,000-acre Auburn SRA are under the jurisdiction of Reclamation. In discussions and meetings with representatives from other public agencies, an attempt was made to consolidate and/or obtain uniformity of the rules and regulations governing such uses as camping, mineral collection, and trail use. Since these negotiations did not result in conformity of the rules and regulations, a constraint exists in developing uniform policies for all of the public lands in the Auburn SRA.

Lands were acquired for the Auburn project until 1977. At that time, acquisition was suspended because of possible environmental concerns. The land pattern that resulted is a patchwork of Reclamation-owned land intermixed with private and other Federal agency land. No new land will be acquired until the project is approved for further construction.

This IRMP relates to the land Reclamation has acquired for the project, either through purchase or withdrawal from other Federal agencies. Reclamation has no jurisdiction over the private land. The other Federal agencies (Bureau of Land Management and Forest Service) currently have management plans that reflect differing uses than those proposed in this IRMP. In order to change the plan, the

agencies affected would have to go through much the same process Reclamation has gone through with the Auburn SRA including public involvement.

The effect of this mixed pattern of land ownership and priorities is not significantly different than other projects where Federal agencies have jurisdiction to adjacent land. Access to Reclamation land at Auburn is controlled by Reclamation under Reclamation rules and regulations. Because access from other Federal land onto the Auburn project lands is somewhat limited, the difference in regulations among agencies does not have a significant impact.

Broad Management Guidelines

The public use of the Auburn Dam project lands was authorized in Public Law 89-161, the enabling legislation for the construction of Auburn Dam. Through consideration of Public Law 89-161, broad management guidelines were developed which helped guide the development of one of the alternative plans (see chapter five for further information on the broad management guidelines).

Chapter Five

Plan Formulation and Selection

Chapter four presented the concerns, goals, and constraints identified in the planning process. This chapter discusses how these factors are synthesized in formulating two alternative plans. The first alternative presents a plan of taking no action in addressing the problems, concerns, and needs identified. The second alternative presents a plan for interim management requiring new facilities and programs and implementing management guidelines. The environmental impacts of both alternative plans are considered. The alternatives are evaluated on their ability to address the planning goals, and plan selection is made.

Plan Formulation

During plan formulation, two primary analyses were conducted to arrive at developing the alternatives. These consisted of applying the plan formulation rationale and the prioritization and ranking systems. These two analyses are presented below.

Rationale

Two alternative plans were developed by applying the following plan formulation rationale:

- Public and agency needs and concerns were identified.
- The problems, needs, and opportunities of the Auburn State Recreation Area (SRA) were identified and evaluated.
- Planning goals were established.
- Planning constraints were identified.
- Alternative plans were formulated to address concerns, problems, needs, opportunities, and planning goals within the specified constraints.
- Alternative plans were evaluated based on their ability to meet the planning goals.

Prioritization and Ranking

Based on plan evaluation, a plan was selected for implementation as the interim resource management plan (IRMP).

The public involvement process resulted in the identification of many desired and needed proposals for various improvements. The problems, needs, and opportunities were considered in the prioritization of the facilities and programs which were developed as part of alternative two. With this consideration, the programs and facilities that address the most critical problems and needs are designated as priority one items. Then those that address the lesser and least critical problems, needs, and opportunities are prioritized respectively at level two and level three. This system was used to focus the plan formulation process and could be used by the Auburn SRA administrators to allocate resources, so that as funding becomes available the most critical needs could be addressed first. Further, a ranking system was developed to rank the recreation subareas on the basis of user demand and potential for providing diverse recreational opportunities. The ranking determines which use areas should be funded for the implementation of new facilities and programs first. The prioritization and ranking systems are discussed in detail below.

Prioritization

Three levels of priority are assigned. Priority one proposals address critical needs which will receive available funding first. Priority two items are less crucial and will receive funding second. Priority three items are desired but are not necessary to meet visitor health and safety or resource protection concerns or needs. It is not anticipated that priority three items will be federally funded. If they are, they would receive funding last. The three priorities are further explained as follows:

Priority One

This priority includes facility improvements and programs necessary to maintain a minimum level of visitor health and safety and resource protection at the Auburn SRA.

Priority one facilities include additional garbage cans and restrooms for most use areas, posted hunting areas, and designated boundaries for off highway vehicle (OHV) use at

Mammoth Bar. Priority one programs include scheduled road maintenance, patrol of problem areas, and monitoring of cultural sites. The monitoring will be based on a cultural resource management plan. These proposals may receive Federal funding.

Priority one also includes compliance with all Federal laws and regulations.

Priority Two

This priority includes programs and facilities necessary to meet existing visitor use and to rehabilitate and protect the resources.

Priority two facilities include development of facilities necessary for increased use levels such as trail staging areas, development and expansion of parking areas, a service ford at Ruck-a-Chucky, and increased signage. Priority two programs include vegetation and wildlife management programs, trail maintenance programs, and volunteer coordination. It is unlikely that these facilities will receive Federal funding.

Priority Three

This priority includes programs and facilities which would provide for recreational and resource enhancement of the Auburn SRA.

Priority three facilities include picnic areas, additional camping areas, new staging areas, interpretive and disabled access trails, fishing docks, and water troughs. Priority three programs include the development of a vegetation management plan and fish stocking programs. It is unlikely that these programs and facilities will receive Federal funding as the Bureau of Reclamation (Reclamation) does not wish to encourage increased use of the Auburn SRA.

Demand Diversity Ranking

Three ranks have been assigned to the subareas at the Auburn SRA as a means to guide the distribution of funds. For example, if funding is insufficient to implement all priority one facilities, rank one subareas will receive priority one facilities first, then rank two

subareas will receive priority one facilities, followed by rank three subareas and so on until the last ranking (rank three–priority three) facilities which would receive funding last.

Two criteria were used in assigning rank—user demand and diversity of recreational opportunities available in the subarea. Rank one use areas are of high public demand and/or exhibit high potential for providing diverse recreational opportunities. It was determined that it is important that these areas remain open to public use. There is less demand for rank two areas, and/or they represent a smaller spectrum of recreational opportunities. Rank three areas receive the least demand, and/or they represent a narrow spectrum of recreational opportunities.

The recreational use subareas have been ranked as follows:

Rank One

- The Confluence
- Lower Lake Clementine
- Upper Lake Clementine
- Ruck-a-Chucky
- Iowa Hill Bridge

Rank Two

- Knickerbocker Flat
- .52
- Ponderosa
- Shirttail
- Cherokee Bar
- Mammoth Bar

Rank Three

- Auburn Dam Overlook
- Auburn Staging Area
- Forest Hill Divide
- Main Bar
- Cherokee Flat

The Alternative Plans

Alternative One

Under this alternative, no action would be taken to improve public health and safety, improve resource protection, or increase volunteerism in the Auburn SRA. The facilities would remain in their present condition. Under this scenario, the following would occur:

- Mammoth Bar OHV area would continue to experience environmental degradation.
- Parking and traffic congestion would continue at popular use subareas such as the Confluence and Ponderosa.
- Inadequate sanitary conditions would persist.
- Some trail construction by volunteers would continue to be inappropriate.
- Conflicts between different Auburn SRA user groups would continue.
- There would be inadequate signage.
- The Auburn SRA visitors would continue to feel threatened by other people.
- Land uses that adversely impact the viewshed might be allowed.

Since alternative one does not entail developing any new programs or facilities, the prioritization and ranking as described above would not be applied.

Alternative Two

Alternative two would establish guidelines, programs and facilities, and special considerations that would address planning goals and provide for current and future recreational use of the Auburn SRA.

In order to identify the recreation subareas which should be addressed first, the ranking system described above was used to assign three levels of importance to the subareas at the Auburn SRA. Additionally, each program and facility was assigned a priority level.

Facilities are defined as structures or physical improvements such as restrooms, parking lots, trails, roads, campgrounds, and picnic areas.

Programs are specific types of resource and recreational activities which were developed to meet the planning goals and public and agency concerns. Unlike guidelines, programs are not directives. They are specific actions taken to address concerns, generally requiring staff time and materials. The proposed new programs and facilities (presented below) in alternative two were prioritized using the prioritization system presented above.

Alternative two also develops management guidelines that address the need to sustain proper use of the Auburn SRA resources and the newly proposed facilities and programs. The management guidelines function on different levels. The broad management guideline applies to all activities in the Auburn SRA and dictates the course of all action taken in the Auburn SRA. Specific guidelines are applicable to one or a few of the facilities or programs. For example, they dictate how the facilities will be constructed, how programs will be implemented, and control how certain recreational activities can be conducted.

Lastly, special considerations for various activities, such as recreational mineral collection, off-road vehicle use, and whitewater boating are included in alternative plan two and are discussed in the special considerations section of this chapter.

The guidelines, programs, facilities, and special considerations developed as part of alternative two are presented below in order of critical importance (prioritization), with cost estimates for the programs and facilities.

Guidelines

This section describes the guidelines which were formulated to direct existing and potential land uses and activities in the Auburn SRA, such as recreation, design standards of new facilities, and resource management. The guidelines were developed in response to the issues and concerns identified during the public scoping and resource inventory phase of the planning process. Guidelines can be implemented immediately and do not require Federal funding.

The first guideline, the broad management guideline, is general and directs all land use actions in the Auburn SRA, except Reclamation's administrative area. Specific

management guidelines, discussed in the next section, address specific land uses and activities in the Auburn SRA, such as the concerns brought forth during public scoping meetings.

Broad Management Guideline

A broad management guideline was conceived early in the planning process and was agreed upon at the first task force meeting. Although the guideline has been revised, its overall intent remains unchanged. The text follows the intent of Public Law 89-161, the enabling legislation for the construction of Auburn Dam. The broad management guideline of this IRMP is as follows:

Any land use proposal made prior to the completion of Auburn Dam shall meet one of the following four criteria:

- It is directly associated with the authorized construction of Auburn Dam or the California State Parks Auburn Reservoir Project General Plan.
- It is for the purposes of fish and wildlife mitigation or enhancement.
- It provides for cultural or historic preservation or mitigation.
- It provides for safe public use and recreational opportunities associated with the resource.

Reclamation's administrative and construction complex, which houses the Auburn Dam project headquarters, the unfinished Auburn Dam construction area, the California Department of Parks and Recreation's (Parks) Auburn SRA headquarters complex, and lands immediately surrounding these areas are exempted from this guideline (see figure 3). This broad management guideline was a major planning constraint and played a significant role in the formulation of the guidelines, programs, and facilities.

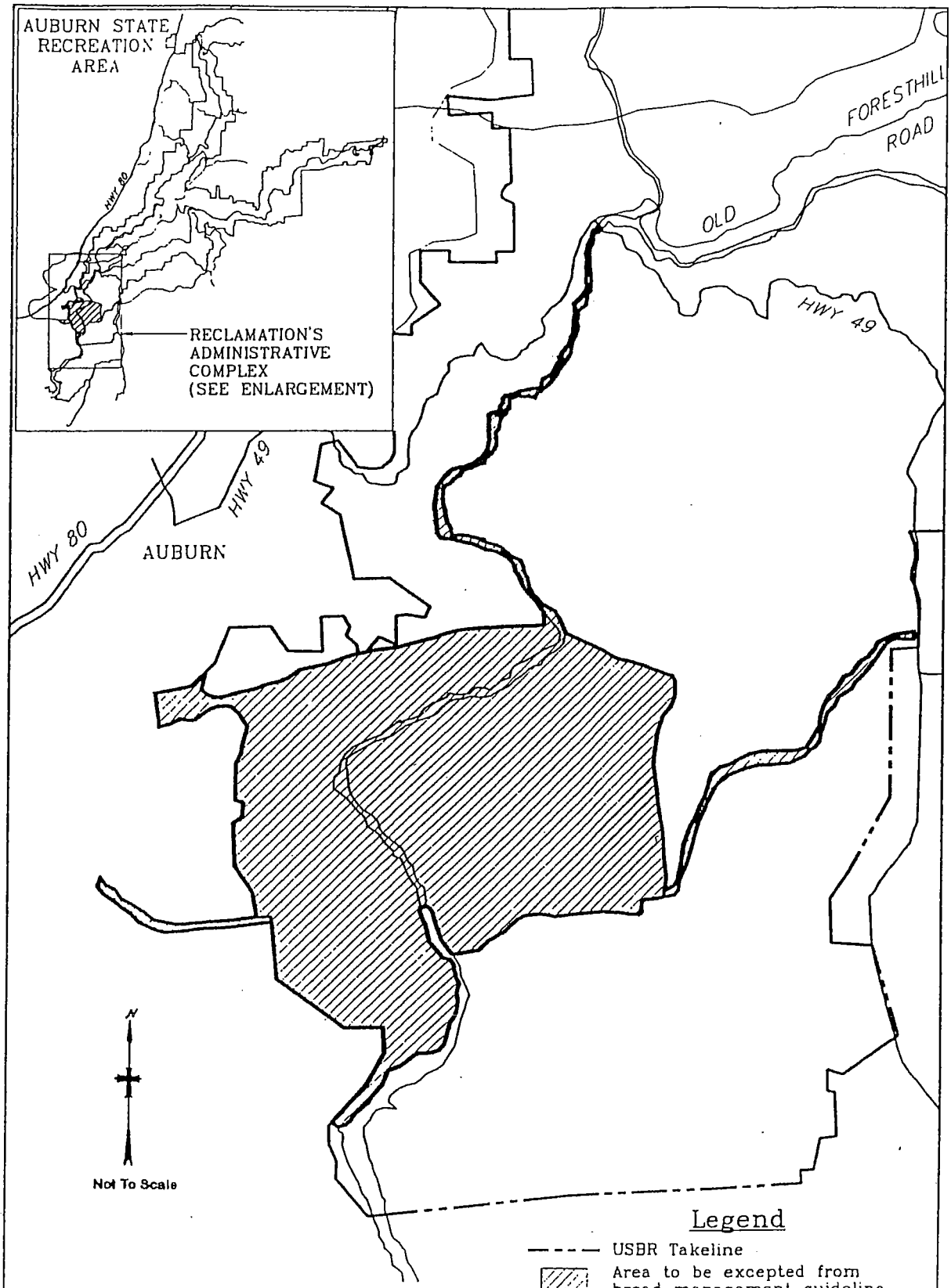

Figure 3
Reclamation's Administrative Complex

Specific Management Guidelines

Design Standards of New Facilities

1. Facilities planned for Auburn SRA must not be permanent, due to the fact that construction of Auburn Dam would cause inundation of any facilities built below the reservoir level.

2. All park signs and facilities in the Auburn SRA should blend with the natural environment. They should be of a design, color, texture, and scale that minimizes adverse visual intrusion into the Auburn SRA.

3. Structures may emulate historic or prehistoric designs but must not be obtrusive.

4. Structures should be screened from view with vegetation or other naturally occurring features whenever possible.

5. Structures should be made of fire resistant materials and designed and located such that they can be adequately serviced.

6. Equestrian staging areas should be large enough to permit trailer loading and unloading, trailer parking, and trailhead signs and facilities for tethering and watering horses, where possible. Equestrian staging areas should be unpaved. Restroom facilities should be provided at staging areas.

7. Campsites should be spaced and screened to ensure privacy and minimize visual contact with other campers.

8. Unless otherwise specified, all restrooms should consist of 1,000-gallon in-ground storage tanks topped with portable restrooms which can be removed seasonally. Wherever possible, these restrooms should be placed behind a barrier. On occasion, restrooms called for in this plan are subject to being flooded. Therefore, during the rainy season and after the peak visitor use season is over, toilet fixtures should be removed and the tanks pumped and then filled with water before being capped, or they should be designed to withstand inundation.

9. All facilities should be located in such a way as to have minimal conflict with cultural and fish and wildlife habitat and values.

10. Groups holding special events at the Auburn SRA should be required to provide portable toilets if sufficient restroom facilities are not available.

Camping

1. All campers outside designated campgrounds must have a special river camping permit (available at Auburn Office of Department of Parks and Recreation) and abide by all rules therein.

2. Human waste shall be disposed of in designated sanitation facilities only. In the event that such facilities are unavailable, portable chemical toilets, ammunition cans, or other self-contained units may be required for solid human waste disposal, and the waste shall be disposed of only at approved dump stations.

3. The maximum camping occupancy limit is 30 days. A 15-consecutive day limit may be imposed at the discretion of the administrative agency.

4. A $250 fine may be levied against the occupant of any campsite should the site not be restored to its natural condition prior to vacating the location.

5. Remote camps shall be temporary only. Tents are the only shelters permitted.

6. Private property may not be left unattended overnight. Such property is subject to confiscation under Federal Property and Administration Services Act of 1949, as amended (40 USC 484(M)). The only exception shall be if the owner is camping in a designated campground or has taken out a special river camping permit and has overnight tags on the equipment. In this case, private property may be left unattended for 48 hours, after which time it is subject to confiscation.

7. All food wastes, garbage, and litter must be removed from the campsite and disposed of at an approved landfill site or garbage cans maintained by State Parks.

Hunting

1. In addition to the above restrictions as per section 4503 of the California Code of Regulations, no hunting may occur within the boundaries of any of the major use areas, including the following (see plate 3):

Iowa Hill Campground

Shirttail Canyon day use area

Ponderosa day use area

Mammoth Bar off-highway vehicle area

Ruck-a-Chucky Campground

Cherokee Bar Campground

Trails

1. Trails should be subject to seasonal closures at the discretion of the managing agency to avoid resource damage.

2. Trail linkages to other trail systems should be encouraged.

3. Access for carriages should be allowed on Knickerbocker Trail and New Knickerbocker Trail on a trial basis. Access for these vehicles must allow carriage entry while excluding motorized vehicle entry.

4. The design of trails and access points should take into account disabled Auburn SRA users, to the extent possible.

Plate 4 shows existing and potential trails.

Construction Standards

1. Trails within the Auburn SRA are not necessarily limited to those proposed on the trails map (plate 4). New trails may be permitted with the approval of the administrative agency. New and existing trails should conform to other IRMP and Auburn SRA guidelines.

2. Trails in conflict with key wildlife habitat areas, at risk of degrading water quality or subject to erosion, should be rerouted or closed.

3. All trails should meet with Forest Service construction standards.

4. Maintenance, construction, and clearing of any trail should have the prior approval of the administrative agency in order to assure conformance to existing trail standards and to ensure the continued ecological, cultural, and scenic integrity of the park.

5. Trail gates should be easy to close or self-closing.

6. Trails should be routed in a loop, where possible.

Use Conflicts

1. Multiple-use trails should be 60 feet or wider.

2. Single-use trails should be sufficiently separated by space, vegetation, or berms to prevent conflicts.

3. At regular intervals, trail signs should identify the authorized use of the trail.

Scenic Viewshed

1. The viewshed is to be maintained. Development should be located outside of scenic areas, adjacent to existing structures, or along the edges of scenic areas where vistas will be less interrupted. Development should not be allowed on ridgelines.

2. Newly proposed roads, parking areas, and other developments should be evaluated to determine their

effects on scenic quality. Proposals that would have an adverse impact on the viewshed should be revised or rejected.

3. Landscaping, berms, and other buffers should be used to separate the Auburn SRA from adjoining land uses.

Resource Management and Protection

1. Trails may be routed near impact-resistant cultural resources such as bedrock mortars. Interpretative activities by volunteers at these trailside sites should be encouraged.

2. Facilities and activities should be located away from cultural resources that may be damaged by visitors.

3. Before any facility is constructed, it should comply with the National Environmental Policy Act (NEPA) and other environmental protection laws. Each project should be evaluated for NEPA and National Historic Preservation Act (NHPA) compliance on a case-by-case basis.

Vegetation and Wildlife Management

1. The natural ecological balance within the Auburn SRA should be retained. Any decisions affecting fish and wildlife populations in the park must be approved by a qualified resource ecologist before being implemented. Any decision made relative to conflicts between wildlife and livestock must be made in favor of wildlife.

2. Rare and endangered plants and animals and their habitats should be protected and managed for their perpetuation in accordance with State law.

3. Prior to any potentially deleterious activity, the affected area must be surveyed by a qualified resource ecologist for sensitive plant and animal species during the appropriate season.

4. Riparian and wetland areas should be managed for their long-term preservation and enhancement.

5. Any landscaping in developed areas must be done using native plants, preferably transplanted from elsewhere in the park.

6. Management of soils should prevent destructive or unnatural erosion.

Programs

The following programs are proposed to meet the planning goals and public and agency concerns. The programs address facilities, hunting, signage, fishing, interpretation, and other identified management concerns. Programs prescribe a plan or procedure for managing a specific Auburn SRA concern and generally require staff time and materials. The cost estimates which accompany the program descriptions are the start up costs needed for implementing the program. Annual costs needed to sustain these programs after start up are not presented. Estimates are based on July 1991 price levels. The programs have been developed to planning goals and are described below.

Sign Facilities

a. Signage is prioritized in terms of the most critical needs (see photo 22). Priority one signage should address visitor health and safety concerns, including designated hunting areas, emergency contacts, etc. Priority two signage should address resource protection and visitor assistance and should include signs identifying trail difficulty, trail markers, special directions, unusual features, and use designations. Other information can be conveyed by priority three signage and should include interpretive information. Volunteers should be encouraged to work in partnership with Parks to construct signs.

Priority one cost:	$ 5,000
Priority two cost:	3,000
Priority three cost:	2,000

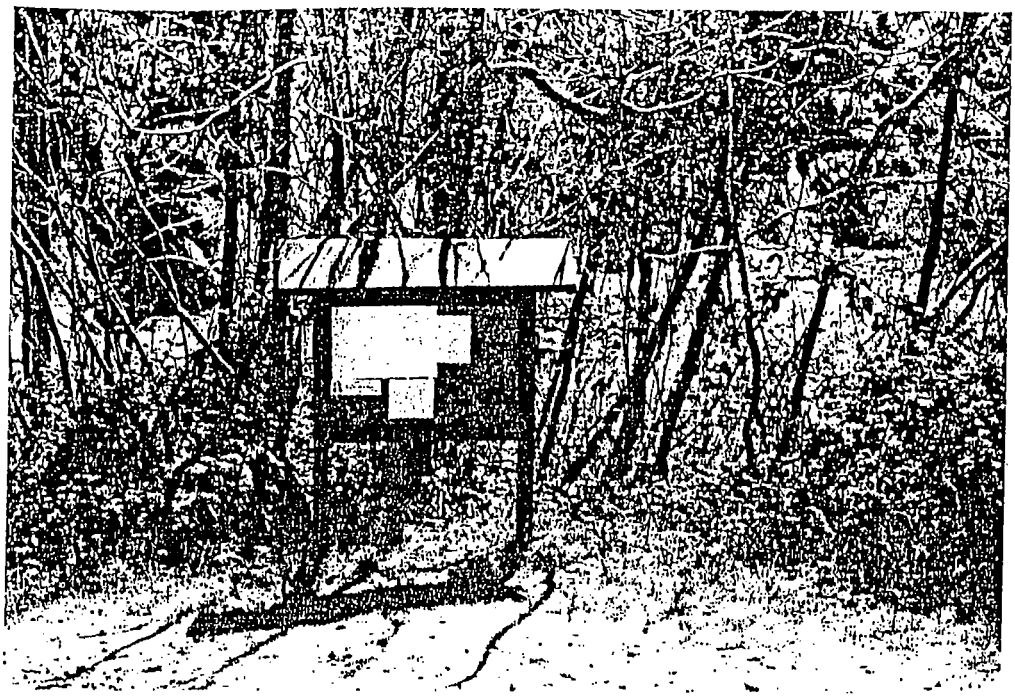

Photo 22.–A signage program has been proposed for the Auburn SRA, so that visitors may be better informed.

Fishing

a. Work should be undertaken with El Dorado County Fish and Game Commission and the California Department of Fish and Game (DFG) to stock the warmwater ponds on Knickerbocker Flat. The possibility of stocking Lake Clementine and the American River should be considered.

Priority three cost (borne by others): $8,000

Interpretation

a. Internships and projects should be developed to coordinate and implement interpretive programs.

Priority three cost: $4,000

Public Safety

a. Landing zones on the helicopter landing zone map should be evaluated on a yearly basis to ensure that they are still suitable for landing zone use (plate 5).

Priority two cost (under current contract): $1,000

b. New firebreaks and fuelbreaks should be implemented where appropriate and maintained by the California Department of Forestry in accordance with Reclamation guidelines.

Priority one cost (borne by others): $165,000

River Access

a. On-river patrol of the North and Middle Forks of the American River should continue in order to provide law enforcement and rescue needs.

Priority one cost (borne by others): $75,000

Lewd Behavior

a. Areas within the Auburn SRA which are known to attract lewd behavior should be identified and patrolled more frequently.

Priority one cost: $5,000

Trails

a. Trail users should be educated, through interpretation and other means, on trail etiquette and low impact trail use.

Priority two cost: $600

b. A trail plan should be prepared to prioritize construction and maintenance needs for trails, outline trail policies, etc. A section of trail for the disabled should be included.

Priority two cost: $5,000

c. A trail map should be developed, preferably by volunteers.

Priority three cost: $2,000

Resource Management

a. A cultural resource management plan should be developed. Volunteers from qualified universities should be encouraged to provide assistance. Participation of local Native Americans in these matters is also to be encouraged.

Priority one cost: $5,000

b. Studies should be continued to identify and evaluate, in terms of National Register of Historical Places significance, the cultural resources in the Auburn SRA. Archeological and historical societies, local Native Americans, universities, and interested groups or individuals should be encouraged to participate in this program.

Priority one cost: $5,000

c. Cultural sites should be monitored to determine visitor impact and to develop management procedures for protection and preservation.

Priority one cost: $5,000

d. Historic trails should be maintained and restored. Any maintenance and repair of these trails should be implemented in a manner consistent with the objective of preservation.

Priority two cost: $6,400

e. A vegetation restoration and management plan should be prepared for the Auburn SRA (see photo 23). This plan would meet the long-range objective of reduction of exotic plants, regeneration of oaks, and restoration and enhancement of native grasslands.

Priority three cost: $30,000

f. A fish and wildlife management plan should be prepared for the Auburn SRA. This plan should aim towards maintaining stable, healthy fish and wildlife populations.

Priority three cost: $30,000

g. Surveys for and identification of needs for protection of rare and endangered species should be updated within the

Photo 23.–A vegetation restoration and management program has been proposed to protect these natural resources.

Auburn SRA to ensure that SRA operations avoid negative impacts.

Priority two cost: $25,000

h. The Auburn SRA resources should be monitored for environmental impact to protect the resource from unacceptable change.

Priority two cost: $15,000

i. A fire management/prescribed burn program should be prepared and implemented.

Priority two cost: $5,000

Operations and Maintenance

Volunteers

a. An advisory committee composed of representatives of different recreational groups should meet regularly to discuss issues at the Auburn SRA. This committee can help coordinate volunteers.

Priority two cost: $500

b. Volunteers should be coordinated and trained to undertake and assist in maintenance, patrol, construction, interpretation, and other similar tasks which are not funded by State or Federal agencies.

Priority two cost: $1,200

c. An active volunteer trail patrol should be formed and maintained.

Priority two cost: $700

Maintenance

a. Cooperative arrangements with other agencies such as Youth Conservation Corps (Federal), California Conservation Corps (State), and the county should be developed to help with maintenance responsibilities.

Priority two cost: $1,000

b. Maintenance should be scheduled for park access roads such as Driver's Flat Road, Sliger Mine Road, and Ponderosa Way. Maintenance should be coordinated with various affected agencies, such as the county, California Department of Forestry, Reclamation, and Parks for efficiency.

Priority one cost: $30,000

Operations

a. Regular patrol at Knickerbocker Flat should occur to monitor the impact on public health and safety conditions and the Auburn SRA resources resulting from increased use.

Priority one cost:	$7,000
Subtotal for priority one programs	**$295,000**
Subtotal for priority two programs	**$64,400**
Subtotal for priority three programs	**$76,000**
TOTAL FIRST PROJECT COST - PROGRAMS	**$435,400**

Facilities

Recreational use of the Auburn SRA has increased in recent years; while to the detriment of visitor health and safety and resource protection, the construction and funding of needed facilities have not kept pace with this increase. As a consequence, various sanitation, recreational, and other facilities are necessary to accommodate the most basic health and safety needs of the public. Facilities are also needed to provide for resource protection, public enjoyment, and access. Restrooms, garbage cans, safe parking areas, and trails are typical of the many types of necessary public use facilities.

The following discussion describes the facility proposals developed in response to the planning goals. Full build out represents an ideal picture of the Auburn SRA as it would appear if all the facilities proposed in this plan were constructed. The full build out envisioned by the plan for the Auburn SRA is shown on the facilities maps, (plates 6-11). (For a more detailed description of existing facilities, see chapter two.) Each of the proposed facilities has been prioritized using the prioritization system discussed earlier in this chapter. As previously noted, it is anticipated that priority one facilities are highly likely to receive Federal funding, priority two facilities may receive Federal funding, and given the current funding constraints, priority three facilities will not

likely receive Federal funding. Preliminary estimates reflecting the first project construction cost, based on July 1991 price levels, are included. These costs do not include operation, maintenance, and replacement.

Highway 49 Corridor

Moderate to heavy use and active forms of recreation are well suited and permitted at the 3-day use areas of the Highway 49 Corridor. This is due in part to the popularity of the areas and their high use capacities when compared with other areas along the North and Middle Forks of the American River. Proposed facilities for the subareas and associated costs are as follows (see plate 6):

Confluence

Proposed priority one facilities:	
6 garbage cans, 2 posts with chains	$ 300
3 restrooms, 2 tanks	9,000
Old Quarry Road staging area: 1 restroom	4,000
Subtotal	$13,300
Proposed priority two facilities:	
Service road/pedestrian access to rivershore	$18,000
Expand parking–50 spaces	40,000
Signage	
Trail directory	900
Auburn area signs	200
Subtotal	$59,100
Proposed priority three facilities:	
Picnic area–20 sites	$32,000
Total cost all facilities Confluence Subarea	**$104,400**

.52

Proposed priority one facilities:	
1 garbage can, 1 post	$ 75
1 restroom, 1 tank	4,000
Subtotal	$4,075
Proposed priority two facilities:	
Expand parking–20 spaces	$16,000
Total cost all facilities .52 area	**$20,075**

Mammoth Bar

Proposed priority one facilities:	
2 garbage cans, 1 post	$ 100
2 restrooms, 1 tank	5,000
Designated off-highway vehicle area with barriers around the perimeter	(cost borne by others)
Subtotal	$5,100
Proposed priority two facilities:	
Separate swim beach	$ 800
1 restroom for Murderer's Bar parking area	5,000
Subtotal	$5,800
Total cost all facilities Mammoth Bar Subarea	**$10,900**
Total cost all facilities Highway 49 Corridor	**$135,375**

Lake Clementine

Lake Clementine is a very popular use area. Waterskiers and nonmotorized boaters alike take advantage of the remote setting of the lake. Proposed facilities for the two use subareas are as follows (see plate 7):

Lower Lake Clementine

Proposed priority one facilities:	
Restroom–to be open year round, 1 tank	$4,000
3 garbage cans, 1 post	125
Subtotal	$4,125
Proposed priority two proposals:	
Contact station kiosk	$9,000
Total cost all facilities Lower Lake Clementine Subarea	$13,125

Upper Lake Clementine

Proposed priority one facilities:	
4 garbage cans, 2 posts	$ 200
Lake Clementine boat-in campground	
Barge with pumper	25,000
2 restrooms, 1 tank	5,000
Subtotal	$30,200
Proposed priority two facilities:	
Contact station kiosk	$9,000
Overnight parking for boat-in campers	9,000
Subtotal	$18,000
Proposed priority three facilities:	
Picnic area–15 sites	$24,000
Total all facilities Upper Lake Clementine Subarea	**$72,200**
Total cost all facilities Lake Clementine	**$85,325**

North Fork of the American River

Except for gold dredging, the North Fork of the American River has been reserved for passive recreation. There are few facilities proposed for the North Fork, as it is intended that the North Fork retain a wild and primitive character. A new hiking-only trail is proposed that would parallel the North Fork from Iowa Hill (Mineral Bar Campground) to Lake Clementine. Although this trail does cross private property, the plan does not make a commitment for acquisition and is only in the form of a long-term proposal. The improvements identified for the three use subareas associated with the North Fork area are presented as follows (see plate 8):

Iowa Hill (Mineral Bar Campground)

Proposed priority one facilities:	
2 garbage cans, 1 post	$ 75
Commercial put-in:	
2 restrooms, 1 tank	5,000
Subtotal	$5,075
Proposed priority two facilities:	
Expand parking–10 spaces	$8,000
Trailhead signs	450
Subtotal	$8,450
Proposed priority three facilities:	
Picnic area–3 sites	$4,800
Total cost all facilities Iowa Hill Subarea	**$18,325**

Shirttail Canyon

Proposed priority one facilities:	
2 garbage cans	$100

Proposed priority two facilities:	
Removal of 5 out of 7 existing restrooms	$ 1,500
Developed private whitewater boating take-out	6,500
Improved parking and vehicle turn-around area	5,000
Subtotal	$13,100
Proposed priority three facilities:	
Picnic area–4 sites	$4,800
Total cost all facilities Shirttail Subarea	$17,900
Ponderosa	
Proposed priority one facilities:	
3 garbage cans, 2 posts	$ 175
2 restrooms, 1 tank	5,000
Subtotal	$5,175
Proposed priority two facilities:	
2 parking areas–10 auto spaces, 3 bus spaces	$12,800
Bus turn-around	25,000
Improve take-out for whitewater boating	10,000
Subtotal	$47,800
Total cost all facilities Ponderosa Subarea	$52,975
Total cost of facilities North Fork of the American River	**$89,200**

Middle Fork of the American River

Except for gold dredging, the upper reaches of the Middle Fork have also been reserved for passive recreation. The Middle Fork, like the North Fork, is envisioned as being fairly primitive. However, due to the fact that the Middle Fork Canyon is not as steep as the North Fork Canyon, it more readily accommodates a wider variety of uses such as equestrian, pedestrian, and bicyclist use. Improvements identified for the three subareas associated with the Middle Fork area are presented in the following paragraphs (see plate 9).

Ruck-a-Chucky

Proposed priority one facilities:	
6 garbage cans, 3 posts	$ 300
1 restroom, 1 tank	4,000
Improved vehicular access along Driver's Flat Road, topped with gravel	25,000
Subtotal	$29,300
Proposed priority two facilities:	
Expand parking–15 spaces	$12,000
Improved access to river shore	5,000
Rebuild ford at Greenwood crossing for service vehicles only	10,000
Subtotal	$27,000
Proposed priority three facilities:	
New bridge for hikers, bikers, and equestrians at Greenwood crossing	$100,000
Expand campground–5 sites	6,000
Subtotal	$106,000
Total cost all facilities Ruck-a-Chucky Subarea	$162,300

Cherokee Bar

Proposed priority one facilities:	
2 restrooms, 1 tank	$5,000
3 garbage cans, 2 posts	175
Subtotal	$5,175
Proposed priority three facilities:	
5 additional campground sites	$10,000
Picnic area–15 sites	18,000
Group camping–by reservation only	5,000
Subtotal	$33,000
Total cost all facilities **Cherokee Bar Subarea**	**$38,175**

Cherokee Flat Staging Area

Proposed priority three facilities:	
Trail signs	$ 300
Staging area for 15 vehicles	12,000
Subtotal	$12,300
Total cost all facilities Cherokee Flat Subarea	$12,300
Total cost all facilities Middle Fork American River	**$212,775**

Knickerbocker Flat

With the exception of three riding and hiking trails through this area, Knickerbocker Flat is closed to day use. This area is a gently rolling topland vegetated with oak woodland. The sensitive nature of this plant community along with Knickerbocker Flat's gentle topography make this area ideal for dispersed passive recreational use. The facilities proposed for this area are (see plate 10):

Knickerbocker Flat

Proposed priority one facilities:	
2 garbage cans, 1 post	$ 100
2 restrooms, 1 tank	5,000
Subtotal	$5,100
Proposed priority two facilities:	
(Cool staging area):	
Additional overflow parking–50 spaces	$40,000
Closed to vehicular traffic	4,000
Trailhead signs	900
Trail markers	600
10 hitching posts	500
Subtotal	$46,000

Proposed priority three facilities:	
(Cool staging area):	
Picnic area–15 sites	$ 18,000
Landscape screening	400
Parking at Cate Croft Lane–5 vehicles	1,200
Parking behind Northside School–15 vehicles	12,000
Disabled access trail along paved haul road	(No cost)
Disabled access to ponds	8,000
Fishing docks at ponds with disabled access	30,000
Interpretive trails	900
Water troughs along trails	500
(Robie's Track):	
2 hitching posts	150
Benches	1,000
Subtotal	$ 72,150
Total cost all facilities Knickerbocker Flat	$123,250

Rim Areas

There are three use areas located along the rim of the canyons. The primary uses of these areas are for trail access and scenic enjoyment. Facilities proposed for this area are (see plate 11):

Forest Hill Divide

Proposed priority two facilities:	
Expand parking–5 spaces	$3,000
Trail signs	500
Subtotal	$3,500
Proposed priority three facilities:	
Parking pull-out at Grizzly Bear House	$6,000
Total cost all facilities Forest Hill Divide Subarea	**$9,500**

Auburn Dam Overlook

Proposed priority one facilities:	
1 restroom, 1 tank	$4,000
3 garbage cans, 2 posts	175
Subtotal	$4,175
Proposed priority three facilities:	
Picnic area with vegetation–10 sites	$15,000
Overflow staging area for special events	500
Subtotal	$15,500
Total cost all facilities Auburn Dam Overlook Subarea	$19,675

Auburn Staging Area

Proposed priority one facility:	
2 restrooms, 1 tank	$5,000
3 garbage cans, 2 posts	175
Subtotal	$5,175
Proposed priority two facilities:	
Overflow parking for 75 vehicles	$1,000
Total cost all facilities Auburn **Staging Area Subarea**	**$ 6,175**
Total cost all facilities Rim Areas	**$35,350**

Trails

Proposed priority three trails	
22.0 miles of single track trail	$203,000
11.3 miles of multiple use trail	500,000
Total cost all trails	**$703,000**

TOTAL COST FACILITIES[1]	$1,384,275
TOTAL COST PROGRAMS	$435,400
TOTAL FIRST PROJECT COST ALL PROGRAMS AND FACILITIES	**$1,819,675**

[1] Total cost of priority one, two, and three facilities is $116,075, $254,650, and $1,013,550, respectively.

SPECIAL CONSIDERATIONS

Because the Auburn SRA offers many unique activities, not all recreational uses were encompassed by general proposals and guidelines. These unique activities, recreational mineral collection, off-highway vehicle use, and whitewater boating, require the specific management strategies, programs, and guidelines that are presented below:

Recreational Mineral Collection

Recreational mineral collection will continue to occur in the Auburn SRA. This activity will be subject to, and must comply with, Federal laws and regulations governing the protection and preservation of cultural resources, specifically the Antiquities Act of 1906, the National Historic Preservation Act of 1966 (as amended), and the Archeological Resource Protection Act of 1979. The Auburn SRA lands have been withdrawn from mineral entry; therefore, commercial mining cannot be permitted. Recreational mineral collection, which is mineral collection for the fun gained and to experience the work required in the Gold Rush days, is permitted (see photo 24).

Guidelines pertaining to mineral collection are aimed at protecting the resource for future users and providing for the safe recreation of all users. These guidelines pertain to all the Auburn SRA lands that are administered by Reclamation. These guidelines do not pertain to private property or any valid claims.

The NHPA requires Federal agencies to take into account the effect of their undertaking on cultural resources listed or eligible for listing

Photo 24.–Recreational mineral collecting was a special consideration in plan development.

on the National Register of Historic Places. Section 1220 of the act provides guidelines for the preservation and protection of historic properties. The following several activities may be associated with mineral collecting in the Auburn SRA:

Treasure Hunting

Treasure trove includes money, unmounted gems, or precious metal coin, plat, or bullion that has been deliberately hidden with the intention of recovering it later. The search for buried treasure can involve methods that are potentially damaging to cultural and natural resources; thus, a special user permit from Reclamation is required. Each permit request is thoroughly evaluated, and permits may not be granted in every case.

Archeological and Historical Resources

The use of metal detectors to locate objects of historic or archeological value is permissible subject to the provisions of the Antiquities Act of 1906, the Archeological Resources Protection Act of 1979, and the Secretary of the Interior's Regulations (43 CFR Part 7). This activity requires an Archeological Resource Protection Act Permit. Permits are available only for legitimate research activities conducted by qualified individuals. Excavations must be undertaken for the purposes of furthering archeological knowledge in the public interest, and archeological resources removed remain the property of the United States. Unauthorized use of metal detectors in the search for and collection of historic and

archeological artifacts is a violation of existing Interior regulations. The act provides both civil and criminal penalties for violation of the permit requirements.

Mineral Collection

The use of a metal detector for the purpose of recreational mineral collection is an allowable activity on the Auburn SRA lands. The use of a metal detector for the purpose of commercial mining is not allowed within the Auburn SRA.

Recent Items

As a recreational pursuit, searching for coins of recent vintage (less than 100 years old) and small objects having no historical value, using a hand-held detector, does not require a special use permit as long as the use of the equipment is confined to areas which do not possess historic or prehistoric resources. Cultural resources on Federal lands are also protected by Title 18, USC, Chapter 31, 641 and Chapter 65, 1361.

The following guidelines have been developed to meet the needs of legitimate recreational mineral collecting and the protection of cultural resources.

General

1. The following should be enforced through spot checks of mineral collection activities by the ranger in charge of the White Water Management Program (WWMP) or any other peace officer (including, but not limited to, officers employed by the California Department of Forestry, DFG, County Sheriffs, etc).

2. Recreational metal detecting is only allowed in the Auburn SRA where there are no archeological or historically sensitive areas during a 2-year study period. This activity will be monitored periodically throughout this study period; and if there is no significant resource damage associated with this activity, it may continue indefinitely.

Suction Dredging and Motorized Sluicing

1. The navigable waterway will remain unobstructed. Cables used to anchor dredges shall be at least 7 feet above the water level and clearly flagged.

2. Dredge intake size will be limited to 4 inches. The only exception to this is Ruck-a-Chucky campground–the maximum allowable dredge size between the upper boundary of Cherokee Bar and Ruck-a-Chucky Falls will be 8 inches.

3. Operation of gasoline-powered dredges in developed campgrounds is permitted between the hours of 9:00 a.m. and 5:00 p.m. only.

4. Material for dredges shall only come from below the running streambed.

5. Material for sluice boxes and gold pans shall come from below the permanent vegetation line and within 100 feet from the running streambed.

6. No hazardous materials associated with the processing of gold, such as cyanide and mercury, shall be permitted within the Auburn SRA.

Restrictions

1. The following areas are closed to suction dredging and other forms of motorized mineral collection:

The Confluence and to the diversion tunnel outlet: the area bounded by the newer Foresthill Bridge, the Auburn Dam construction area, and the east end of Louisiana Bar on the Middle Fork.

Lake Clementine: near Upper Lake Clementine Campground (no dredging in sections 21 and 22, which includes the campground) to 1/4 mile below the North Fork Dam.

Cherokee Bar on the east side of the Middle Fork.

Whitewater boating put-ins/take-outs at Oxbow, Ruck-a-Chucky, Iowa Hill, and Ponderosa during rafting season. Closed areas should be posted with signs.

2. Knickerbocker Flat is closed to all forms of mineral collection.

Mammoth Bar OHV Area

Mammoth Bar OHV area was established by Reclamation and Parks as an interim use area within the Auburn SRA. Since it was believed that the OHV area would be inundated within the near future, the resulting resource damage was acceptable at the time.

Mammoth Bar is the only OHV area in the Auburn SRA. Because the area lacks distinct boundaries, OHV users wander away from the intended use area, creating a dangerous situation in addition to user conflicts and resource damage.

Whitewater Management Program

The WWMP for the North and Middle Forks of the American River was developed under a separate planning process than the rest of the IRMP. This program provides a context for making management decisions for the 15 and 24 miles respectively of whitewater recreational resources along the North and Middle Forks (plate 12). A draft WWMP was developed and implemented in 1987. This IRMP adopts and finalizes the guidelines and standards developed in the draft WWMP and presents these in their final form in this chapter. (A WWMP document for the North Fork and the Middle Fork of the American River, which will incorporate all of the relevant documentation used in the administration of the program, will be prepared in the future. This new document, as with the previous documents, will be a "living" document, open for modifications in order to address changing conditions of the resource and the needs of the public and the administrative agencies.)

The WWMP discusses the North and Middle Forks relative to whitewater recreation (see photo 25). It also discusses the problems and issues resulting from increased numbers of participants in this activity. Based on the resources, problems, and issues, program objectives were identified. In response to these objectives, a program for commercial and private use and allocation for use

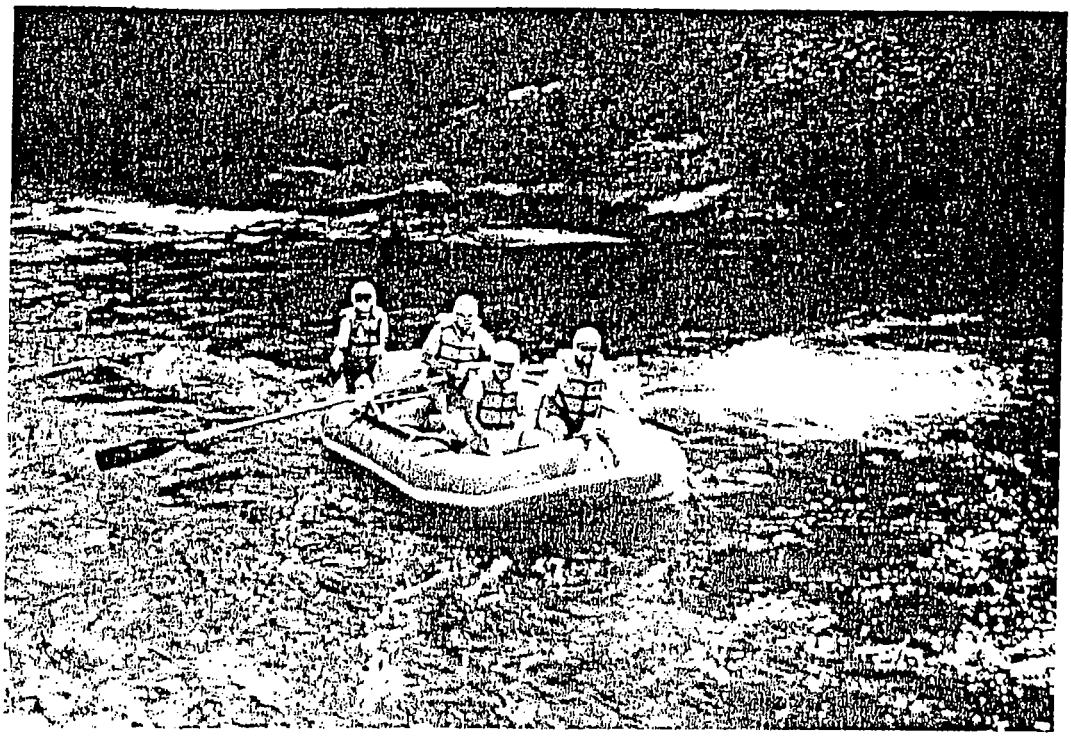

Photo 25.–Whitewater rafting along the Middle Fork of the American River.

permits was developed; and responsibilities for management and implementation of the WWMP were assigned. The WWMP provides a context for making recreational management decisions on the North and Middle Forks of the American River.

Whitewater Recreation Program Objectives

The following program objectives were developed to provide overall guidance to the whitewater management programming effort for both the North and Middle Forks. The first section contains program objectives that apply to both rivers and the overall planning/management effort. The second and third sections contain program objectives that apply specifically to the North and Middle Forks respectively.

General Objectives

1. The IRMP will consider whitewater recreation as a valuable recreational activity in the Auburn SRA and adopt the WWMP developed for the North and Middle Forks of the American River.

2. The WWMP will provide for the most appropriate whitewater recreation management for the long term; it is not influenced by the prospects of the Auburn Dam project.

3. The WWMP objectives and recommended management guidelines will conform to administrative agency rules and regulations. To address specific management problems, the administrative agency may develop interagency agreements and modify existing or adopt new rules and regulations.

4. The WWMP will work toward simplifying and consolidating management authority and developing a coordinated permit process for commercial operations.

5. In approaching the solutions of management problems, the administrative agency will not be limited by current funding levels but will consider increased funding and alternative funding sources and mechanisms.

6. The final management approach and program will be balanced with respect to staffing required and staffing available for fully executing the program.

7. If the number of commercial outfitters is to be reduced, parameters for selection of the outfitters to be retained will include provisions for accommodating a wide range of services and user patterns.

8. The commercial permit selection criteria will provide for the involvement of as many commercial outfitters as possible, while allowing these outfitters to maintain economically viable operations.

9. The WWMP will eliminate the perceived resale value of the commercial permit.

10. The WWMP will minimize the administrative agency's and commercial outfitters' administrative workloads to the extent possible.

11. To the extent possible, the WWMP will maintain implementation and management at the district level.

12. A carrying capacity approach will be used as a basis for establishing recommended use levels.

13. Environmental, facility, physical, and social factors will be used to develop carrying capacity estimates.

14. User contact thresholds will be employed to address the social factor in carrying capacity evaluation for both facilities and on-river conditions.

15. For purposes of developing the initial estimates of instantaneous carrying capacities of facilities and on-river conditions, the WWMP will employ, to the degree possible, user patterns observed in the 1985, 1986, and 1987 seasons. Thereafter, changes in carrying capacity estimates will be considered using the most recent adequate data and observations.

16. In establishing recreational experiential goals of the WWMP, guiding elements will include: the resource characteristics of the North and Middle Forks, the regional spectrum of available whitewater opportunities, and the regional uniqueness of the North and Middle Fork resources.

17. The WWMP will aim at making optimum public use of the recreational opportunities. Natural and cultural elements may be managed to enhance the recreational experience. Standards of optimum public use will balance maximum use with quality recreational experiences.

18. To aid in the development of optimum public use, the WWMP will explore increases in facility capacities and control of daily user patterns through active management.

19. When issues arise regarding resource or user conflicts between whitewater recreational users and other recreational user groups, proposed actions to resolve the issues will consider the potential resource implications to all user groups involved.

20. The administrative agency will work with other agencies to limit the proliferation of roads into the canyons.

21. The WWMP will accommodate whitewater use on the North Fork via the Giant Gap run (permitted by Forest Service/Bureau of Land Management); however, should resource or recreational use conflicts arise in the area of

jurisdiction of the WWMP, commercial operations on the Giant Gap run will receive the lowest recreational priority.

22. The WWMP will provide for monitoring and assessing changing recreational conditions such as user patterns, carrying capacity, and contact conditions.

23. The WWMP will be flexible so that if significant problems or changes are detected, management changes can be made. Changes envisaged include changes in requirements to resolve user conflicts, new estimates of carrying capacity derived from improved facilities or changed user patterns, and changes in allocation derived from changes in carrying capacity or demand.

24. The WWMP will provide for a continuing task force to provide input to the administrative agency from interested agencies and both the commercial and noncommercial sectors on whitewater management issues.

25. The WWMP will be utilized if there is an excess in demand over supply (within the context of carrying capacity and user contact objectives) and if there is dislocation or displacement of use among the user groups (commercial, noncommercial, institutional/nonprofit). To resolve conflicts and to maintain river accessibility to all user groups, the WWMP will provide for increased facility capacity, where feasible, and employ active management techniques on the user patterns and use levels (allocation) of commercial outfitters and noncommercial users that comply with the management objectives for each river.

26. If there is continued excess demand over supply and continued user group displacement after all facility improvements and active management options have been considered, the WWMP will employ standards of optimum public use on allocation adjustments to resolve conflicts between groups.

27. The administrative agency should make a continued effort to develop a search and rescue program with El Dorado and Placer Counties to provide efficient emergency services within the river drainages.

Specific Objectives—North Fork

1. To provide for optimum public use, a moderate contact user threshold will be the social carrying capacity target on the North Fork.

2. To ensure, to the degree possible, that noncommercial users will not be displaced due to conflict with other use groups, active management techniques to control the user patterns and the use levels of commercial operations will be employed to attain target carrying capacities.

3. The control of user patterns and the application of allocation/limitation of use levels of the noncommercial sector will be the management tool of last resort in maintaining carrying capacity objectives.

Specific Objectives—Middle Fork

1. Interagency agreements should be established and maintained with Tahoe and El Dorado National Forests to consolidate management authority and permitting processes.

2. Because of the importance of wilderness/primitive characteristics within the total resource value of the Middle Fork and alternative regional resources, a moderate contact user threshold will be the sociological carrying capacity target on the Middle Fork.

3. Because of minimal noncommercial use levels, use by the commercial sector will be defined as optimal public use on the Middle Fork.

Ongoing Management Responsibilities

Field Responsibilities

Field responsibilities include collecting information required to assess management objectives during the season at various locations and documentation of user patterns and put-in times on the control days (if any) for both commercial and noncommercial boaters. Data are taken at key congestion points such as put-ins, take-outs, Chamberlain Falls, Tunnel Chute, and Ruck-a-Chucky.

Documentation of start times and put-in behavior is a priority when there is a need for regulation of commercial use levels. The administrative agency records the number and times of starts for both the commercial and noncommercial sectors in order to maintain a reliable data base which complements the management objective data and helps to trace the source of onriver congestion.

Rangers will continue onriver raft patrols throughout the season at least weekly for law enforcement, to check compliance of commercial permit regulations, to monitor resource integrity, and to affirm and maintain the basis for moderate contact use.

The administrative agency should conduct user surveys at take-out points three or four times a season. The surveys will elicit direct information concerning experience and user contact levels from both commercial and noncommercial users. This information is used to help affirm management objectives and to promote levels of use that meet the program objectives for the North Fork and the Middle Fork.

Field responsibilities of the administrative agency include the assignment of rangers to randomly patrol the put-in and take-out sites to enforce management program and permit rules.

Management Guidelines

The second management responsibility is the management guidelines. Management guidelines establish acceptable use, which when exceeded, signal that user contact is exceeding the moderate contact level.

Each management guideline is associated with a specific site and has an indicator, standard, and an exceedence limit. The sites for which management guidelines have been identified are those sites that tend to congest quickly or that congest with fewer users. Examples of these critical sites are put-ins, take-outs, and major rapids or sites that need scouting.

The indicator is a measurement of a specific item at the site that can be readily seen or timed. Examples of indicators are the number of boats in one place at one time or the number of "waits" occurring in one place throughout a given day.

The standard is the maximum acceptable use level established for a given indicator.

The exceedence limit is "triggered" when an established standard is surpassed by a specific amount, which suggests that the management guidelines for that site are being exceeded.

When the management guidelines are exceeded a defined number of times, it is a signal that moderate contact program objectives are not being reached or that the standards set are too strict.

North Fork Management Guidelines

The critical sites identified to indicate crowding on the North Fork run are the Colfax/Iowa Hill put-in, both noncommercial and commercial sides; Chamberlain Falls; and the take-out at Ponderosa Road Bridge. The management guidelines designed around them are:

1. Colfax/Iowa Hill Bridge, Noncommercial Put-in

Indicator:

Number of boats (rafts) occupying various sites of the put-in at once.

Standard:

a. 12 boats in the water or along the bank at once;

b. 9 boats in the lower staging site at once;

c. 8 boats in the parking lot at once.

Exceedence Limit:

Exceedence of one of the standard factors for 1 hour each day.

2. Colfax/Iowa Hill Bridge, Commercial Put-in:

Indicator:

The number of rafts and/or groups occupying various sites of the put-in at once.

Standard:

One of the following:

a) 4 groups staging at once;

b) 20 rafts on the bank at once (this provides for stacked rafts to be counted as one);

c) 3 client groups in the site at once.

Exceedence Limit:

One occurrence of exceeding any one of the standard factors is allowed 25 percent of the days when management information is recorded.

3. Chamberlain Falls

Indicator:

Length and duration of on river delays.

Standard:

Up to a 30-minute delay caused by the use patterns of another group (excluding delays caused by wraps and flips).

Exceedence Limit:

No exceedence of the standard is allowed.

4. Ponderosa Way Take-Out

Indicator:

The number of rafts and/or groups occupying various sites of the take-out at any given moment.

Standard:

One of the following:

a. 8 groups;

b. 3 commercial client groups;

c. 10-15 inflated rafts (this provides for vertically stacked rafts to be counted as one).

Exceedence Limit:

Exceedence limit occurs when any part of the standard is exceeded for 1 hour or more in any given day.

Middle Fork Management Guidelines

The critical subareas identified to indicate crowding on the Middle Fork are the Oxbow Powerplant put-in, the Tunnel Chute scouting eddy, and the portage at Ruck-a-Chucky. The management guidelines designed around them are:

1. Oxbow Powerplant Put-In

Indicator:

The number of groups using the put-in at any one time.

Standard:

6 groups at the put-in at any one time.

Exceedence Limit:

The standard may not be exceeded for more than 1 hour on any given day.

2. Tunnel Chute

Indicator:

The number of rafts in the scout eddy above Tunnel Chute (on river left).

Standard:

The number of rafts in the scout eddy at one time is not to exceed 25 rafts.

Exceedence Limit:

No exceedence of the standard is allowed.

3. Ruck-a-Chucky Portage:

Indicator:

Length and duration of on-river delays.

Standard:

Up to a 30-minute or more delay caused by the use patterns of another group for any reason.

Exceedence Limit:

No exceedence of the standard is allowed.

Advisory Task Group

The third management responsibility is the formation of an ongoing advisory task force group to aid in solving whitewater recreation problems. The advisory group is responsible for review and interpretation of the management objective information at the end of the boating season. The advisory group is composed of commercial company owners, noncommercial boaters, environmental group representatives, and other resource agency representatives of concern.

Use Allocation and Reallocation

To meet the program management objective of providing for optimal public use, a permitting system for the commercial whitewater boating sector has been established. Permits are distributed through an allocation system.

For management purposes, the WWMP recognizes three major whitewater recreational use groups: noncommercial users, commercial outfitters, and commercial institutional/nonprofit outfitters. Each of these groups uses

and affects the resource differently and may require a different management approach. The major distinction is between the noncommercial and commercial groups. Noncommercial users share trip expenses and tend to run smaller trips, whereas commercial outfitters charge clients for the trip and tend to run larger trips. The second distinction is between commercial outfitters and nonprofit outfitters. The separation of the two groups is based upon the fact that nonprofit groups have tax-exempt status.

Allocation

In accordance with program objectives concerning maximizing use of the resource, providing for optimum public use, employing active management techniques to moderate user patterns, and controlling commercial use to accommodate noncommercial use, no specific allocation for noncommercial users has been needed in the management program. These groups may run trips at any time without a permit.

North Fork

Using the moderate contact objective as a basis, on-river conditions dictate a capacity of an estimated 3.5 groups/hour. Therefore, on the North Fork, commercial outfitter representatives agreed to a specific number of starts daily, with the understanding that permit regulation will be strict, especially with respect to start times. Should start times not be met consistently, then spacing between start times will be increased. This will result in a reduced number of start times.

Middle Fork

The maximum acceptable number of users on the river is based on the existing conditions of the resource. The program objectives allow for a moderate contact experience. Since weekday use has not approached the maximum acceptable number of users, allocation for those days has not yet been necessary. However, since weekend day use has historically exceeded the maximum acceptable number of users, Middle Fork outfitters have agreed to limit the number of trips run per weekend day to

meet the program objectives. No specific start times have been required on the Middle Fork.

Reallocation

Reallocation, or a restructuring of how starts are distributed among whitewater recreation users, may be necessary should noncommercial use patterns increase and/or change, causing the maximum number of acceptable users to be exceeded (greater use than supply), or if decreased noncommercial use or changes in user patterns result in additional available capacity (greater supply than allowed). The advisory task group will provide input for this process.

Annually, at the end of the use season, management objectives will be reviewed for exceedence of moderate contact standards. If exceedence of moderate contact standards has been noted, the administrative agency and the advisory group will review the situation to determine if the moderate contact indicators and standards are appropriate and will make adjustments in these factors if necessary. If, after this review, moderate contact standards are still exceeded, the administrative agency and the advisory group will identify facility and/or user pattern changes which could resolve the capacity problems. If it is determined that moderate contact conditions are still exceeded, the administrative agency and the advisory group will enter the reallocation process.

Commercial Permits

Outfitters must obtain a permit from the administrative agency to operate commercial recreation businesses on the North Fork of the American River from the Colfax/Iowa Hill Bridge to the upper end of Lake Clementine or on the Middle Fork of the American River from Oxbow Powerplant to the Confluence with the North Fork of the American.

Environmental Considerations

Alternative one, no action, would entail taking no action to address the planning goals specified in chapter four. Thus, no improvement for public health and safety, resource protection, or measures to increase volunteerism would be undertaken. Hence, there would be no project-related impacts. However, the consequences of taking no action would result in continued negative impacts stemming from

improper use of the Auburn SRA resources. These impacts would result from inadequate user facilities and resource protection measures because the guidelines, programs, and facilities needed to ensure the proper use of the area's resources would not be developed in this alternative plan.

Examples of the problems which would continue include the use of Mammoth Bar OHV in its current condition resulting in further resource damage and erosion. Visitors to Ponderosa and the Confluence would continue to experience a lack of restroom facilities and would relieve themselves in the Auburn SRA vegetation, causing unsanitary conditions. Further, without land use guidelines, land use decisions would continue to be made in a piecemeal fashion, jeopardizing the natural and scenic resources of the Auburn SRA. Unless cultural sites at the Auburn SRA are studied and prioritized in terms of their significance, it will be difficult to make decisions involving the cultural resources; and as a result, highly significant sites may be disturbed. As illustrated by these examples, selection of alternative one, no action, would not address the need for resource management measures. This would result in the continuing degradation of the Auburn SRA resources and a decrease in public health and safety (see photo 26).

The following matrix identifies the significant resources which will likely be affected by the facilities developed for alternative two. Included in the matrix is an assessment of whether further environmental documentation for each proposed facility is required. The facilities are presented in order of priority and ranking of the recreational subareas with priority one facilities for the highest ranked recreation subarea being presented first, priority one facilities for the second ranked recreation subarea is presented next, and so forth.

As indicated in the matrix, no significant impacts are expected to occur as a consequence of implementing priority one facilities. It is anticipated that priority one facilities will not require further environmental documentation as per NEPA. Compliance with NEPA for the priority one facilities implementation has been fulfilled using a categorical exclusion from Reclamation's list of categorical exclusions (*Department of the Interior Manual*, 516 DM6, Appendix 9, 9.4(c)(3). The categorical exclusion checklist is presented in appendix A of this report.

Priority two and three proposals may require further NEPA documentation prior to their implementation. Further environmental documentation may include section 404 permits, streambed alteration permits, meeting waste discharge requirements, and meeting requirements outlined in NEPA. Facilities requiring additional environmental documentation will be evaluated on a case-by-case basis prior to construction.

Photo 26.–Environmental considerations must be evaluated to help prevent resource degradation in the Auburn SRA.

PRIORITY ONE FACILITY IMPACTS

Subarea	Potential resource significantly affected	Further NEPA documentation needed
Highway 49 Corridor		
Confluence		
5 garbage cans	None	No
3 restrooms	None	No
Old Quarry Road		
1 garbage can	None	No
1 restroom	None	No
.52		
1 garbage can	None	No
1 restroom	None	No
Mammoth Bar		
2 garbage cans	None	No
2 restrooms	None	No
Designated OHV area	None	No
Lake Clementine		
Lower Lake Clementine		
1 restroom	None	No
3 garbage cans	None	No
Upper Lake Clementine		
4 garbage cans	None	No
Boat-in campground improvements	None	No
2 restrooms	None	No
North Fork		
Iowa Hill		
2 garbage cans	None	No
2 restrooms	None	No
Shirttail		
2 garbage cans	None	No
Ponderosa		
3 garbage cans	None	No
2 restrooms	None	No

PRIORITY ONE FACILITY IMPACTS (Continued)

Subarea	Potential resource significantly affected	Further NEPA documentation needed
Middle Fork		
Ruck-a-Chucky		
6 garbage cans	None	No
1 restroom	None	No
Improved access	None	No
Cherokee Bar		
3 garbage cans	None	No
2 restrooms	None	No
Knickerbocker Flat		
2 garbage cans	None	No
2 restrooms	None	No
Rim Areas		
Auburn Dam Overlook		
3 garbage cans	None	No
1 restroom	None	No
Auburn Staging Area		
2 restrooms	None	No
3 garbage cans	None	No

PRIORITY TWO FACILITY IMPACTS

Subarea	Potential resource significantly affected	Further NEPA documentation needed
Highway 49 Corridor		
Confluence		
Expand parking 50 spaces	Soils, archeological, esthetics, wildlife, vegetation	Yes
Signage	Esthetics	No
Improve access (pedestrian/service)	Soils, archeological, vegetation, esthetics	Uncertain
.52		
Expand parking 20 spaces	Soils, archeological, wildlife, vegetation, esthetics	Uncertain
Mammoth Bar		
Separate swim beach	Soils, vegetation, esthetics	No
1 restroom	None	No
Lake Clementine		
Lower Lake Clementine		
Kiosk	Soils, esthetics	No
Upper Lake Clementine		
Kiosk	Soils, esthetics	No
Overnight parking for boat-in camping	Soils, archeological, wildlife, vegetation, esthetics	Uncertain
North Fork		
Iowa Hill		
Expand parking 10 spaces	Soils, wildlife, archeological, vegetation, esthetics	Yes
Shirttail Canyon		
Develop private boater take-out	Soils, archeological, vegetation, esthetics	Uncertain
Improved parking and vehicle turn-around	Soils, archeological, vegetation, wildlife, esthetics	Uncertain

PRIORITY TWO FACILITY IMPACTS (Continued)

Subarea	Potential resource significantly affected	Further NEPA documentation needed
North Fork (continued)		
Ponderosa		
Bus turnaround	Soils, archeological, vegetation, esthetics	Uncertain
Improve take-out	Soils, archeological, vegetation, esthetics	Uncertain
2 parking areas– 10 car, 3 bus	Soils, archeological, wildlife, vegetation, esthetics	Yes
Middle Fork		
Ruck-a-Chucky		
Rebuild service ford across river	Soils, wildlife, archeological, vegetation, esthetics	Uncertain
Expand parking 15 spaces	Soils, wildlife,esthetics, archeological, vegetation	Uncertain
Improve access to river	Soils, wildlife, esthetics, archeological, vegetation	Uncertain
Knickerbocker Flat		
Expand parking 50 spaces	Soils, wildlife, esthetics, archeological, vegetation	Uncertain
Signage	None	No
10 hitching posts	None	No
Rim Areas		
Forest Hill Divide		
Signage	None	No
Expand parking–5 spaces	Soils, archeological, vegetation, esthetics	No
Auburn Dam Overlook		
Overflow staging area	Soils, vegetation, wildlife, esthetics	Uncertain
Auburn Staging Area		
Expand parking–75 spaces	Soils, wildlife, esthetics archeological, vegetation	Uncertain

PRIORITY THREE FACILITY IMPACTS

Subarea	Potential resource significantly affected	Further NEPA documentation needed
Highway 49 Corridor		
Confluence		
Picnic area–20 sites	Soils, vegetation, esthetics	No
Lake Clementine		
Upper Lake Clementine		
Picnic area–15 sites	Soils, vegetation, esthetics	No
North Fork		
Iowa Hill		
Picnic area–3 sites	Soils, vegetation, esthetics	No
Trailhead sign	None	No
Shirttail		
Picnic area–4 sites	Soils, vegetation, esthetics	No
Middle Fork		
Ruck-a-Chucky		
Expand campground–5 sites	Soils, wildlife, archeological, vegetation, esthetics	Uncertain
New foot and equestrian bridge at old Greenwood bridge site	Soils, wildlife, archeological, vegetation, esthetics	Uncertain
Cherokee Bar		
Developed campground–5 additional sites	Soils, vegetation, esthetics	No
Group campground	Soils, vegetation, esthetics	No
Picnic area–15 sites	Soils, vegetation, esthetics	No
Cherokee Flat		
Create parking–15 spaces	Soils, wildlife, archeological, vegetation, esthetics	Uncertain
Signage	None	No

PRIORITY THREE FACILITY IMPACTS (Continued)

Subarea	Potential resource significantly affected	Further NEPA documentation needed
Knickerbocker Flat		
Picnic area	Soils, vegetation, esthetics	No
Hitching posts	None	No
Landscape screening	Soils, vegetation, esthetics	No
Disabled access	Soils, archeological, vegetation, esthetics	Uncertain
Fishing docks	Wildlife, wetland, esthetics	Uncertain
Interpretive trail	Soils, vegetation, esthetics	No
Pond hiking trail	Soils, vegetation, wetland, esthetics	No
Water troughs	Esthetics	No
Benches	Esthetics	No
Parking behind Northside School–15 spaces	Soils, archeological, vegetation, esthetics	Uncertain
Parking at Cate Croft Lane 5 spaces	Soils, archeological, vegetation, esthetics	Uncertain
Rim Areas		
Forest Hill Divide		
Parking pull-out at Grizzly Bear House	Soils, wildlife, archeological, vegetation, esthetics	Uncertain
Auburn Dam Overlook		
Picnic area	Soils, vegetation, esthetics	No

Evaluation and Selection of Plan Alternatives

Both alternative one and alternative two were evaluated to determine their effectiveness in addressing the planning goals identified in chapter four, while staying within the specified constraints.

If alternative one were implemented, no action would be taken to implement new guidelines, programs, or facilities for the Auburn SRA. Facilities needed to meet basic visitor health and safety needs would not be constructed. Programs for resource management would not be developed, nor would guidelines be implemented to encourage appropriate use of the Auburn SRA resources from existing and expected future demand. The special considerations, formulated for specific activities which require specific management strategies, including recreational mineral collection, OHV use, and whitewater boating, would not be addressed. As a result, there would be no means to address the unique management needs of these activities.

The result of this no action alternative would be a continuation and possible increase in current problems. In addition, there would be no criteria upon which to base land use decisions. Thus, these decisions could easily be made in a piecemeal fashion, resulting in continued inappropriate land use. Alternative one does not meet the planning goals or address the problems, needs, and opportunities identified in the Auburn SRA. Because there is strong public and agency concern that the resource management needs of the Auburn SRA be addressed, alternative one, the no action alternative, was dropped from further consideration.

If alternative two were selected, guidelines, programs, and facilities would be implemented during the interim period for the Auburn SRA. These would respond to agency and public concerns by providing for visitor health and safety, resource protection, increased volunteerism, and management for the existing and expected future recreational use of the Auburn SRA.

The results of implementing alternative two would include improvements in sanitation facilities, improved management of resources, hunting safety and signage programs, increased volunteer involvement, and improvement of recreation facilities. Additionally, guidelines would be established that would lend themselves to

making appropriate land use decisions. Alternative two meets the planning goals, while addressing the needs and problems identified in the Auburn SRA.

After evaluating and comparing the ability of alternatives one and two to address the planning goals, alternative two, the IRMP for the Auburn SRA, was selected as the recommended plan.

Chapter Six

Unresolved Issues, Major Findings, and Conclusions

Unresolved Issues

As discussed in chapter five, the programs, guidelines, facilities, and special considerations formulated as part of the interim resource management plan (IRMP) address most of the major health, safety, resource management, and protection needs. Because of circumstances beyond the scope of this plan, some issues remain unresolved at this time. In the future, circumstances may change, and the individual factors that render these issues unresolvable may no longer be present. Until then, the following issues remain unresolved.

Funding

Funding and staffing increases have not been commensurate with increases in use pressures applied to the Auburn State Recreation Area (SRA). To provide for the health and safety of visitors now and in the future, a source of funding for this plan should be identified. Until this occurs, it will be difficult to implement the programs and facilities included in the selected plan. In some cases, programs and facilities may be implemented by volunteers. However, some components of the plan, such as law enforcement, require funded staffing and professional implementation and administration.

Mammoth Bar Off-Highway Vehicle (OHV)

The plan presents three alternative means of addressing the resource, health, and safety problems at Mammoth Bar. Funding is now being pursued to implement the preferred alternative, to develop and implement a management plan. If a source of funding is found, this alternative can be effected.

Other Recreational Uses

The question of how best to incorporate recreational activities that are new to or rare in the Auburn SRA, such as carriage driving, will have to be addressed as these activities are proposed. Recreational uses not specifically considered in this plan will be appraised on a case-by-case basis. Research should be conducted to determine whether the use is appropriate, can be safely accommodated, and does not result in unreasonable amounts of resource damage. Most likely, it will be the responsibility of the user group to propose a feasible way to integrate the activity into the Auburn SRA.

Metal Detecting

Metal detecting will be permitted throughout the Auburn SRA, with the exception of Knickerbocker Flat, for a 2-year study period. If during the 2-year study period, periodic investigations reveal significant resource damage attributed to metal detecting, this activity will be modified in the Auburn SRA. If no significant damage has been found, metal detecting may continue. The extent and sensitive nature of cultural and natural resources has necessitated the exclusion of all forms of recreational mineral collection from Knickerbocker Flat. Until this 2-year study is completed, the acceptable conditions under which this activity may continue will be unresolved.

Knicker-bocker Flat

The extent to which Knickerbocker Flat can be opened up to the public is also unresolved. It has been closed due to insufficient law enforcement staff. If these staffing needs can be met, Knickerbocker Flat can be opened to the public in its entirety. Should a fraction of the necessary staff be available, fractions of Knickerbocker Flat can be opened.

Jurisdiction

The level of and mechanism for coordination of the various jurisdictions and managing agencies within the Auburn SRA remains unresolved. The Auburn SRA lands under the jurisdiction of the Bureau of Reclamation (Reclamation) constitute only a part (25,000 acres) of the lands within the 41,000-acre Auburn SRA. However, the public commonly perceives all lands within the Auburn SRA boundary as being under the jurisdiction of Reclamation. There are many inconsistencies in regulations for the different agencies with jurisdictional responsibility in the Auburn

SRA. An act which is illegal on Reclamation land may be legal on adjacent Forest Service land. This patchwork nature of ownerships and regulations complicates law enforcement and is confusing to the public.

Major Findings

As evidenced by the depth and breadth of the problems, needs, and opportunities identified during the study process, an IRMP for the Auburn SRA is warranted. The Auburn SRA resource base provides a wide variety of recreational opportunities. As demonstrated during the planning process, the multifaceted nature of the Auburn SRA creates a challenge relative to the development and implementation of a plan, and ultimately, the management of the area. In this section, the major findings of the study, along with conclusions and recommendations regarding the interim land use plan, are presented.

An issue of importance is the interim nature of the use of the Auburn SRA as a recreation-oriented resource. This interim status will continue until a final decision is made as to whether or not to construct the multipurpose Auburn Dam project. If project construction is reinitiated, a minimum of 10 years will be required to build the project, in addition to the time period required to fill the reservoir. This status places a significant constraint on the development of improvements for health, safety, and resource protection in the Auburn SRA because the interim status is accompanied with limited funds.

Because funding that could be applied to addressing the problems and needs of the Auburn SRA is expected to be limited, a prioritization of the facilities and programs necessary to adequately address the public concerns and planning goals was established. This priority system functions as an implementation guide, assigning priority levels to the various programs and facilities. This guide assures that funding and other resources will be allocated to the most critical needs first. Thus, priority one facilities and programs will include facility improvements and programs necessary to maintain a minimum level of visitor health and safety and resource protection at the Auburn SRA. Priority two facilities and programs will include programs and facilities necessary to meet existing visitor use and to rehabilitate and protect the Auburn SRA resources. Priority three facilities and programs will include programs and facilities which would enhance the resources and recreational experience of the area.

Most of the major problems at the Auburn SRA are related to visitor health and safety and the need for resource protection measures. These problems include, for example, sanitation problems resulting from a lack of restrooms and garbage cans; lack of adequate patrol; and resource degradation at Mammoth Bar OHV area. If not addressed, these problems will continue and worsen. This progression will intensify the conditions which jeopardize visitor health and safety and result in increased damage to the Auburn SRA resources.

Concerns relative to resource management needs include the Mammoth Bar OHV area, trail construction and maintenance, and activities associated with recreational mineral collection. These areas will require continued evaluation and active management. If this does not occur, serious degradation of the natural and cultural resources could result.

The planning process also brought to light the need for consistent, well-defined management guidelines to direct land use in the Auburn SRA. Without these guidelines, it would be difficult to meet current and future use demand while providing for public health and safety and the protection of natural and cultural resources in the project area.

Two alternatives were evaluated for meeting the planning goals as outlined in chapter four. These alternatives are presented in chapter five. The first alternative plan is one of no action. This alternative was not selected because it does not address the planning goals and would result in the continued degradation of the resource base and a decrease in the conditions for public health and safety.

The second alternative, the IRMP, is a plan which identifies viable means of addressing the problems, needs, and opportunities of the Auburn SRA and meets the planning goals of providing for visitor health and safety and resource protection and increased volunteerism. Alternative two addresses the desires of the Auburn SRA users and provides for public enjoyment of the area. Alternative two develops guidelines, facilities, and programs that address the planning goals. Implementation of alternative two, priority one facilities would improve user health and safety conditions by furnishing restrooms and garbage cans. Additionally, alternative two guidelines would direct future improvements, land use, facilities design and construction standards, special events,

camping, resource management, recreational mineral collection, and whitewater recreation. The priority two and three features of alternative two would manage the natural and cultural resources and accommodate existing recreational demand beyond the immediate needs of providing for visitor health and safety and resource protection. Alternative two was selected and provides the IRMP for the Auburn SRA.

Because of dynamic use, the Auburn SRA will continue to present complex management problems. These problems will result from increasing user demands, cumulative impacts from various activities, and new, emerging recreational pursuits. No plan can adequately predict future needs and demands. The sometimes mutually exclusive demands of users on the Auburn SRA's resources will continue to give rise to complex management and resource protection needs. It will be necessary to evaluate the effectiveness of the selected plan continually after its implementation and to revise the plan, if necessary. If the parameters that render certain issues unresolvable change, it will be necessary to reevaluate the issues according to the guidelines established for the IRMP to reach resolution, if possible. Public involvement by users, special interest groups, and concerned public agencies during the ongoing implementation and evaluation process will continue to be critical to identify and address on-site issues and develop workable solutions. This dynamic process ensures that agency and public concerns will continue to be addressed.

Conclusions

Alternative two, the IRMP should be implemented. As soon as funds are available, priority one facilities and programs, the management guidelines and special considerations to provide for basic public health and safety, resource protection and to encourage active volunteerism within the Auburn SRA should be implemented. The cost of implementing priority one facilities and programs is approximately $116,075. Implementation of the broad and specific management guidelines (which have no costs associated with them) and the special considerations, where possible, become effective September 1, 1992.

The maintenance and visitor service staff should be increased to ensure proper implementation of the plan proposals which address visitor health and safety. The maintenance staff should be increased by one full-time maintenance person and two seasonal maintenance workers to insure the level of maintenance needed for acceptable public health conditions. Visitor service staff should be increased by

one full-time ranger and one seasonal ranger for increased administrative and law enforcement presence which would decrease safety problems and deter resource damage.

The implementation of priority two and three proposals is also recommended, once they are determined to be environmentally acceptable. The cost of implementing priority two and three proposals are estimated at approximately $254,650 and $1,013,550, respectively. Given the restrictions in available funding from Reclamation, other means for funding and/or implementation should be considered for these proposals, especially for priority three facilities and programs. To implement these programs, increased volunteerism may be necessary. Volunteers have shown a high level of interest in helping implement the IRMP proposals. These groups represent a significant labor force and have the potential for developing sources of funding other than Federal funding.

Photo 27.–Early morning on a winter day in the Auburn SRA.

Appendices

Appendix A

Categorical Exclusion Checklist

Project: Auburn-Folsom South Unit, CVP Date: 3-27-92

Nature of Action: Auburn Reservoir Area Interim Resources Management Plan, Priority One Actions, including completing the Knickerbocker-Cool horse trail loop, and restoring the Mammoth Bar OHV area.

Exclusion category: Categorical Exclusion D(1)

Evaluation of criteria for Categorical Exclusion

1. This action or group of actions would have a significant effect on the quality of human environment.	No X	Uncertain	Yes
2. This action or group of actions would involve unresolved conflicts concerning alternative uses of available resources	No X	Uncertain	Yes

Evaluation of exceptions to actions within Categorical Exclusion

1. This action would have significant adverse effects on public health or safety	No X	Uncertain	Yes
2. This action would affect unique geographical features as: wetlands, wild or scenic rivers, refuges, floodplains, etc.	No X	Uncertain	Yes
3. The action will have highly controversial environmental effects	No X	Uncertain	Yes
4. The action will have highly uncertain environmental effects or involve unique or unknown environmental risk	No X	Uncertain	Yes

Categorical Exclusion Checklist
(Continued)

5.	This action will establish a precedent for future actions.	No	X	Uncertain		Yes	
6.	This action is related to other actions with individually insignificant but cumulatively significant environmental effects.	No	X	Uncertain		Yes	
7.	This action will affect properties listed or eligible for listing in the National Register of Historic Places.	No	X	Uncertain		Yes	
8.	This action will affect a species listed or proposed to be listed as Endangered or Threatened.	No	X	Uncertain		Yes	
9.	This action threatens to violate Federal, State, local or tribal law or requirements imposed for protection of the environment.	No	X	Uncertain		Yes	

NEPA Action-Categorical Exclusion X
EA
EIS

Explanation and/or remarks: Priority One items all involve actions which will either arrest on-going environmental degradation or improve the environment at existing use areas. No new development or increased use of existing areas will occur.

Preparer's Name and Title: Henry L. Hansen

Regional Archeologist concurrence with item 7 Pat Welch 5/15/92
J. West, MP-750

Concur: Larry R. Boll, Project Superintendent Date: 4-9-92
Division/Office Chief

JF 5-15-92

Concur: R. Breitenbach, MP-750 Date: 5/26/92
Regional Environmental Quality Officer

Appendix B

LIST OF PLATES

Plate 1: Surrounding Townships

Plate 2: Recreational Use Areas and Subareas

Plate 3: Areas Closed to Hunting

Plate 4: Trails

Plate 5: Helicopter Landing Zones

Plate 6: Facilities Map - Highway 49 Corridor

Plate 7: Facilities Map - Lake Clementine

Plate 8: Facilities Map - North Fork of the American River

Plate 9: Facilities Map - Middle Fork of the American River

Plate 10: Facilities Map - Knickerbocker Flat

Plate 11: Facilities Map - Rim Areas

Plate 12: Whitewater Resources Map

Appendix C

GLOSSARY

Administrative agency:
The public agency responsible for administering the recreational component of the Auburn State Recreation Area.

BLM:
Bureau of Land Management, U.S. Department of the Interior.

Broad management guideline:
A general guideline to direct all land use actions.

Carrying capacity:
The level or amount of appropriate use in an area within prescribed management objectives.

DFG:
Department of Fish and Game, State of California.

Developed campground:
Campground with restrooms and assigned sites.

Entry kiosk:
Small structure for fee collection, information, and safety. Controls park access.

Equestrians:
Those who ride horses as a sport.

FWS:
The Fish and Wildlife Service, U.S. Department of the Interior

Guideline:
A standard or principle by which to make a judgement or determine a policy or course of action.

IRMP:
Interim resource management plan.

Parks:
Department of Parks and Recreation, State of California.

Put-in:
An area to launch boats for whitewater trips.

Primitive campground:
Campground with no developed sites.

Program:
A plan or procedure for addressing concerns and planning goals.

Reclamation:
The Bureau of Reclamation, U.S. Department of the Interior.

Specific management guideline:
A guideline used to direct a specific land use action.

SRA:
State Recreation Area.

Take-out:
Area used for removal of boats from the river after a whitewater trip.

Wash:
A channel made by running water.

WWMP:
Whitewater management program.

Appendix D

WHITEWATER CLASS SYSTEM

The following is a recommended classification guide for rivers established by the American White Water Affiliation.

Class I Very easy (practiced beginner)

Moving water with a few riffles and small waves. Few or no obstructions.

Class II Easy (intermediate)

Easy rapids with high, irregular waves often capable of swamping an ocean canoe. Narrow passages that often require complex maneuvering. May require scouting from shore.

Class III Medium (experienced)

Rapids with high, irregular waves often capable of swamping an open canoe. Narrow passages that often require complex maneuvering. May require scouting from shore.

Class IV Very difficult (teams of experts)

Extremely difficult, long, and very violent rapids with highly congested routes which nearly always must be scouted from shore. Rescue conditions are difficult, and there is significant hazard to life in event of mishap.

Class V Extremely difficult (teams of experts)

Difficulties of class V carried to the extreme of navigability. Nearly impossible and very dangerous. For teams of experts only, after close study with all precautions taken.

Class VI Unnavigatable

Requires portage–carry boats and equipment around the rapids.

Appendix E

CONTACTED AGENCIES AND OFFICIALS[1]

FEDERAL

Fred Kindel, Chief, Environmental Resources Branch, Army Corps of Engineers, Planning Division
David Kruse, Environmental Planner, Army Corps of Engineers, Planning Division

Deane K. Swickard, Area Manager, Folsom Resource Area, Bureau of Land Management

Harlan Hamburger, Resource Officer, Foresthill Ranger District, U.S. Forest Service
Arthur A. Allen, Resource Manager, Georgetown Ranger District, U. S. Forest Service
Jim Plank, Landscape Architect, Eldorado National Forest, U.S. Forest Service

Monte Knudsen, U.S. Fish and Wildlife Service
Rick Morat, U.S. Fish and Wildlife Service
Gary Taylor, U.S. Fish and Wildlife Service
Tamara Terry, U.S. Fish and Wildlife Service

STATE OF CALIFORNIA

The Honorable John Doolittle, Member of the Senate
The Honorable Leroy Greene, Member of the Senate
The Honorable Lloyd Connelly, Member of the Assembly
The Honorable Phil Isenberg, Member of the Assembly
The Honorable Tim Leslie , Member of the Assemble
The Honorable Norman Waters, Member of the Assembly

Raymond P. Lyon, Project Coordinator, California Conservation Corp Greenwood Satellite
Robert Pirtle, Warden, California Department of Fish and Game
Wade Johnson, Warden, California Department of Fish and Game

Steve Lumley, Fire Captain Specialist, California Department of Forestry
Captain B.J. Sheppard, Captain, Newcastle Office, California Highway Patrol

COUNTY/CITY

Honorable John N. Cefalu, Chair, El Dorado County Board of Supervisors
Scott Chad, Transportation Director, El Dorado County
Larry Walrod, Director, Planning Department, El Dorado County

Honorable George Beland, Chair, County Board of Supervisors, Placer County
Heidi Tschudin, Director, Community Development Department, Placer County
Jack Warren, Director, Public Works, Placer County

Honorable Bud Pisarek, Mayor, City of Auburn
Steve Hallam, Director, Community Development, City of Auburn
Rich Guillen, Director, Public Services, City of Auburn

Honorable Fern Chadd, Mayor, City of Colfax
Randy Chafin, Planning Consultant, City of Colfax
David Woodford, Director, Public Works, City of Colfax

Jerry Sayers, Cool/Pilot Hill Municipal Advisory Committee
Pete Field, Administrator, Georgetown Divide Recreation District
Charles F. Gierau, General Manager, Georgetown Divide Public Utilities District
Mona Percival, Member, Foresthill Forum

[1] Many of these officials have completed their terms of office, and new officials now preside.

Appendix F

REFERENCES AND OTHER DOCUMENTATION

Various sources of information and documentation were evaluated and examined in the preparation of this report. The following is representative of the documentation:

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Appendix G

AUBURN-FOLSOM SOUTH UNIT, CENTRAL VALLEY PROJECT

An act to authorize the Secretary of the Interior to construct, operate, and maintain the Auburn-Folsom South unit, American River division, Central Valley project, California, under Federal reclamation laws. (Act of September 2, 1965, Public Law 89-161, 79 Stat. 615)

[Sec. 1. **Construction—Principal works.**]—For the principal purpose of increasing the supply of water available for irrigation and other beneficial uses in the Central Valley of California, the Secretary of the Interior (hereinafter referred to as the "Secretary"), acting pursuant to the Federal reclamation laws (Act of June 17, 1902; 32 Stat. 388, and Acts amendatory thereof or supplementary thereto), is authorized to construct, operate, and maintain, as an addition to, and an integral part of, the Central Valley project, California, the Auburn-Folsom South unit, American River division. The principal works of the unit shall consist of—

(1) the Auburn Dam and Reservoir with maximum water surface elevation of one thousand one hundred and forty feet above mean sea level, and capacity of approximately two and one-half million acre-feet;

(2) a hydroelectric powerplant at Auburn Dam with initial installed capacity of approximately two hundred and forty thousand kilowatts and necessary electric transmission system for interconnection with the Central Valley project power system: *Provided,* That provision may be made for the ultimate development of the hydroelectric capacity (now estimated at approximately four hundred thousand kilowatts) and such installation may be made when duly authorized by an Act of Congress: *Provided further,* That no facilities except those required for interconnecting the Auburn powerplant and the Folsom switchyard and those interconnecting the Folsom switchyard and the Elverta substation, shall be constructed for electric transmission or distribution service which the Secretary determines, on the basis of a firm offer of a fifty-year contract from a local public or private agency, can be obtained at less cost to the Federal Government than by construction and operation of Government facilities;

(3) the Sugar Pine Dam and Reservoir;

(4) the County Line Dam and Reservoir;

(5) necessary diversion works, conduits, and other appurtenant works for the delivery of water supplies to projects on the Forest Hill Divide in Placer County and in the Folsom-Malby area in Sacramento and El Dorado Counties;

(6) the Folsom South canal and such related structures, including pumping plants, regulating reservoirs, floodways, channels, levees, and other appurtenant works for the delivery of water as the Secretary determines will best serve the needs of Sacramento and San Joaquin Counties: *Provided,* That the Secretary is authorized to include in such canal and related operating structures such additional works or capacity as he deems necessary and economically justified to provide for the future construction of the East Side division of the Central Valley project, and the incremental costs of providing additional works or capacity in the Folsom South canal to serve the East Side division of the Central Valley project shall be assigned to deferred use for

repayment from Central Valley project revenues. In the event that the East Side division is authorized, such costs shall be deemed a part of the cost of that division and shall be reallocated as the Secretary deems right and proper. (79 Stat. 615; 43 U.S.C. § 616aaa)

Sec. 2 [Integration with other Central Valley features.]—Subject to the provisions of this Act, the operation of the Auburn-Folsom South unit, American River division, shall be integrated and coordinated, from both a financial and an operational standpoint, with the operation of other features of the Central Valley project, as presently authorized and as may in the future be authorized by Act of Congress, in such manner as will effectuate the fullest, most beneficial, and most economic utilization of the water resources hereby made available. Auburn and County Line Dams shall be operated for flood control in accordance with criteria established by the Secretary of the Army as provided for in section 7 of the Flood Control Act of 1944 (58 Stat. 887; 33 U.S.C. 709). (79 Stat. 616; 43 U.S.C. § 616bbb)

EXPLANATORY NOTE

Reference in the Text. Extracts from the Flood Control Act of 1944 (58 Stat. 887; 33 U.S.C. 709), enacted December 22, 1944, including section 7 which is referred to in the text, appear herein in chronological order.

Sec. 3 [Recreation and fish and wildlife enhancement facilities.]—(a) Subject to the provisions of subsections (b), (c), (d), and (e) of this section, the Secretary is authorized in connection with the Auburn-Folsom South unit (i) to construct, operate, and maintain or provide for the construction, operation, and maintenance of public outdoor recreation and fish and wildlife enhancement facilities, (ii) to acquire or otherwise to include within the unit area such adjacent lands or interests in land as are necessary for present or future public recreation or fish and wildlife use, (iii) to allocate water and reservoir capacity to recreation and fish and wildlife enhancement, and (iv) to provide for the public use and enjoyment of unit lands, facilities, and water areas in a manner coordinated with other unit purposes. The Secretary is further authorized to enter into agreements with Federal agencies or State or local public bodies for the operation, maintenance, and replacement of unit facilities, and to transfer unit lands or facilities to Federal agencies or State or local public bodies by lease or exchange, upon such terms and conditions as will best promote the development and operation of such lands or facilities in the public interest for recreation and fish and wildlife enhancement purposes.

(b) Costs of recreation facilities at Sugar Pine Reservoir shall be nonreimbursable, and the provisions of subsections (c), (d), and (e) of this section shall not be applicable to such facilities.

(c)(1) If, before commencement of construction of the unit, non-Federal public bodies agree to administer unit land and water areas for recreation or fish and wildlife enhancement or for both of these purposes pursuant to the plan for the development of the unit approved by the Secretary and to bear not less than one-half the separable costs of the unit allocated to either or both of said purposes, as the case may be, and all the costs of operation, maintenance, and replacement incurred in connection therewith, the remainder of the separable capital costs so allocated shall be nonreimbursable.

(2) In the absence of such a preconstruction agreement recreation and fish and wildlife enhancement facilities (other than minimum facilities for the public health and safety at reservoir access points) shall not be provided, and the allocation of unit costs shall reflect only the number of visitor days and the value per visitor day estimated to result from such diminished recreation development without reference to lands which may be provided pursuant to subsection (e) of this section.

(d) The non-Federal share of the separable capital costs of the unit allocated to recreation and fish and wildlife enhancement shall be borne by non-Federal interests, under either or both of the following methods as may be determined appropriate by the Secretary: (i) payment, or provision of lands, interests therein, or facilities for the unit; or (ii) repayment, with interest, within fifty years of first use of unit recreation or fish and wildlife enhancement facilities: *Provided*, That the source of repayment may be limited to entrance and user fees or charges collected at the unit by non-Federal interests if the fee schedule and the portion of fees dedicated to repayment are established on a basis calculated to achieve repayment as aforesaid and are made subject to review and renegotiation at intervals of not more than five years.

(e) Notwithstanding the absence of preconstruction agreements as specified in subsection (c) of this section lands may be acquired in connection with construction of the unit to preserve its recreation potential, its fish and wildlife enhancement potential, or both.

(1) If non-Federal public bodies agree within ten years after initial unit operation to administer unit land and water areas for recreation and fish and wildlife enhancement pursuant to the plan for development of the unit approved by the Secretary and to bear not less than one-half the costs of land acquired therefor pursuant to this subsection and facilities and project modifications provided for those purposes and all costs of operation, maintenance, and replacement incurred therefor, the remainder of the costs of such lands, facilities, and project modification shall be nonreimbursable. Such agreement and subsequent development shall not be the basis for any allocation of joint costs of the unit to recreation or fish and wildlife enhancement.

(2) If, within ten years after initial operation of the unit, there is not an executed agreement as specified in paragraph (1) of this subsection, the Secretary may utilize the lands for any lawful purpose within the jurisdiction of the Department of the Interior, or may transfer custody of the lands to another Federal agency for use for any lawful purpose within the jurisdiction of that agency, or may lease the lands to a non-Federal public body, or may transfer the lands to the Administrator of General Services for disposition in accordance with the surplus property laws of the United States. In no case shall the lands be used or made available for use for any purpose in conflict with the purposes for which the project was constructed, and in every case preference shall be given to uses which will preserve and promote the recreation and fish and wildlife enhancement potential of the project or, in the absence thereof, will not detract from that potential.

(f) Subject to the limitations hereinbefore stated, joint capital costs allocated to recreation and fish and wildlife enhancement shall be nonreimbursable.

(g) Costs of means and measures to prevent loss of and damage to fish and wildlife shall be treated as unit costs and allocated among all unit purposes.

(h) As used in this Act, the term "nonreimbursable" shall not be construed to prohibit the imposition of entrance, admission, and other recreation user fees or charges. (79 Stat. 616; 43 U.S.C. § 616ccc)

Sec. 4 [State and local interests to be consulted.]—In locating and designing the works and facilities authorized for construction by this Act, and in acquiring or withdrawing any lands as authorized by this Act, the Secretary shall give due consideration to the reports upon the California water plan prepared by the State of California, and shall consult the local interests who may be affected by the construction and operation of said works and facilities or by the acquisition or withdrawal of lands, through public hearings or in such manner as in his discretion may be found best suited to a maximum expression of the views of such local interests. (79 Stat 618; 43 U.S.C. § 616ddd)

Sec. 5. [Act not to be construed as allocating water.]—Nothing contained in this Act shall be construed by implication or otherwise as an allocation of water, and in the studies for the purposes of developing plans for disposal of water as herein authorized the Secretary shall make recommendations for the use of water in accord with State water laws, including but not limited to such laws giving priority to the counties and areas of origin for present and future needs. (79 Stat 618; 43 U.S.C. § 616eee)

Sec. 6. [Appropriations.]—There is hereby authorized to be appropriated for construction of the Auburn-Folsom South unit, American River division, the sum of $425,000,000 (1965 prices), plus or minus such amounts, if any, as may be justified by reason of ordinary fluctuations in construction costs as indicated by engineering cost indexes applicable to the types of construction involved herein. There are also authorized to be appropriated such additional sums as may be required for operation and maintenance of the project. (79 Stat. 618; 43 U.S.C. § 616fff)

EXPLANATORY NOTES

Cross Reference, Central Valley Project, California. The Central Valley project, referred to in the text, was authorized by a finding of feasibility by the Secretary of the Interior, approved by the President on December 2, 1935. The project was reauthorized by section 2 of the Act of August 26, 1937, 50 Stat. 850. The 1937 Act appears herein in chronological order. For references to other authorizations in the Central Valley project, California, see the explanatory notes following section 2 of the 1937 Act.

Legislative History. H.R. 485, Public Law 89-161 in the 89th Congress. Reported in House from Interior and Insular Affairs May 6, 1965; H.R. Rept. No. 295. Passed House June 16, 1965. Passed Senate August 20, 1965. Companion bill S. 599. Reported in Senate from Interior and Insular Affairs June 10, 1965; S. Rept. No. 312.

Appendix H

RECREATION – RELATED CHRONOLOGY AUBURN STATE RECREATION AREA

1965	
1966	Project authorization provides for recreation.
	Federal-State agreement for definate plan report to construct and operate recreational and fish and wildlife enhancement facilities at the Auburn-Folsom South Unit project.
1976	
	Definite plan report initiates recreational planning for the Auburn-Folsom South Unit.
1977	
	California Department of Parks and Recreation (Parks) enters into an interim agreement with U.S. Bureau of Reclamation (Reclamation) to manage and protect project lands during construction.
1978	
	California Resources Agency task force prepares a preliminary Auburn Reservoir Project, Folsom Lake State Recreation Area General Plan.
1979	
	Reclamation and the California Park and Recreation Commission (Commission) approve, with amendments, the Auburn Reservoir Project, Folsom Lake State Recreation Area General Plan; the Auburn State Recreation Area (SRA) was created by the Commission's action.
1983	
	At the request of State Assemblyman Lloyd Connelly, Parks prepares a preliminary interim resource management plan for Auburn SRA.
1987	
	Reclamation prepares a draft whitewater management plan for the North and Middle Forks, American River.
	Reclamation recognizes the need and budgets for an interim resources management planning study.

1989

Congress authorizes the U.S. Bureau of Land Management to study the feasibility of a national recreation area for the American River basin including the Auburn project area.. The Auburn interim resource management study was authorized and funded by Congress.

1991

The U.S. Bureau of Land Management released its feasibility report, *National Recreation Area Study for the American River.*

☆U.S. GOVERNMENT PRINTING OFFICE: 1992—837-495

Legend

U.S. Bureau of Reclamation Takeline

Colfax

Weimar

Meadow Vista

Applegate

Bowman

Clippergap

Auburn

Newcastle

Cool

Pilot Hill

Greenwood

Georgetown

Foresthill

Volcanoville

Extended Zone
and
Impact Counties

PLACER
EL DORADO
YOLO
SACRAMENTO
AMADOR
SOLANO
CONTRA COSTA
SAN JOAQUIN
ALAMEDA

Not To Scale

United States Department of the Interior
Bureau of Reclamation

Auburn State Recreation Area
Surrounding Townships

Plate 1

September 1992

Legend

Use Area Boundaries

Subareas

LAKE CLEMENTINE USE AREA

Upper Lake Clementine

Lower Lake Clementine

HIGHWAY 49 CORRIDOR USE AREA

Mammoth Bar

Confluence

.52

RIM USE AREA

Auburn Dam Overlook

Auburn Staging Area

RIM USE AREA

Forest Hill Divide

KNICKERBOCKER FLAT USE AREA

NORTH FORK USE AREA

Iowa Hill

Shirttail

Ponderosa

MIDDLE FORK USE AREA

Maine Bar

Cherokee Bar

Ruck-a-Chucky

Cherokee Flat

Oxbow -- Under U.S. Forest Service jurisdiction

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United States Department of the Interior

Bureau of Reclamation

Auburn State Recreation Area

Recreation Use Areas and Subareas

Plate 2

September 1992

Legend

Areas Closed to Hunting

U.S. Bureau of Reclamation Takeline

WEIMAR

INTERSTATE 80

AUBURN

INTERSTATE 80

COOL

HWY 193

SOUTH FORK AMERICAN RIVER

MIDDLE FORK AMERICAN RIVER

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United States Department of the Interior

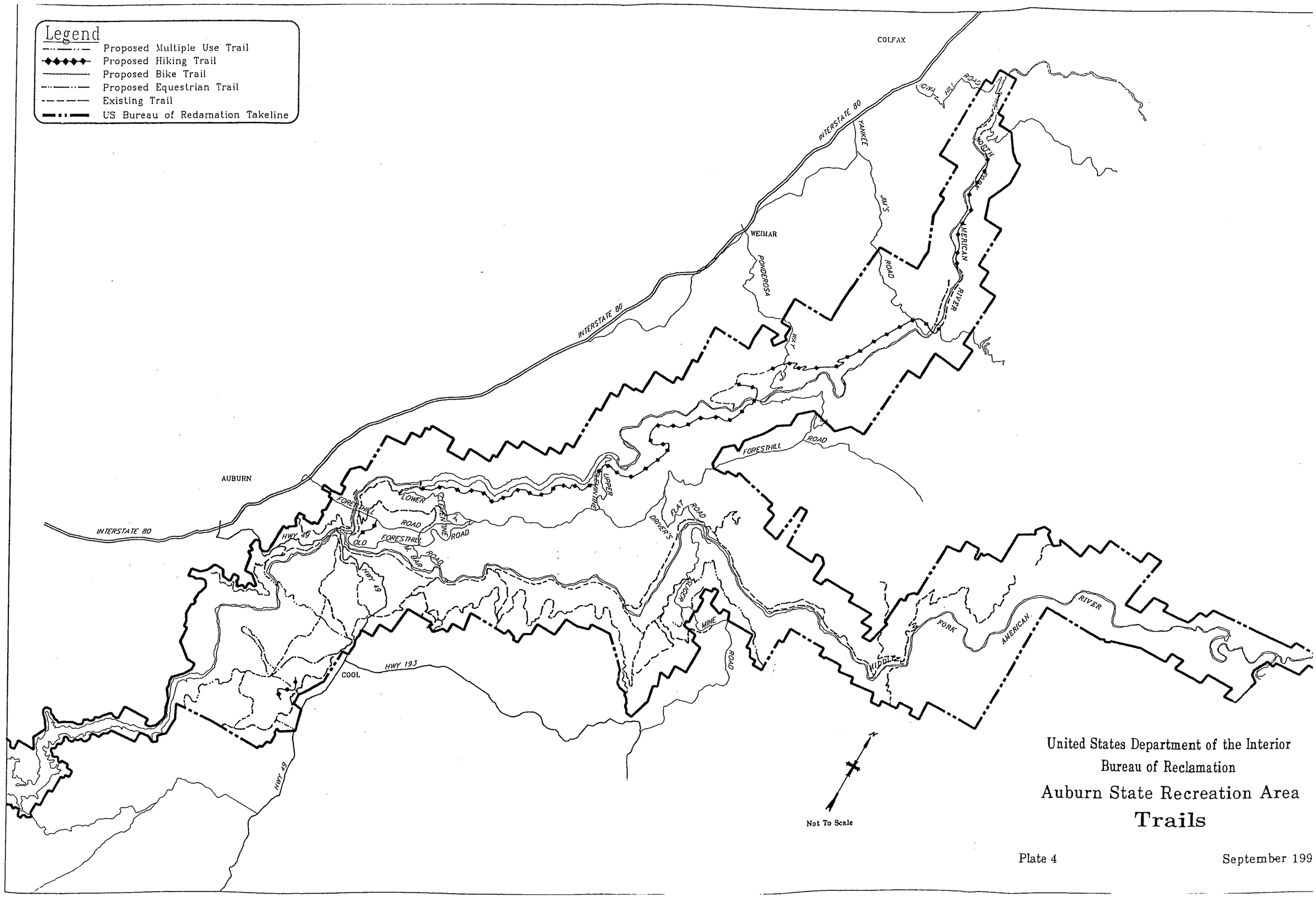
Bureau of Reclamation

Auburn State Recreation Area

Areas Closed to Hunting

Plate 3

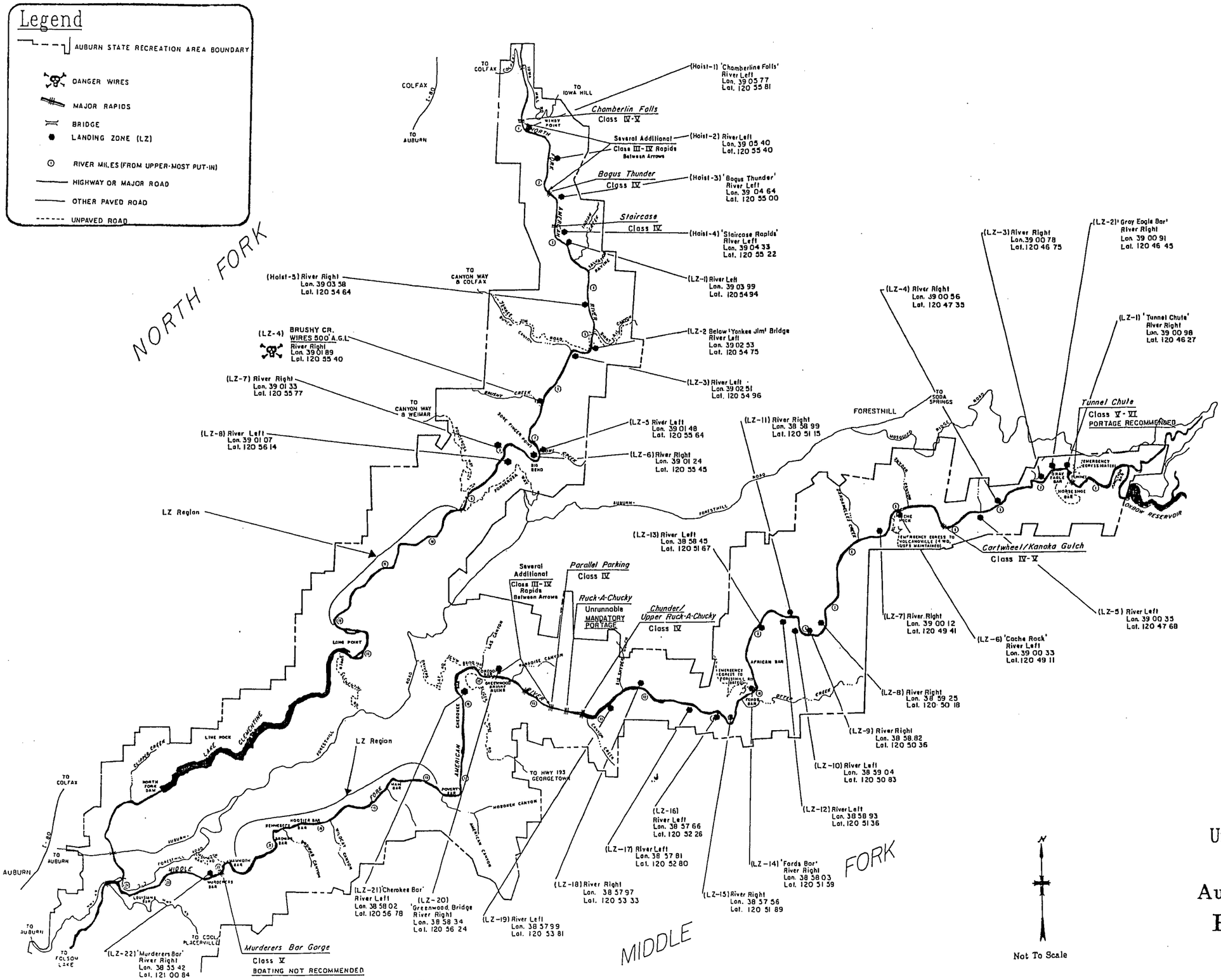
September 1992



United States Department of the Interior
Bureau of Reclamation
Auburn State Recreation Area
Trails

Plate 4

September 199



Source : California Department of Parks and Recreation

United States Department of the Interior
Bureau of Reclamation

Auburn State Recreation Area

Helcopter Landing Zones

Plate 5

September 1992

Legend

- Highway 49 Corridor Use Area
- Subareas
- U.S. Bureau of Reclamation Takeline

Confluence

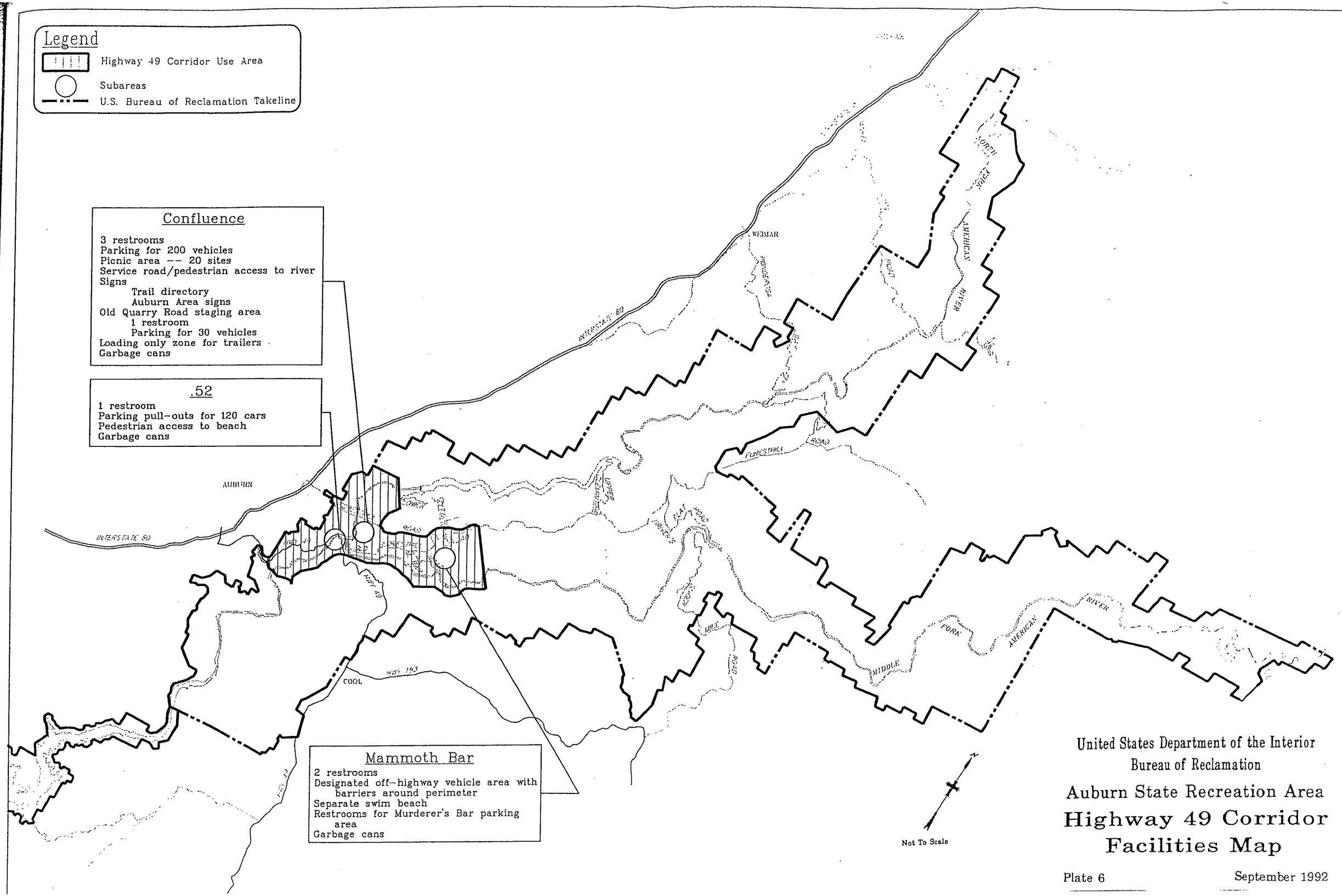
3 restrooms
Parking for 200 vehicles
Picnic area -- 20 sites
Service road/pedestrian access to river
Signs
  Trail directory
  Auburn Area signs
Old Quarry Road staging area
  1 restroom
  Parking for 30 vehicles
Loading only zone for trailers
Garbage cans

.52

1 restroom
Parking pull-outs for 120 cars
Pedestrian access to beach
Garbage cans

Mammoth Bar

2 restrooms
Designated off-highway vehicle area with barriers around perimeter
Separate swim beach
Restrooms for Murderer's Bar parking area
Garbage cans



United States Department of the Interior
Bureau of Reclamation

Auburn State Recreation Area
Highway 49 Corridor Facilities Map

Plate 6

September 1992

Legend

Lake Clementine Use Area

Subareas

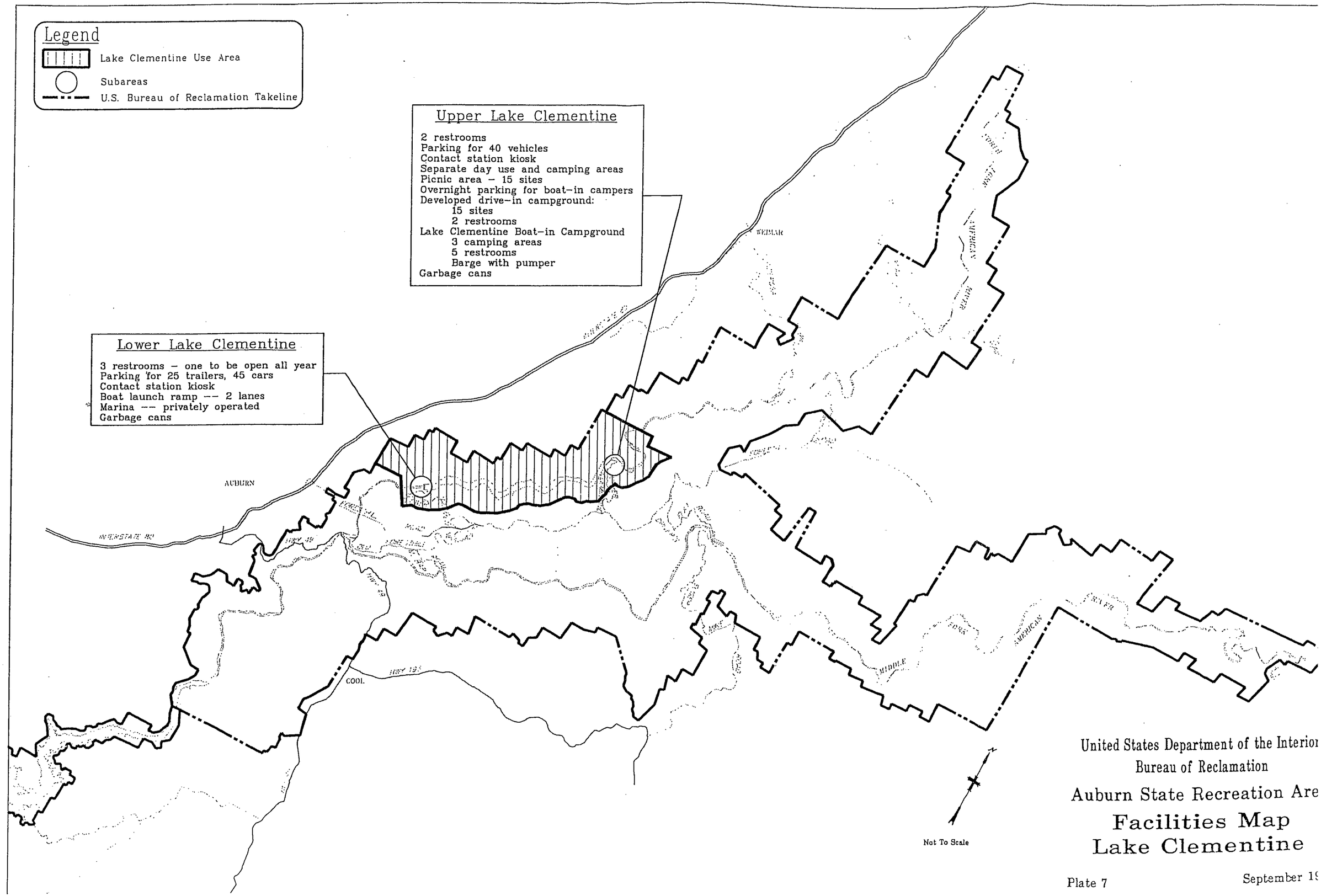
U.S. Bureau of Reclamation Takeline

Upper Lake Clementine

2 restrooms
Parking for 40 vehicles
Contact station kiosk
Separate day use and camping areas
Picnic area – 15 sites
Overnight parking for boat–in campers
Developed drive–in campground:
    15 sites
    2 restrooms
Lake Clementine Boat–in Campground
    3 camping areas
    5 restrooms
    Barge with pumper
Garbage cans

Lower Lake Clementine

3 restrooms – one to be open all year
Parking for 25 trailers, 45 cars
Contact station kiosk
Boat launch ramp –– 2 lanes
Marina –– privately operated
Garbage cans



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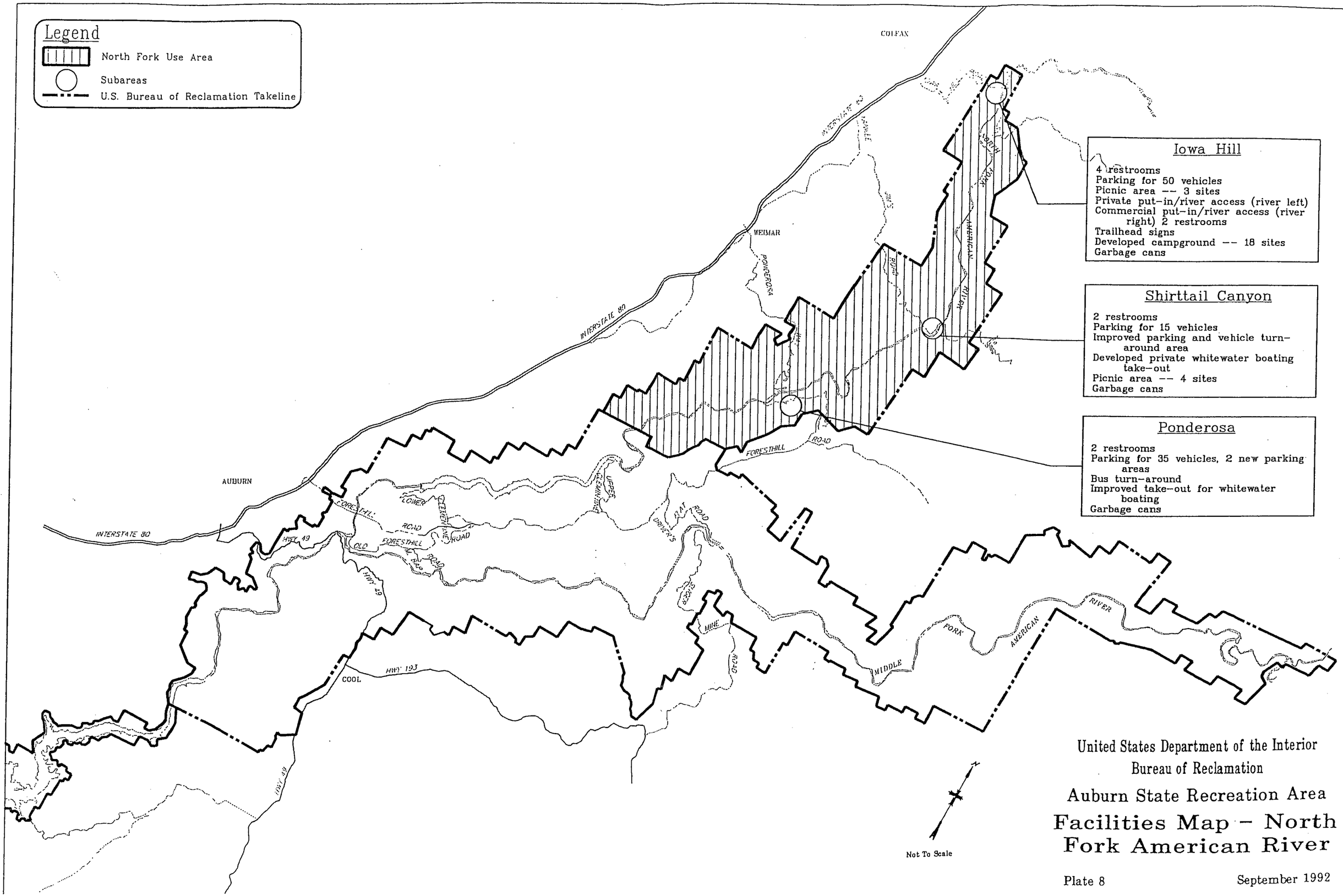
United States Department of the Interior
Bureau of Reclamation

Auburn State Recreation Are

Facilities Map
Lake Clementine

Plate 7

September 19



Iowa Hill

4 restrooms
Parking for 50 vehicles
Picnic area -- 3 sites
Private put-in/river access (river left)
Commercial put-in/river access (river right) 2 restrooms
Trailhead signs
Developed campground -- 18 sites
Garbage cans

Shirttail Canyon

2 restrooms
Parking for 15 vehicles
Improved parking and vehicle turn-around area
Developed private whitewater boating take-out
Picnic area -- 4 sites
Garbage cans

Ponderosa

2 restrooms
Parking for 35 vehicles, 2 new parking areas
Bus turn-around
Improved take-out for whitewater boating
Garbage cans

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Auburn State Recreation Area

Facilities Map - North Fork American River

Plate 8

September 1992

Legend

Middle Fork Use Area

Subareas

U.S. Bureau of Reclamation Takeline

Ruck-a-Chucky

5 restrooms
Parking for 40 vehicles
Improved access to river
Improved vehicular access along Driver's Flat Road, top with gravel
Ford at Greenwood crossing for service vehicles only
Bridge for hikers, bikers and equestrians at Greenwood crossing
Developed campground -- 15 sites
Garbage cans

Maine Bar

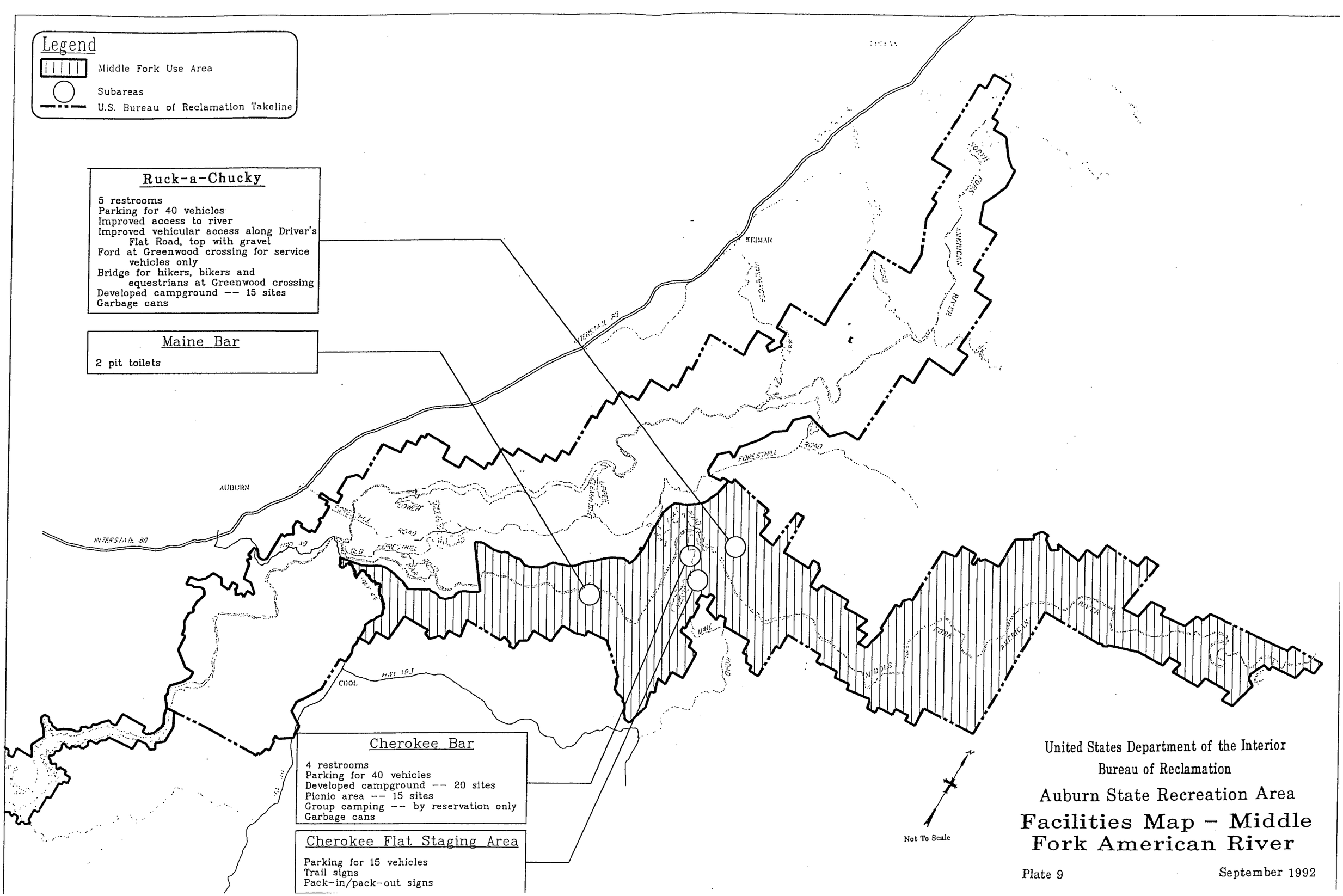
2 pit toilets

Cherokee Bar

4 restrooms
Parking for 40 vehicles
Developed campground -- 20 sites
Picnic area -- 15 sites
Group camping -- by reservation only
Garbage cans

Cherokee Flat Staging Area

Parking for 15 vehicles
Trail signs
Pack-in/pack-out signs



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Auburn State Recreation Area

Facilities Map – Middle Fork American River

Plate 9

September 1992

Legend

Knickerbocker Flat Use Area

Subareas

U.S. Bureau of Reclamation Takeline

Knickerbocker Flat

Cool Staging Area
- 2 restrooms
- Parking for 50 vehicles
- Additional overflow parking – 125 vehicles
- Closed to vehiclular traffic
- Picnic area – 15 sites
- Trailhead sign with "Pack–in\pack out" message
- 10 hitching posts
- Landscape screening
- Garbage cans

Trail Markers

Roadside parking at Cate Croft Lane -- 5 vehicles

Parking behind Northside School -- 15 vehicles

Disabled access trail along existing paved haul road and to ponds

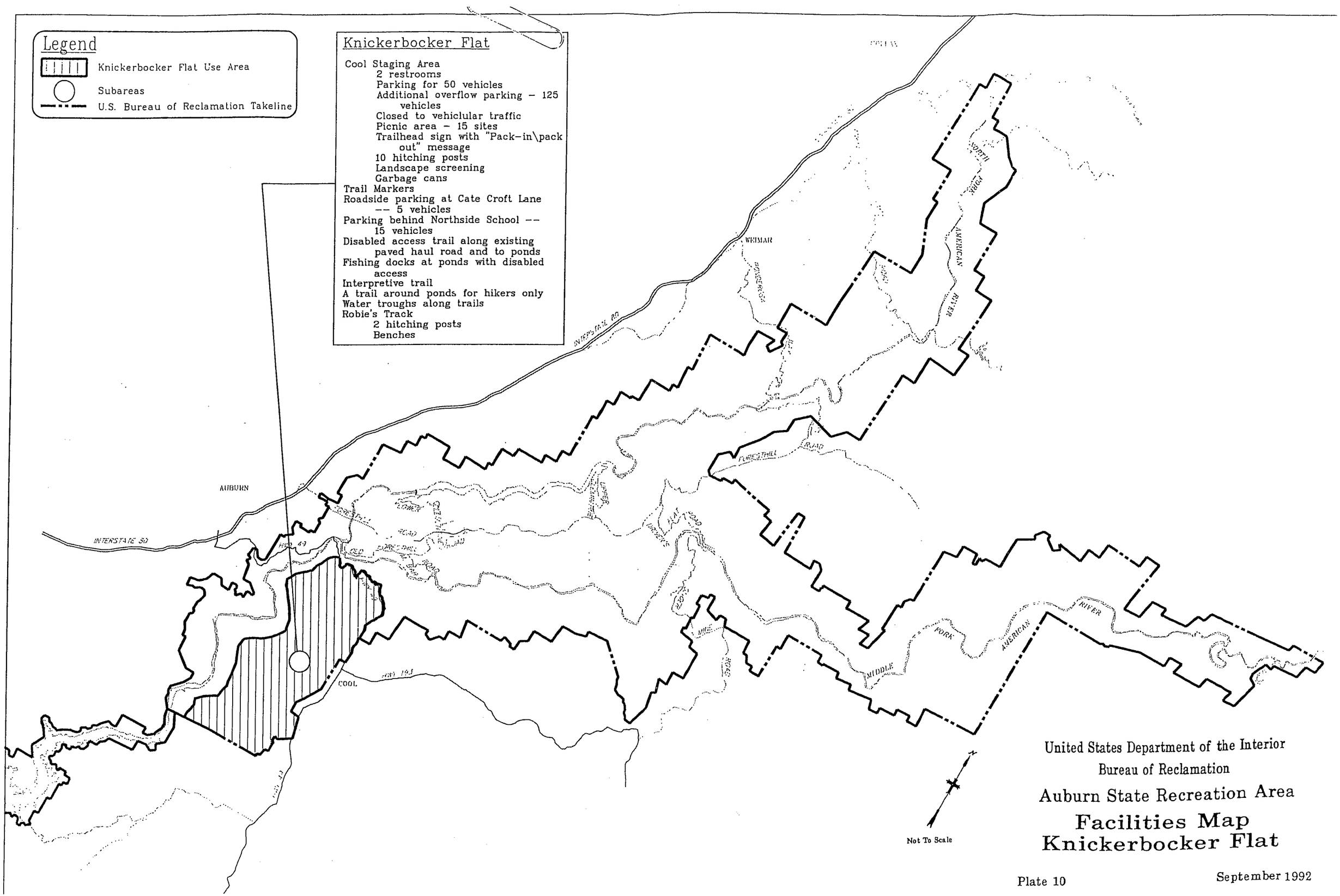
Fishing docks at ponds with disabled access

Interpretive trail

A trail around ponds for hikers only

Water troughs along trails

Robie's Track
- 2 hitching posts
- Benches



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Auburn State Recreation Area

Facilities Map Knickerbocker Flat

Plate 10

September 1992

Legend

Rim Area Use Area

Subareas

U.S. Bureau of Reclamation Takeline

Auburn Dam Overlook

1 restroom
Picnic area with vegetation -- 10 sites
Overflow staging area for special events
Garbage cans

Auburn Staging Area

2 restrooms
Staging for 75 vehicles
Overflow parking for 75 vehicles
Garbage cans

Forest Hill Divide

Roadside parking for 45 vehicles
Trail signs
Parking pull-out for Grizzly Bear House

Not To Scale

United States Department of the Interior
Bureau of Reclamation

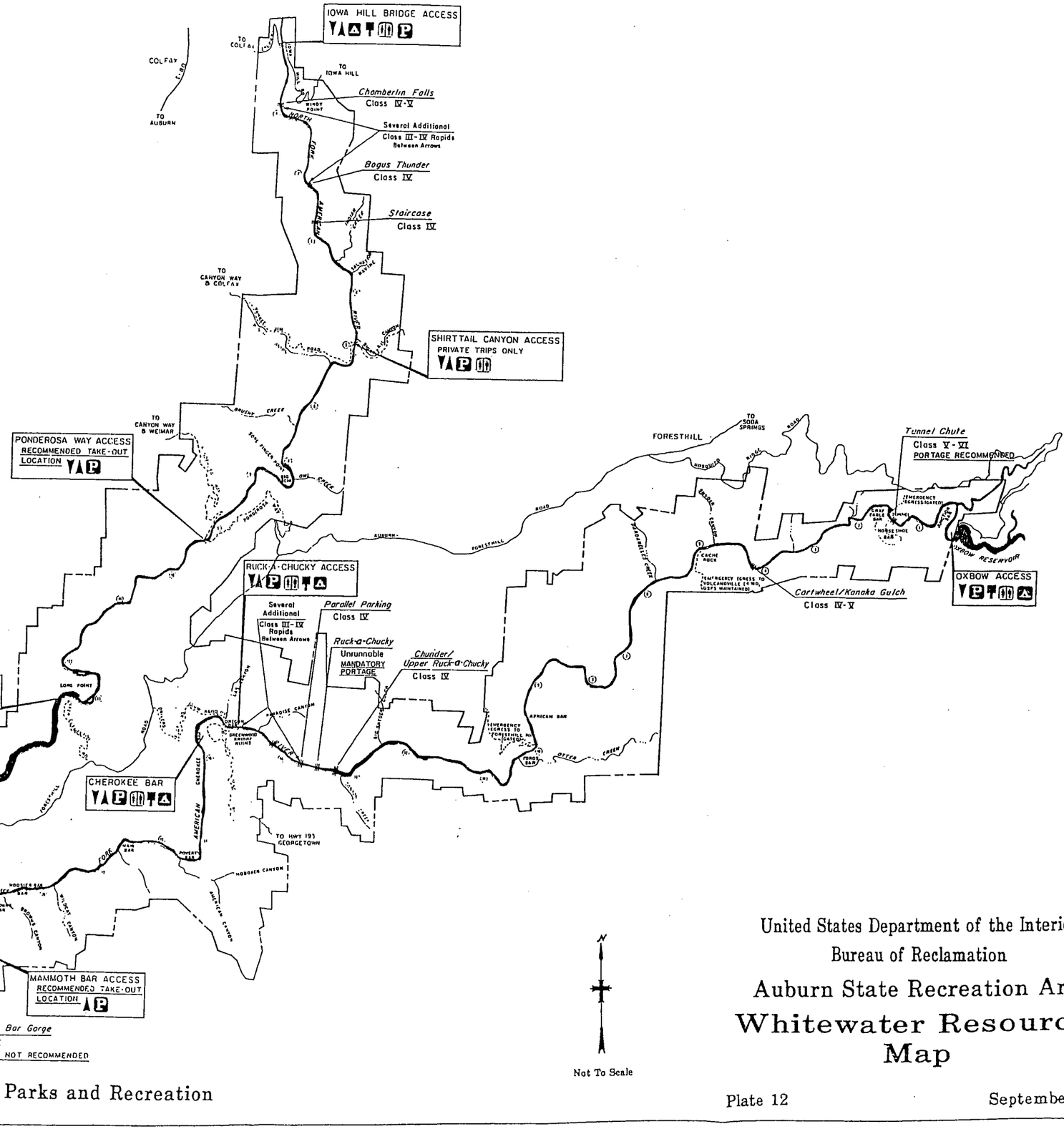
Auburn State Recreation Area
Facilities Map
Rim Areas

Plate 11

September 1992

Legend

- AUBURN STATE RECREATION AREA BOUNDARY
- PUT-IN (ACCESS)
- TAKE-OUT (EGRESS)
- MAJOR RAPIDS
- BRIDGE
- RANGER STATION
- CAMPING
- INFORMATION BOARD
- PARKING
- RESTROOM (CHEMICAL FACILITY)
- RIVER MILES (FROM UPPER-MOST PUT-IN)
- HIGHWAY OR MAJOR ROAD
- OTHER PAVED ROAD
- UNPAVED ROAD



Source : California Department of Parks and Recreation

United States Department of the Interior
Bureau of Reclamation

Auburn State Recreation Area

Whitewater Resources Map

Plate 12

September 1992