Executive Summary

ES.1 Introduction

Since 1984, the County of El Dorado (County) manages commercial and non-commercial whitewater recreation to enhance public health, safety, and welfare and preserve environmental values. The County's River Management Plan (RMP) establishes a set of operational rules for commercial and private boaters navigating the South Fork of the American River between the Chili Bar Dam and Salmon Falls Road in El Dorado County (see Figure 1). These rules define and update the County's river management and reporting activities.

~~The County has implemented the current RMP, since its adoption in 2001, with minor revisions. Five-year summary reports, required by RMP Section 7.2.2, were not completed for the 2002 to 2006 time period; the County prepared 5-year reports for the 2002 to 2006 time period, retrospectively, at the time of the preparation of the 2007 to 2011 report in 2013. The 2013 RMP report provided a "List of Minor Modifications to the El Dorado County River Management Plan (From the 2002–2006 and 2007–2011 Five Year Summary Reports)." This list recommended some measures that have been implemented, but the RMP has not been revised to reflect these changes.~~

~~The County retained Environmental Stewardship & Planning Inc. (ESP) to conduct an analysis of the status of RMP implementation and to provide focused recommendations on how the plan could be updated to respond to current community, regulatory, and fiscal conditions. ESP's successor firm, Dudek, has prepared this summary and recommendations.~~

ES.2 Background

On August 10, 1976, the El Dorado County Board of Supervisors adopted an ordinance making it unlawful to use the South Fork of the American River, from Chili Bar to Folsom Lake " . . . to float, swim or travel in said waterway by any artificial means." Fishing or swimming "in a lawful manner," use of the public areas, and exercise of property rights by private owners were declared exempt. Violation of the ordinance was pronounced a misdemeanor punishable by a fine of up to $500, 6 months in jail, or both" (*People ex rel. Younger v. County of El Dorado*, 1979). Such was the beginning of the County's regulation and management of one of America's great whitewater recreation areas.

The County, acting in response to the California Court of Appeal, Third Appellate District determination that while "effective to eliminate pollution and sanitation problems, the ordinance goes too far" (*People ex rel. Younger v. County of El Dorado*, 1979), the County embarked on the development and implementation of an RMP.

The original RMP[1] was "intended to provide overall guidance for the long-term use of the river and adjacent riparian lands" (*People ex rel. Younger v. County of El Dorado*, 1979, p. ix). This document and its environmental impact report (EIR) used over 2,500 questionnaires, polling, and resource analyses to identify the opinions of river area property owners and river users to prepare the suite of possible management actions that resulted in the first RMP (*People ex rel. Younger v. County of El Dorado*, 1979, p. 10). The

[1] The RMP evolved from an "Interim Management Plan" that was developed in 1981 and used by the County to manage the river until the development of and adoption of the first true RMP in 1984 (River Management Plan, South Fork American River, Volume 1, Adopted April 4, 1984, El Dorado County Community Development Department, Planning Division, Executive Summary, p. 10

management objectives identified in this process where segregated into three chapters of the RMP:

- County's management objectives
- River user's objectives
- Landowner's objectives.

It drew its authorities from California Government Code Sections 65300–65303.4, Article 5 (Authority for and Scope of General Plans) and through the Harbors and Navigation Code (Section 660), regulating the waters within their jurisdiction "as long as they do not directly conflict with primary State regulation" (*People ex rel. Younger v. County of El Dorado,* 1979, p. 2). Subsequent RMP amendments in 1988 and 1992 resulted in litigation (*Carlson v. County of El Dorado*) in 1994. The County authorized the most recent RMP update in response to this litigation, developing technical studies, intensive public involvement, and legal review that supported the 2001 RMP that is in force today.

Over the ensuing 15 years, the structure of the County's government has changed and the responsibility for the implementation of the RMP has moved from the County Department of Airports, Parks, and Grounds to the County Department of Environmental Management to the County Department of Transportation and currently to the County Administrator's Office.

~~RMP staff members prepared and presented 5-Year Summary reports for the time period of 2002–2006 and 2007–2011 in 2007 and 2012, respectively, with no substantial changes proposed in either report.~~ The County has implemented the current RMP, since its adoption in 2001, with minor revisions. Five-year summary reports, required by RMP Section 7.2.2, were not completed for the 2002 to 2006 time period; the County prepared 5-year reports for the 2002 to 2006 time period, retrospectively, at the time of the preparation of the 2007 to 2011 report in 2012.

In 2013, the River Manager provided the summary of these recommended RMP modificaitons as a "List of Minor Modifications to the El Dorado County River Management Plan (From the 2002–2006 and 2007–2011 Five Year Summary Reports)" to the County Planning Commission on March 23, 2013. Many, but not all, of these recommended RMP modifications were endorsed by the Planning Commission. TheRMP has not been revised to reflect these changes. Since that time, potential revisions to the RMP has been postponed until a more complete analysis of the RMP has been conducted.

Given the static nature of the RMP, and the lack of compliance with the prescribed data gathering, analysis, and interactive, adaptive management protocols, the County retained ESP to conduct a review of the RMP and its implementation. ESP has been succeeded by Dudek.

ES.3 Methodology

ESP conducted a three-phase approach to identify the perceptions and functions of the RMP's current implementation. These steps included:

- Conducting confidential interviews with over 20 interested parties and representatives of 6 public agencies
- Conducting a fiscal analysis of the implementation
- Conducting an analysis of the implementation of the RMP
- Providing the River Management Advisory Committee (RMAC) with a briefing on the results of the interviews and analyses

- Conducting public workshops to solicit thoughts and ideas from members of the community, regulatory and resource management agencies, and the public at large
- Providing recommendations on how the RMP could be updated to address current conditions and fiscal realities.

Summaries of the results of these activities were presented to the RMAC on April 3, 2015 (see Appendix A)_and proposed changes to the RMP are provided as redline/strikeout text in Chapters 2 through 6 of this plan.

ES.4 Summary of Observations

ES.4.1 Public Outreach Results

The results of confidential interviews conducted in 2014 and 2015, observation of numerous RMAC meetings, and the results of the May 2015 public workshops (summarized in Appendix B of this report). The fall 2014 and winter 2015 interviews were conducted in an informal manner and the participants were informed that direct comments would not be published. The following description of general comments, presented within the framework of the existing RMP elements, is provided to summarize both specific and general opinions.

Educational Programs

Newsletter/Website

The newsletter is poorly designed and doesn't provide the information that is needed.

The newsletter should be online and include a standard "things you should know about the South Fork" summary for those that are unfamiliar with the river.

There continues to be great misunderstanding about the boundaries of private property and the waters of the State; this information should be readily available on the County website and on signs (especially where trespassing has been reported).

Emergency information beyond 911, including routes to active fire stations, Marshall Hospital, and Auburn hospitals should be made available.

The website should provide information on what to do about noise and unsafe conditions at river resorts, campgrounds, and outfitter facilities.

Signage

River signs are disjointed, contain too much information, and are sporadically located.

River users should have a standard set of signs to guide them, no matter if they are passing through private, state, or federal lands.

River users don't have the signage needed to identify where to park or find services.

Signage should let people know about local businesses that provide food and lodging.

River Ambassadors

The County should enlist individuals to greet people at Henningsen-Lotus Park and on-water to reinforce safety and etiquette.

Education

The County should rely on non-profits or other governmental agencies to conduct history and environmental education.

Private boater training should not be the County's responsibility.

The curriculum of the Conservancy shouldn't become the official position of the County.

The County should have outfitter permits that address more than rafting. For example, there is a great opportunity to conduct floating fishing trips along the South Fork, providing a unique recreational opportunity.

Safety Programs

River Safety Committee

The River Safety Committee was a bad idea. The County shouldn't take on that responsibility.

The (now defunct) River Safety Committee and rescue training should be one of the County's primary jobs.

Agency Safety and Rescue Training

The annual interagency meetings are a critical piece of emergency practice updates.

County Park's Staff Activities

The River Patrol is overwhelmed by tubers on busy weekends—they could devote all of their time to the Marshall Gold to Greenwood Reach.

County Parks Boat Patrol should minimize their time on the Upper and Lower Reaches and maximize their time on the Coloma to Greenwood Reach.

Transportation Programs

River Shuttle

The River Shuttle is one of the most successful parts of the RMP.

The economics of the River Shuttle should be investigated by the Grand Jury.

A parking area should be developed across the road from Henningsen Lotus Park.

Illegal parking (and trespassing) continue to be an epidemic.

The RMP traffic studies are a waste of time and money.

Monitoring and Reporting Programs

Incident Reporting/Cooperating Agency Reports

There is virtually no communication or coordination between the County and other agencies with land along the River.

RMP staff has never put any data (that we know of) in the County geographic information system (GIS).

Water Quality Sampling

The RMP's water quality program is a waste of time. The protocols that they use are outdated and, after 30 years, there hasn't been data to justify continuing the program.

Water quality work should be left to the County Environmental Management Department.

ES.5 Summary of RMP Implementation Analysis

The Context of the RMP Has Dramatically Changed

The RMP was originally prepared in response to trespassing land use conflicts, environmental impact concerns, and potential health and safety issues. While trespassing continues to occur on an infrequent basis, most of the other reasons for the creation of the RMP are no longer concerns. The issuance of special-use permits, the implementation of County Environmental Management monitoring of food preparation and other heath protection measures, the development of outfitter campgrounds and staging areas, and the development of the river recreation community has obviated the needs that prompted the County to begin managing whitewater recreation over 30 years ago. There is, however, a continued need for the County to actively monitor and manage special-use permit holders within the River area, especially within the Coloma Valley.

The RMP Has Not Been Fully Implemented

The primary observation of this analysis is that the existing RMP is not and has not been fully implemented over its 15-year history. The RMP was designed to be informed each year by the results of river use, incident reports (e.g., emergency response, special-use permit violations, parking violations, pirate boater activities, and law enforcement actions), water quality analysis results, traffic\operations, and river flows).

Problems created by the lack of complete data sets were compounded by delays in the River Manager's completion of annual RMP reports: the RMP was designed with strict timing protocols that allow for the RMAC to consider the results of each boating season and provide recommendations on how the RMP could be modified to address substantive issues in the next rafting season. Staff's submittal of draft annual reports in the spring of the following year, instead of the RMP-specified fall of each boating season, prevented timely consideration of changing conditions and, ultimately, the 5-year update processes in 2006 and 2011.

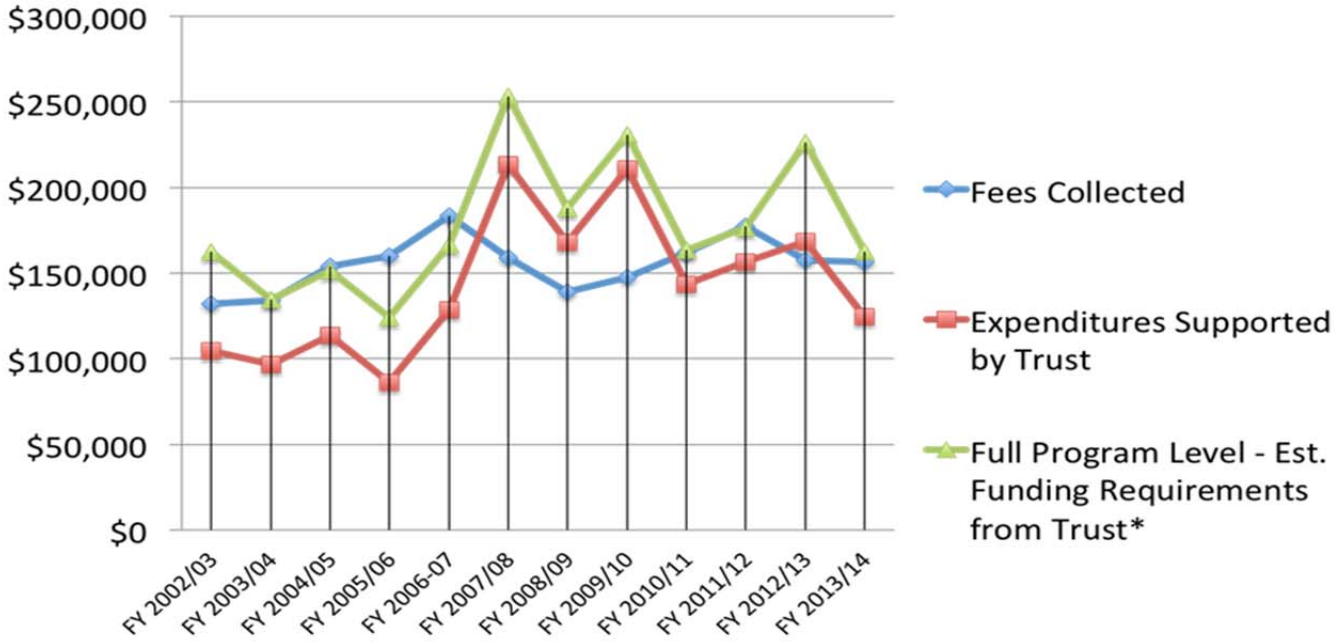
Many RMP elements have ceased to be implemented or were never fully implemented.

RMP elements that are not being implemented include:

- Element 1: Educational Programs
  - Cultural and natural resources workshops are not consistently taking place.
  - Resource and habitat education is not being implemented because of funding constraints.
- Element 2: Safety Programs
  - The River Safety Committee has ceased operation, despite its inclusion in the RMP.
  - Non-commercial boater education is not taking place, despite its inclusion in the RMP.
- Element 4: Monitoring and Reporting Programs
  - Incident Reporting

        - No cooperating agency (within the County and with state and federal partner agencies) data is shared.
        - Information on commercial outfitter warnings and violations are not readily available for public review.
        - No record of public complaints or comments is made available for review.
        - No complaint tracking and resolution system currently exists.
    - Stormwater sampling protocols have not been updated since 2002.
- Element 5: Agency and Community Coordination
    - Pre- and Post-Season Meetings:
        - Late annual reports results in data not available to RMAC for consideration/adaptive management recommendations.
        - The lack of substantive staff recommendations undermines the RMP adaptive management strategy.
    - No volunteer coordination record-keeping or summary information is available to assess programs or to compete for in-kind service grant programs.
    - No River Festival was held in 2015.
    - No agency coordination records have been kept or summarized.
- Element 6: Permits and Requirements
    - RMP staff member's conclusion that "RMP mitigaiton mesaure monitoring requirement minimums are still being met" with the current fee structure ignores the RMP elements that are incomplete or not being implemented.
- Element 8: Regulations and Ordinances
    - No unified County strategy for responses to pirate boater observations/evidence has been prepared.
    - Quiet Zone, trespass, and motorboat ordinance enforcement should be part of the RMP.
- Element 9: Facilities and Land Management
    - No unified restroom development and maintenance plan has been created by the RMP managers.
    - No planning, design, or construction of new RMP capital improvements has been identified in the County Parks Master Plan ~~occurred in~~over the past 15 years~~.~~
- Element 10: Funding
    - The RMP implementation has been driven by the funds available from the River Trust Fund: no other funding sources have been proposed and RMP has not been revised to respond to the actual cost of full RMP implementation (see Exhibit 1).

Exhibit 1: Actual v. Estimate of Required RMP Implementation Costs



*ESP Estimate

- The cost to deliver river management services by the County has increased, as the value of dollars collected from commercial guests has diminished ($2.00 in 1997 = $2.96 in 2014 [U.S. Bureau of Labor Statistics 2015])
- Fee revenue erosion has resulted in undocumented program "adjustments" by RMP staff members
- Incomplete implementation of the RMP and the lack of cost estimates for the full implementation of the RMP make actual funding needs unclear
- Revenue reductions, caused by inflation and reduced commercial guest receipts, has compromised the County's ability to adequately address the requirements of the RMP
- Maintaining the current funding "balance" can only be supported by an ever-decreasing degree of RMP implementation
- A capital improvement program (CIP) has not been developed for the RMP – the absence of a CIP limits the County's ability to develop and operate RMP facilities and program enhancement measures.

RMP elements that are not being completely or effectively implemented include:

- Element 1: Educational Programs
  - Signage: despite the RMP's call for a unified, effective signage program, signs are sporadic and disjointed between County, state, and federal lands. Private campgrounds would also benefit from participation in a unified signage program.

- The County's RMP website needs to be updated to serve as an effective source of trip planning and educational materials, as well as a clear statement of the County's RMP rules and standards.
- Quiet Zone, toilet locations, and public access information is not readily available on the RMP website or River area signs.

- Element 3: Transportation Programs
  - Illegal parking continues to be reported by River area residents and create unsafe conditions.

RMP elements that appear to be obsolete or unneeded include:

- Element 3: Transportation Programs
  - Off-Site River access parking continues to be identified as a goal of the RMP, despite no evidence that this measure is needed or wanted.
  - The RMP's stormwater sampling has not identified water pollution problems.
  - The results of the annual traffic study are not used by the Community Development Agency for planning or decision-making.
- Element 4: Monitoring and Reporting Programs
  - The lack of historic exceedance events makes the need for an ongoing bacterial sampling program questionable.
  - Zoning and Special-Use Permits are the responsibility of the Community Development Agency and their monitoring and management should be removed from the RMP.
  - While the RMP can assist in the promotion of River etiquette, Noise Ordinance enforcement is a responsibility shared by other County entities ~~the Sheriff's Office and the Community Development Agency~~.
- Element 5: Agency and Community Coordination
  - The Flow Phone has been made obsolete by Dreamflows.com.
- Element 9: Facilities and Land Management
  - The American River Conservancy Memorandum of Understanding, realted to the Chili Bar property transfer, was identified in the 2001 RMP was executed in 2007; this measure should be removed from the RMP~~.~~

The RMP Annual Reporting Protocols Have Been Ignored

The lack of complete and timely reporting by the River Manager and the lack of program consistency caused by the shifting of the RMP to four different elements of County government (i.e., the Department of Airports, Parks, and Grounds; the Department of General Services; the Department of Environmental Management; and the County Administrator's Office) has continually eroded the RMP's adaptive management system. Record-keeping has been diligent, in most cases, but the RMP annual review and update protocols, defined in RMP Sections 7.1 and 7.2, have been undermined by delays in sharing information with the RMAC, interested and responsible public agencies, commercial outfitters, and the public-at-large. Because of these annual report delays, the RMP program has become a mechanical exercise that cannot be informed by data and information gained each boating season.

The RMP Has Become a Static Program

The lack of adaptive management updates to the RMP has led to a static program that has not evaluated or embraced new technologies, such as boater count and global positioning system (GPS) data gathering, and current regulatory standards, such as stormwater monitoring protocols.

The RMP has not evolved to address key issues, such as the large number of inner tube and other "flatwater" craft that now use the central Class-1 segment of the River more than once in one day.

~~Their comments provided many insights into the concerns about the RMP, from the perspectives of Coloma Valley residents, private boaters, commercial outfitters, campground owners, local business people, law enforcement officers, historic resource managers, natural resource managers, non-profit organizations, and members of RMAC.~~

Many Commercial Outfitters Operate a User Day Market Outside of the RMP

It has become standard practice for some commercial outfitters to "trade" user days to respond to client bookings and RMP permit limits. This process involves temporarily marking one company's boats with another company's name and "sharing" the ability to accept clients. This informal marketplace is not allowed by the current RMP and has been operated with the knowledge of the River Manager. Despite extended discussion of this issues by the RMAC, ~~N~~no steps have been taken to enforce permit violations, modify the RMP, or address this user-day "graymarket."

ES.6 Recommendations

1. Reconsider the County's Management of Whitewater Recreation.

Our primary recommendation is for the County to seriously reconsider its role as the manager of recreation on the South Fork of the American River. The County's property holdings and River-related facilities are currently limited to Henningsen-Lotus Park.[2] Given this small "footprint," as compared to the active management of the lands of the Bureau of Land Management (BLM) and Department of Parks and Recreation (State Parks), the County's primary responsibilities are generally limited to the management of commercial outfitters and on-river patrols.

2. Delegate the Management of Commercial Outfitters to a State or Federal Agency.

Both State Parks and the BLM also manage commercial outfitters on the South Fork of the American River. Because of this overlapping, duplicative system and the County's ongoing RMP expenditures, we believe that the County should decide if it wants to continue to serve as River Manager, or to negotiate a cost-sharing agreement with the BLM and/or State Parks to accept the responsibility for managing commercial outfitters and other elements of South Fork River recreation.

---

[2] Because of ongoing litigation and the lack of capital improvement funds, the Chili Bar property will remain underdeveloped for the foreseeable future.

3. Use the County's GIS as the Clearinghouse for Outfitter Data.

In the event that the County continues to manage commercial outfitters, the County GIS should be used as a gateway to and repository for all outfitter data. This transition into a web-based accounting program will obviate the need for the River Manager to waste time updating spreadsheets.

4. The RMP Needs to Be Streamlined.

If the County decides to continue to actively manage the South Fork, we recommend the County streamline the River Manager's duties and responsibilities. The "redline-strikeout" changes that we recommend are presented in Chapter 4.

5. Dissolve the RMAC.

The most significant change that we propose is to dissolve the RMAC. This committee has done some very good and dedicated work since its inception in 1984, but has evolved into more of a community-focused, rather than River-focused organization. Because of the lack of substantive issues that require deliberation and the wide-ranging interests of the RMAC, we recommend that this committee be dissolved and that the County encourage interested participants to form an ad-hoc committee. This committee could be supported by the County in same manner as the Rubicon Oversight Committee that has successfully conducted ad-hoc meetings for over 10 years.

6. Update the RMP Every 3 Years.

We recommend that annual reporting be ceased, unless an emergency situation warrants immediate intervention into the County's river management activities. Instead, the RMP would be updated every 3 years and direct monitoring and incident data would be transferred to the County's GIS and made available to the public on the County website.

7. Reduce the RMP Position to a Seasonal or Half-Year Assignment.

This potential reduction in River Management staff responsibilities proposed by these recommendations would allow the County to make the River Manager a one-half time position, with the winter season devoted to other parks, trails, or recreation facility assignments.

8. Create a User-Day Marketplace for Commercial User Days or Enforce Current Regulations.

The County should either modify the RMP to create a marketplace for the temporary transfer of user days between outfitters or enforce current prohibition on these practices. The practice of the River Manager allowing this clear violation of the existing RMP management framework undermines its implementation.

9. Address the Management of Institutional User Groups.

The County should either implement the RMAC recommendations for managing Institutional User Groups or use a 3-year transition period to require that institutional user groups become commercially permitted operations or cease operations on the South Fork of the American River.

10. End RMP Water Quality Sampling Programs.

Because of changed water quality regulations, the RMP water quality sampling protocol is outdated, and it's unneeded because of Sacramento Municipal Utility District's robust water quality monitoring program.

ES.7 References

People ex rel. Younger v. County of El Dorado (1979) Civ. No. 17987. Third Dist. Aug. 27, 1979.

U.S. Bureau of Labor Statistics. 2015. Consumer Price Index.

INTENTIONALLY LEFT BLANK

1 Introduction

1.1 Purpose of the RMP

Since the early 1980's, the County of El Dorado manages commercial and non-commercial whitewater recreation to enhance public health, safety, and welfare and preserve environmental values. This El Dorado County River Management Plan (RMP) (2001) establishes a set of operational rules for commercial and private boaters navigating the South Fork of the American River between the Chili Bar Dam and Salmon Falls Road in El Dorado County. These rules define and update the County's river management and reporting activities.

The RMP focuses on whitewater recreation on the 20.7-mile segment of the South Fork of the American River between the Chili Bar Dam, near State Highway 193, and Salmon Falls Road, at the upper extent of Folsom Reservoir (see Figure 1-1). This document reflects an update process authorized by County Ordinance 4365. This ordinance and subsequent actions by the El Dorado County Board of Supervisors (Board) directed the whitewater recreation plan update process and the ultimate implementation of the policies and procedures described herein.

1.2 History of the RMP Planning Process

The Board has adopted this El Dorado County RMP (2016), which updates the 2001 El Dorado County RMP. This RMP is the latest action in El Dorado County's (the County's) ongoing interest in the preservation and enhancement of human and natural environments within the project area. Over the past 35 years, the County has banned, and then actively managed, whitewater recreation on the South Fork of the American River.

In response to landowner complaints about noise, trespassing, litter, and inadequate sanitation, the County banned whitewater recreation by ordinance in 1976 (RMI, 1997). This ordinance was later struck down by the State Court of Appeal in the case of People ex rel. Younger v. County of El Dorado (1979) (96 CalApp.3rd 403). Following the Younger decision, the County adopted a Stream and River Rafting ordinance in 1980. In 1981, the County began active management of commercial outfitters on the South Fork.

The County then embarked on the development of survey and factual information to formulate a river management program. This effort consisted of property owner surveys, river user surveys, and coordination with representatives of responsible and interested agencies (County of El Dorado, 1984). An El Dorado County RMP and accompanying Environmental Impact Report (EIR) were prepared in 1984. This plan was adopted by the County in 1984 as a chapter of the General Plan's Recreational Element (ibid.). The project EIR also was certified in 1984, and the County began the active management of whitewater recreation in and along the South Fork of the American River.

The RMP was amended in March 1988 (Sections III, IV, and V— County Resolution 99-88) and again in May 1992 (Sections 3A, 4A, and 4B—County Resolution 135-92). Many of the 1988 RMP's (Section IV, Land Use and Facilities) goals have been met, including:

- Special Use Permitting for all river access and camps;
- Acquisition and development of Henningsen-Lotus Park;
- Public agency (Bureau of Land Management) acquisition of river area lands; and
- Development of a radio communications system by the El Dorado County Sheriff's Office.

In 1995, Mr. Bernard Carlson sued the County on the grounds that the commercial permitting process in the RMP was a discretionary, rather than a ministerial process, under the California Environmental Quality Act (CEQA). Mr. Carlson prevailed in this litigation and, as a term of settlement, the County agreed to contract with independent consultants to update the existing RMP and prepare a new one.

1.3 Planning Process

In adherence to the terms of Carlson vs. County of El Dorado (as defined by County Ordinance 4365), the 2001 RMP and the 2001 RMP EIR were prepared by independent consultants reporting to the Planning Commission and the Board of Supervisors, through coordination with the County.

The County has implemented the current RMP, since its adoption in 2001, with minor revisions. Five-year summary reports, required by RMP Section 7.2.2, was not done for the 2002 to 2006 time period. The County prepared Five-Year reports for the 2002 to 2006 time period, retrospectively, at the time of the preparation of the 2007 to 2011 report in 2013. The 2013 RMP report provided a "List of Minor Modifications to the El Dorado County River Management Plan (From the 2002-2006 and 2007-2011 Five Year Summary Reports)." These recommended some of these measures have been implemented, but the RMP has not been revised to reflect these changes.

The County will consider any proposed modifications to the RMP and evaluate the need for specific California Environmental Quality Act (CEQA) compliance activities.

1.4 RMP Content and Structure

The RMP consists of nine chapters which present the technical basis and management elements of the RMP and five technical appendices:

- Chapter 1 examines the context of the County's plan to manage whitewater recreation on the South Fork of the American River.
- Chapter 2 identifies the legal and geographic boundaries of the standards and procedures presented in later chapters of the plan.
- Chapter 3 describes the natural resources, as modified by historical and current human use, that provide the physical setting of the RMP.
- Chapter 4 identifies the County's river management goals, recounts the body of goals and objectives that have remained in effect since the adoption of the most recent (2001) RMP, introduces the new goals and objectives, and presents the relationship between these guiding principals and respondent RMP (2001) elements.
- Chapter 5 discusses the carrying capacity development process and provides an overview of the resulting management actions that are embodied in elements of the RMP.
- Chapter 6 contains the RMP elements. This body of 11 functional plan elements is the heart of the RMP: all County river management and river user performance standards are designed to respond to the basic precepts of the plan's elements.
- Chapter 7 defines an annual process that provides public forums and processes for calibrating the RMP and an evaluation process that requires County consideration of the need for an RMP update on a 5-year cycle.
- Chapters 8 and 9 present references cited in the document and list the plan preparers, respectively.
- Appendix A – Resolution No. _____ Board of Supervisors Adoption of the RMP.

- Appendix B - Mitigation Monitoring Plan.
- Appendix C - River Use Ordinances and Guidelines.
- Appendix D - RMP Data and Standards.
- Appendix E - Summary of RMP Elements.

1.5 Definitions and Terminology

The following terms are used in the RMP as defined below.

Camp/Campground: A land use area designed and used for overnight camping. The level of physical improvements varies from undeveloped to highly developed. Put-in and takeout by boaters may occur, depending on location. Road access may or may not exist. Special Use Permits are required for commercial operations.

Carrying Capacity: A prescribed number and type of people that an area will accommodate, given the desired biophysical/cultural resources, visitor experiences, and management program

Commercial Outfitter: A business person who organizes and transports people on the river for profit. Commercial Outfitters are required to hold a River Use Permit. (Chapter 6, Element 6 contains a more detailed definition of commercial outfitters and their requirements.)

Limiting Factors: Any natural, social, or economic constraint to use of the river system.

Lunch, Rest Stop: A location along the river where non-commercial and/or commercial boaters stop for a period of time to rest or have lunch and put-in or takeout does not occur.

Non-Commercial/Private Boater: Members of the general public who float the river for recreational or educational purposes and share costs equally.

Pirate Boaters: Any person or outfitter operating on the South Fork who meets the definition of commercial outfitter, but does not hold a River Use Permit for such operations.

Put-in: A location where rafts, kayaks, and other craft are physically placed in the water; the act of ingress to the river with boats, equipment, and people for trip origination.

Rapids (Class I, II, III, IV, V, VI): A whitewater difficulty rating system adopted by the American Whitewater Affiliation.

- **Class I:** Very easy (beginner). Waves small, regular; passages clear; sandbanks, some artificial difficulties like bridge piers; riffles.
- **Class II:** Easy (intermediate). Rapids of medium difficulty, with passages clear and wide; low ledges; spraydecks useful.
- **Class III:** Medium (experienced). Waves numerous, high, irregular; rocks, eddies, and rapids with passages that are clear through narrow, requiring expertise in maneuvering; inspection usually needed; spraydeck needed.
- **Class IV:** Difficulty (highly skilled with several years experience with organized group). Long rapids, waves powerful and irregular; dangerous rocks; boiling eddies; passages difficult to reconnoiter; inspection mandatory first time.
- **Class V:** Extremely difficult (teams of experts). Extremely difficult, long, and very violent rapids following each other almost without interruption; riverbed extremely obstructed; big drops, violent current, very steep gradient; reconnoitering essential but difficult.

- **Class VI:** 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 at favorable water levels.

Registration: As used in this RMP, the act of providing information to the County prior to each boating season or each trip. Registration enables the County to collect information, confirm that applicable requirements are met, and disseminate information concerning safety, trespass, and environmental protection. Registration requirements vary by user group, and are specified in Chapter 6, Element 6.

River User: A general description of people who use the river for a variety of activities, including swimming, boating, and fishing, and for aesthetic enjoyment.

River Use Permit: A permit issued by the County that enables a commercial outfitter to operate on the South Fork. River Use Permits specify client and guest allocations and include terms, conditions and requirements that must be met by commercial outfitters.

Run (Upper, Middle and Lower): A reach or segment of the South Fork.

- **Upper Run** :Reach of the South Fork from below Chili Bar Dam to Coloma.
- **Middle Run:** Reach of the South Fork from Coloma to Greenwood Creek.
- **Lower Run:** Reach of the South Fork from Greenwood Creek to Skunk Hollow/Salmon Falls.

Shuttle: A term used to describe a route and/or vehicle trips required from the put-in location to the takeout location.

Special Use Permit (SUP): A permit issued by the County that allows specific land uses pursuant to terms and conditions identified in the permit.

Takeout: A location where rafts, kayaks, and other craft are physically removed from the water; the act of egress from the river with boats, equipment, and people for trip termination.

Threshold: Measurable levels of a particular limiting factor that can be used for management of the river over time. This RMP incorporates river use and density thresholds into its management mechanisms in the interest of public safety and natural resources protection.

User Day: A day, or any portion of a day, that a paying passenger, commercial outfitter, or private boater floats or otherwise travels on the river.

User Group: A general term inclusive of four defined types of boaters used in this RMP to distinguish river users by type and requirements. User groups identified within this RMP include: commercial outfitters, institutional groups, large groups, and private boaters. Specific definitions and requirements associated with each of these user groups are contained within Chapter 6, Element 6.

El Dorado County River Management Plan Phase I Report (April 1996) – The Phase I Report documented existing conditions and explored the scope of issues to be addressed through the RMP update process.

El Dorado County River Management Plan Phase II Report (April 1997) – The Phase II Report documented the second phase of the RMP update process, focusing on RMP alternatives. The report considered the County's options for the management of whitewater recreational use levels, educational programs, safety and emergency response activities, environmental protection, noise and water quality concerns, and the relationship between recreational activities and residents' rights.

Phase II studies documented in the report included intensive community involvement, such as topical public workshops, surveys of river users and residents, and analyses of the economic impacts of whitewater recreation and river area noise. Using this information, 10 project alternatives were presented in the report for consideration by members of the public, organizations, interested agencies, and the County. The number of alternatives increased to 15 prior to the initiation of the EIR process in 1998.

El Dorado County River Management Plan EIR (Phase III) – In 1998, a Draft EIR was prepared to evaluate various alternatives for the update of the existing RMP. The EIR was provided for public and agency review and comment on September 4, 1998. Subsequently, public and agency comments were received and reviewed by the County and its project consultants.

2 Planning Area and Legal Authorities

2.1 Planning Area

In accordance with the Board of Supervisors direction, this RMP is limited to the South Fork of the American River corridor from Chili Bar (at and adjacent to the Highway 193 bridge) to the Salmon Falls parking area (adjacent to the Salmon Falls Road Bridge) within El Dorado County, California. The vicinity and boundary of the RMP area are identified in Figure 1-1. The RMP is also applicable to all properties required to have a Special Use Permit pursuant to the County's Stream and River Rafting ordinance.

Land use within this area is comprised of a mix of commercial, residential, industrial, agricultural, and recreational uses. Commercial rafting outfitters own, operate and use campgrounds, and parking and staging areas along portions of the river. In addition, a number of recreation-related and other small businesses are located in the area, predominantly near the communities of Coloma and Lotus.

A number of private residences are located adjacent to the river and are dispersed throughout the area. Many residents living in this area enjoy the peaceful solitude associated with remote, low- density locations. Industrial land uses in the area involve relatively small mining and rock harvesting operations, including one slate cutting operation adjacent to the river, southeast of the Highway 193 bridge. Agricultural lands within the river corridor include scattered small farms and cattle grazing. Recreational uses of the river corridor include whitewater rafting and kayaking, as well as fishing, gold mining, and a number of other water and shoreline activities.

2.2 Legal Authorities

This RMP provides regulatory, plan, and policy guidance for El Dorado County's (the County's) management of whitewater recreation and related activities in and adjacent to the South Fork of the American River. This RMP updates prior plans in accordance with El Dorado County Ordinance No. 4365 (El Dorado County Board of Supervisors, 1995).

The RMP is responsive to Objective 9.1 in the El Dorado County General Plan (General Plan) Parks and Recreation Element (El Dorado County Board of Supervisors, 1996):

> Conserve and promote the waterways of El Dorado County, particularly the South Fork of the American River, as recreational and economic assets.

and to Policy 9.1.4.1:

> The River Management Plan, South Fork of the American River, (River Management Plan) is considered the implementation plan for the river management policies of this chapter.

2.2.1 RMP Relationship to El Dorado County General Plan Elements

The El Dorado County General Plan is the primary land use document governing the project area. The General Plan identifies a comprehensive set of goals, objectives, policies, and programs designed to direct the County's growth, protect natural resources, and provide opportunities for economic growth and community development. The RMP is an

implementing tool of the Parks and Recreation Element of the 2004 General Plan, and is responsive to goals and policies identified in other General Plan elements.

Table 2-1 presents the specific County goals, objectives, policies, and programs in the General Plan Parks and Recreation Element that relate to the RMP.

Table 2-2 identifies the RMP's compatibility with the goals, objectives, policies, and programs of other General Plan elements. These general assessments of RMP compatibility assumes that the County will take reasonable measures to ensure compatibility of the RMP with the General Plan, including land use designations of the General Plan map, when implementing specific elements of the RMP.

2.2.2 Other Agency Jurisdictions in the Project Area

Other governmental agencies with jurisdiction in the South Fork corridor, in addition to El Dorado County, include the BLM and the State of California Department of Parks and Recreation (California State Parks). Lands managed under jurisdiction of the County are comprised of unincorporated land either owned by the County (such as parks) or held privately (privately owned lands contain commercial, residential, and undeveloped parcels).

California State Parks manages Marshall Gold Discovery State Historic Park and the Folsom Lake State Recreation Area. There are approximately 6,368 acres of BLM lands adjacent to the river, with 14 miles of river frontage. Public toilets also are available on BLM lands. The County participates in river management planning programs developed and conducted by the BLM.

Deleted: 3,700

Formatted: Not Highlight

Deleted: 2.5

Formatted: Not Highlight

Public rights-of-way for river access are available at the Highway 49 and Highway 193 river crossings. Although agencies other than the County have jurisdiction over lands adjacent to the river, the County maintains the lead role in managing whitewater recreation activities and is deferred to by other agencies with regard to most South Fork management planning.

Commercial outfitter vehicles (e.g., client shuttle busses and vans) are subject to the requirements of the California Public Utilities Commission. Outfitter camps and housing facilities are subject to regulation by the California Department of Housing and Community Development.

2.2.3 Other Legal Authorities

The County's authority to regulate boating and associated activities within the South Fork of the American River arises from several sources. The primary source of legal authority is the County's police powers under Article XI, Section 7 of the state constitution. Specifically:

Deleted: The following information on the source and limits of the County's regulatory authority is based on the El Dorado Office of County Counsel opinion presented in the RMP Update Phase II Report (RMI, 1997).

> A county or city may make and enforce within its limits all local, police, sanitary, and other ordinances and regulations not in conflict with general laws.

The state and federal constitutions, and preemptive state and federal law limit these powers. In particular, Article X, section 4 of the California Constitution safeguards the public's access to navigable waters, the public trust doctrine protects a broad range of public rights in navigable waters, and California's common law also includes a public right to access and use navigable waters for various activities. It is uncertain whether, or to what extent, some of these legal principles apply to the South Fork of the American River. The case of People ex rel. Younger v. County of El Dorado, however, makes it clear that the public's rights impose limits on the County's regulatory powers.

The Harbors and Navigation Code defines what exercises of police power by the County will be deemed acceptable in the context of the public's right to access and use the river, specifically

stating that regulations must pertain only to "time-of-day restrictions, speed zones, special use areas, and sanitation and pollution control" (Section 660 [a]) (RMI, 1997).

CEQA also creates statutory duties that affirm the County's power to regulate and carry out those duties (Public Resources Code, Section 21000, et sec). The RMP update process complies with CEQA by adopting alternatives and mitigation measures that will substantially lessen environmental effects and by imposing a monitoring program that will ensure compliance with the mitigation measures during project implementation.

As noted above, the County has regulated commercial boating since 1981 (El Dorado County Planning Department, 1984). This regulatory program includes taxing power over commercial outfitters' possessory interest in the river, regulation of overall numbers and concentration of commercial use, time-of-day restrictions, pollution and sanitation control, and other management activities. This RMP will continue these management actions with modification and calibration as described in Chapter 6.

This RMP includes management and regulatory provisions for institutional and large-group use of the river. These activities are indistinguishable in appearance and impact from commercial activities. As such, the river management regulations presented herein are within the County's recognized authority to enact, implement, and enforce reasonable limits on river use.

Table 2-1

Comparison of RMP Elements and El Dorado County General Plan, Parks and Recreation Element

General Plan Goal, Objective, Policy, or Program	RMP Compatibility with Goal, Objective, Policy, or Program
Parks and Recreation Element	
Parks and Recreation Facilities	
Goal 9.1. Provide adequate recreation opportunities and facilities including developed regional and community parks, trails, and resource-based recreation areas for the health and welfare of all residents and visitors of El Dorado County.	The RMP contributes to this goal. The RMP would increase recreational opportunities through extension of the middle run and would result in the development of parking areas, restroom facilities, and trails to accommodate recreationists.
Objective 9.1.4. Conserve and promote the waterways of El Dorado County, particularly the South Fork of the American River, as recreational and economic assets.	The RMP contributes to this objective. The RMP would promote the recreational value of the South Fork of the American River, thereby contributing to its value as a recreational and economic asset.
Policy 9.1.4.1. The RMP, South Fork of the American River, (RMP) is considered the implementation plan for the river management policies of this chapter.	The RMP is consistent with this policy. The RMP provides necessary elements for the implementation of the Parks and Recreation Facilities Chapter of the General Plan Parks and Recreation Element; however, the RMP does not contribute to all of the goals and policies of the Parks and Recreation Facilities Chapter (see Policy 9.1.4.2, below).
Policy 9.1.4.2. Support the acquisition of a public river access adjacent to the Marshall Gold Discovery State	The RMP does not contribute to this policy. The RMP does not contain provisions for the

Table 2-1
Comparison of RMP Elements and El Dorado County General Plan,
Parks and Recreation Element

General Plan Goal, Objective, Policy, or Program	RMP Compatibility with Goal, Objective, Policy, or Program
Historic Park.	acquisition of a public river access adjacent to the Park.
Objective 9.1.5. Coordinate future park and trail planning and development with Federal, State, cities, community service districts, school districts, and other recreation agencies and districts to provide increased recreation opportunities through shared use of facilities, continuity and efficiency of operation, and a more coordinated and balanced park system.	The RMP is consistent with this objective. The RMP contains elements to promote and encourage coordination of future park and trail planning with federal, state, and other agencies.
Funding	
Goal 9.2. Secure an adequate and stable source of funding to implement a comprehensive Countywide parks and recreation plan.	The RMP does not contribute to this goal. The RMP would provide some funding for County activities related to river activities, but it would not secure adequate and stable funding for a Countywide parks and recreation plan.
Objective 9.2.1. Secure adequate funds to implement the Interim Master Plan, the Trails Master Plan, the Bikeway Master Plan, and the RMP to provide for the acquisition, development, maintenance, and management of parks and recreation facilities.	The RMP is consistent with this objective. Funding for implementation of the RMP is, and would continue to be, provided through commercial user fees.
Objective 9.2.3. Other types of funding including Federal, State, and private grants, user-fees, concession agreements, and private contributions to fund the construction of facilities such as trails along abandoned railroad lines (Rails-to-Trails) along rivers and creeks and to acquire historical or archaeologically significant land for parks.	The RMP is generally consistent with this objective. The RMP provides funding collection methods such as river- user and parking fees, as well as campground and commercial outfitter surcharges that could be applied to the construction of facilities.
Policy 9.2.3.1. Institute a system whereby user fees and concessions of various sorts (e.g., food and beverage vendors, gift shops, and boat rental facilities), wherever possible, contribute to the operation and maintenance costs of a facility.	The RMP is consistent with this policy. Commercial outfitters would continue to pay a boater surcharge fee to the County.
Policy 9.2.3.2. The River Management program for the South Fork of the American River shall continue to be	The RMP is consistent with this policy. The RMP would receive primary funding

Table 2-1
Comparison of RMP Elements and El Dorado County General Plan, Parks and Recreation Element

General Plan Goal, Objective, Policy, or Program	RMP Compatibility with Goal, Objective, Policy, or Program
funded primarily through commercial permits and user fees.	through commercial permits and user fees.
Policy 9.2.3.3. Actively encourage private sector donations of land and/or conservation easements through the use of various land use mechanisms (such as density transfers).	The RMP does not contribute to this policy. The RMP does not actively encourage private sector donations; however, the plan does not discourage or affect the potential for such donations to occur.
Policy 9.2.3.4. Actively encourage private sector donations of structures, materials, funds, and/or labor to reduce acquisition, development, and maintenance costs.	The RMP is consistent with this policy. The RMP would encourage volunteer activities related to river use.
Policy 9.2.3.5. The County will encourage private sector development, operation, and maintenance of recreation facilities.	The RMP is consistent with this policy. The RMP would allow special use permit modifications for the operation of a privately operated put-in/take-out facility near Highway Rapid.
Tourism and Recreation Uses	
Goal 9.3. Greater opportunities to capitalize on the recreational resources of the County through tourism and recreational based businesses and industries.	The RMP contributes to this goal. The RMP supports and contributes to the protection of the recreational and tourism value of the South Fork of the American River.
Objective 9.3.1. Protect and maintain existing recreational and tourist based assets such as Apple Hill, State historic parks, the Lake Tahoe Basin, wineries, South Fork of the American River and other water sport areas and resorts, and encourage the development of additional recreation/tourism businesses and industries.	The RMP contributes to this objective. The RMP supports and contributes to the protection of the recreational and tourism value of the South Fork of the American River.
Objective 9.3.2. Protect and preserve those resources that attract tourism.	The RMP contributes to this objective. The RMP supports and contributes to the protection of the recreational and tourism value of the South Fork of the American River.
General Plan Goal, Objective, Policy, or Program	**RMP Compatibility with Goal, Objective, Policy, or Program**
Objective 9.3.3. Actively encourage major recreational events (e.g., professional bicycle races, running events, white water kayaking, equestrian shows, rodeos, and athletic events) to showcase El Dorado	The RMP would be consistent with this objective. The RMP supports recreational events.

Deleted: (including whitewater kayaking) through continued support of the American River Festival

Table 2-1
Comparison of RMP Elements and El Dorado County General Plan,
Parks and Recreation Element

General Plan Goal, Objective, Policy, or Program	RMP Compatibility with Goal, Objective, Policy, or Program
County and increase tourism.	

Table 2-2
Comparison of RMP and Related El Dorado County General Plan Elements

General Plan Goal, Objective, Policy, or Program	RMP Compatibility with Goal, Objective, Policy, or Program
Introduction	
Statement of Vision	
1. Maintain and protect the County's natural beauty and environmental quality, vegetation, air and water quality, natural landscape features, cultural resource values, and maintain the rural character and lifestyle while ensuring the economic viability critical to promoting and sustaining community identity.	The RMP is generally consistent with this goal. The RMP would result in relatively few adverse impacts on the natural beauty and environmental quality of the area. The RMP's adverse impacts would be localized and predominantly temporary or short-term, and would be offset in most cases by beneficial economic effects.
7. Improve and expand local park and recreational facilities throughout the County.	The RMP generally contributes to this goal.
Plan Objectives	
3. To sustain a quality environment.	The RMP is generally consistent with this objective. The RMP would result in relatively few adverse impacts on the environmental quality of the area. The RMP's adverse impacts would be localized and predominantly temporary or short-term, and would be offset in most cases by significant beneficial effects that would be realized immediately and continue into the future.
Land Use Element	
Policy 2.2.5.15. Any imposition of National Recreational Area or Wild and Scenic River designations on lands within El Dorado County shall be deemed inconsistent with this General Plan.	The RMP is consistent with this policy. The RMP does not recommend, support, or directly encourage a National Recreation Area or Wild and Scenic River designation on the South Fork.
Transportation and Circulation Element	
Policy TC-Xa.3 Developer-paid traffic impact fees shall fully pay for building all necessary road capacity improvements to fully offset and mitigate all direct and cumulative	The RMP is consistent with this policy. In assessing any necessary traffic impact fees, the County would ensure that such fees are sufficient to meet the requirements of this

Deleted: Implementation of the RMP would result in the construction of new recreational facilities, including trails, restrooms, and parking areas, and could result in additional river access area for boaters.

Deleted: 3.2.2.4

Table 2-2

Comparison of RMP and Related El Dorado County General Plan Elements

General Plan Goal, Objective, Policy, or Program	RMP Compatibility with Goal, Objective, Policy, or Program
traffic impacts from new development upon any highways, arterial roads, and their intersections during weekday, peak-hour periods in unincorporated areas of the County.	policy.
Policy TC-Xa.2. The County shall not add any additional segments of Highway 50, or any other roads, to the County's list of roads that are allowed to operate at Level of Service "F" (gridlock) without first getting the voter's [sic] approval.	The RMP is consistent with this policy. The RMP would not result in the addition of any roads, including additional segments of Highway 50, to the County's list of roads that are allowed to operate at level of service "F."
Public Health, Safety, and Noise Element	
Fire Hazards	
Goal 6.2. Minimize fire hazards in both wildland and developed areas.	The RMP does not affect this goal. The RMP does not significantly increase the possibility of wildland or developed area fire hazards.
Objective 6.2.2. Regulate development in areas of high and very high fire hazard as designated by the California Department of Forestry and Fire Prevention Fire Hazard Severity Zone Maps.	The RMP is consistent with this objective. Prior to construction of any facilities related to the RMP, Fire Hazard Severity Zone Maps would be consulted to determine site-specific fire hazards. All appropriate standards and mitigation measures would be applied, depending on ultimate site selection.
Flood Hazards	
Objective 6.4.1. Minimize loss of life and property by regulating development in areas subject to flooding in accordance with Federal Emergency Management Agency (FEMA) guidelines, California law, and the El Dorado County Flood Damage Prevention Ordinance.	The RMP is consistent with this objective. The RMP would not require or encourage human-occupied development in areas located within the 100-year flood plain. Facilities that would be developed would be located outside the 100-year flood plain.
Noise	
Objective 6.5.1. Protect existing noise-sensitive developments (e.g., hospitals, schools, churches and residential) from new uses that would generate noise levels incompatible with those uses and, conversely, discourage noise-sensitive uses from locating near sources of high noise levels.	The RMP is generally consistent with this objective. The RMP would not create an additional noise source near noise-sensitive development nor would it encourage noise- sensitive uses to locate near existing noise sources. The RMP could, however, result in short- and/or long-term increased noise levels in some areas as a result of potential increased use of the middle reach.
Policy 6.5.1.7. Noise created by new	The RMP is generally consistent with this

Deleted: 3.5.1.6.2

Deleted: *Safety*

Deleted: *Protection*

Table 2-2

Comparison of RMP and Related El Dorado County General Plan Elements

General Plan Goal, Objective, Policy, or Program	RMP Compatibility with Goal, Objective, Policy, or Program
proposed non- transportation sources shall be mitigated so as not to exceed the noise level standards of Table [10-1] for noise sensitive uses.	policy. The RMP would not introduce a new non-motorized noise source. However, it would allow increased river use, which could result in increased potential for exceedance of County noise standards.
Conservation and Open Space Element	
Conservation and Protection of Water Resources	
Objective 7.3.1. Preserve and protect the supply and quality of the County's water resources including the protection of critical watersheds, riparian zones, and aquifers.	The RMP is generally consistent with this objective. The RMP includes elements and mitigation to avoid significant degradation of the water quality of the South Fork of the American River.
Objective 7.3.2. Maintenance of and, where possible, improvement of the quality of underground and surface water quality.	The RMP is generally consistent with this objective. The RMP includes elements and mitigation to avoid significant degradation of the water quality of the South Fork of the American River.
Policy 7.3.2.1. Stream and lake embankments shall be protected from erosion, and streams and lakes shall be protected from excessive turbidity.	The RMP is consistent with this policy. The RMP would result in increased enforcement of special use permit requirements related to erosion control.
Policy 7.3.2.5. As a means to improve the water quality affecting the County's recreational waters, enhanced and increased detailed analytical water quality studies and monitoring should be implemented to identify and reduce point and non-point pollutants and contaminants. Where such studies or monitoring reports have identified sources of pollution, the County shall propose means to prevent, control, or treat identified pollutants and contaminants.	The RMP is generally consistent with this policy. The RMP requires continued water quality monitoring of the South Fork of the American River. The RMP contains elements to reduce both point and non-point source pollution by enforcement of special use permit requirements related to underground septic systems and through the construction of restroom facilities to reduce direct introduction of human waste to the river and the river's shoreline.
Objective 7.3.3. Wetlands protection of natural and man-made wetlands, vernal pools, wet meadows, and riparian areas from impacts related to development for their importance to wildlife habitat, water purification, scenic values, and unique and	The RMP is consistent with this objective. The RMP would not affect wetlands within the river corridor.

Deleted: Construction of new facilities would avoid wetland areas.

Table 2-2

Comparison of RMP and Related El Dorado County General Plan Elements

General Plan Goal, Objective, Policy, or Program	RMP Compatibility with Goal, Objective, Policy, or Program
sensitive plant life.	
Conservation of Biological Resources	
Goal 7.4. Identify, conserve, and manage wildlife, wildlife habitat, fisheries, and vegetation resources of significant biological, ecological, and recreational value.	The RMP is consistent with this goal. The RMP is not expected to affect biological resources of significant value.
Objective 7.4.2. Identification and protection, where feasible, of critical fish and wildlife habitat including deer winter, summer, and fawning ranges; deer migration routes; steam and river riparian habitat; lake shore habitat; fish spawning areas; wetlands; wildlife corridors; and diverse wildlife habitat.	The RMP would further this objective. RMP elements (including any adopted California Environmental Quality Act mitigation measures) require pre-construction surveys or monitoring to identify additional wildlife or aquatic resources within the river corridor where facilities may be constructed.
Preservation of Open Space	
Goal 7.6. Conserve open space land for the continuation of the County's rural character, commercial agriculture, forestry and other productive uses, the enjoyment of scenic beauty and recreation, the protection of natural resources, for protection from natural hazards, and for wildlife habitat.	The RMP is generally compatible with this goal. The RMP would result in the construction of parking areas, restroom facilities, and trails that could be located in open space. In addition, the RMP does not dedicate, recommend, or preserve the maintenance of open space.
Objective 7.6.1. Consideration of open space is an important factor in the County's quality of life.	The RMP is generally compatible with this goal. The RMP would result in the construction of parking areas, restroom facilities, and trails that could be located in open space. In addition, the RMP does not dedicate, recommend, or preserve the maintenance of open space.
Policy 7.6.1.1. The General Plan land use map shall include an Open Space land use designation. The purpose of this designation is to implement the goals and objectives of the Land Use and the Conservation and Open Space Elements by serving one or more of the purposes stated below: A. Conserving natural resource areas required for the conservation of plant and animal life including habitat for fish and wildlife species; areas required for ecological and other scientific study purposes; rivers, streams banks of rivers and streams and watershed lands.	The RMP is generally compatible with this policy. The RMP contains elements that would enhance the County's geographic information system (GIS) with updated information collected related to river recreation. This information would be provided to County and other agencies for utilization in meeting the elements of Policy 7.6.1.1.

Comment [SP1]: To Be Determined by the CEQA document.

Deleted: adopted Environmental Impact Report

Table 2-2

Comparison of RMP and Related El Dorado County General Plan Elements

General Plan Goal, Objective, Policy, or Program	RMP Compatibility with Goal, Objective, Policy, or Program
Maintaining areas of importance for outdoor recreation including areas of outstanding scenic, historic, and cultural value; areas particularly suited for park and recreation purposes including those providing access to lake shores, beaches and rivers and streams; and areas which serve as links between major recreation and open space reservations including utility easements, banks of rivers and steams, trails and scenic highway corridors. Delineating open space for public health and safety including, but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soils areas, floodplains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs, and areas required for the protection and enhancement of air quality.	
Economic Development Element	
Policy Section	
Program 10.1.1.3.1. Support County business and local government efforts to develop regional, State, National, and international markets for our County's products, services, and attractions.	The RMP is consistent with this program. The RMP supports the maintenance of commercial outfitters' business and the attractions and services within the South Fork corridor.
Policy 10.1.2.2. Improve, streamline, and monitor permit processing procedures.	The RMP is consistent with this policy. The RMP would provide for improvements or streamlining permit processing procedures.
Program 10.1.2.2.1. Assess the impact on large and small businesses of regulatory issues and recommend cost saving changes to permit processing procedures.	The RMP does not further this program.
Program 10.1.2.2.4. Review existing County regulations and procedures to eliminate unneeded, inconsistent, and redundant legal requirements.	The RMP is consistent with this program. The RMP has resulted in a review of existing river-related regulation and procedures.
Policy 10.1.2.3. All County	The RMP is consistent with this policy.

Deleted: does not further

Deleted: result in increased monitoring requirements and does not

Table 2-2

Comparison of RMP and Related El Dorado County General Plan Elements

General Plan Goal, Objective, Policy, or Program	RMP Compatibility with Goal, Objective, Policy, or Program
regulations and procedures shall be written in a concise and easy to understand manner.	The RMP is written in a manner that is concise and easy to understand.
Policy 10.1.2.4. When adopting new regulations or procedures, both regulatory and business needs shall be reflected.	The RMP is consistent with this policy. The RMP recommends certain new regulations and procedures related to river management that consider both regulatory and business needs.
Program 10.1.2.4.1. Regulations shall include a means to accomplish regulatory needs with the least interference and/or barriers to business. Interested parties should be invited to participate in the development and review of new regulations.	The RMP is consistent with this program. The RMP recommends new regulations and procedures related to river management that consider both regulatory and business needs, attempt to accomplish these needs with the least interference to business. Interested parties have been and will continue to be involved in the development and review process.
Program 10.1.2.4.2. The County shall prepare an overview statement for proposed laws or administrative regulations including: (a) the purpose of the law and/or regulation; and (b) the relationship between stated purposes and other adopted laws and/or regulations of the County.	The RMP is consistent with this program. Prior to proposing regulations, County Parks would prepare an overview statement.
Program 10.1.2.4.3. All proposed development regulations or ordinances shall demonstrate a public benefit where proposed regulations or ordinances will result in private or public costs. This requirement shall not be construed to create a cause of action against the County for its alleged failure to prepare a formal cost/benefit analysis or its alleged failure to prepare a legally adequate or sufficient cost/benefit analysis.	The RMP is consistent with this program. Prior to proposing regulations, the public benefit would be demonstrated whenever there would be an associated cost.
Policy 10.1.2.5. County agencies and/or department, when developing ordinances, rules, regulations, and procedures to implement the General Plan, will analyze and present to the appropriate reviewing and/or regulating bodies the economical effects and taking implications of the proposed ordinances, rules, regulations, procedures on private property and private property rights.	The RMP is consistent with this policy. Prior to proposing regulations, County Parks or another appropriate County agency would determine and present the economical effects.

Table 2-2

Comparison of RMP and Related El Dorado County General Plan Elements

General Plan Goal, Objective, Policy, or Program	RMP Compatibility with Goal, Objective, Policy, or Program
This requirement shall not be construed to create a cause of action against the County for its alleged failure to prepare a formal cost/benefit analysis or its alleged failure to prepare a legally adequate or sufficient cost/benefit analysis.	
Objective 10.1.5. Assist in the retention and expansion of existing businesses through focused outreach and public and private incentive programs and target new industries which diversify and strengthen our export base.	The RMP is generally consistent with this objective. The RMP retains existing businesses related to river recreation, but does not target or expand new river recreation-related industries.
Policy 10.1.5.1. Assist industries to remain, expand, or to locate in El Dorado County.	The RMP is generally consistent with this objective. The RMP provides provisions for existing businesses to remain in El Dorado County but does not expand or encourage new river recreation-related industries.
Program 10.1.5.1.1. Identify and attract selected targeted industries that are consistent with the County's goal of balancing economic vitality and environmental protection.	The RMP does not contribute to this program.
Objective 10.1.6. Capture a greater share of retail and tourist dollars within the County by providing opportunities to establish new tourist-related commercial operations while promoting and maintaining existing tourist commercial operations.	The RMP is consistent with this objective.
Policy 10.1.6.5. The County shall designate areas Tourist Recreation to promote the development of tourist-related business. Such areas may be located along the U.S. Highway 50 Corridor, other State highways, the American River Canyons, and other appropriate areas suitable for such uses. A new zone district shall be established to differentiate between the low intensity recreational uses and high intensity recreational uses such as RV parks. The placement of this designation shall not be used as a precedent for additional high intensity land use designations in	The RMP does not contribute to this policy. The RMP does not assign land use designations to any portions of the South Fork of the American River.

Table 2-2

Comparison of RMP and Related El Dorado County General Plan Elements

General Plan Goal, Objective, Policy, or Program	RMP Compatibility with Goal, Objective, Policy, or Program
nearby areas.	
Program 10.2.2.1.1. Review other County impact fees and consider adopting fees necessary to assure that new development pays its fair share of public facility and services costs.	The RMP is consistent with this program. The RMP has considered and provides for review of necessary impact fees, in an attempt to fairly distribute development costs.
Program 10.2.2.2.1. When a project directly or indirectly impacts existing public services and/or infrastructure, it shall provide for and finance improvements consistent with the degree of impact to public services and/or infrastructure directly or indirectly attributed to the project. Cost to be borne by the project proponent shall be determined on the basis of the above described nexus and other pre- existing legally binding agreements such as development agreements.	With the implementation of Mitigation Measure 4-1 (see Appendix B, Mitigation Monitoring Plan) and certain elements specified in Chapter 6, the RMP is consistent with this program. The RMP would require increased public services and infrastructure that would be funded through existing mechanisms, including the River Trust Fund and the California Department of Boating and Waterways. Currently, the River Trust Fund is supported through a commercial use surcharge. The RMP requires that adequate funding is secured prior to the implementation of management actions that require increased expenditures.
Policy 10.2.2.3. Fees and assessments collected shall be applied to the geographic zone from which they are originated.	The RMP is consistent with this policy. Fees collected from river users and river corridor permit holders and applicants would continue to be applied to river- related services.

INTENTIONALLY LEFT BLANK

3 Physical Setting of RMP Project Area

Suggest that this chapter be removed from the RMP and that all applicable information be updated and used in the RMP CEQA document.

The RMP project area is located within the South Fork of the American River, in the Sierra Nevada foothills. The physical setting of the RMP project area is described in terms of its geologic, hydrologic, and biological character. Much of the following descriptions are taken from the El Dorado County River Management Plan Update Revised Draft EIR (Navigant Consulting, 2000).

3.1 Geology

The project area is the portion of the South Fork of the American River between Chili Bar Dam and Salmon Falls Road. The length of this segment of the South Fork is approximately 20 miles. Channel slopes are relatively flat for the foothill region. Elevations range from about 940 feet below Chili Bar Dam to about 460 feet at Folsom Reservoir, giving this reach an average slope of 24 feet per mile. However, about 190 feet of this drop is in the 6.3 mile reach from Chili Bar Dam to Coloma, giving that reach an average slope of about 30 feet per mile. This slope compares with an average slope of about 80 feet per mile in the immediately upstream reach of South Fork above the project area, between Slab Creek Dam and Chili Bar Reservoir.

3.1.1 South Fork Geologic Reaches

The segment of the South Fork to be managed by the RMP can be divided geologically into three distinct reaches: Upper, Middle, and Lower. Floating the entire river offers a chance to see the differences in each section and realize the diversity of the river corridor. Geology and topography combined with river flow contribute to the rapids that make this area an attractive whitewater resource area.

Upper Reach

The stretch between Chili Bar and the town of Coloma contains the narrowest and steepest section of the project area. Canyon sides rise almost from the river's edge to heights of 600 to 800 feet above the river, within a horizontal distance of only four to six tenths of a mile; average slopes are greater than 35 percent. Rapids are numerous, and a lengthy swim in the upper stretch can be dangerous because of their length and the abrasive sedimentary and volcanic rock.

Middle Reach

About 1 mile above Coloma, the canyon walls open up and the gradient subsides to between 10 and 15 percent. Alluvial terraces border the river throughout most of this reach. With the exception of a few rapids created by quartz-laden granite ledges, this stretch contains relatively easy Class I and II rapids.

Lower Reach

Between Clark Mountain and Folsom Lake, the topography of the river corridor begins to resemble that of the first segment. It differs mainly in that the canyon is not as narrow and

canyon sides are somewhat lower than the upper reach, rising some 400 to 600 feet above the river. Slopes average between 20 and 25 percent. The bedrock underlying this stretch is by far the hardest of the river, comprised mainly of chert, gabbro, and amphibolite.

3.2 General Description of the Watershed

The South Fork of the American River above Folsom Reservoir encompasses approximately 804 square miles of the 1,861 square mile American River watershed, which is tributary to Folsom Dam. The South Fork reach subject to the RMP is emphasized on the map to show its relationship to the rest of the South Fork watershed and hydrologic system (see Figure 1-1).

The watershed is about 55 miles long, with elevations ranging from less than 500 feet near Folsom Reservoir to approximately 10,000 feet at several locations along or near the Sierra Crest, which forms the eastern boundary and head of the watershed. The mean elevation of the South Fork watershed above Folsom Reservoir is about 4,400 feet.

The major tributaries of the South Fork are Silver Fork, Alder Creek, Silver Creek, Rock Creek, and Weber Creek. The upper reaches of the South Fork drainage basin are typical of the high Sierra Nevada with a thin soil mantle, rocky barrens, and sparse vegetation. Intermediate elevations are characterized by dense stands of pine, fir, and cedar. The canyons and lower foothill areas are steep and covered with oak, brush, and grasslands. Agricultural and residential development have occurred primarily within the lower portion of the intermediate elevation zone and in the foothill areas.

3.2.1 Precipitation

The South Fork of the American River experiences its heaviest precipitation from November through April. The precipitation regime at Blue Canyon (about 5,280 feet elevation on the North Fork) is typical of the regime in the higher reaches of the South Fork above Kyburz. Moisture moving east from weather fronts originating in the Pacific Ocean is blocked by the Sierra Nevada mountains, which act as a meteorologic barrier. This results in relatively heavy precipitation on the west slope as compared with most western interior mountain ranges. Annual precipitation in the South Fork basin averages about 55 inches, varying from a low of about 20 inches near Folsom Reservoir to highs estimated in the range of 65 to 70 inches in some of the more remote mountain areas near the easterly boundary of the basin.

Precipitation in this central Sierra Nevada region is seasonally variable. The variation in precipitation at Placerville is typical of the variation in precipitation in the lower South Fork of the American River basin. Variability between years tends to be somewhat less at the higher elevations near the Sierra Nevada crest.

3.2.2 Snowpack Accumulation and Melt

Approximately 40 percent of the full length of the South Fork above Folsom Reservoir is located above 5,000 feet in elevation. About 96 percent of the area above Kyburz lies above 5,000 feet. A large percentage of the precipitation that falls at these higher elevations during winter occurs as snow. Snowpack accumulates from about November through March, with the maximum accumulation generally occurring about April 1. The average April 1 snow line is below 5,000 feet, with snowpack covering about 45 percent of the watershed. The snowpack in most of the American River basin generally begins to melt during March, but the period of major snowmelt activity is typically April through July.

Winter snowpack is the source of about 50 percent of annual South Fork runoff above Folsom Reservoir. At higher elevations, almost the entire runoff is from snowmelt. Runoff varies widely from different locations in the watershed. Flows in the South Fork vary widely from season to season. The minimum annual observed runoff near Kyburz was 75,400 acre-feet in water year 1977 (i.e., October 1, 1976 to September 30, 1977) while maximum annual runoff within recent years was 709,000 acre-feet in water year 1983. These are respectively 26 percent and 242 percent of average annual runoff at Kyburz, which is about 293,000 acre-feet.

3.2.3 Historical Water Development

The South Fork has long been subject to water resources development. Major diversions from the South Fork began in the early 1850s, primarily for mining. Much of the water from these early diversions was used only during winter and spring, when rainfall and snowmelt flows were adequate. However, agricultural demands and other consumptive uses developed in the basin. There has been a long history of water diversion, regulation, and import to the watershed. The South Fork American River has therefore not been in a true "unimpaired" or "natural flow" condition for about 150 years. The flow regime now, particularly during the summer and fall recreational season, is much more reliable and thus conducive to recreation than it would have been without development of water imports and regulated flows.

Three major water systems in the South Fork drainage substantially affect the magnitude and regulation of flow. Two are hydro-electric projects licensed under the Federal Energy Regulatory Commission (FERC). Pacific Gas and Electric Corporation (PG&E) and El Dorado Irrigation District (EID) have operated a hydroelectric project (the El Dorado Project, FERC Project 184) with a small import and substantial regulation of flows tributary to the South Fork American River near Kyburz. Another water system operated by EID diverts flows from the PG&E system for consumptive use along the Placerville Ridge area. The Sacramento Municipal Utility District (SMUD) operates the Upper American River Project (the UARP, FERC Project 2101), a major hydroelectric project, on Silver Creek, which is a tributary to the South Fork American River near Pollock Pines. The SMUD system imports large quantities of water from the Rubicon River basin and substantially re-regulates flows for power generation. Finally, the Chili Bar Project (FERC Project 2155) regulates the outflow from the SMUD system and generates hydroelectricity.

PG&E System

Substantial re-regulation of flows began before 1900. Imports from Echo Lake in the Lake Tahoe basin began in 1876. By the early 1920s, Western States Gas and Electric Company (WSG&E) had acquired reservoirs and ditches from predecessor companies, increased reservoir storage, and installed power generation facilities in the South Fork drainage. The WSG&E system, later acquired by PG&E and known as the El Dorado Project, has been operating in a manner somewhat similar to that presently observed since about 1935. It was acquired by EID in 1999. This El Dorado Project (FERC Project 184), consisting of storage, conveyance, and the El Dorado Powerhouse, provides for hydroelectric power generation and water supply for EID use on the Placerville Ridge service area.

PG&E imports up to about 1,900 acre-feet annually from the Echo Lake watershed, which is a tributary to the Lake Tahoe basin. Imports generally begin in late season (after the recreational season) and continue through the fall months. This water enters the South Fork watershed through a tunnel near Echo Summit.

A dam on Lake Aloha (Medley Lakes) in the Pyramid Creek drainage tributary to South Fork has created a small reservoir with usable storage capacity of about 5,000 acre-feet. The reservoir generally fills during the snowmelt period. Water is released during late

summer to augment the natural flows of the South Fork for rediversion and hydroelectric power generation. The reservoir is located in one of the most productive areas for fish within the South Fork drainage.

Two reservoirs are located on tributaries of the Silver Fork. Silver Lake, with a drainage area of 15.1 square miles, has an average annual runoff of about 28,300 acre-feet. Useable storage capacity at the spillway water surface level is about 3,840 acre-feet, which can be increased to 8,590 acre-feet by adding elevation through the use of gates and flashboards. Caples Lake (Twin Lakes) has a drainage area of 13.5 square miles and an average annual runoff of about 26,840 acre-feet at the gaging station. Storage capacity is about 21,580 acre-feet. Releases from Silver and Caples Lakes are made to augment the flow of Silver Fork in late summer and fall after snowmelt has ceased. Releases from Silver Lake begin after Labor Day and continue through the following winter until natural stream flow is adequate to meet downstream needs for hydroelectric power generation and consumptive use.

The Silver Fork joins the South Fork American near Kyburz. Just below the confluence, EID diverts flow up to approximately 156 cubic feet per second (cfs) into the El Dorado Canal. The diverted water travels about 22 miles by open canal to the El Dorado Forebay at Pollock Pines. There, consumptive waters are diverted into EID's delivery system. The majority of the water then drops 1,900 feet to the PG&E El Dorado Powerhouse where it is returned to the South Fork above SMUD's Slab Creek Reservoir. There is some interception and diversion enroute to the canal, including a diversion at Alder Creek.

Before construction of the SMUD project, PG&E operated the American River Powerhouse near the confluence of South Fork and Rock Creek. This powerhouse was eliminated during construction of the SMUD project. It was replaced by the Chili Bar Dam and Powerhouse, which is operated by PG&E (FERC Project 2155). The purpose of Chili Bar Reservoir is to re-regulate power releases from the SMUD system in order to maintain a desired flow regime in the South Fork American River below Chili Bar during peaking operation of SMUD's White Rock Powerhouse.

The owners and operators have the necessary water rights (through pre-1914 water rights, state applications, permits, and licenses; and FERC licenses) to operate both the El Dorado Project (FERC Project 184) and the Chili Bar Project (FERC Project 2155). The El Dorado Project is scheduled for FERC relicensing in 2002. The Chili Bar Project is scheduled for FERC relicensing in 2007. PG&E is seeking to sell the Chili Bar Project as part of its general withdrawal from the hydroelectric generation business.

EID System

For over 100 years, water has been diverted from the South Fork American River at the present El Dorado Project diversion point at Kyburz and delivered for use on Placerville Ridge. Since 1919, EID and its predecessor received water from the project to serve the Placerville Ridge. The diversion represents an annual entitlement of approximately 15,080 acre-feet taken from the El Dorado Canal at El Dorado Forebay near Pollock Pines. The EID entitlement results from a 1919 Agreement between the predecessors of PG&E and EID. However, the diversion to the Placerville Ridge area was made along about the same route since the 1860s – prior to construction of the PG&E system.

In 1955, the U.S. Bureau of Reclamation (USBR) developed a water supply for EID that imports water to the Placerville Ridge from the Cosumnes River basin. This project is the Sly Park Unit of the Central Valley Project (USBR). Sly Park Reservoir, with a storage capacity of 41,000 acre-feet, was constructed on Park Creek, a tributary of Camp Creek and the North Fork of the Cosumnes River. Water is diverted from Camp Creek, also a tributary of the North Fork, into Sly Park Reservoir. Sly Park water is conveyed through the Camino Conduit to the Placerville Ridge area in the vicinity of Camino and released into the EID

conveyance and distribution system. Enroute releases are made along this conduit to meet demands at certain locations within the EID service area.

In addition, EID has a contract with USBR for water delivered at Folsom Reservoir to the far western portion of the service area. EID and El Dorado County Water Agency have had applications approved by the State Water Resources Control Board for additional water, made available by Project 184 from the upper South Fork American River watershed, to be rediverted at Folsom Reservoir. That water continues to flow through the RMP reach.

SMUD System

In the late 1950s, SMUD began development of the Upper American River Hydroelectric Project (the UARP, FERC Project 2101). The majority of the UARP facilities were constructed in the 1960s; however, the Loon Lake, Slab Creek, and Jones Fork power plants were not completed until 1971, 1983, and 1985, respectively. The UARP represents the major source of storage, regulation, and import for the South Fork watershed. Imports from the Rubicon River through Robbs Tunnel and Powerhouse increase South Fork flows about 20 percent annually. SMUD reservoirs provide over 400,000 acre-feet of useable storage to regulate flows and distribute winter and spring snowmelt runoff to meet hydroelectric generation needs. The SMUD system became fully operational in the early 1970s. It is the primary factor in increasing and re-regulating South Fork flows to provide the relatively high and consistent flows currently enjoyed in the South Fork drainage.

SMUD's UARP is located on the Middle and South Forks of the American River watershed. The UARP was designed as a single-purpose power project. Principal storage development is in the Silver Creek drainage basin, which totals about 180 square miles. Diversions into Silver Creek are made from approximately 85 square miles of the Rubicon River, a tributary to the Middle Fork of the American River. The average annual diversion from the Rubicon River to the South Fork American River has been about 180,000 acre-feet since the project has been in full operation.

Flows are diverted from the Rubicon River into Loon Lake Reservoir, which has a total capacity of 76,200 acre-feet. Releases from Loon Lake Reservoir are then made to Gerle Creek Reservoir located on a tributary of South Fork Rubicon. Waters flow through the Loon Lake Powerhouse; after reaching the South Fork of the Rubicon River, the flows are again diverted through the Robbs Peak Tunnel to Robbs Peak Powerhouse, which is located on Union Valley Reservoir in the Silver Creek drainage. This is the diversion from the Middle Fork American River and represents a substantial portion of South Fork American River flow.

From Robbs Peak Powerhouse, flows enter Union Valley Reservoir, which has a total capacity (with spill gates down) of 277,300 acre-feet and is located on Silver Creek, a tributary of the South Fork American River. Icehouse Reservoir in the Silver Creek drainage, with a total capacity of 46,000 acre-feet, regulates flows down the South Fork of Silver Creek to Junction Reservoir. Most of the release from Icehouse Reservoir is through the 11.5 megawatt (MW) Jones Fork Powerhouse into Union Valley Reservoir.

Flows from Union Valley Reservoir are released through the Union Valley Powerhouse into a forebay at Junction Reservoir. Rediversion is then made from Junction Reservoir through Jaybird Tunnel and Powerhouse back into Silver Creek at the Camino Powerhouse Diversion, and then rediverted into the Camino Tunnel. Flows then pass through Camino Powerhouse into Slab Creek Reservoir on the South Fork American River.

Slab Creek inflow includes the Camino Powerhouse release and release from the El Dorado Powerhouse. It also includes spills and the flows from the South Fork American River watershed above the confluence with Silver Creek. Flows are released from Slab Creek Reservoir through the White Rock Tunnel and Powerhouse, returning to the South Fork at Chili Bar Reservoir. All UARP powerhouses, and especially White Rock Powerhouse, are

used to meet hydroelectric load-following needs. This often requires releases of up to about 3,600 cfs at White Rock for limited daily and weekly time periods. Chili Bar Reservoir is used as an afterbay to re-regulate power releases from White Rock. SMUD holds the necessary FERC licenses for operating the UARP. When SMUD filed applications for storage and diversion for UARP, filing was made for both non-consumptive and consumptive use rights. SMUD has retained the non-consumptive use rights for power but assigned the consumptive use permits to the City of Sacramento for essentially the same storage and diversion that SMUD has constructed. The UARP (FERC Project 2101) is scheduled for FERC relicensing in 2007.

3.2.4 South Fork American River Flow Regime

The flow regime of the South Fork American River between Chili Bar Dam and Folsom Reservoir is highly regulated. During summer and fall (the primary recreation season), flows are the product of river system regulation by SMUD's UARP. The sustained high monthly and mean daily flows during August, September, and October result primarily from reservoir regulation and import to the South Fork basin by the UARP. Although the EID Project 184 system positively affects these recreation season flows, the impact is minor when compared to the impact of the UARP.

Although releases from PG&E's powerplant at Chili Bar regulate flows in the RMP reach, it is SMUD's UARP that controls the volume of flow available to Chili Bar Reservoir and PG&E's Chili Bar Powerhouse. The RMP is based on the analysis of historic river operations (i.e., over 25 years of hydroelectric power operations during the County administration of whitewater recreation by implementation of the RMP) and the presence of informal agreements between river outfitters and SMUD. This historic record, including drought and flood periods, serves as the "baseline" for the RMP. Significant changes in the amounts and timing of hydroelectric water releases would be incompatible with the RMP's river management strategies and impact mitigation measures.

The following sections describe various aspects of the river flow regime related to the high degree of regulation.

Average Monthly Distribution of Flow

Streamflow in the RMP reach has not been in a natural or unimpaired state since the 1850s and 1860s. In the early 1900s, prior to SMUD's UARP but after development of facilities to divert water to the Placerville Ridge area, mean daily flows on the order of 50 cfs or less were not uncommon in the RMP reach. Mean daily flows of less than 20 cfs were recorded at Coloma in the early 1930s. As described by various U.S. Geological Survey (USGS) water supply papers and other USGS publications, mean monthly flow rates less than 30 cfs were recorded in August 1931, a relatively dry year but not as critical as 1977. No years during that period were as critical as 1977.

The UARP has substantially affected the RMP reach flow regime. The relatively large differences in summer and fall flows result from regulation and import. Most of that diverted water is returned to the South Fork at El Dorado Powerhouse so it is available to the RMP reach. By comparing the impact of total impairment (including SMUD) against the impact of the EID system, it is apparent that, in the August through October period, the EID system represents only about 12 percent of the total impairment impact on the entire system.

The SMUD UARP affects flows of the South Fork American River below Chili Bar Dam. Construction of the UARP began in about 1959, with its major features mostly completed before 1970. Increases in mean monthly flows for 1965 and later represent most of the total impact of the UARP. The UARP impacts on summer and fall flows within the RMP reach are very apparent when the pre-1965 and post-1965 flows are compared.

It is important to recognize the relative impact of SMUD's UARP as compared to all other impairments in the basin. The UARP provides the major portion of the summer and fall (and often during the following winter, especially in dry years) import and release volumes from reservoirs through the SMUD powerplants. These flow volumes may be concentrated within specific intervals during the day and week. Flow volume variations significantly affect river levels and flow durations, often causing significantly changed river conditions with rapid, unpredictable flow ramping. Short duration releases concentrate flows into a short time period, often causing congestion at whitewater rapids and potentially unsafe conditions.

Water from the SMUD system reaches Chili Bar Reservoir from White Rock Powerhouse. It is then primarily PG&E's responsibility to re-regulate the volume of flow into the flow regime currently enjoyed in the South Fork/RMP area.

Operation of SMUD's UARP

SMUD's UARP is operated as a single-purpose hydroelectric project. SMUD holds the non-consumptive use water rights and the FERC licenses for all UARP facilities and operations. The City of Sacramento holds consumptive use rights for virtually the same water as SMUD, subject to priority of SMUD hydroelectric operation.

When first constructed, the UARP was subject to different electrical contractual arrangements and operational criteria than presently used. After January 1, 1990, the issues of energy and capacity delivered from the UARP took on a different importance in SMUD's total power supply mix. Under current operational conditions, the UARP's function is to "follow the load," with the intent of minimizing the need and likelihood of activating certain contractual arrangements for energy that could be very costly for SMUD on a long-term basis. The UARP, with a total capacity of approximately 680 MW is used primarily to meet current electrical power requirements during peak load periods. Its use minimizes the amount of other contractual power needed to meet the highest load situations. Should the UARP not be able to provide these very short-term capacity requirements, the energy and capacity may need to come from another source.

White Rock Powerhouse represents about 224 MW of the approximately 680 MW system-wide capacity. It is the lowest SMUD powerplant in a series of powerplants between Loon Lake and Chili Bar Reservoir. System operation requires running several powerplants with different hydraulic capacities for different units of time to "follow the load" during any day or period. For example, allowing no contribution from inflow, it would take over 7 hours of maximum load generation at Camino Powerhouse just above Slab Creek Reservoir to represent the same volume of water as 4 hours of maximum load generation at White Rock Powerhouse. There is no simple relationship between flow through White Rock Powerhouse on any given day during summer and fall and the size of the water year runoff. Anticipated daily electrical load, direct runoff, water in storage, and location of storage influence operational decisions. Operation of the UARP hydropower generation system, even with some intermediate storage along the route of flow, represents a very complicated "juggling act" to maintain flows in order to meet current needs while maintaining storage in order to meet future needs.

Slab Creek Reservoir, which is the "forebay" to White Rock Powerhouse, represents about 16,600 acre-feet of storage, not all of which can be used as a result of powerplant head considerations. Although White Rock could be operated for a short period without replacing the water taken from storage with water from other upstream reservoirs, it is important to "balance" the entire system in order to meet load-following criteria, maximize production, and obtain the capability for ensuring capacity well into the future, often measured in years.

The SMUD system has the greatest influence on the flow regime of the South Fork American River in the RMP reach. Its operation, particularly during the summer recreation

season, is critical to the County's ability to facilitate safe use of the South Fork for whitewater recreation.

Water is often released in "blocks" at rates of up to about 3,600 cfs for fairly short periods during the day through White Rock Powerhouse, especially during the summer and fall recreation season. The "block" of water is discharged into Chili Bar Reservoir. If it were not for the operation of Chili Bar Reservoir and Powerhouse (PG&E), the flow in the river during late summer might increase from nearly 0 cfs to 3,600 cfs during the afternoon period and drop again to near 0 cfs after the effect of the block release dissipated. This would be an unsatisfactory condition for the RMP reach not only from the recreational aspects but also from all other aspects associated with management of the river channel.

PG&E Operation of Chili Bar

The "block" flows mentioned above would have created an unacceptable flow regime in the South Fork American River between Chili Bar and Folsom Reservoir. Chili Bar Reservoir initially was designed as an afterbay to re-regulate the block releases from White Rock Powerhouse when it is functioning in a peaking type operation. The original intent was to permit the White Rock Powerhouse release to be re-regulated by storage in Chili Bar Reservoir, in order to provide a more consistent release over a 24-hour period through Chili Bar Powerhouse. Storage in Chili Bar Reservoir is only about 3,700 acre-feet, but not all of that storage is useable because it is needed to retain adequate hydraulic head to keep Chili Bar Powerhouse operating appropriately. If White Rock Powerhouse were to operate on a cycle in which discharge of 3,600 cfs were made between noon and 6:00 p.m. during a typical daily peaking period, this would represent about 1,800 acre-feet inflow to Chili Bar Reservoir. Over the 24-hour period, PG&E would need to schedule releases in order to deplete storage and prepare for the next daily cycle.

In addition, SMUD's peaking cycle may not be fully activated during weekends when commercial loads are not on-line. This could mean that PG&E might need to meet a 7-day flow release schedule below Chili Bar Powerhouse from a 6-hour-per-day, 5-day-per-week release schedule at White Rock Powerhouse. PG&E might need to schedule releases so that the storage available at about 6:00 p.m. Friday night would be released from Friday night through about noon on Monday — when White Rock would again start its generation cycle. These numbers are merely illustrative to point out the function of the Chili Bar "afterbay" and the general way in which the system was designed to operate.

PG&E is required to release 100 cfs for fisheries below Chili Bar Powerhouse, representing the minimum flow that must be released during the 24-hour period. River rafting interests approached PG&E in 1992 concerning the possibility of adjusting the release schedule at Chili Bar Powerhouse to provide for relatively high recreational rafting flows during the day and over the weekend.

It should be noted that PG&E has proposed to divest its hydroelectric facilities. However, it is assumed that in the event of future changes in ownership or management of PG&E facilities, these facilities would continue to operate similar to current practices.

Short-Term Variation of Flow Regime below Chili Bar

PG&E's present re-regulation of White Rock releases at Chili Bar Powerhouse substantially addresses the needs of rafting interests between Chili Bar and Folsom Reservoir, and has provided for unique recreational flows in the RMP reach, even under adverse hydrologic conditions. SMUD's UARP provides the volume of water on weekly and daily schedules but in time blocks of flow related to SMUD's electrical operational demands. The release through SMUD's White Rock Powerhouse is a SMUD option, and PG&E cannot demand that SMUD alter the release schedules or do more than provide PG&E with forecasts of operational schedules on a timely basis. Within more recent years, SMUD has been able to

provide PG&E with timely and realistic forecasts of water deliveries from White Rock Powerhouse, including weekend schedules. Since about 1990, both SMUD and PG&E operations have become more formalized.

PG&E must be prepared to operate Chili Bar Powerhouse within the flow regime imposed by SMUD. Using the SMUD forecasts, PG&E must make a determination of the water that will probably be available during any given period as a result of White Rock releases and adjust the Chili Bar release schedule accordingly. Recall that Chili Bar Reservoir is relatively small, and there is little that PG&E can do to maintain consistently high flows on a sustained basis without the continued releases through White Rock Powerhouse. A sustained release of 1,750 cfs (near the maximum rated hydraulic capacity) could fully deplete Chili Bar Reservoir in 24 hours without additional inflow.

During most summer and fall weekdays, releases through Chili Bar Powerhouse are generally adequate for the downstream recreational flows with no major problems except in drier years. Only in critically dry years is it necessary for PG&E to either reduce the maximum discharge rate or decrease the amount of time at the maximum discharge rate in order to meet a daily flow regime during the week and provide water for weekend releases.

To optimize recreational flows, releases during the week must be scheduled to provide maximum storage at the beginning of the weekend or holiday period, and scheduled during the weekend period to meet the maximum possible recreational flows and time schedules. The weekend presents a challenge to PG&E to make sure the reservoir is full at the end of the 5-day weekly cycle, because SMUD releases may be low during the weekend. Consequently, PG&E must be prepared to use stored water in order to meet the recreational flow regime through 2, and possibly 3 weekend days. The problem may be compounded during 3-day holiday weekends. The weekend and holiday scheduling probably represents the biggest problem in meeting recreational flows. PG&E has generally been able to hold flows in the 1,000 to 1,700 cfs range during the recreational block releases in all but the driest years. Unfortunately, there have been many dry category years during California's extended drought.

Another problem related to the recreational releases is that PG&E is restricted as to the hourly change in water surface elevation that may result from increases or decreases in releases at Chili Bar. The process of changing or "ramping" flow rates takes about 2 hours to increase the flow rate from the 100-cfs minimum release to a recreational flow rate. Decreasing the flow rate also takes about 2 hours. The ramping period could represent about 125 acre-feet per changes in flow rate or about 250 acre-feet per daily cycle. Much of this ramping water would be essentially lost to recreational flows, since the flows would be at rates lower than the desirable rates.

Ramping represents other potential problems for the operation of the flows in the RMP reach. The rapid changes in flow rate now experienced in this heavily regulated portion of the South Fork may be undesirable in certain environmental aspects. Lengthening the ramp period or increasing the minimal flow rates would detract from the desirable maximum rates for recreational purposes.

3.3 Water Quality

This subsection examines existing water quality in the project area. The major source of water quality degradation appears to be existing sources of fecal coliform that flow into the river throughout the South Fork's watershed

The coliform group of bacteria, as defined by the U.S. Environmental Protection Agency (EPA) standards (40 Code of Federal Regulations 133), is used as the principal indicator of the suitability of water for potable use. The methods for the detection of coliforms are

intended to indicate the degree of water contamination. The coliform group is used because the number of coliform organisms present in waste is much greater than pathogenic organisms; therefore, the test checks for indicator or surrogate organisms.

While rare forms of fecal coliform bacteria threaten human health, generally the presence of these bacteria is used as an indicator that other harmful pathogens associated with fecal wastes may be present. However, there is no consistent quantitative relationship between the concentrations of fecal coliform bacteria present and the concentration of pathogens. Surface waters with high concentrations of fecal coliform may in fact have low concentrations of bacteria and viruses harmful to humans. In contrast, enteric (intestinal) viruses have been found at significant levels in waters with low fecal coliform bacteria concentrations. For these and other reasons, fecal coliform bacteria are not ideal indicators of the risk of exposure to fecal pathogens.

The American River receives contaminants from many sources. Potential sources of contaminant discharges to the South Fork include timber operations/road construction; mining; agricultural runoff; sewage/septic system leach fields; erosion from launch areas; municipal facilities; industrial facilities; and boating, bike trails, rafting, and other recreation-related disturbances and contributions.

It appears that contamination of the South Fork American River from animal waste, and perhaps some defective septic tank leach field sewage disposal systems and other undocumented sources, outweighs contamination originating from rafting activities. Most of the data implying fecal coliform contamination from untreated sewage are identified during the non-rafting season. In general, these existing sources appear to mask and overshadow incremental water quality problems or benefits that would be due to any increase or decrease in future river use. The data also indicated that many sources of contamination are upstream of the project area.

3.3.1 Water Quality Requirements

All water quality requirements for the South Fork are contained in the Central Valley Regional Water Quality Control Board (RWQCB) *Water Quality Control Plan for the Central Valley Region* (Basin Plan). The Central Valley Basin Plan serves as the basis of the State of California's formal adoption of water quality criteria for the Sacramento and San Joaquin River basins, including the South Fork of the American River. As such, the Central Valley Basin Plan provides detailed guidance on acceptable standards for surface and groundwater quality. Current SWRCB water quality objectives include parameters that could be affected by increased river use, as presented in Table 3-1.

Table 3-1

Current RWQCB Water Quality Objectives Applicable to the South Fork of the American River

Constituent	Maximum Concentration
Bacteria (coliform) in waters designated for contact recreation (REC-1)	Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a geometric mean of 100/100 ml, nor shall more than 10% of the total number of samples taken during any 30-day period exceed 200/100 ml.
Dissolved oxygen	The monthly median of the mean daily dissolved oxygen (DO) concentration shall not fall below 85% of saturation in the main water mass, and the 95th percentile concentration shall not

Table 3-1

Current RWQCB Water Quality Objectives Applicable to the South Fork of the American River

Constituent	Maximum Concentration
	fall below 75% of saturation. The DO concentration shall not be reduced below 7.0 mg/l at any time.
Floating material	Water shall not contain floating material in amounts that cause nuisance or adversely affect beneficial uses.
Oil and grease	Waters shall not contain oils, greases, waxes, or other materials in concentrations that cause nuisance, result in visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses.
Sediment	The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.
Suspended material	Water shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.
Turbidity	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in turbidity attributable to controllable water quality factors shall not exceed the following limits: Where natural turbidity is between 0 and 5 nephelometric turbidity units (NTUs), increases shall not exceed 1 NTU. • Where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20%. • Where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10%. • Where natural turbidity is greater than 100 NTUs, increases shall not exceed 10%.

Source: California Regional Water Quality Control Board Central Valley Region, 1998.

3.4 Vegetation, Wildlife, and Aquatic Resources

3.4.1 Vegetative Communities

North Slope Oak Woodland

The north slope oak woodland habitat includes dense canopy areas of mixed hardwood, canyon live oak (*Quercus chrysolepis*), black oak (*Q. kelloggii*), and Douglas fir hardwood. Additional tree species in this habitat include blue oak (*Q. douglasii*), interior live oak (*Q. wislizenii*), California bay (*Umbellularia californica*), Pacific ponderosa pine (*Pinus ponderosa*), and Pacific madrone (*Arbutus menziesii*).

The composition and density of understory species varies depending on site conditions. Densely shaded sites may support little understory growth, with ground cover often consisting of forest litter or bare soil. Moderately dense canopy sites, wind throws, and canopy gaps typically support young forest trees, woody shrubs and vines, and a variety of grasses and forbs.

South Slope Oak Woodland

This habitat occurs more frequently than the north slope oak woodland. South slope oak woodland is a largely oak dominated habitat type that typically occurs on drier, southwest to south facing slopes with shallow to moderately deep soils. Although highly variable in tree density and species composition, many of the species of trees and shrubs found in the north slope oak woodland habitat also occur in this cover type. It differs from north slope oak woodland by its open to moderately open canopy. Canopy components vary greatly, depending on the aspect, exposure, elevation, and soils; but interior and canyon live oaks are the most common dominants.

Grassland

In areas where tree cover drops below 30 percent and shrub cover shows a corresponding decline, grassland habitat becomes the dominant vegetative community. This habitat type typically consists of non native, annual species and is most often used for livestock grazing.

Chaparral

Chaparral habitat is composed of evergreen woody shrubs that are typical of the dry, well drained, shallow soils of foothill and lower montane slopes of the Sierra Nevada. The dominant woody species of the chaparral in the RMP area include chemise, manzanita (*Arctostaphylos* sp.), ceanothus (*Ceanothus* sp.), toyon (*Heteromeles arbutifolia*), shrubby forms of the interior and canyon live oaks and, infrequently, shrubby forms of the deciduous blue oak. In northern California, this habitat is usually found on south facing slopes (Holland, 1986).

Pine Forest

Ponderosa and grey pines are the conifer species most frequently encountered in this region. They typically occur as scattered individuals mixed with plants of the chaparral, hardwood woodland, and hardwood forest communities. Ponderosa pine forest is often found on south facing slopes on coarse, well drained soils. Gray (digger) pine (*Pinus sabiniana*) woodlands typically occur on well drained soils below 4,000 feet in elevation.

Montane Riparian

Although the South Fork is regulated by several hydropower impoundments, the riparian habitats and ecological conditions of the South Fork corridor retain characteristics of a relatively natural foothill riparian system. Various riparian vegetation types and ages exist along the mainstream river corridor, including palustrine forest, dense thickets and thin stringers of palustrine scrub shrub habitats, areas of frequently inundated grasses and ruderal habitats, and even emergent marshes on backwaters and isolated ponds. Palustrine scrub shrub includes areas of dense willow scrub vegetation that typically occur along mountain and foothill streams, as well as broad variations of seasonally inundated habitats diffusely covered by woody shrubs and interstitial grasses and herbs. Palustrine forest is highly limited along the river.

Other important features of the riparian corridor include sandy flats and moving sand bars that contribute importantly to the dynamics of riparian vegetation and extensive areas of exposed gravels, cobbles, and rocky outcrops. Elderberry (*Sambucus* sp.) shrubs can be found occasionally, usually closely associated with drainages and steep draws.

3.4.2 Plant Species

A search of the California Natural Diversity Data Base (CNDDB) was run for the Garden Valley, Coloma, Pilot Hill, Clarksville, Shingle Springs, and Placerville USGS quadrangles on March 27, 1998. The search identified several species of special concern with the potential to occur in the project area. These species and their current status are listed in Table 3-2.

Four plant species listed as endangered or threatened under the federal Endangered Species Act (ESA) were recorded within 1 mile of the South Fork of the American River, including Stebbins's morning glory (*Calystegia stebbinsii*), Pine Hill ceanothus (*Ceanothus roderickii*), El Dorado bedstraw (*Galium californicum* spp. *sierrae*), and Layne's ragwort (*Senecio layneae*).

The Pine Hill flannelbush (*Fremontodendron decumbens*) and the Nissenan manzanita (*Arctostaphylos nissenana*) also have the potential to occur within the RMP project area. El Dorado County mule ears (*Wyethia reticulata*) has potential to occur in the chaparral and pine forest communities.

Three former candidates for listing under the federal ESA also occur within 1 mile of the South Fork American River. These species are currently considered U.S. Fish and Wildlife Service species of concern. Red Hills soaproot (*Chlorogalum grandiflorum*), Bisbee Peak rush rose (*Helianthemum suffrutescens*), and El Dorado County mule ears are found in chaparral communities. Red Hills soaproot is recorded in four locations, Bisbee Peak rush rose has five occurrences, and El Dorado County mule ears has nine occurrences.

Table 3-2

Special Status Species with Potential to Occur in Study Area

Scientific Name/ Common Name	Federal/ State Status	General Habitat
	Birds	
Accipiter gentilis Northern goshawk	SC/CSC	Uses mature coniferous and broad-leafed forest habitat in montane areas
Haliaeetus leucocephalus Bald eagle	T/E	Frequents large bodies of water where abundant fish and adjacent snags are available
Agelatius tricolor (nesting colony) Tri-colored blackbird	SC/CSC	Moderate to large areas of dense cattails, tules, or water- dependent shrubs associated with emergent wetlands
	Plants	
Arctostaphylos nissenana Nissenan manzanita	SC/CNPS 1B	Coniferous forest, chaparral; known from a few occurrences in El Dorado and Tuolumne Counties
Balsamorhiza macrolepis var macrolepis Big-scale balsamroot	-/CNPS 1B	Valley and foothill grassland, cismontane woodland
Calystegia stebbinsii Stebbins's morning glory	E/E	Chaparral, cismontane woodland; endemic to Pine Hill formation in El Dorado and Nevada Counties
Ceanothus roderickii Pine Hill ceanothus	E/R	Chaparral, cismontane woodland; endemic to Pine Hill formation in El Dorado County
Chlorogalum grandiflorum Red Hills soaproot	SC/CNPS 1B	Cismontane woodland, chaparral, lower montane coniferous forest
Fremontodendron decumbens Pine Hill flannelbush	E/R	Chaparral, cismontane woodland; endemic to gabbroic chaparral community in El Dorado and Nevada Counties
Galium californicum ssp *sierrae* El Dorado bedstraw	E/R	Cismontane woodland, chaparral, lower montane coniferous forest; endemic to El Dorado County

Table 3-2

Special-Status Species with Potential to Occur in Study Area

Scientific Name/ Common Name	Federal/ State Status	General Habitat
Helianthemum suffrutescens Bisbee Peak rush-rose	CNPS 3	Chaparral
Wyethia reticulata El Dorado County mule ears	SC/CNPS 1B	Chaparral, cismontane woodland, lower montane coniferous forest
Senecio layneae Layne's ragwort	T/R	Chaparral, cismontane woodland
Invertebrates and Reptiles		
Rana aurora draytonii, California red-legged frog	T/CSC	Dense, shrubby vegetation associated with deep, quiet, still or slow-moving water
Rana boylii, Foothill yellow-legged frog	SC/CSC	Shallow, flowing water in small to moderate-sized streams with cobble-sized substrate
Clemmys marmorata Western pond turtle	SC/CSC	Permanent moderate to warm temperature pools, ponds, lakes, and streams with still or slow-moving water
Desmocerus californicus Valley elderberry longhorn beetle	T/-	Elderberry shrubs located adjacent to low-elevation streams and reservoirs

Federal
E = Endangered.
T = Threatened.
SC = Species of concern.

State
CSC = California Department of Fish and Game species of special concern. R = Listed as rare by the State of California.

California Native Plant Society (CNPS)
1B = Rare, threatened, or endangered and mandatory to be considered under CEQA.
3 = Plants for which more information needs to be gathered (CNDDB March 27, 1998).

All of the plant species, except for Bisbee Peak rush-rose, are California Native Plant Society (CNPS) List 1B species. Because CNPS considers these species to qualify for listing under the Native Plant Protection Act, they warrant full consideration under CEQA. Bisbee Peak rush-rose is classified as a CNPS List 3 species. CNPS recognizes that further research is required for List 3 species but recommends consideration under CEQA as these species may warrant listing.

Gabbro soils, which provide habitat for certain special-status plant species, are located within some upland areas north and south of the lower reach of the South Fork corridor. These soils are not located immediately adjacent to the river (Britting, 2000), and plant species associated with gabbro soils habitat are not expected to be affected by typical whitewater boating-related shoreline use.

In addition, El Dorado County has officially adopted a system of five plant preserves, totaling 3,500 acres, for protection of the rare plant species and habitat associated with gabbro and serpentine soils within western El Dorado County. The preserves consist of lands already owned by various government agencies; lands recently acquired by the County and the BLM with funding from multiple sources, including the El Dorado County Water Agency and EID; and private lands. On all lands overlain with the Ecological Preserve land use designation, special zoning rules strictly limit development and require on-site set-asides and off-site mitigation for impacts to the plants or their habitat from land development. Both lands designated Ecological Preserve and other lands are identified as sources for the potential acquisition of land or development rights to further preservation.

3.4.3 Wildlife Species

Wildlife resources found within the project area are well documented in numerous publications. Habitats of California wildlife have been categorized by Mayer and Laudenslayer (1988) and are currently used in defining wildlife occupancy by habitat in the CNDDB.

The primary habitats identified in the RMP project area are defined below:

- **Riverine:** This area includes three zones or substrates, open water, submerged zone (between open water and the shore), and the shore.
- **Montane Riparian:** This habitat type includes broad leaved trees that form a narrow border to waterways in forests dominated by coniferous trees. This type is found in the uppermost elevations in the project area.
- **Valley Foothill Riparian:** This type is the predominant terrestrial type in the project area. It includes broad leaved trees and shrubs, specifically cottonwood, sycamore, and valley oak with understories including a variety of species as well as California blackberry, poison oak, and willow.

Wildlife species often use more than one habitat type or zone within a habitat type. Many species require an interface of two or more habitat types to satisfy their daily and seasonal requirements. A complete list of species with the potential to be found in the project area, either permanently or seasonally, is not included herein. Such data on terrestrial vertebrates are available in California's Wildlife, Volumes I-III (Zeiner et al., 1990). For the purpose of this assessment, emphasis on wildlife species is restricted to those species listed as threatened or endangered under the federal or state ESA, and those designated as "sensitive" on various state and federal agency lists.

The CNDDB search conducted on March 27, 1998, noted four listed or sensitive wildlife species with potential to occur in the project area. This list included northern goshawk, tri-colored blackbird, western pond turtle, and valley elderberry longhorn beetle, as described below:

- **Northern goshawk (*Accipiter gentilis*):** Actual location for this species in the project area was not available. However, Zeiner et al., (1990) indicates that the species prefers mature old-growth stands of conifer and deciduous habitats, usually nesting on north slopes. Nesting occurs in areas above the project area although there is some movement downslope in the winter, occasionally into valley foothill habitats. Goshawks may occasionally occur within the project area but are unlikely to use the area for nesting and foraging.
- **Tri-colored blackbird (*Agelaius tricolor*):** This species uses emergent wetland habitats where dense cattails or tules, blackberry willow, or other tall shrubs and herbs provide nesting areas (Zeiner et al., 1990). No occurrences of this species are documented in the project area.
- **Western pond turtle (*Clemmys marmorata*):** The western pond turtle uses slack or slow water habitats, avoiding high gradient streams where water velocity, temperature, and food resources are limiting (Jennings and Hayes, 1994). This species is known to occur in suitable habitats adjacent to the South Fork corridor. Populations in the river corridor (above the slack water of Folsom Reservoir) are limited to areas where slack water occurs, such as near Marshall Gold Discovery State Historic Park.
- **Valley elderberry longhorn beetle (*Desmocerus californicus dimpohus*):** This species is totally dependent on elderberry shrubs for completing its life history.

Although there are no documented locations of this species in the project area, it is possible that habitat suitable for species occupancy (specifically elderberry bushes) may occur at the lower levels of the river corridor in the vicinity of Folsom Reservoir.

In addition to species located in the CNDDB, three other species, two listed and one sensitive, deserve consideration. These are bald eagle, California red-legged frog, and foothill yellow-legged frog, as described below:

- Bald eagle (Haliaeetus leucocephalus): The bald eagle is found in many areas of California. Populations in the Sierra Nevada are normally located near large bodies of water (e.g., lakes and reservoirs) where food, in the form of native and exotic fish, is readily available (Zeiner et al., 1990). While bald eagles may occasionally occur in the South Fork corridor, no known nesting locations or optimum habitat conditions have been located in the project area.
- **California red-legged frog (*Rana aurora draytonii*):** This species is associated with dense, shrubby vegetation in deep, quiet, still, or slow-moving water (Zeiner et al., 1990; Jennings and Hayes, 1994). This species has been considered to be extirpated from most of the western Sierra Nevada streams (Jennings and Hayes, 1994) although recent data indicate isolated populations in local ponds in Placer and El Dorado Counties. Aquatic and vegetative conditions in the project area are not conducive to red-legged frog occupancy.
- **Foothill yellow-legged frog (*Rana boylei*):** Foothill yellow-legged frogs prefer shallow, flowing water in small to moderate-sized streams with cobble-sized substrate (Jennings and Hayes, 1994). The species spends most of its time in or directly adjacent to the water, feeding from emergent and floating vegetation near the stream margin (Zeiner et al., 1990). Breeding takes place following the reduction of flow in mountain streams (Stebbins, 1954). The foothill yellow-legged frog has been documented in El Dorado County but not within the project area.

3.4.4 Aquatic Resources

Habitat Conditions

The South Fork of the American River descends approximately 500 vertical feet in elevation between Chili Bar (960 feet above mean sea level [msl]) and Salmon Falls Bridge at Folsom Reservoir (460 feet above msl). Historically, the South Fork demonstrated an annual hydrograph typical of other Sierra Nevada-origin streams. The runoff pattern was characterized by high flows in spring and early summer due to rainfall and snowmelt. June through September was characterized by declining flows, with an increase starting in October. Mean monthly unimpaired summer flows for the period 1965-1994 ranged from about 420 cfs in July down to 79 cfs in September. However, given SMUD's extensive development of the watershed for hydroelectric and water supply purposes during the mid-1960s, the annual hydrograph has changed, with the most dramatic shift being the increased mean monthly flows in July–October.

Because SMUD's projects store winter and spring runoff and import Rubicon River water into the basin, more water is available to meet electricity demands in summer, resulting in higher than historical summer flows in this reach of the river.

Although Chili Bar Dam impounds the river's flow, its small capacity (3,700 acre-feet) and high rate of inflow from the White Rock Powerhouse prevents its waters from thermally stratifying (operating at full capacity for 24 hours, White Rock Powerhouse would discharge in excess of 7,000 acre-feet into Chili Bar Reservoir). As indicated in Table 3-3, Chili Bar Reservoir's water exchange rate (number of days to completely exchange water [outflow and inflow] in a reservoir) ranges from 1.1 to 9.1 days. In addition to the high rate of water-

exchange, the short-term high flows from the White Rock Powerhouse would generate substantial mixing of the reservoir's waters and likely prevent thermal stratification.

Table 3-3

Number of Days to Completely Exchange Water in Chili Bar Reservoir

Water Year	% Avg Annual Runoff	July		August		September	
		Monthly RO (acre-feet)	*Exchange Days*	*Monthly RO (acre-feet)*	*Exchange Days*	*Monthly RO (acre-feet)*	*Exchange (Days)*
1988	33%	25,170	4.6	25,100	4.6	27,010	4.1
1992	41%	28,080[1]	4.1	32,060	3.6	24,460	4.5
1993	114%	72,080	1.6	60,580	1.9	50,200	2.2
1995	199%	211,200	0.5	89,500	1.3	86,700	1.3

Note:
RO = Runoff.
[1] June 1992 was lower at 27,210 acre-feet.

The increased volume of flow; its headwater storage in thermally stratified reservoirs; and the passage of much of this water in pipelines, penstocks, and canals with little or no exposure to thermal radiation – all contribute to lower than historical summer water temperatures in the South Fork below Chili Bar. However, summer water temperatures still typically exceed 70°F and are marginal for some trout species when average annual runoff is below normal.

In addition to the changes in the annual and monthly hydrographs discussed above, daily fluctuations in flow volumes due to hydropower peaking can range from 100 to 3,600 cfs. These rapid changes in flow volumes result in daily changes in the amount of available fish habitats and the quality of those habitats. These flow fluctuations result in degraded habitat conditions, which are manifested in the fish species composition and relative abundance discussed below. Also, loss of riparian vegetation due to actions by recreationists and resort owners is a concern.

Fishery Resources

Data on fishes in the reach of the river downstream from Chili Bar are limited. Relevant data in the files of the California Department of Fish and Game (DFG) at Rancho Cordova, California, are limited to a summary of two snorkel counts conducted in pools and one electrofishing sampling of a riffle completed on October 26 and 27, 1976. These sampling efforts found:

- Sacramento pikeminnow (formerly Sacramento squawfish) (*Ptychochelius grandis*),
- Sacramento sucker (*Catostomus occidentalis*),
- Rainbow trout (*Oncorhynchus mykiss*),
- Smallmouth bass (*Micropterus dolomieui*),
- Kokanee (landlocked sockeye salmon) (*Oncorhynchus nerka*), and
- Unidentified sculpins (*Cottus* spp.).

Fewer than 20 individuals of each species were observed or captured, except for the kokanee. An estimated 200-400 kokanee were observed as they were either spawning or part of a spawning aggregation moving upstream from Folsom Lake. The other species captured or observed ranged from young-of-the-year to adults. No largemouth bass

(*Micropterus salmoides)* or carp (*Cyprinus carpio)* were observed. Since these surveys were completed, landlocked chinook salmon (*Oncorhynchus tshawytscha*) have been stocked into Folsom Lake and there are anecdotal reports that a spawning run moves into this reach of the river (Lehr pers. comm.). Brown (*Salmo trutta)* and rainbow trout in this reach are most likely recruits from upstream areas and tributary streams.

In the late 1970s, visual fish counts with mask and snorkel resulted in estimates of the trout population of the river between Chili Bar and Coloma at 5 pounds per acre, and downstream of Coloma at 0.7 pound per acre. For comparison, note that the South Fork above Kyburz has a trout population of approximately 40 pounds per acre. Since water management operations have not appreciably changed in the intervening period, there is little reason to expect much of a change in the magnitude of the differences between upstream locations and within the project area.

Because habitat quality and naturally reproducing populations of trout are so low in this section of river, DFG provides approximately 4,800 catchable rainbow trout per year for stocking into this reach of the river. Fish are stocked at Marshall Gold Discovery State Historic Park and Henningsen Lotus Park. Fish stocking begins early in the year and ceases when water temperatures exceed 70^{o}F. By midsummer, trout must locate cool pockets of spring inflow or perish. No creel census information was present in the files examined, but the summer water temperature profile and timing of fish stocking suggest that there is little interaction between whitewater boaters and the local fish populations. Because of existing water operations that cause rapid fluctuations in water levels, water temperature changes caused by decreasing flows, and naturally occurring water temperature increases, the South Fork within the project area becomes marginal trout habitat as summer progresses.

3 RMP Goals and Objectives

The RMP embodies the County's intent to manage and support whitewater recreation while protecting the natural and social resources of the South Fork of the American River. Past and current river management goals and objectives form the guiding principles of these management actions, as described below.

3.1 RMP Objectives

Table 4-1 lists these project objectives and provides a reference to the primary RMP elements that serve as the implementation strategies for the achievement of each objective. Detailed descriptions of the requirements of each element are provided in Chapter 5 of this RMP.

Table 3-1

RMP Update Objectives and Respondent RMP Elements

RMP Update Objectives	Respondent RMP Elements
Objective 1: To promote on-going community and user participation in river management.	Element 2 – Safety Programs Element 5 – Agency and Community Coordination Programs
Objective 2: To provide adequate facilities and suitable services to support river-related activities, where there is a documented need to support such activities; protect the natural, cultural and human resource values of the river; and preserve the quality of life in the area and experience.	Element 1 – Educational Programs Element 4 – Monitoring and Reporting Programs Element 6 – Permits and Requirements Element 8 – Regulations and Ordinances Element 9 – Facilities and Lands Management
Objective 3: To preserve and enhance the unique range of experiences and historic character of the river.	Element 1 – Educational Programs Element 4 – Monitoring and Reporting Programs Element 6 – Permits and Requirements Element 8 – Regulations and Ordinances Element 9 – Facilities and Lands Management
Objective 4: To employ equity as a guiding principle when defining rights, responsibilities and obligations of ALL river users.	Element 5 – Agency and Community Coordination Programs Element 8 – Regulations and Ordinances
Objective 5: To achieve a balance between County- wide economic benefits, costs and impacts associated with river recreation. (Requires more detailed economic information to identify the costs and impact versus economic benefits associated with river recreation.)	Element 9 – Facilities and Lands Management Element 10 – Funding
Objective 6: To preserve and protect environmental and cultural resources.	Element 1 – Educational Programs Element 4 – Monitoring and Reporting Programs Element 6 – Permits and Requirements Element 8 – Regulations and Ordinances
Objective 7: To enhance educational	Element 1 – Educational Programs

Table 3-1

RMP Update Objectives and Respondent RMP Elements

RMP Update Objectives	Respondent RMP Elements
programs on river safety and etiquette, respect for private and public lands, natural and historical resources, and river rules and regulations.	
Objective 8: To establish the County's primary role in facilitating coordinated river management, in cooperation with the Bureau of Land Management and other resource agencies and groups.	Element 5 – Agency and Community Coordination Programs
Objective 9: To enhance safety through education, enforcement, facilities, and coordinated rescue response.	Element 1 – Educational Programs Element 2 – Safety Programs Element 5 – Agency and Community Coordination Programs
Objective 10: To promote adequate law and (rational) code enforcement to protect public health, safety, and welfare; property; and natural resources.	Element 4 – Monitoring and Reporting Programs Element 6 – Permits and Requirements Element 8 – Regulations and Ordinances

Sources:
RMI, 1996 and 1997.
ESP, 2001.

~~5~~4 South Fork Carrying Capacity

~~5~~4.1 Introduction

~~The recent RMP update process involved the consideration and adoption of numeric or performance limits to minimize or avoid health, safety, environmental, and social impacts. The planning process involved analysis and discussion by the Board, citizens, governmental agency representatives, and the consultant team. A general consensus indicated that such limits, generally known as "carrying capacity" should be included in the County's RMP.~~

The following discussion summarizes the RMP carrying capacity process, the intent of the adopted carrying capacity measures, and the resulting management actions thresholds and actions that are embodied in RMP elements presented in Chapter 6.

~~Carrying Capacity Development Process~~

~~Carrying capacity management strategies were employed as the prototypical river management tools in the 1984 RMP. The County's commercial outfitter allocation system was developed as a metering mechanism that was designed to the results of river user and river resident surveys and professional judgement (El Dorado County. 1984). This RMP provides additional carrying capacity tools that respond to concerns about the potential impacts of increases in river use.~~

~~The concept of carrying capacity was re-introduced in RMP workshops conducted in January 1996 (RMI, 1996) and was explored throughout the RMP update process (ESP, 2000). Two of the 15 project alternatives considered by the County in the 1998 Draft EIR (RMI, 1998) included carrying capacity provisions for river management.~~

~~In response to the Board's selection of the RMAC Alternative as the Proposed Project for the Draft EIR, concerned citizens formed an ad hoc committee focused on the development of carrying capacity elements that could be added to the County's project alternative. This self-selected committee, called the Carrying Capacity Working Group (CCWG), convened in 1998. The CCWG developed a series of use-level thresholds, points of data collection, and threshold-related management strategies and standards.~~

~~The Board reviewed the recommendations of the CCWG in June 1998. The Board ultimately directed staff and consultants to develop a multi-factor carrying capacity and management program that would be included in this RMP (ESP, 2000). The Board's stated intent focused on defining actions that reduce impacts associated with potential increases in river use levels.~~

~~As a result of this Board direction, an evaluation of carrying capacity options was prepared in April 2000 and finalized in July 2000 (ESP, 2000). These draft and final "White Paper" reports~~5.2 ~~provided the public and EIR consultant with recommendations on river use performance standards and management actions that respond to increases in the intensity and duration of river use.~~

~~Navigant Consulting, Inc. evaluated these documents and incorporated many of the recommendations as impact mitigation measures within the Revised Draft and Final EIR.~~

~~During the development of this RMP, it was determined that the implementation of certain mitigation measures contained in the EIR would be best achieved through their incorporation into the RMP as specific plan elements. This incorporation was accomplished through integrating specific mitigation measures into the various plan elements found in~~

~~Chapter 6 of the RMP. Note, however, that all of the mitigation measures identified in the EIR are included in the Mitigation Monitoring Plan (see Appendix B). Opportunities for public review and comment concerning the incorporation of various mitigation measures into the RMP as plan elements were provided through the post-EIR RMP development process described in Section 1.3.~~

Definition

The following definition of carrying capacity is used as the operative concept of this plan.

Carrying Capacity: A prescribed number and type of people (demand) that an area will accommodate (supply), given the desired biophysical/cultural resources, visitor experiences, and management program.

Where:

- "A prescribed number" acknowledges the reasoned decision by a person of authority rather than some absolute or formula-based decision;
- "Type of people" is inclusive beyond recreation use and considers all human uses and values for an area, and must also clearly and comprehensively define what people are demanding (i.e., activities, settings, and experiences);
- "Demand" recognizes the importance of consumer preference in public resource decisions;
- "That an area will accommodate" implies that only a portion of the demand will be provided for, and also implies that use of public resources is a privilege and not a right;
- "Supply" recognizes that agencies produce or provide services, products, and values to the public;
- "Given" acknowledges the existence of conditions and/or constraints by which public demand will be supplied in a given area; and
- "Biophysical/cultural resources, visitor experiences, and management program" recognizes the need to be comprehensive, integrative, concurrent, and holistic in decision making (Haas, 1999).

~~54~~.~~2~~~~3~~ Carrying Capacity Management Actions Overview

The framework of carrying-capacity management actions contained in this RMP consists of a process that includes the identification and monitoring of objective and measurable performance standards, and specific response mechanisms to be implemented in the event that performance standards are not met. ~~A number of mitigation measures and elements contained within this RMP are based upon the recommendations contained within the Carrying Capacity White Paper (ESP, 2000), and respond to various indicators of carrying capacity exceedance associated with environmental, safety, and social considerations.~~

~~Environmental carrying capacity indicators are embodied in RMP Mitigation Measures 6-2 (water quality monitoring), 8-2 (c) and 8-2(d) (riparian habitat monitoring) and RMP Element 4.~~

~~Two carrying capacity mitigation measures identified in the Final EIR (Navigant, 2000), Mitigation Measures 13-2 and 16-5, are embodied in RMP elements to respond to~~

~~potential safety impacts (related to boat density in rapids) and cumulative effects (related to daily total numbers of boaters).~~

~~Specifically,~~ Element 4.1 of this RMP describes the County's monitoring requirements associated with determining boat densities and daily boater totals to identify density and river use carrying capacity threshold exceedance. Element 6 provides definitions and requirements associated with commercial and non-commercial use, ~~including institutional, large group and private boater registration requirements~~,[1] as well as insurance and reporting requirements for commercial outfitters and institutional groups, as required pursuant to the mitigation measure identified above (unlike the 1988 RMP, this RMP addresses the potential contributions of non-commercial large groups to boater density and numbers). Finally, Element 7 contains specific management actions to be implemented by the County in the event that the carrying capacity thresholds are exceeded.

~~Upon adoption of the RMP, various management actions will be implemented that include increased data collection and increased efforts to educate river users by providing information concerning safety, environmental protection, sanitation, and river corridor land owner sensitivities.~~ Management actions contained in Element 7 invoke increasingly rigorous levels of management actions that will be implemented in the event of observed exceedances of thresholds associated with boat densities and total daily numbers of boaters. This "tiered" approach will, in the event of threshold exceedance, initially result in the implementation of management actions and river user requirements that focus on providing incentives and disincentives through methods such as increased commercial outfitter river use fees and new river use fees for institutional groups. In the event that such actions are implemented and threshold exceedance is repeated, more rigorous management actions will be implemented, including trip time scheduling and/or a reduction in commercial outfitter allocations and the development of an allocation system for institutional groups. Finally, in the event that all available management actions to reduce cumulative impacts to less-than-significant levels are implemented and total boater thresholds are still met or exceeded, the County will institute a permit system for all river users. As with all management actions, the project's goals of equitability will be a primary consideration during the development of such a permit system.

Following two successive years during which daily boater total threshold levels are not exceeded, the County may consider the elimination of some or all of the management actions developed pursuant to the previous exceedance occurrence.

---

1 This analysis suggests that the County consider either invoking new Institutional Group management methods, as identified by the RMAC (Proposal *Draft Institutional Permit Update to the River Management Plan*, El Dorado County River Management Advisory Committee, March 2013), or transition Institutional Groups into the Commercial Outfitter management protocols (see RMP Section 6.2).

INTRODUCTION

This chapter provides the County's actions associated with management of the South Fork of the American River below Chili Bar Dam. In addition to the County's responsibilities, the chapter discusses requirements placed on commercial outfitters operating on the South Fork, and use permit requirements for landowners and managers, as well as private and other groups of boaters who utilize the river. Due to the County's ongoing management of the South Fork, many of the management actions and requirements contained herein are currently being implemented or are in place.

This chapter has been divided into the following 11 general element classifications; each general classification is subdivided into specific elements:

- Element 1 – Educational Programs
- Element 2 – Safety Programs
- Element 3 – Transportation Programs
- Element 4 – Monitoring and Reporting Programs
- Element 5 – Agency and Community Coordination Programs
- Element 6 – Permits and Requirements
- Element 7 – Carrying Capacity Exceedance Actions and Implementation
- Element 8 – Regulations and Ordinances
- Element 9 – Facilities and Lands Management
- Element 10 – Funding
- Element 11 – River Data Availability

Appendix E provides a summary of the plan elements contained herein.

ELEMENT 1 - EDUCATIONAL PROGRAMS

Educational programs contained within this RMP serve to provide information to river users and landowners with a goal of improved safety and social conditions through increased knowledge of various aspects of river use, requirements, and rights. Educational programs serve as the primary tool for management efforts directed towards private boaters. Such efforts include information dissemination (including information provided in association with private boater registration tags, as described in Element 6) and County staff presence at put-in locations.

1.1 The County will ~~continue to publish a Quarterly Newsletter to~~ provide landowners, ~~/~~residents and visitors with the following information.

1.1.1 A~~n annual~~ summary of landowner rights and boater rights and limitations, and a discussion of trespass issues in a unified manner, including a graphic illustration of the typical boundary between public riparian and river use zones and trespass zones.

~~1.1.1~~1.1.2 A map of public and private lands throughout the river corridor.

Formatted: Not Expanded by / Condensed by

~~1.1.2~~1.1.3 A directory of services and contact numbers to report emergencies, problems and annoyances

~~1.1.3 Opportunities to participate in RMAC meetings.~~

1.1.4 A calendar of river-related activities.

1.2 Signs will be developed under the supervision of the County Parks Division~~Department of General Services in collaboration with the RMAC, El Dorado County Sheriff's Department (Sheriff's Department), the River Safety Committee (RSC), the Marshall Gold Discovery State Historic Park (SHP), and the American River Conservancy. The design guidelines for these signs will be utilized in all river-related signage. The cost of design guidelines, sign text, manufacture, placement, and maintenance will be funded by River Management Trust Funds.~~

~~1.2.1 A limited amount of on-river signage will be added to the river corridor to support management activities and goals. A unified signage system, designed in an unobtrusive yet effective manner, will identify legal put-ins and takeouts, resting areas (i.e., public land boundaries), toilets, and Quiet Zone entrance and exit. Interpretive site signs will be used to reference cultural and natural resources. Signs also will be placed at sites where wading and swimming are determined to be unsafe and in areas where children or land-based river users could be pulled into swift water.~~

~~1.2.2 Roadway and on-river signage will be increased to direct recreationists to parking, access, and toilet/changing facilities; and to indicate private property boundaries and warn trespassers of prosecution.~~

~~1.2.3 Middle Run Signage~~

~~1.2.3.1 The County will increase signage specifically directed toward Middle Run boaters with warnings about the dangers of rafting with improper equipment, skills, and knowledge of rescue techniques and river flows.~~

~~1.2.3.2 In the event that Special Use Permit (SUP) modification near Highway Rapid results in private boater put-in and takeout access at this location, the County will install signage at Middle Run put-ins and upriver from Highway Rapid, informing boaters of the location of the Highway Rapid takeout and warning unprepared boaters of the dangers of continuing beyond Highway Rapid.~~

~~1.2.3.3 The County will increase and continue to provide on-river signage at the start, end, and within the Quiet Zone, as a reminder to rafters when they are within the Quiet Zone.~~

1.3 Standardized informational kiosks, using the sign design guidelines developed above, will be placed (existing kiosks will be replaced or modified, as necessary) at County facilities, Chili Bar, Henningsen–Lotus Park, Camp Lotus, Marshall Gold Discovery State Historic Park, Greenwood Creek (in association with the BLM) and Salmon Falls/Skunk Hollow (in association with the California Department of Parks and Recreation). Each kiosk will provide safety and orientation materials, emergency response available at these sites, and a comment box.

~~1.3.1 Kiosks will be designed and constructed by the County Department of General Services.~~

~~1.3.2~~

~~1.3.3 Kiosks will use the design guidelines developed for river signage, including standardized color palate and materials.~~

~~1.3.4 The cost of kiosk design, manufacture, placement, and maintenance will be funded by River Management Trust Funds.~~

1.4 The County Parks Division~~Department of General Services~~ will use the RMP website to publicize the Dreamflows website (http://www.dreamflows.com/) to provide river flow conditions and projections. ~~continue to facilitate a "flow phone" telephone system. This system will be publicized and accessible both within and outside the 530 area code, and will provide current flow information throughout the boating season. The County Department of General Services may coordinate with private enterprise or other government agencies to provide this service. This program will use a voice message system to provide information on river flows and timing; recent recreational use levels; estimates of high and low use periods; parking, camping, and shuttle options; and other river-related information~~.

1.5 ~~The County Department of General Services will continue to expand its use of the Internet to disseminate and receive information on river management activities via the County's RMP web site (http://co.el-dorado.ca.us/generalservices/parks/). In addition to the information described in Elements 1.1 through 1.4, the County web site will provide information on river flows and use patterns and levels, and will solicit comments and suggestions related to river management.~~

~~1.6 Using brochures, kiosks, and the Internet, the County will institute an educational program designed to provide river users and landowners/managers within the river corridor information regarding the value of plant, fish, and wildlife resources and the habitats on which they depend, and encourage protection of riparian vegetation.~~

~~1.7~~1.6 The County will continue~~increase~~ efforts to educate boaters (especially those putting in at Marshall Gold Discovery State Historic Park and at Henningsen-Lotus Park) of the requirements and sensitivities of the Quiet Zone. (See Element 6 for a discussion of Quiet Zone requirements.)

~~1.8~~1.7 As a part of the river education program, the County will continue to provide information on the location of trash disposal containers and toilets.

~~1.9~~1.8 The County will continue to provide mapping, available for printing or download from the RMP website, that provides information on the approved river put-in and takeout areas, campgrounds, and lunch stops.

~~1.10~~1.9 Commercial Guide Educational Programs

~~1.10.1~~1.9.1 The ~~Sheriff's Office and~~ River Manager, with the assistance of the Sheriff's Office, ~~County Parks~~ will continue to provide boating education, river etiquette, emergency procedures, and evacuation instruction for commercial outfitters and their guides. The Sheriff's Department, County Parks, and commercial outfitters will continue to offer boating safety instruction, boating emergency procedures, first-aid, and evacuation and emergency communications education to other interested boaters.

~~1.10.2~~

~~1.10.2.1 River guides serve as the managers of commercial clients on the South Fork of the American River. It is important that all guides understand the importance of river safety, etiquette, and sensitivity to residents and local~~

merchants. Toward these ends, a day-long, pre-season guide orientation workshop will be held each year.

~~1.10.2.1.1~~1.9.1.1.1 This workshop will be coordinated by the County Parks Division~~Department of General Services~~ with the participation of representatives of the ~~Sheriff's Department, the~~ State Department of Parks and Recreation, ~~the El Dorado County Fire Protection District, the RSC~~, and the BLM. ~~RMAC will be represented by a Coloma-area resident and a local merchant.~~ Participation of local residents will also be encouraged to facilitate mutual respect and understanding.

~~1.10.2.1.2 The American River Conservancy will be asked to provide a natural history orientation and a schedule of naturalist training available during the guiding season. The focus of this session will be communication between guides and local residents to develop mutual respect and a sense of community.~~

~~1.10.3~~ In addition to required safety talks at all commercial put-ins, guides will be provided with a standardized script to brief clients on El Dorado County river etiquette guidelines. This talk will focus on behavior in and around the Quiet Zone, water fights, and the use of vulgar or abusive language. ~~The RSC will be involved in producing the etiquette standards.~~

Formatted: Space Before: 0.25 pt

1.9.2

~~1.11 The County, in coordination with Marshall Gold Discovery SHP and American River Conservancy representatives, will lead cultural resources and natural resources workshops at Henningsen-Lotus Park and on river. These sessions will be open to the public and focus on interpretation of historical river use (including the evolution of recreational boating) and the natural environment of the South Fork.~~

Formatted: Body Text, Justified, Indent: Left: 0.47", Right: 0.1", Outline numbered + Level: 3 + Numbering Style: 1, 2, 3, … + Start at: 1 + Alignment: Left + Aligned at: 0.49" + Indent at: 0.99", Tab stops: 0.97", Left

ELEMENT 2 - SAFETY PROGRAMS

Safety is the primary goal of many of the elements contained throughout this RMP. ~~This Safety Programs element is comprised of River Safety Committee coordination protocols and County staff responsibilities associated with monitoring safety programs and boater activities.~~ The County Sheriff's ~~Department~~ Boating Safety Unit~~, funded annually through the California Department of Boating and Waterways,~~ maintains the lead role in ~~coordinating safety training, incident reporting and~~ law enforcement functions. ~~Coordination among the Sheriff's Department, the River Safety Committee, the El Dorado County Fire Protection District and County Parks is necessary to fulfill the safety related elements of this RMP.~~

~~2.1 River Safety Committee (RSC)~~

~~2.1.1 The RSC will be coordinated by, and provided training under the direction of, the Sheriff's Department. The RSC will be formed to coordinate and standardize El Dorado County safety instruction and rescue coordination. The RSC will coordinate volunteers and provide safety training to the rafting community.~~

~~2.1.2 Participation will be solicited from the County Department of General Services, the El Dorado County Fire Protection District, California State Parks and Recreation Department (California State Parks) personnel, BLM personnel, riverside residents, and interested professional and expert boaters. This group will prepare and update recommended safety curricula, and develop educational opportunities and competitions at the River Rodeo and training sessions.~~

~~2.1.3 The RSC will form a volunteer River Search and Rescue Team, consisting of government agency personnel and qualified local paddlers. This team will define chain-of-command, mobilization, equipment management, and record-keeping as coordinated by the Sergeant of the Boat Patrol. Emergency operations protocols will be developed by the RSC and coordinated and approved by the Sheriff's Department and California Office of Emergency Services.~~

~~2.2 Agency Safety and Rescue Training~~

~~Agencies currently cooperating with El Dorado County river management activities have varying degrees of river safety and swiftwater rescue capabilities. To unify, upgrade, and update safety and rescue activities, representatives of the RSC, under the direction of the Sheriff's Department, will be authorized to conduct training sessions for agency personnel.~~

~~2.2.1 Annual agency safety and rescue training sessions will consist of basic paddling skills, safety protocols instruction and rescue techniques, and emergency response protocols.~~

~~2.2.2 RSC instructors will be paid a reasonable fee for execution of training activities using the River Trust Fund or other available funds.~~

~~2.3~~2.1 ~~The Sheriff's Department, County Parks, and commercial outfitters will continue to offer boating safety instruction, boating emergency procedures, first aid, and evacuation and emergency communications education.~~

~~2.4~~2.1 County Parks Staff Activities

~~2.4.1~~2.1.1 County Parks will maintain a presence at the Chili Bar and Henningsen-Lotus Park put-ins, or other locations as determined necessary. County Parks will use seasonal river recreation aides ~~and volunteers from the RSC~~ to assist with County Parks' efforts at these put-ins.

~~2.4.2 During weekend days, on-river staff will provide patrol and respond to safety, trespass, and noise issues. Boat counts and coordination with the Sheriff related to trespass and illegal parking incidents will be conducted by on-shore staff.~~

~~2.4.3~~2.1.2 County Parks will provide staff at Middle-Run put-ins and at the Highway Rapid takeout to provide safety equipment checks and to inform rafters of the hazards of the lower reach.

~~2.4.4 County Parks will coordinate with the RSC on safety-oriented programs, such as swiftwater rescue courses for the public.~~

~~2.5 The Sheriff's Department will remain the lead agency for river emergency response.~~

~~2.5.1 The Sheriff's Department will continue its river regulation and law enforcement functions, and coordinate with the El Dorado County Fire Protection District and RSC in all river rescue planning and response functions.~~

~~Sheriff's Department efforts will focus on riverside enforcement activities during weekends, with weekday periods devoted to the investigation and prosecution of pirate boaters.~~

~~2.5.2~~

~~2.6 The El Dorado County Fire Protection District will continue to coordinate with the Sheriff's Department for river rescue planning and response functions.~~

~~2.7~~2.2 The County will use boater density carrying-capacity thresholds and additional management actions as described in Element 7 to address safety issues associated with high boater density and use levels.

ELEMENT 3 - TRANSPORTATION PROGRAMS

This Transportation Programs element requires that the County conduct traffic studies and adhere to performance standards when undertaking actions that could have an effect on traffic patterns, requires that the County continue to encourage and seek opportunities for the development of one or more boater shuttles, and specifies methods to avert illegal parking. The County strongly supports, and the State Department of Parks and Recreation currently requires, the use of buses and vans by commercial outfitters to reduce traffic volumes and parking demand.

~~3.1 The County will encourage the private sector to implement a river shuttle service. The County will assist in the implementation of this shuttle service or, if the private sector is unable to do so, the County may investigate operating this shuttle service.~~

~~3.2 The County will seek to obtain a central meeting location and parking area that enables and encourages boaters to organize shuttles on their own as a method to reduce traffic on local roads as well as provide a needed service.~~

~~3.2.1 Two large areas on the north end of Coloma located just off Highway 49, on either side of the highway, shall be given special consideration. These areas are centrally located for vehicles coming from the Bay Area that use Highway 50, drive through Shingle Springs, and arrive in Coloma via Lotus Road. If the areas could be used, by permission, lease, or otherwise, they would offer ideal staging areas.~~

~~3.2.2 If developed, signs stating the specific use of the parking areas and the best times to convene people for shuttles will be posted.~~

~~3.2.3 The parking areas will be closed overnight to prevent misuse of the facility.~~

~~3.2.4 When and if the location becomes the recognized meeting place, the County may consider providing bus transportation to and from the river access locations.~~

~~3.3 The County will undertake the following actions to respond to illegal parking:~~

~~3.3.1 Illegal parking areas identified by citizen and merchant complaints will be designated as double fine zones.~~

~~3.3.2 Double fine zone designations will be displayed by signage to notify motorists of the County's commitment to parking control.~~

~~3.3.3 The Sheriff's Department will be encouraged to authorize the towing of illegally parked cars.~~

~~3.3.4 Established no parking zones along Bayne Road, Little Road, and Salmon Falls Road will continue to be enforced.~~

~~3.4 Commercial outfitters may not use Mt. Murphy Bridge for commercial boating activities transport.~~

~~3.5 The County will conduct detailed traffic studies and adhere to performance standards as necessary to comply with measures 9-1 and 9-4 identified in the Mitigation Monitoring Plan (see Appendix B).~~

ELEMENT 4 - MONITORING AND REPORTING PROGRAMS

This Monitoring and Report Programs element identifies methods and protocols for the County to collect information regarding river use, community satisfaction, water quality, and other environmental conditions within the river corridor.

4.1 Carrying Capacity Monitoring - To determine use levels and boat densities in order to identify carrying-capacity threshold exceedance associated with Element 7, County Parks will perform boater and boat counts at Troublemaker, Barking Dog and Satan's Cesspool rapids. The County will request proposals for the use of remote sensing technology to monitor river use to reduce monitoring costs and increase the accuracy and objectivity of boater and boat counts.

~~4.2 Incident Reporting/Cooperating Agency Reports - The Sheriff's Department and County Department of General Services staff will continue to develop incident and accident, regulation violation, and safety report summaries. The County will compile the information in an annual report, and present findings to the RMAC. These reports also will include incident information made available by California State Parks, the BLM, and other cooperating agencies. These annual reports will be compiled on a computer data base and summarized in the Department's post-season report. The geographic locations of incidents and accidents will be recorded for inclusion in the County's Geographic Information System (GIS).~~

~~4.3~~4.2 Public Comments/Complaints

~~4.3.1~~4.2.1 Standardized complaint forms will be made available to ~~L~~landowners, residents, and river users on the County's website~~will be provided with standardized comment/complaint forms~~. ~~These forms will be distributed in annual landowner/resident informational mailings and made available at river area kiosks. The forms will include checklists for comment/complaint type, occurrence date and time, location, and descriptions of follow-up action(s).~~

4.3.2 The County Department of General Services will continue to operate a telephone line and voicemail system dedicated to receiving comments and complaints related to river management issues. Reported traffic and trespass issues will be forwarded to the Sheriff's Department for action. The County Department of General Services is tasked with coordinating responses to calls and ensuring responses to all messages left on the dedicated answering machine.

4.3.3 Public comments/complaints will be distributed by the County Department of General Services to the County Planning Department (Planning Department) and Sheriff's Department. This information also will be tabulated in the County Parks' data base, spatially recorded in the County GIS, and reported in the post-season report.

4.4 The County GIS will be used to catalogue the spatial location of river use data, including incident/accident reports and public complaints/comments, and to assess management trends and management needs.

4.5 The County Department of General Services will continue to compile a summary of river use patterns and totals, incident reports, revenue stream, and County river management expenditures for staff presentation in an annual report at a post-season RMAC meeting.

4.6 Water Quality Sampling and Analysis

4.6.1 The County Departments of Environmental Management and Environmental Health will coordinate with the County Department of General Services and the Central Valley Regional Water Quality Control Board (RWQCB) to define a unified water quality analysis program that apportions a percentage of cost sharing to each entity.

4.6.2 Special focus on near-river vehicle parking, erosion and sedimentation, malfunctioning septic systems, abandoned mines, and untreated human waste will be used to define the program protocols.

4.6.3 Monitoring shall include the following:

4.6.3.1 Sampling runoff from unpaved parking areas, such as Chili Bar, during initial-season rainstorms and peak-season afternoons for petroleum contamination according to Basin Plan requirements.

4.6.3.2 Sampling human fecal coliform (as a key indicator of water quality impacts and management action needs) routinely, including during peak-season weekend days.

4.6.4 In the event that water quality monitoring indicates an exceedance of any water quality standard defined by the *Water Quality Control Plan for the Central Valley Region* (Basin Plan), the County will:

4.6.4.1 Report exceedance(s) of standards to County Departments of Planning, Environmental Management, and Environmental Health and the Central Valley RWQCB for possible enforcement action.

4.6.4.2 Investigate and report the relationship between exceedance of standards and river-related SUP permitted activities.

4.7 The County will continue to require that all river-related land uses have the proper zoning and SUPs for proposed or existing uses. Annual and complaint-based inspections of lands subject to SUPs will be conducted as specified in Element 6.5.

4.8 Noise Monitoring - The County will develop and implement a system for conducting noise monitoring and reporting for noise-sensitive areas near project area campgrounds and at other sensitive locations along the river, with focus on areas within the Quiet Zone.

4.8.1 Observed or reported violations of Quiet Zone regulations or County noise standards will be reported to the County Code Enforcement Officer or the Sheriff's Department, as appropriate, within 2 working days of the occurrence.

4.8.2 More than two noise exceedance citations per year issued to SUP holders may result in a formal hearing considering the noise exceedances and the possible imposition of fines and other disciplinary measures on violators.

4.8.3 More than two noise exceedance citations in two consecutive years may result in a formal recommendation for limitation or revocation of an SUP to the County Code Enforcement Officer and Planning Director.

4.9 Recreation Impact Monitoring - County Parks will coordinate with California State Department of Parks and Recreation and BLM staff to identify the occurrence of conflicts between non-whitewater recreation, historic interpretation, mining, and uses administered by the RMP. County Parks' staff also will survey Henningsen-Lotus Park users about intended recreational uses and the possible limitation of recreational opportunities resulting from whitewater recreation use.

4.9.1 If recreation conflict/impact surveys identify potentially significant impacts on non-whitewater recreation, historic interpretation, or mining uses, the County will (1) develop a mitigation plan and/or modify facilities or management strategies, and (2) present the mitigation plan to the RMAC and the Planning Commission for RMP modification and/or other action as determined appropriate. Such actions may include allocation of parking and river access for non-whitewater uses.

4.9.1.1 Impact analysis of any proposed management actions will require completion of a CEQA Initial Study checklist and additional CEQA analyses if required.

4.9.1.2 A focused recreation conflict/impact survey in addition to standard RMP monitoring and canvassing will continue following the implementation of mitigating actions, to assess their effectiveness and sufficiency.

4.10 The County will hire sufficient seasonal summer staff to enforce and investigate river use characteristics, land use, and other management actions.

4.11 The County will record river use data compiled during normal RMP operations in the County GIS.

ELEMENT 5 - AGENCY AND COMMUNITY COORDINATION PROGRAMS

This Agency and Community Coordination Programs element defines protocols for sharing of information and recommendations through pre- and post-season annual meetings, coordination of community involvement activities including meeting participation and volunteer opportunities, and coordination with federal and state agencies concerning river management issues. ~~The River Management Advisory Committee serves an important role in many of these functions. The RMAC advises the Planning Commission and Board on RMP amendments, Special Use Permit applications, and use of the River Trust Fund. Monthly public meetings are held as a community forum. RMAC membership, role, and conduct are established by Resolution 120-2001.~~

~~5.1 Pre- and Post-Season RMAC Meetings - Each November, the RMAC will hold a post-season meeting to summarize the year's river management character. This meeting will be publicized by notices distributed to river area residents and merchants, in addition to the usual RMAC mailing list. The meeting will feature a summary report by County staff and opportunities for residents, outfitters, private boaters, merchants, and all other interested persons to discuss river operations. County staff will be tasked with the review of the minutes of this session to identify issues requiring special attention in the coming recreation season. The minutes of this session will be presented to the Planning Commission by the RMAC Chairperson.~~

~~5.1.1 In response to the input received at the post-season RMAC meeting, County staff will present the results of review of input, coordination with representatives of collaborating County departments, and other agencies. Proposed modifications to river management protocols will be announced and discussed by the RMAC and the public. Updated river management protocols will be implemented with the advice of the RMAC, the County Department of General Services, and other river management agencies.~~

~~5.1.2 Representatives of the El Dorado County Water Agency and/or El Dorado Irrigation District (EID), the Sacramento Municipal Utility District (SMUD), and Pacific Gas and Electric Company (PG&E) will be requested to present a forecast for river flow and typical system operations. This information will be used to anticipate the character of river management needs, and the need to track low water issues such as congestion of the Gorge area on mid-July and early-August Saturdays.~~

~~5.2 The County Department of General Services will coordinate with utilities (i.e., PG&E, SMUD, and EID) to ensure their participation in a pre-season outfitter meeting to receive flow information and outlooks. The goal of this element is to improve communication with utilities.~~

~~5.3 The County will identify opportunities for individuals and organizations to provide service to the river environment. In addition to river cleanups, tree planting, and river safety training, events will be coordinated and conducted by the County to use the efforts of the interested volunteers.~~

~~5.4 The River Festival has provided an important opportunity to coordinate with the river community. The County will use this opportunity to provide river safety and management~~

~~information to festival participants. The festival will be subject to standard Temporary Use Permit (TUP) provisions, as required by the Planning Department.~~

~~5.5~~5.1 Any CEQA evaluation of a proposed RMP modification will be noticed and considered in accordance with CEQA.

~~5.6 Litter Control~~

~~5.6.1 County efforts to collect river trash will be expanded to a monthly program. County staff and seasonal aides will work with river organizations and interested individuals to conduct frequent clean-ups throughout the summer season.~~

~~5.6.2 In addition to the cleanup efforts described above, litter control will be improved by using volunteers and members of non-profit organizations. Monitoring of gear storage and other litter prevention activities at put-ins and enforcement of existing litter laws will be continued.~~

~~5.7~~5.2 Agency Coordination

~~5.7.1 The County will pursue coordination with California State Parks and BLM recreation staff to identify the occurrence of conflicts between non-whitewater recreation, historic interpretation, mining, and uses administered by the RMP.~~

~~5.7.2 The County will request annual reports from California State Parks and the BLM to identify specific riparian habitat and/or general environmental quality impacts (i.e., acceptable levels of change) occurring at their facilities or management areas.~~

~~5.7.3~~5.2.1 The County Department of General Services currently enjoys a high level of coordination and cooperation with other County Departments, as well as with state and federal agencies. As the lead river management agency, the Department will enter into memoranda of understanding with any agencies with jurisdiction over the river (e.g., the California State Parks and the BLM) to delineate physical and functional areas of responsibility and coordination. These memoranda of understanding will include data-sharing and collection protocols, coordination of on-river patrols, and emergency management procedures.

~~5.7.4 The County will encourage the BLM to retain new holdings near Greenwood Creek as wilderness for the near future.~~

ELEMENT 6 - PERMITS AND REQUIREMENTS

This Permits and Requirements element specifies requirements associated with commercial outfitter activities (note that commercial outfitter application regulations are specified in the El Dorado County Stream and River Rafting Ordinance included in Appendix C), non-commercial boating (with distinction between ~~Institutional,~~ Large Group, and private boater requirements), and both Temporary and Special Use Permit requirements. Special Use Permit monitoring and reporting activities are also included.

~~The County began regulation of commercial outfitting on the South Fork in 1981 with the adoption of the Stream and River Rafting Ordinance Chapter 5.48. Outfitters that could submit documentation to the County providing evidence of their operating commercial trips on the South Fork in 1980 and prior years were given the opportunity to apply for River Use Permits beginning in 1981.~~

A River Use Permit is required for any person, outfitter, organization, club, school or institution that sponsors or organizes river use activity on the South Fork of the American River that falls within under the definition of commercial use. The recreation programs of schools, universities and colleges must comply with the requirement for a River Use Permit if the program meets the commercial definition.

~~The 1984 River Management Plan contained a policy declaring that no new River Use Permits would be issued, thus closing the opportunity to apply for a permit based on 1980 documentation. The County's decision to limit the number of permits was made on the basis of the existing number of outfitters with a wide variety of use patterns, accommodations, and services available. Additional outfitters would be duplicating those services and create additional impacts to the cultural and physical features in the river corridor. There are currently sixty-seven River Use Permits in existence, and outfitters are allowed to hold more than one River Use Permit (see Appendix D).~~

The County may consider the approval of a new River Use Permit application by an outfitter who offers a truly new and unique service. The service should not duplicate the services of an existing outfitter.

~~The 1984 River Management Plan contained an outfitter allocation system that was revised in 1987. The revision was based on a reallocation formula that focused on reducing the amount of commercial river use on peak weekends. As a result of the 1987 revision, the total number of weekend user days in the allocation system was reduced to 2,750 per weekend day; the total season allocation provision contained in the 1984 RMP was removed; individual outfitter's allocations were revised based upon the historic use of his/her permit. Weekday allocations were not adjusted, thereby continuing a 1984 RMP policy of allowing growth in the amount of midweek commercial river use. The reallocation system was subsequently adopted into the 1988 RMP through Resolution No. 99-88.~~

6.1 User and Group Definitions

6.1.1 Commercial Outfitters are defined as operations that meet any one or more of the following five criteria: :

6.1.1.1 Where fees, charges, and other compensation are collected in excess of the actual costs of the river trips or where the fees are typically paid to one member or organization that does not share equally in the costs among the trip members.

6.1.1.2 Where fees and charges are collected for financial gain for salaries or benefit for any of the group, its leaders, or sponsors.

6.1.1.3 Where other compensation is received, such as capital increases in equipment or facilities used for the trip.

6.1.1.4 Where guides, managers, drivers, and any other employees are paid by salary, wages, or any other form of compensation.

6.1.1.5 Where advertising and promotion of river trips are made.

~~6.1.2 An Institutional Group is defined as a non-commercial group participating in a river trip operated as a program of a non-profit organization that meets IRS tax-exempt requirements, or a non-commercial group participating in a river trip through an accredited academic program as part of the educational curriculum of a school, college, or university. An Institutional Group must also meet the following criteria:~~

~~6.1.2.1 Fees or charges are collected only to recover the actual costs of the trip.~~

~~6.1.2.2 All expenses are shared equally by all group members.~~

~~6.1.2.3 No member of the group obtains financial gain, including salaries, or otherwise benefits by increased assets.~~

~~6.1.2.4 No paid employees such as guides, lead guides and drivers are compensated by salary, wages, or equipment, with the exception that educational leaders for accredited educational programs may be paid or compensated.~~

~~6.1.3~~6.1.2 Large Groups are defined as non-commercial and non-institutional group of four or more boats having three or more occupants, or a total of 18 or more people.

~~6.1.4~~6.1.3 Private Boaters are defined as an individual boater who is self-~~-~~funded or on a shared cost trip, and is not participating in a commercial or institutional river trip. A group of private boaters meeting the size criteria in Element 6.1.3 is considered a large group, and is subject to the large group requirements specified in Element 6.3.7.

6.2 Commercial Outfitter Requirements

6.2.1 Annual Commercial River Use Permits - The Stream and River Rafting Ordinance Chapter 5.48 governs River Use Permit application procedures and standards. The ordinance requires any entity conducting commercial trips on the South Fork to obtain a River Use Permit and requires that such entity meet and follow applicable insurance requirements; provides authority to the Planning Commission to approve River Use Permits for a three-year term; establishes standards for a River Use Permit application, termed the "river use plan"; and establishes a procedure to appeal the decision of the Planning Commission to the County Board of Supervisors.

6.2.1.1 The term for a River Use Permit issued to an existing, permitted commercial outfitter shall be three years with an annual update of said permit. The provisional term for a permit issued to an outfitter who has been operating for less than one year on the South Fork shall be one year. Transfer of a River Use Permit from an existing outfitter to an outfitter who is not currently operating on the South Fork shall cause the term of the transferred permit to change, if necessary, so it expires as of the next March 31st. Permits shall be issued by April 1st of each year.

6.2.1.2 The granting of a River Use Permit will not establish any vested rights to an extension or renewal beyond the permit period.

6.2.1.3 River Use Permit Allocations

6.2.1.3.1 The County's River Use Permit system contains an allocation system that regulates the number of user days available to each outfitter. The basic purpose of the allocation system is to protect the environmental quality of the river corridor and to prevent the river's environmental quality, public services, roads and social values from being overburdened or damaged from excessive use.

6.2.1.3.2 Current River Use Permit holders and capacities are presented in Appendix D.

6.2.1.3.3 The total weekday, weekend and guest allocations will not be increased above the capacities provided in Appendix D, and may be reduced per future management actions as identified in Element 7.

6.2.1.3.4 The current allocation system includes a separate weekend day allocation and weekday allocation for each permit. On weekend days, the total number of user days available to an outfitter each weekend day is specified by their permit's weekend day allocation. Outfitters may utilize their weekend day allocation on any weekend day throughout the permit term.

6.2.1.3.4.1 The maximum number of weekday user days available is up to two times the permit's weekday allocation. However, a commercial outfitter's combined weekday user day levels during any one week may not exceed five times the weekday allocation.

~~6.2.1.3.4.2 In addition to the user day allocation, outfitters are allowed guests on trips. A specific guest allowance of 8 percent has been established (Resolution No. 99-88). The total number of guests shall not exceed 8 percent, rounded to the nearest whole number, of an outfitter's allocation. The guest allowance on a weekend day is 8 percent of the weekend day allocation. The guest allowance on a weekday is 8 percent of the weekday allocation.~~

~~6.2.1.3.4.3~~6.2.1.3.4.2 Outfitters are allowed one guide per boat that is not counted towards the permit's user day allocation. Extra guides or assistant boatmen are also permitted. The use of extra guides is limited, and extra guides cannot be used if the outfitter's river use is at the permit's allocation capacity. If an outfitter exceeds permit capacity through the use of extra guides, a Class I violation for exceeding capacity shall apply. An exception to the extra guide limitation will be granted to 1) outfitters primarily serving "special needs"

passengers, and 2) whitewater kayak instruction. Approval of this exception must be specified in an outfitter's River Use Permit.

6.2.1.3.5 Outfitters with a weekend day allocation of less than 30 user days may "flex" their allocation. The intent of the flex is to allow the smaller outfitters to run somewhat larger and more profitable trips during the peak summer season. These outfitters must stay within their season-long weekend day allocation, defined as 30 (the number of weekend days between Memorial Day and Labor Day) times their base allocation. Current flex allocations are specified in Appendix D.

6.2.1.3.6 User days cannot be transferred, loaned, or borrowed. User days, as assigned to each outfitter, are not a commodity or an element of their permit that can be traded or purchased or sold among different outfitters. The capacity assigned under each permit is assigned strictly to the permit holder named on the River Use Permit.

6.2.1.4 River Use Permit Transfers - Where a commercial outfitter wishes to transfer a River Use Permit, the following guidelines and procedures shall be used.

6.2.1.4.1 For any proposed transfer of a River Use Permit, a written application must be submitted to the Planning Commission for its review and approval prior to a transfer being consummated. Said application letter is to be submitted through County Parks. The following guidelines are to be used to facilitate the application for transfer.

6.2.1.4.1.1 The buyer and seller negotiate and settle privately on the selling price of that commercial outfitter's business and inventory, excluding the South Fork River Use Permit. The River Use Permit shall have no value assigned to it in the transaction.

6.2.1.4.1.2 The seller and buyer submit a Letter of Intent stating that the seller wishes to sell his business and transfer the River Use Permit to the buyer. The letter shall include the River Use Permit numbers and names of outfitters involved. This Letter shall be delivered to County Parks. With the Letter of Intent, when requested by the County, the buyer and seller shall include an inventory of equipment and other assets that shall be transferred along with the permit.

6.2.1.4.1.3 County Parks shall review the proposed transfer and forward a staff recommendation along with conditions to the Planning Commission. A transfer fee, set by the Board of Supervisors, will be paid to the County by the new permit holder.

6.2.1.4.1.4 Permit holders with outstanding violations may not be allowed to transfer a permit until the violations are resolved.

Comment [SP1]: The County should either modify the RMP to create a marketplace for the temporary transfer of user days between outfitters or enforce current prohibition on these practices. The practice of the River Manager allowing this clear violation of the existing RMP management framework undermines its implementation.

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Comment [SP2]: VS note: get language from Noah

Formatted: Highlight

Formatted: Highlight

Comment [SP3]: Noah to insert new language

Formatted: Highlight

6.2.1.4.1.5 An existing outfitter's business may be sold to an individual who does not currently hold a River Use Permit or to another permit holder.

6.2.1.4.2 Transfer of a Portion of a River Use Permit - In some instances where an outfitter would like to sell a portion, but not all of his business, or an existing partnership is proposed to be dissolved, the Planning Commission may consider the transfer of a portion of that River Use Permit. The guidelines outlined in the preceding Elements shall apply as well as the following.

6.2.1.4.2.1 The transfer of a portion of a River Use Permit can only be authorized between two commercial outfitters that each hold a valid County River Use Permit.

6.2.1.4.2.2 The transfer of a portion of a River Use Permit must specifically state what portion of the weekday and weekend capacity is to be transferred.

6.2.1.4.2.3 The business sale must include a share of equipment or other physical assets proportioned to the portion of the River Use Permit that is to be transferred between the two outfitters.

6.2.1.4.2.4 Two outfitters may form a partnership and merge their individual permits. The Planning Commission must approve mergers, and transfer fees shall apply. Partnerships or merged permits may be dissolved through approval of the Planning Commission. Transfer fees shall apply for applications to dissolve merged permits.

6.2.1.4.2.5 The permittees' past history of river use, violations, complaints, and other operating characteristics will be carefully considered prior to approving any transfer of permit capacity. In general, the County wishes to allow partial transfers only to those outfitters who have exhibited the highest level of expertise and commercial management and have operated without violations or infractions.

6.2.1.4.3 Consolidation of River Use Permits – The County strongly desires that outfitters who hold more than one County River Use Permit combine those Permits into a single Permit. This will greatly simplify the County's accounting procedures. In some situations, it is a business advantage to an outfitter to hold more than one Permit. The County will not, in general, require that multiple permits be combined unless problems with reporting, accounting, exceeding permit capacity, and other problems occur. Multiple permits may be required to be combined in the following instances.

6.2.1.4.3.1 When there is a history of reporting and accounting problems by either the County or the outfitter.

6.2.1.4.3.2 When the capacity limits as described in the permit(s) are exceeded.

6.2.1.4.3.3 When a transfer of a permit is proposed.

6.2.1.4.3.4 When the outfitter does not properly mark equipment and boats with the company name (if there is more than one company name on each permit and each permit is accounted for separately and distinctly.)

6.2.1.4.3.5 If the company names on the permits are the same, the overall multiple permit capacity shall be the sum total of the individual permits' weekend day and weekday allocations.

6.2.1.4.4 River Use Permits, Inactive Status - A commercial outfitter who does not wish to operate in any year may request that the River Use Permit be placed in an inactive status. The following requirements apply to inactive River Use Permits.

6.2.1.4.4.1 River Use Permits cannot remain in an inactive status more than one year;

6.2.1.4.4.2 A permit maintenance fee, set by resolution of the Board of Supervisors, is required for inactive River Use Permits;

6.2.1.4.4.3 A letter requesting that the River Use Permit be placed in an inactive status must be submitted to County Parks prior to May 1st.

6.2.1.4.4.4 The "normal" requirements for River Use Permits (insurance, Operating Plans, fees, etc.) are not required for inactive permits.

6.2.1.4.4.5 A River Use Permit in an inactive status has no use capacity allocation assigned to it; the inactive designation merely reserves that use/capacity potential until the permit is activated.

6.2.1.4.4.6 An inactive River Use Permit in no way allows commercial river use.

6.2.2 Maximum Group Size

6.2.2.1 With the exception of Element 6.2.2.2, the number of boats in each group on the South Fork will be limited to 7 and will not exceed 56 people (passengers, guests, guides) per group. If more than one group is traveling together, sufficient distance between groups should be maintained so that, if needed, other individual boats may fit in.

6.2.2.2 All kayak and canoe groups will be limited to a maximum of 12 boats in any group while on the river.

6.2.3 Quiet Zone – The Quiet Zone in the Coloma-Lotus area is designated as follows:

6.2.3.1 The Quiet Zone begins at Indian Creek above Coloma, and ends at Greenwood Creek below Rivers Bend.

6.2.3.2 All commercial outfitters are required to counsel their passengers to refrain from loud noises, screaming, and yelling in the Quiet Zone, with the exception of the immediate vicinity of Troublemaker Rapid.

6.2.3.3 A Class I violation in the Quiet Zone may be issued for any non-emergency yelling or screaming by passengers that is not being actively discouraged by the guide, except for normal noise associated with downriver travel in rapids.

6.2.3.4 All commercial outfitters will be required to observe the Quiet Zone. ~~Both the Sheriff's River Patrol and County Parks staff will enforce the Quiet Zone.~~

6.2.4 To protect public health and safety and to respect the rights and reasonable expectations of adjoining landowners, no commercial outfitter will organize a commercial river trip with the intent to be on the South Fork after sunset.

6.2.5 All commercial boats used on the South Fork of the American River shall be identified by name or logo.

6.2.5.1 All inflatable and hard-shell craft operated by commercial outfitters shall be subject to identification requirements.

6.2.5.2 The required boat identification standard is letters at least 6 inches high that can be easily read from either bank of the river at its widest point. Where boat space is limited, letter size may be reduced, provided the name or logo must be readable from either bank of the river at its widest point.

6.2.5.3 Identification requirements also apply to boats that are borrowed from another outfitter. In such instances, the boat(s) borrowed will be marked and identified with the name or logo only of the company under whose permit it is operating. Identification will be to the same standard as specified above.

6.2.5.4 The identification of other items used by outfitters, such as jackets and paddles, is also strongly recommended. This will assist not only in lost and found situations but also when County staff are on the river taking commercial and non-commercial user day counts.

6.2.5.4.1 Adequate identification of all commercial boats used on the South Fork of the American River will be enforced by ~~both~~ the ~~Sheriff's Patrol and~~ County Parks Division.

6.2.6 County Operating Reports and Fees

6.2.6.1 To enforce the permit allocation system and to track a commercial outfitter's operational characteristics, the County requires that each outfitter provide the County an Operating Report for every month in which operations are conducted. The County's Geographic Information System will serve as the clearinghouse for this accounting.

6.2.6.1.1 Operating Reports are mandatory for the months of April through September whether or not there are operations. If no river use was conducted for a specific month, outfitters are to submit a report marked, "No River Use This Month."

6.2.6.1.2 All Operating Reports must be submitted electronically ~~postmarked (if mailed) or received by the County Parks office~~ no later than the 15th day of the month following the month of operations.

6.2.6.1.3 Where user day fees are ~~mailed or~~ received after the deadlines stipulated above, a late penalty charge will be added to the amount due. The current late penalty amount is provided in Appendix D. The late penalty charge cannot be appealed.

6.2.6.1.4 It is a Class I violation to fail to ~~postmark or~~ deliver an Operating Report for any month of operation by the required deadline. Each 30 days thereafter the Operating Report is not received constitutes an additional Class I violation.

6.2.6.2 The following information is to be contained on each Operating Report:

1. Name of outfitter;
2. River Use Permit number month of report;
3. Designate day of each river trip, put-in, lunch camping, and takeout areas;
4. List numbers of passengers and non-paying guests for each trip, number of crafts used.

6.2.6.3 Commercial Fees Required

6.2.6.3.1 Application Fees – There shall be a fee associated with each full permit application. These fees or other fees will be sufficient to reimburse the County for administrative staffing and materials costs. Current permit application fees are provided in Appendix D.

6.2.6.3.2 River Management Fees – Each commercial outfitter is required to submit a surcharge per passenger per user day, for each commercial passenger and guest that is transported on the river. The river use fees will be submitted electronically each month, along with the

monthly Operating

Reports. The current River Management Fee, as adopted by Board Resolution, is provided in Appendix D.

6.2.6.3.2.1 The County will assess the amount of the River Management Fee surcharge based on the cost of administration of management activities associated with the management of commercial outfitters. The surcharge will be adequate to generate sufficient revenue to pay for County administrative costs associated with commercial outfitters as well as administrative costs associated with activities that have shared or incidental benefits to private boaters. (See also, Element 10, Funding.)

6.2.7 Commercial Guide Requirements

6.2.7.1 Trip leaders for commercial river outfitters will be required to provide the County Parks Division~~Department of General Services~~ with copies of current American Whitewater Affiliation-approved Swiftwater Rescue Certification. All guides will be required to review and sign a statement agreeing to comply with County River Safety and Etiquette standards.

6.2.7.2 El Dorado County will work with the commercial outfitters, landowners, and Federal, State, and County staff to develop river guide operational standards, knowledge, and skill levels. If problems caused by an obvious disregard or lack of knowledge are observed, these guidelines will be adopted as mandatory requirements by the County for all commercial outfitters, area managers, and guides.

Recommended knowledge and skills include:

a. Emergency procedures, access, and evacuation;

b. Boat wrap/flip emergency procedures;

c. Communications;

d. Location of approved rest areas, lunch stops, camping, put-in and take-out areas;

e. Governmental agencies, involvement and jurisdiction;

f. Boating skills (guide for a minimum of 3 Class III trips, various flow levels, boating type);

g. Standard first aid and C.P.R. All commercial guides shall be certified in standard first aid and C.P.R. Records of certification shall be maintained by the employer and shall be available for inspection by the County.

~~Sheriff is to provide an annual report of violations and citations to the Community Development Director.~~

As a condition placed on the issuance of each outfitter's River Use Permit, guides are required to be fully knowledgeable and competent for items a., b., f., and g.

6.2.8 Commercial operators will be required to carry a repair kit and a first-aid kit for each group or trip.

6.2.9 Insurance, Business License, and Water Notice Requirements

6.2.9.1 Each commercial outfitter shall have and maintain in force, bodily injury and liability insurance.

6.2.9.1.1 Each insurance certificate must name the County of El Dorado, its officers and employees and the riparian owners along the South Fork of the American River as additional insureds, and comply with standard insurance requirements prescribed by the County Department of Risk Management.

6.2.9.1.2 The amounts and scope of required insurance coverages will be periodically reviewed by the County Department of Risk Management, and may be amended by resolution of the Board. Current minimum insurance requirements are provided in Appendix D.

6.2.9.2 Each commercial outfitter is required by County ordinance and State and Federal law to have a valid El Dorado County Business License that must be renewed each year, and meet the requirements of Federal and State labor laws.

6.2.9.3 Water Notice – El Dorado County requires that each commercial outfitter provide a water flow notice to their passengers who book trips on the South Fork.

6.2.9.3.1 The water notice shall read as follows: "Water flows in the South Fork American River result from releases from hydroelectric facilities located upstream. Such water releases are not subject to the control of El Dorado County or commercial rafting companies operating under Permits from the County of El Dorado."

6.2.9.3.2 Outfitters shall determine the most appropriate means to notify their passengers; however, El Dorado County requires proof of this notice in the form of a brochure, booking confirmation notice, or other document.

6.2.10 Violations, Penalties, and Appeals

Commercial Outfitter violations are classified as Class I or Class II violations which result in varying degrees of penalty severity as prescribed below.

6.2.10.1 Violation Terminology

6.2.10.1.1 Class I violations include:

1. Violations of Quiet Zone requirements
2. Violations of the maximum group size limit
3. Operating after sunset
4. Violations of the boat marking requirements
5. Violations of the Operating Report submission requirements.
6. Violations of the land use requirements pursuant to the County Stream and River Boating Ordinance Section 5.48.060, including any unauthorized, non-emergency use of land along the river.
7. Exceeding approved permit capacities. (NOTE: In addition to the normal penalty fine for this violation, an additional penalty fee per passenger per user day may be assessed. The current additional penalty fee is provided in Appendix D.)

6.2.10.1.2 Class II violations include:

1. Improper sale, loaning, borrowing, or transfer of user days.
2. Violations of consolidation, transfer, and adjustment requirements for River Use Permits
3. Violations of insurance requirements

6.2.10.2 A violation notice will be sent to the River Use Permit holder by certified mail, return receipt requested, within 14 days of the County's observation of the violation.

6.2.10.3 Penalty Schedule

6.2.10.3.1 For Class I Violations occurring in any single calendar year, the penalty schedule is provided in Appendix D.

6.2.10.3.2 Should a commercial outfitter receive four violations in any one Class I category or six in any combination of Class I categories, a recommendation of suspension of the River Use Permit up to 10 consecutive days between Memorial Day and Labor Day may be submitted for hearing before the Hearing Officer, whose decision may be appealed to the Board of Supervisors.

6.2.10.4 Class I Violation Appeal Procedures – Class I Violations, if appealed, will follow the procedure below.

6.2.10.4.1 Within 10 days of receiving a violation notice, a commercial outfitter may submit a written appeal request to County Parks.

6.2.10.4.2 County Parks will then submit said appeal with a recommendation to the County Parks Hearing Officer.

6.2.10.4.3 The County will notify the outfitter in writing of the date, time, and place at least 10 days in advance of the hearing.

6.2.10.4.4 The Hearing Office may sustain, reverse, or modify the violation notice. The decision on the appeal of the Hearing Officer will be final.

6.2.10.5 For Class II violations, following due notice and hearing, the Hearing Officer may suspend or revoke the River Use Permit.

6.2.10.5.1 The County will notify the outfitter in writing of the date, time, and place of hearing at least 10 days in advance of the hearing.

6.2.10.6 Class II Violation Appeal Procedures - Any decision of the Hearing Officer may be appealed directly to the Board. Appeals must be made in writing and submitted to the Board Office. A fee is charged for each appeal.

6.2.10.6.1 There will be a stay on an appeal of the Hearing Officer decision to the Board.

6.2.10.6.2 Following submittal of the appeal application, the Board will schedule a hearing on the appeal, normally within 4 weeks. The Board may sustain, reverse, modify, or remand the Hearing Officer's decision.

6.2.10.7 Status of River Use Permits which are Denied or Revoked

6.2.10.7.1 Any River Use Permit which has been denied or revoked in any year may be reapplied for in the following year. This reapplication provision shall only be available the calendar year after the year the denial or revocation of the permit has occurred. The River Use Permit may only be approved if the conditions of denial or revocation have been resolved.

6.2.10.7.2 Where a River Use Permit has been revoked or denied and not reapplied for, the capacity of that permit shall revert to the County. ~~With recommendation of the RMAC, the capacity allocation may, upon action of the Board of Supervisors, be dissolved or be assigned to any existing outfitter, combination of outfitters, or proposed new outfitter who successfully bids for the opportunity to utilize the permit capacity.~~

6.2.11 All commercial outfitters are required to follow current food storage, food preparation, sanitation, and human waste guidelines established by the Environmental Management Department. Environmental Health Permits shall be obtained as required. Current sanitary guidelines are provided in Appendix C.

6.2.12 Falsification of any documentation will result in a mandatory hearing before the Hearing Officer, who may issue a warning, or suspend or revoke a River Use Permit.

6.3 Non-Commercial Boater Requirements

6.3.1 The County has designated the South Fork of the American River as a special use area as allowed by the State Harbor and Navigation Code Section 660. The specific purpose of designating a special use area along the South Fork is to require that non-commercial boaters who float the river are aware of basic whitewater boating safety and pollution control information. The designation of a river special use area is intended to be analogous to those special use areas now in existence where certain types of boater restrictions apply and basic boating knowledge is necessary to prevent conflicts from occurring and to provide for the boater's safety.

6.3.1.1 Within this special use area, the County requires that at least one person or group leader for each boat have in their possession while on the river, a signed and dated registration certificate/information tag that includes safety information, locations of public and private lands, information concerning what to do in an emergency, basic sanitation rules and other necessary information. The tag is required to be renewed each season. Such tags will be made available through County Parks at certain public put-in locations.

6.3.1.2 This element applies to all non-commercial groups/boaters, including Institutional Groups, Large Groups, and private boaters, and is intended to ensure that at least one person in each boating group is knowledgeable of boating safety, sanitary and other information as specified.

6.3.2 All river users will have one Coast Guard-approved life jacket for each passenger and guide. It is required ~~strongly recommended~~ that these life jackets be worn at all times while on the river. The Sheriff~~'s Department~~ will continue to enforce applicable state laws and County ordinances regarding life jackets.

6.3.3 Waste Requirements

6.3.3.1 All river users are directed to remove all their waste and refuse from the river corridor and dispose of it in a proper location.

6.3.3.2 Litter containers are required for all boats with more than two people on board.

6.3.4 Maximum Group Size

6.3.4.1 With the exception of Element 6.3.4.2, below, the number of boats in each group on the South Fork will be limited to 7 and will not exceed 56 people (passengers, guests, guides) per group. If more than one group is traveling together, sufficient distance between groups should be maintained so that, if needed, other individual boats may fit in.

6.3.4.2 All kayak and canoe groups will be limited to a maximum of 12 boats in any group while on the river.

6.3.5 All river users will respect the sensitivities of the Quiet Zone (as defined in Element 6.2.3), will make efforts to limit noise while within the Quiet Zone, and will comply with applicable County ordinances.

~~6.3.6 Institutional Group Requirements~~

~~6.3.6.1 Institutional groups are subject to the requirements of Elements 6.3.1, 6.3.2, 6.3.3, 6.3.4 and 6.3.5, above.~~

~~6.3.6.2 Institutional groups are subject to pre-season annual registration with County Parks.~~

~~6.3.6.3 Liability insurance and proof of such insurance will be required upon registration. Insurance requirements will be the same as those identified for commercial outfitters in Element 6.2.9.1.~~

~~6.3.6.4 A trip leader will be designated and will provide proof of guide certification on rescue training, first aid, and knowledge of County regulations.~~

~~6.3.6.5 Institutional groups will provide post-season annual reporting of river use, by date.~~

~~6.3.6.6 Institutional groups will be provided information on boat dispersion techniques and river etiquette from the County upon registration.~~

~~6.3.7~~6.3.6 Large Group Requirements

~~6.3.7.1~~6.3.6.1 Large Groups are subject to the requirements of Elements 6.3.1, 6.3.2, 6.3.3,
6.3.4 and 6.3.5, above.

~~6.3.7.2~~6.3.6.2 Large Groups are subject to pre-trip registration with County Parks.

~~6.3.7.3~~6.3.6.3 Large Groups will be provided information on boat dispersion techniques and river etiquette from the County upon registration.

~~6.3.8~~6.3.7 Private Boater Requirements

~~6.3.8.1~~6.3.7.1 Private boaters are subject to the requirements of Elements 6.3.1, 6.3.2, 6.3.3,
6.3.4 and 6.3.5, above. Note: A group of private boaters meeting the size criteria in Element 6.1.3 is considered a large group, and is subject to the large group requirements specified in Element 6.3.7.

~~6.4 Temporary Use Permit (TUP) Requirements~~

~~6.4.1~~6.3.8 ~~The Planning Department will require TUPs for all river-related events, including those on~~

~~public property and sponsored by a County agency. The Planning~~

~~Department's review and approval will be conducted in coordination with the Sheriff's Department, Department of Environmental Health, and Department of Transportation.~~

~~6.4.2 TUPs will focus on river-related activities in a manner consistent with current Planning Department procedures.~~

~~6.5~~6.4 Special Use Permit Issuance, Guidelines, and Inspections

~~6.5.1 To increase the knowledge base of RMAC consideration of SUP applications and modifications, Planning Department and County Department of General Services staff will work with the RMAC to prepare a set of SUP review guidelines for RMAC and Planning Commission adoption.~~

~~6.5.1.1 These protocols will define a standard process for RMAC consideration of new or modified SUP applications, including a checklist of environmental and RMP consistency items, standards the RMAC will use for review of SUPs, and a discussion of the RMAC's role in the County's Technical Advisory Committee and Planning Commission processes.~~

~~6.5.1.2 Planning Department staff will present all such SUP applications within the River corridor to the RMAC and be available to answer technical questions, as appropriate.~~

~~6.5.1.3 RMAC members will be encouraged to conduct site visits (with the approval of applicants) to review the site characteristics of each SUP application.~~

~~6.5.2 All new or reissued SUPs will include landscape, signage, drainage, and erosion control plans.~~

~~6.5.2.1 The use of turf, native grasses and native plant materials for biotechnical slope protection and ornamental purposes will be emphasized to stabilize areas within the river floodplain.~~

~~6.5.2.2 The installation, health, and vigor of planting plans will be evaluated as a normal SUP monitoring function.~~

~~6.5.2.3 Appropriate levels of signage related to restrooms, stopping locations, and takeout points will be provided.~~

~~6.5.2.4 Development of parking lot drainage collection and filter systems for new SUPs and SUP revisions with parking areas within the 100-year floodplain will be required.~~

~~6.5.2.5 SUPs currently in place will be made subject to the above requirements at such time as they may apply for permit revisions.~~

6.5.3 The County will annually inspect for compliance with SUP conditions on all privately owned lands within the project area subject to SUPs. Inspections based on complaints also will be conducted.

6.5.3.1 Observed violations, including written records and photographs, will be provided to the County Code Enforcement Officer for enforcement actions as deemed appropriate by the Enforcement Officer.

6.5.3.2 Upon observation of violations of two or more permit conditions in successive years, a formal recommendation for revocation of the SUP will be provided to the County Code Enforcement Officer and the Planning Director.

6.5.3.3 In the event that annual or complaint-based SUP monitoring identifies evidence of erosion or unpermitted grading in SUP and other areas, the County will take the following actions:

6.5.3.3.1 Photograph erosion/grading areas and transmit with a written report to County Environmental Management and Planning Departments for possible enforcement action.

6.5.3.3.2 Conduct water quality sampling in the river downstream of the subject site and report results to County Environmental Management.

6.5.3.3.3 In the event that photographic monitoring or other monitoring and reporting indicate a loss of riparian resources suspected to be attributable to the whitewater boating-related activities, the County will:

6.5.3.3.3.1 Report the potential impact to the California Department of Fish and Game.

6.5.3.3.3.2 Coordinate biological monitoring program protocol development with California State Parks and BLM recreation staff.

6.5.3.3.3.3 Conduct focused monitoring of the impact site in conjunction with the following season's monitoring.

6.5.3.3.3.4 Identify ownership of the subject property and report the impact to the County Planning Department if the impact occurs in an SUP area.

6.5.3.3.3.5 Provide signage (or coordinate signage with California State Parks and BLM recreation staff) and other management disincentives to minimize human use of affected areas.

6.5.3.3.3.6 Coordinate and assist with funding, when feasible, for focused habitat restoration project(s) with willing landowners, California State Parks, and/or BLM recreation staff, as appropriate.

~~6.5.3.4 The Planning Department will prepare an annual summary of River Area SUP inspections. This report will be presented by the County River Manager at the post-season RMAC meeting, and to the El Dorado County Planning Commission (Planning Commission) in the event that modifications are recommended.~~

ELEMENT 7 - CARRYING CAPACITY EXCEEDANCE ACTIONS AND IMPLEMENTATION

This element defines the protocols to be used by the County in the event that river use levels (based on total daily boater use and density) exceed specified carrying capacity thresholds. Management actions specified herein implement increasingly rigorous methods for reducing use and density to the levels determined necessary for boater safety, and protection of environmental resources and social conditions within the South Fork corridor.

7.1 The County will use river use periodic river use~~level~~ counts ~~conducted as required in Element 4.1 of this RMP~~ to determine exceedance of carrying-capacity thresholds associated with density and/or total daily river use as discussed below. In the event that thresholds are exceeded, the County will implement management actions as specified in this element.

7.2 The County will conduct CEQA or other legal analysis as required prior to implementation of the management actions presented in this element. It is expected that further refinement and definition of the actions to be taken may occur during any required CEQA compliance activities, and the County will encourage public and agency input during any such refinement process. As a component of CEQA or other analysis, potential adverse effects associated with potential changes in use patterns will be considered.

7.3 In the event that boat counts exceed a "density threshold" (as defined in Appendix D), the County will implement management actions to address density and associated safety issues on the South Fork as specified in this element. In the event that one or more density exceedance occurs during a day with low-flow releases from Chili Bar Dam (as defined in Appendix D), the County may exclude up to two low-flow release days from the count.

7.3.1 The following Level One management actions will be implemented in the year following observed exceedance of the density threshold identified above:

7.3.1.1 The County will increase the commercial river use fee surcharge for each weekend day passenger during the summer rafting season, between and including Memorial Day weekend and Labor Day weekend. Such fee increases shall be applied only to trips conducted on the segment(s) of the river on which the threshold exceedance occurred.

7.3.1.2 The County will institute a fee equal to that of the adjusted commercial surcharge fee as identified in Element 7.3.1.1 that will apply to each boater on the South Fork participating in an Institutional Group trip on weekend days during the summer rafting season. This fee shall be applied only to trips conducted on the segment(s) of the river on which the threshold exceedance

occurred. The fee shall be due to the County at the time of submittal of the post-season report.

~~7.3.1.3 County Parks will provide staff on weekend days during the summer rafting season who will meter all boaters at select rapids in an effort reduce staging backlog above the rapids and to increase safety for all river users.~~

~~7.3.1.4~~7.3.1.3 Following two successive years during which density threshold levels are not exceeded, the County may consider the elimination of some or all of the Level One management actions identified in this element.

7.3.2 The following Level Two management actions will be implemented in the year following observed exceedance of the density threshold that occurs during a year with management actions identified in Element 7.3.1 in place:

7.3.2.1 Level One management actions identified in Element 7.3.1 will remain in effect.

7.3.2.2 The County will institute trip time scheduling protocols for the segment(s) of the river on which the threshold exceedances occurred.

7.3.2.2.1 Trip time scheduling protocols will require commercial outfitters and institutional groups to register for specific departure time slots (each time slot will be a 30-minute period) and put-in locations no less than 2 days prior to a weekend day trip.

7.3.2.2.2 The County will facilitate this scheduling requirement by providing a secure, automated registration system, using the County's Internet site, an automated telephone system, or a combination of the two systems.

7.3.2.3 Following two successive years during which density threshold levels are not exceeded, the County may consider the elimination of some or all of the Level Two management actions identified in this element.

7.3.3 The following Level Three management actions will be implemented in the year following observed exceedance of the density threshold that occurs during a year with management actions identified in Element 7.3.1 and 7.3.2 in place:

7.3.3.1 Level One and Level Two management actions identified in Elements 7.3.1 and 7.3.2 will remain in effect.

7.3.3.2 The County will reduce commercial outfitter weekend day allocations.

7.3.3.3 The County will implement an institutional group allocation system.

7.3.3.3.1 Institutional group allocations will be equivalent to an amount less than the institutional group use level that occurred during the year of threshold exceedance.

7.3.3.4 Following two successive years during which density threshold levels are not exceeded, the County may consider the elimination of some or all of the Level Three management actions identified in this element.

7.4 In the event that data collected in a single year indicate exceedance of a "daily boater total" threshold (as defined in Appendix D), the County will implement management actions to reduce total daily boater use levels and allocate use to address potential environmental and other impacts associated with high levels of river use as specified in this element.

7.4.1 The following Level One management actions will be implemented in the year following observed exceedance of the daily boater total threshold identified above.

7.4.1.1 Commercial outfitter guest allocations will be eliminated from each commercial outfitter's total allocation. This action will result in a reduction of the total commercial outfitter allocations by 8 percent.

7.4.1.2 The County will increase the commercial river use fee surcharge for each weekend day passenger during the summer rafting season, between and including Memorial Day weekend and Labor Day weekend. Such fee increases shall be applied to trips conducted on the segment of the river for which the threshold exceedance occurred.

7.4.1.3 The County will institute a fee equal to that of the adjusted commercial surcharge fee as identified in Element 7.4.1.2 which will apply to each boater on the South Fork participating in an institutional group trip on weekend days during the summer rafting season. This fee shall be applied only to trips conducted on the segment of the river for which the threshold exceedance occurred. The fee shall be due to the County at the time of submittal of the post-season report.

7.4.1.4 Following two successive years during which daily boater total threshold levels are not exceeded, the County may consider the elimination of some or all of the Level One management actions identified in this element.

7.4.2 The following Level Two management actions will be implemented in the year following observed exceedance of the daily boater total threshold during a year with management actions identified in Element 7.4.1 in place:

7.4.2.1 Level One management actions identified in Element 7.4.1 will remain in effect.

7.4.2.2 The County will reduce commercial outfitter weekend day allocations, and will assign commercial allocations by river segment in an amount proportional to past use ratios of the upper and lower reaches by commercial outfitters to ensure that the reduction in use is distributed.

7.4.2.3 The County will implement an institutional group allocation system.

7.4.2.3.1 Institutional group allocations will be equivalent to an amount less than the institutional group use levels that occurred during the year of threshold exceedance.

7.4.2.4 Following two successive years during which daily boater total threshold levels are not exceeded, the County may consider the elimination of some or all of the Level Two management actions identified in this element.

7.4.3 The following Level Three management actions will be implemented in the year following observed exceedance of the boater daily total threshold that occurs during a year with management actions identified in Element 7.4.1 and 7.4.2 in place:

7.4.3.1 In the event that all available management actions to reduce cumulative impacts to less-than-significant levels are implemented and boater daily total thresholds are still met or exceeded, the County will institute a permit system for all river users. As with all management actions, the project's goals of equitability will be a primary consideration during the development of such a permit system.

7.4.3.2 Following two successive years during which daily boater total threshold levels are not exceeded, the County may consider the elimination of some or all of the Level Three management actions developed pursuant to this element.

ELEMENT 8 - REGULATIONS AND ORDINANCES

Appendix C includes copies of the primary County ordinances that are applicable to activities on the South Fork. Nothing in this RMP shall be interpreted to allow activities that are inconsistent with any County ordinance.

8.1 Pirate Boater Ordinance Enforcement

~~8.1.1 The County will pursue civil prosecution of pirate boaters under the Unfair or Fraudulent Business Practices (§17200) and False Advertising (§12500) codes. The use of civil, rather than criminal prosecution, allows the imposition of civil penalties of up to $2,500 per instance; and conviction requires the use of preponderance of evidence, rather than the "beyond a reasonable doubt" standard of criminal proceedings.~~

~~8.1.2 The County office initiating the civil action (e.g., the Sheriff's Department or County Department of General Services) and the District Attorney's office will divide equally the fines received from civil action against pirate boaters.~~

~~8.1.3 A portion of these fines will be used to continue the investigation and prosecution of pirate boaters.~~

8.2 The County will amend Quiet Zone regulations and enforcement mechanisms to enable the issuance of citations to private rafters violating Quiet Zone requirements.

Comment [SP4]: Revision of the existing Pirate Boater Ordinance should be coordinated by County Counsel, the District Attorney's office and the Sheriff's Department should be encouraged to identify a more effective strategy for addressing this issue.

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

~~8.3 To reduce the occurrence of trespass, the County will:~~

~~8.3.1 Increase prosecution of trespass violations.~~

~~8.3.2 Increase towing of vehicles parked in unauthorized areas.~~

~~8.3.3 Provide prompt response, towing, and substantial fines and/or prosecution when property owners report vehicles blocking access to driveways.~~

~~8.4~~8.3 Motorboats are prohibited by Ordinance Code Section 12.64.040.

ELEMENT 9 - FACILITIES AND LANDS MANAGEMENT

Continued maintenance and consideration of opportunities for additional river-related facilities is an important function of the County's river management activities. This element contains requirements for the County to continue such activities and to coordinate with landowners and agencies with jurisdiction within and adjacent to the river corridor to accomplish the County's facilities and lands management responsibilities.

9.1 ~~The County Department of General Services will obtain a memorandum of understanding with put-in owners in the Chili Bar area, allowing County staff (i.e., County Department of General Services and Sheriff's Department), the El Dorado County Fire Protection District, and RSC staff, formally recognized access to the put in site to implement the updated RMP~~.

9.2 The County Parks Division~~Department of General Services~~ will work with California State Parks, Folsom Lake Division, and adjacent landowners in order to identify opportunities to increase parking in the vicinity of Salmon Falls.

9.3 The County may continue to explore opportunities for land acquisition and/or development of river access facilities within the corridor, including areas near Marshall Gold Discovery State Historic Park.

9.4 The County will pursue identification of appropriate sites for the development of additional restroom facilities within the river corridor. The use of Phoenix composting toilets will be considered at such locations.

9.5 The County will work with the BLM to continue to maintain toilets on BLM sites.

~~9.6 The County may allow, on a willing permittee basis, SUP modifications to enable private boaters to use the Highway Rapid area for put-ins and takeouts. Any such modification to a SUP is subject to all SUP issuance and modification requirements specified in this RMP.~~

~~9.7~~9.6 Trails

~~9.7.1~~9.6.1 The County will maintain existing County-owned trails within the river corridor.

~~9.7.2~~9.6.2 The County Department of General Services will continue to coordinate with BLM, California State Parks, and other agencies to develop riverside trails on public lands. In

the event that private landowners express a willingness to allow public access, these opportunities will be considered as well. No trails will be developed near residences, except with the consent of landowners.

~~9.8 Prior to and during construction of new facilities or modifications to existing facilities, the County will adhere to Mitigation Measures 5-1, 6-1, 8-1, 10-1, 10-2, 11-1, 12-1, 15-2, and 16-3 as described in Appendix B, Mitigation Monitoring Plan.~~

~~9.9~~9.7 No net loss of riparian habitat (including wetlands) will occur as a result of development of RMP-related facilities.

Comment [SP5]: This section will be revised in response to the updated CEQA analysis.

ELEMENT 10 - FUNDING

Commercial River Use Permit application fees and river use fees serve to support the River Trust Fund, which is the source of funding for much of the County's river-related management activities. ~~Sheriff's Department river activities are funded through annual application to the California Department of Boating and Waterways.~~

10.1 The River Trust Fund, created in 1981, will continue to function as a savings account for the deposit of commercial River Use Permit application fees and user day fees. County Parks provides fiscal administration of the River Trust Fund.

10.2 The River Trust Fund will be used, as budgeted by the County, as the basic funding source for improvements in the river corridor, including education programs, land lease/purchase, mitigation monitoring and reporting, staffing, and other management activities as specified in this RMP.

10.3 The County will ensure that adequate funds are available or funding is secured prior to the implementation of the elements of this RMP that may require increased County expenditures or elements that could result in decreased revenue to levels below that necessary to conduct the management activities identified in this RMP.

ELEMENT 11 - RIVER DATA AVAILABILITY

Table 6-1 provides a summary of river data to be collected and the methods to be used for making this information available to boaters and landowners/residents pursuant to Elements 1, 2, 4, 5, 8, 9, and 10 of this RMP. Much of the information collected through monitoring and reporting programs will be input and stored within the County's GIS database. In addition, the County will make river requirements, flow condition, ~~RMAC meeting notices and minutes,~~ and other requirements available to the public on kiosks and on the internet within the County's RMP web site (http://co.el-dorado.ca.us/generalservices/parks/) in order to facilitate the rapid broadcasting of river operations and conditions.

Table 6-1
River Data Dissemination Methods

Information	As Specified in Element:	Landowner/ Resident Information Sheet	Riverside Kiosks	~~"Flow Phone"~~	County Internet Site	Signage	~~Sheriff's Dept. and County Parks Staff/RSC~~	Tri- Annua
Landowner rights	1,4,9	✓	✓		✓			
Boater's rights	1, 4, 9	✓	✓		✓			
Trespass	1, 4	✓	✓		✓	✓	✓	
River activity calendar	1	✓	✓		✓			
Safety and Orientation Materials	1, 2, 6		✓		✓	✓	✓	
River flow projections	1, 2, 6		✓	✓	✓			
Recent use levels	1, 2, 6			✓	✓			✓
Estimated High and Low Use Periods	1, 2, 6	✓		✓	✓			✓
Parking/shuttle options	1, 2, 3		✓	✓	✓	✓	✓	
General camping information	1		✓		✓		✓	
Wildlife and Habitat Protection	1, 4, 5	✓	✓		✓			
Quiet Zone requirements	1, 6		✓		✓		✓	
Quiet Zone locations	1, 6		✓		✓	✓	✓	
Double Fine zones	1, 3				✓	✓		
Middle run boundaries/ lower reach hazards	1, 2		✓	✓	✓	✓	✓	
Trash disposal container locations	1, 5		✓		✓	✓		
Approved river access/rest stop locations	1, 3, 4, 9		✓		✓	✓	✓	
Boating education	1, 2, 5, 6, 7						✓	
River etiquette	1, 2, 6		✓		✓		✓	
Emergency and Evacuation Procedures	1, 2, 5		✓		✓		✓	
Environmental Monitoring and Water Quality Information	1, 2, 4, 6	✓			✓			✓
Volunteer opportunities	1, 2, 5	✓	✓		✓			
Source: ESP, 2001.								

Comment [SP6]: No longer needed with the advent of the "Dream Flows" website.

~~7~~6 RMP Revision Process

The RMP is designed to serve as an active, evolving tool that implements the County's river management goals. The intent of this portion of the RMP is to provide ongoing refinement of the RMP to ensure public safety, environmental protection, and the most efficient use of County resources. RMP update procedures are defined to provide for plan refinements in response to:

- Results of annual operations monitoring, and
- Low water conditions.

The RMP revision processes described below also include a periodic review of the RMP to ensure that the adopted and implemented management actions and impact mitigation measures remain, in total, meaningful and responsive to current guidance provided by the Board.

6~~7~~.1 Annual Operations

After completion of the first rafting season following full implementation of the RMP, County Parks will present a summary of the year's river management activities and their relationship to the carrying capacity program to the County Parks and Recreation Commission (CPRC)~~RMAC~~ in a public session. The CPRC~~RMAC~~ will consider this report in public sessions to assess:

- The adequacy of the adopted carrying capacity measures,
- The appropriateness of the adopted measures, and
- The need for new or different carrying capacity measures.

If substantive issues or suggestions are identified in these sessions, the County River Manager will direct County staff to conduct a focused study of these subjects for consideration at the next annual (pre-season) CPRC~~RMAC~~ meeting. If no substantial plan revisions are proposed after this first year of RMP implementation, the next review of the RMP would occur three years from the date of the last RMP review.

~~7~~6.2 Three-Year ~~Annual~~ Report to the Parks and Recreation Committee~~RMAC~~

The three-year RMP update ~~annual report~~ process is the heart of the intent to refine and improve the County's ongoing management of the River. This three-year~~annual~~ cycle will provide the interested parties with current information and timely public involvement opportunities each season. The process described below and presented in Figure ~~7~~6-1 will be used to implement annual review processes.

The County River Manager, working with the County Geographic Information System (GIS) Manager, ~~-~~will compile data and observations from staff ~~and the River Safety~~ Committee for the past three completed boating season. River use data will be summarized in Nov~~Sept~~ember of each third year and posted on the County's web site. ~~These data also will be transmitted to the County's Geographic Information System (GIS) for recordation and facilities management purposes.~~

The County River Manager will meet with representatives of the BLM, California State Parks, and key County agencies including, but not limited to, the County Sheriff,

Community Development Agency and Health and human Services Agency ~~Department of Environmental Management, and Planning Department~~. This session (typically held in mid-winter~~October~~ of the third year) will focus on a review of the past seasons and a collaborative review of lessons learned and possible improvements in the management of the South Fork.

~~County Parks will present a summary of the year's river management activities (including specific reports on issue areas, as recommended by the RMAC) to the RMAC in a public session, typically held at the November RMAC meeting. This report will include recommendations formulated by County Parks, in consultation with California State Parks and BLM recreation staff, after their joint review of annual river data.~~

The public will be encouraged to propose increased County attention to management issues, conflicts, or problems by monitoring in the subsequent year or by temporary RMP modification.

~~If a majority of the RMAC believes that elements of the carrying capacity program should be modified, the proposed modifications will be considered in at least one subsequent RMAC public session. The RMAC will accept or reject the proposed modifications and provide recommendations to the County Planning Commission.~~

~~6~~7.2.1 Planning Commission Consideration of ~~RMAC~~ CPR~~RMAC~~ Recommendations

The County Planning Commission will conduct a public session for consideration of any CPRC~~RMAC~~ recommendations to modify the existing RMP. After the receipt of public comments and deliberation, the Planning Commission will reject or tentatively accept the CPRC~~RMAC~~ recommendation. If the CPR~~RMA~~C recommendation is accepted, a CEQA Initial Study will be conducted to identify and report the potential environmental impacts of the proposed program modification. The results of this analysis will be reported to the County Planning Commission in a public session. The Planning Commission will consider the results of the CEQA analysis and accept or reject the CPR~~RMA~~C recommendation to modify the RMP.

~~7~~6.2.2 Periodic Review

RMP tri-annual reports will be compiled by the County River Manager ~~each year~~. By January 30 of every sixt~~fift~~h year, these annual reports will be summarized by the County River Manager, and this summary will be submitted to ~~both~~ the ~~County General Services Director and the~~ County Community Development ~~Planning~~ Director. The Community Development Department ~~of General Services and the County Planning Department~~ will evaluate the adequacy of the RMP, as implemented, in consideration of conditions reported in the summary report. Such evaluation will consider the following:

- Responsiveness to County goals and polices,
- Completeness of impact mitigation measures, and
- Efficiency and economy of RMP implementation.

The County Community Development~~Planning~~ Director will present the findings of this review to the County Planning Commission, including recommendations to:

- Continue implementation of the RMP as currently prescribed,
- Continue implementation of the RMP with minor modifications, or
- Update the RMP.

In the event that the second finding is presented, the County Planning Commission will conduct a public session to consider any Community Development ~~Planning~~ Director's recommendations to modify the existing RMP. After the receipt of public comments and deliberation, the Planning Commission will reject or tentatively accept the Community Development ~~Planning~~ Director's recommendations. If these recommendations are accepted, a CEQA Initial Study will be conducted to identify and report the potential environmental impacts of the proposed program modification. The results of this analysis will be reported to the County Planning Commission in a public session. The Planning Commission will consider the results of the CEQA analysis and accept or reject these recommendations to modify the RMP.

In the event that the third finding is presented, the County Planning Commission will conduct a public session to consider any Planning Director's recommendation to update the RMP. After the receipt of public comments and deliberation, the Planning Commission will reject or tentatively accept the Community Development ~~Planning~~ Director's recommendation. If the Planning Commission accepts this recommendation, it will be transmitted to the Board for deliberation and action. The Board will consider the results of this process and determine the need to update the RMP.

6~~7.3 Low Water Conditions~~

~~The RMP recognizes that the reduction in river flow amounts and duration can cause greater boat density and significant reductions in safety, especially in whitewater rapids. The County will conduct the actions described below and depicted in Figure 7-2 to forecast and respond to low water seasons.~~

~~7.3.1 Low Water Season Designation~~

~~County river management staff will coordinate with DWR and SMUD to characterize each boating season in mid-May of each year. In the event that average daily weekend flows of at least 1,200 cfs for a 5-hour period (8:00 AM to 1:00 PM) are not projected for the period from June 1 to August 15 of the coming season, the County will declare the season a Low-Water Season. The County River Manager will present this designation as an informational item to the County Planning Commission at a June Planning Commission meeting. The Low Water Season is defined as the period between June and August 15 of a single season.~~

~~7.3.2 RMP Response to Low Water Season~~

~~In the event that the River Manager designates the coming season as a Low Water Season (based on the process identified above), the following actions will be initiated.~~

~~As soon as flow projections are available, or as the likely occurrence of low-flow releases becomes evident, the River Manager will present flow projections and the manager's conclusions on management needs for the coming season at an RMAC meeting. The River Manager will post the designation of a Low Water Season flow on the County's RMP web site, including information on flow timing and boat density projections. The River Manager will alert the County Sheriff's Department, California State Parks, and BLM representatives that low-water management practices will be required. Large groups registered in past seasons will be contacted in order to provide information on potential increases in overall boat density and potential use conflicts.~~

~~The County will coordinate with SMUD and other river management entities to project flow conditions and durations by Wednesday of each week during the designated season. This information will be posted on the County's web site. County staff will coordinate with commercial outfitters and large groups to develop voluntary timing and boat spacing plans~~

~~for June, July, and August weekend days. County River Management staff will provide in-river spacing control above key rapids on the River.~~

7 References

Britting, Sue. 2000. California Native Plant Society. Telephone conversation regarding Gabbro Soils in Project Area. August 28, 2000.

El Dorado County Board of Supervisors. 1996. El Dorado County General Plan. January 23. El Dorado County Planning Department. Placerville, CA.

El Dorado County Planning Department. 1984. El Dorado County River Management Plan. April. Placerville, CA.

ESP. See Environmental Stewardship & Planning.

Environmental Stewardship & Planning. 2000. El Dorado County River Management Plan– Carrying Capacity White Paper. July. Prepared for El Dorado County Department of General Services. Sacramento, CA.

Haas, Glen. 1999. A Working Definition and Process Model. In Congress on Recreation and Resource Capacity. Fort Collins, CO: College of Natural Resources.

Holland, R. F. 1986. Preliminary description of the terrestrial vegetation of California. California Resources Agency, Department of Fish and Game. Sacramento, CA.

Jennings, M. R. and M. P. Hayes. 1994. Amphibian and reptile species of special concern in California. Final report. California Department of Fish and Game, Inland Fisheries Division. Rancho Cordova, CA.

Mayer, K. E. and W. F. Laudenslayer (eds.). 1988. A guide to wildlife habitats of California. California Department of Fish and Game. Sacramento, CA.

Navigant Consulting, Inc. 2000. Revised Draft Environmental Impact Report for the El Dorado Management Plan Update. September. Rancho Cordova, CA.

RMI. See Resource Management International, Inc.

Resource Management International, Inc. 1997. El Dorado County River Management Plan Phase II Report (Appendix A). April. Sacramento, CA.

Stebbins, R. C. 1954. Amphibians and reptiles of western North America. McGraw-Hill Book Company. New York, NY.

Zeiner, D. C., W. F. Laudenslayer, Jr., K. E. Mayer, and M. White. 1990. California's wildlife. Vol. I – amphibians and reptiles. Vol. II – birds. Vol. III – mammals. California Department of Fish and Game. Sacramento, CA.

Deleted: 8

Deleted: 8

INTENTIONALLY LEFT BLANK

Formatted: Normal

Formatted: Normal, Indent: First line: 0.5"

INTENTIONALLY LEFT BLANK