



COUNTY OF EL DORADO

CAO, Parks Division

River Management Program

330 Fair Lane, Bldg. A

Placerville, Ca 95667

El Dorado County River Management Plan 2015 Annual Report



Prepared by Noah R. Triplett
River Recreation Supervisor

El Dorado County River Management Plan 2015 Annual Report

Table of Contents

	Page
Introduction.....	2
Flow Outlook.....	2
Annual River Use.....	3
Carrying Capacity Exceedance Actions and Implementation.....	6
River Section Use Preferences.....	7
County Parks River Patrol Activities.....	9
El Dorado County Sherriff's Activities and River Use Permit Compliance.....	11
Transportation and Traffic.....	12
Water Quality Monitoring	12
Facilities and Goals.....	13
Budget.....	14

List of Tables

Table 1.	SMUD UARP Flow Schedule below Chili Bar Dam by Water Year Type.....	3
Table 2.	River Use Permit Violations 2015.....	12
Table 3.	River Trust Fund balance and fiscal year 2014-2015 budget summary.....	15

List of Figures

Figure 1.	River Use Totals 2005-2015.....	4
Figure 2.	Boat Density Gorge run in 2010-2015.....	7
Figure 3.	Preference of Runs Memorial Day to Labor Day Weekend 2014-2015.....	8
Figure 4.	Type of Water Craft on Class III Sections in 2015.....	9

Appendix A	Mitigation Monitoring Plan.....	16
Appendix B	Water Quality Monitoring Program and Testing Results.....	42
Appendix C	Sheriff's Department Boating and Safety Unit Summary.....	61
Appendix D	County River Management Advisory Committee Comments.....	64
Appendix E	Public Comments on 2014 River Season.....	66

Cover Page Photos Courtesy of Copyright © Hotshot Imaging, Inc.

El Dorado County River Management Plan 2015 Annual Report

The El Dorado County River Management Plan 2015 Annual Report is to provide information on the 2015 river season. The report also provides information on the River Management Plan (RMP) implementation to identify areas of concern regarding the RMP and to recommend modifications to plan elements or implementation procedures. Details on element implementation requirements can be found in the mitigation and monitoring plan, Appendix A.

This report goes before the River Management Advisory Committee (RMAC) and the public, then to the Planning Commission for approval to continue to implement the RMP as prescribed along with any recommended changes.

The County has contracted with Environmental Stewardship and Planning in 2015, to provide a comprehensive update to the River Management Plan. Changes identified in this and past annual reports are being considered in the RMP update. The update is ongoing and is expected to be completed in 2016.

The 21 mile section of South Fork of the American River from Chili Bar Dam to Folsom Lake continues to be one of the most rafted and kayaked river in the State of California typically averaging well over 100,000* people annually. This river flows through the seven mile long Coloma Lotus valley where gold was discovered in 1848 making it a national recreational and historical destination. As such there are four large public campgrounds along the river in addition to Marshall Gold Discovery State Historic Park, Henningsen Lotus County Park and a number of Bureau of Land Management parcels. There are many public trails that provide access to and run along the river at either end of the valley. State Highway 49 Bridge provides public access to the river in addition to the nine private properties with Special Use Permits used by rafting outfitters along the river in the valley. Residential houses some of which are used as vacation rentals are adjacent to the river throughout the valley as well. The number and diversity of these recreational facilities and personal properties along the river combined with the annually scheduled recreational water releases flows make the South Fork of the American River a regional destination for class II-III boating and a variety of river recreation.

California experienced its fourth year of drought in 2015. The snowpack on May 1, 2015 was half of the previous low of 3 percent in 1977. In 2014 the snowpack was 15 percent. Reservoir storage statewide was about 65 percent of average which was 5 percent fewer than in 2014 but 20 percent more than in 1977 on May 1. The complete CA Department of Water Resources Bulletin 120 reports can be found at <http://cdec.water.ca.gov/snow/bulletin120/>.

The water year type in 2015 was designated as a Super Dry Year which assigned the release schedule out of Chili Bar Reservoir for river recreation. These recreational releases are required as part of Sacramento Municipal Utility Districts and PG&E's Federal Energy Regulatory Commission (FERC) license for dams on the South Fork of the American River. In a Super Dry Year there are daily releases Wednesday through Sunday between Memorial Day weekend and Labor Day weekend.

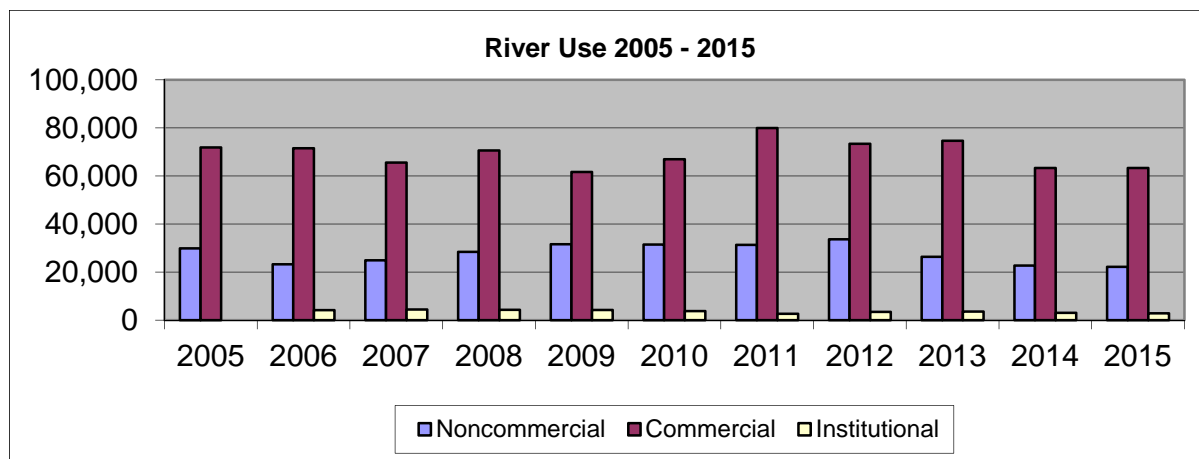
The release in any water year is between 1,300 and 1,500 cubic feet per second (CFS) which provides quality whitewater during those releases. Water Year Type designations with corresponding flow schedules out of Chili Bar Dam can be seen in *table 1* below.

South Fork American River Below Chili Bar Reservoir Dam Minimum Recreational Flow by Water Year (cfs)								
WATER YEAR								
TYPE	PERIOD	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
Super Dry	April - Memorial Day	3 Hrs @ 1300					3 Hrs @ 1300	3 Hrs @ 1300
	Memorial Day - Labor Day	3 Hrs @ 1300			3 Hrs @ 1300	3 Hrs @ 1300	5 Hrs @ 1300	5 Hrs @ 1300
	Labor Day - September						3 Hrs @ 1300	3 Hrs @ 1300
	October - March						3 Hrs @ 1300	
Critically Dry	March - Memorial Day	3 Hrs @ 1300					3 Hrs @ 1300	3 Hrs @ 1300
	Memorial Day - Labor Day	3 Hrs @ 1300			3 Hrs @ 1300	3 Hrs @ 1300	5 Hrs @ 1500	5 Hrs @ 1500
	Labor Day - September					3 Hrs @ 1300	3 Hrs @ 1300	3 Hrs @ 1300
	October - February						3 Hrs @ 1300	
Dry	March - Memorial Day	3 Hrs @ 1300	3 Hrs @ 1300				3 Hrs @ 1500	3 Hrs @ 1500
	Memorial Day - Labor Day	3 Hrs @ 1300	3 Hrs @ 1300		3 Hrs @ 1300	3 Hrs @ 1300	5 Hrs @ 1500	5 Hrs @ 1500
	Labor Day - September					3 Hrs @ 1300	3 Hrs @ 1300	3 Hrs @ 1300
	October - February						3 Hrs @ 1300	3 Hrs @ 1300
Below Normal	March - Memorial Day	3 Hrs @ 1300	3 Hrs @ 1300		3 Hrs @ 1300	3 Hrs @ 1300	3 Hrs @ 1500	3 Hrs @ 1500
	Memorial Day - Labor Day	3 Hrs @ 1300	3 Hrs @ 1300		3 Hrs @ 1300	3 Hrs @ 1300	6 Hrs @ 1500	6 Hrs @ 1500
	Labor Day - September				3 Hrs @ 1300	3 Hrs @ 1300	3 Hrs @ 1500	3 Hrs @ 1500
	October	3 Hrs @ 1300				3 Hrs @ 1300	3 Hrs @ 1500	3 Hrs @ 1500
	November - February						3 Hrs @ 1300	3 Hrs @ 1300
Above Normal	March - Memorial Day	3 Hrs @ 1300	3 Hrs @ 1300	3 Hrs @ 1300	3 Hrs @ 1300	3 Hrs @ 1300	4 Hrs @ 1750	4 Hrs @ 1750
	Memorial Day - Labor Day	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	6 Hrs @ 1750	6 Hrs @ 1750
	Labor Day - September				3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500
	October	3 Hrs @ 1300				3 Hrs @ 1300	3 Hrs @ 1500	3 Hrs @ 1500
	November - February						3 Hrs @ 1500	3 Hrs @ 1500
Wet	March - Memorial Day	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	6 Hrs @ 1750	6 Hrs @ 1750
	Memorial Day - Labor Day	4 Hrs @ 1500	4 Hrs @ 1500	4 Hrs @ 1500	4 Hrs @ 1500	4 Hrs @ 1500	6 Hrs @ 1750	6 Hrs @ 1750
	Labor Day - September				3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500
	October	3 Hrs @ 1300				3 Hrs @ 1300	3 Hrs @ 1500	3 Hrs @ 1500
	November - February						3 Hrs @ 1500	3 Hrs @ 1500

Table 1. South Fork of the American below Chili Bar Dam Release Schedule by Water year Type

2015 was the lowest use year in the last 10 years having just over 88,000* boaters being counted which is slightly lower than 2014 which was the previous lowest use year in the last 10 years having just over 89,000 boaters*. This was the fourth year of drought in California which may play into the public's perceptions on river recreation quality and availability not knowing that once the spring runoff is contained behind the dams the quality and availability whitewater on the rivers are consistent year to year from scheduled releases. The continued reduction of use in 2015 can also be attributed to the reduction in the number of days of recreational releases in a "Super Dry" water year which has the least days of recreational releases scheduled compared to any other water year type. *Figure 1* below shows the last 10 years river use totals for commercial, private and institutional use. These use numbers only reflect the use on the class III sections. The total reduction of boating use in 2014 from 2013 was 15% of which 8.7% can be accounted to the loss of a water release on Tuesdays. It could be theorized that use in 2015 would have been 8.7% higher if there were water releases on Tuesdays. The majority of the river use and days of scheduled releases occur between Memorial Day weekend and Labor Day weekend. 88.4% of commercial and 85.76% of private use

occurred between Memorial Day weekend and Labor Day weekend which was under a 1% difference from 2014. The Institutional use from Memorial Day weekend and Labor Day weekend dropped just over 2% from 2014 to 82.44%.



*Commercial Use Number do not include commercial guides, commercial non-paying guests and guide trainees

Figure 1. River Use Totals 2005-2015

The 5 mile middle section of river from Coloma to Greenwood Creek in the Coloma/Lotus valley continues to be a popular class II section of river. Boaters, campground visitors, residents and tourists like to float in inner tubes or small rafts on this section. There is a continued concern that the alcohol bans on other regional rivers on holiday weekends would attract the drinking inner tube users to the South Fork of the American River.

The last three years counts on the section below the State Park (below Coloma) on the 4th of July and on Memorial Day weekend have shown an increase in the number of inner tubers but not conclusively that there is an increase in the number of open containers. There were 380 inner tubers counted on July 4 and 416 inner tubers on Sunday of Labor Day weekend both of which was a 41% increase from 2014. The Sheriff's Department has not reported an increase in problems on this section of river during these weekends.

The seasonal use on this middle section has been difficult to quantify due the many put ins and take outs along the river, additional use during none scheduled release days and the availability for users to run multiple trips in a day of which was observed as being as many as four trips in a day. There are approximately 30 weekend days annually between Memorial Day weekend and Labor Day weekend. A conservative estimate of use for this section could easily be 9,000 people based on an average of 300 people per day that would include class II boater's in addition inner tubers and other casual drifters. The County did pass a resolution of support for the BLM's request to CalTrans to ban parking from 3000' north of Magnolia Ranch parking area to 3000' south of the Greenwood Cr. parking area along Hwy 49. There is a safety concern which necessitated this request to CalTrans.

The use of outfitters is the primary way the public rafts down the South Fork. There were 29 permitted outfitters in 2015 which was two fewer than 2014 and seven fewer than 2005. One of the 29 companies was given the power of attorney to operate another company which created a unique

situation. There are two river use permits that are unallocated by the County which would bring the permitted outfitter number up to 31 if reallocated.

The consolidation of outfitters on the South Fork and rivers nationwide has been an ongoing trend over the last 10 years. This has resulted in more companies having multiple trips on the water or larger trips more frequently. Some of the negative observations and impacts to other river users with companies having multiple trips on the water has been when these same companies' trips overlap. The overlapping typically occurs at lunch spots and at various locations on the river when one trip slows down for a company photo kayaker to get ahead of the trips or when the trips group up for takeout. The unique situation with the company having power of attorney to operate another company and the long standing practice of outfitters to working together to take down customers has also played a role in the congestion on the river.

The current requirement for keeping trips (7 rafts) of the same company separate is that "sufficient distance between groups should be maintained so that, if needed, other individual boats may fit in". A change to this requirement should be considered with the change to require that trips of the same group are a set time period apart when on the river and when launching off shore at put in's or from lunch stops. An exception should be considered to allow for the regrouping of trips below Hospital Bar Rapid for consolidation of shuttles and efficiency at take out (Salmon Falls).

Additionally a time limit of how far apart rafts in the same trip can be apart should be considered to encourage safety and any negative river experiences associated by other river users or land owners from having trips spread out over long distances. Regulations on the Arkansas River in Colorado stipulate that "All vessels participating in a regulated trip shall remain in reasonably close proximity with one another. "Reasonably close proximity" means that all vessels on the regulated trip will be close enough to one another to give assistance, whenever needed, without unnecessary delay".

There were also a number of complaints and observations made by County Parks River Patrol of rafts passing other rafts in class III rapids along with entire trips being integrated in other trips running through class III rapids. This brings up a number of safety concerns in addition to etiquette concerns. Trips should not be integrating in Class III rapids and this practice should be prohibited. A trip's lead raft should be communicating with the other trip's sweep boat about passing. The use of hand signals and proper boat spacing by both trips should negate the need to pass other trips in the middle of class III rapids.

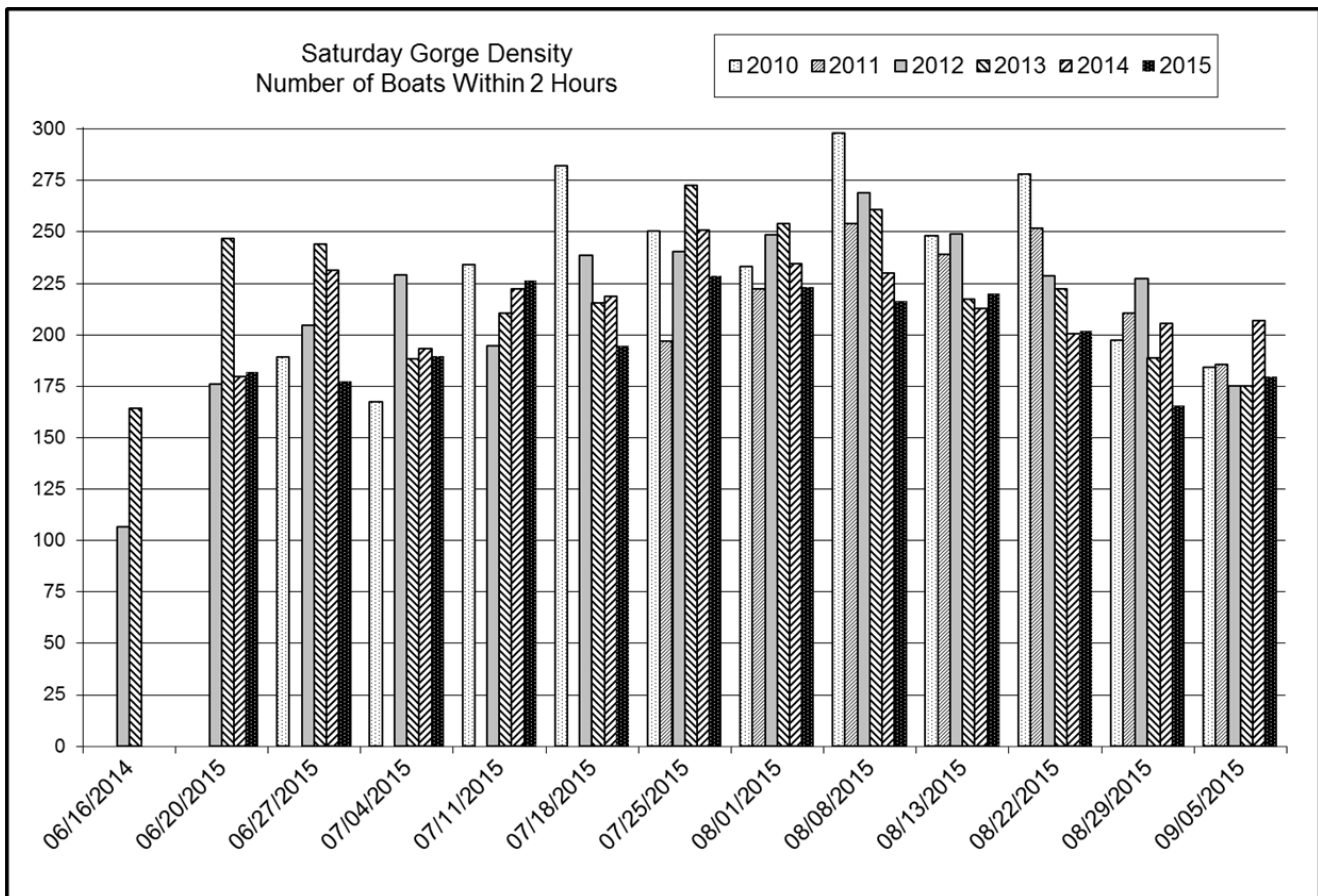
There were eight Institutional Groups registered in 2015 which was an increase of one group from 2014. These groups typically run season long rafting programs but in the case of UC Santa Cruz and Chico State University this was for holding accredited classes taking place within one weeks' time. The additional group in 2015 was Chico State University which held accredited classes on the South Fork due to the North Fork of the Feather River which did not have enough water due to the drought. Currently there is not a daily limitation for private boaters or Institutional Groups but a recommendation of limiting Institutional Groups to seven organizations was made by RMAC and will be considered in the RMP update. There continues to be some confusion/problems surrounding the Institutional Groups. The County Institutional Group registration category of user group is not consistent with the BLM and State Parks which has confused State Parks, County personnel and Institutional Groups staff on regulations relating to river access, fees and reporting.

This lack of regulatory parity between agencies has also been reflected by the public comments and questions to staff after observing institutionally organized river programs. The RMAC made recommended changes to the RMP requirements for Institutional Groups which make strides toward parity with outfitters with County River Use permits but would continue the lack of regulatory parity between agencies. The RMAC recommendation will be considered in the RMP update.

The peak day of use with the total number of people on the river was July 25, 2015 with a total of 2,197 people which was lower than last year's total on July 26, 2014 of 2,609 people and lower than the 2,524 people on July 20, 2013. If there were exceedances on the river from use on the lower or upper section of river or an exceedance to the boat density threshold on the South Fork mitigation measures would need to be implemented.

The peak use on the lower (Gorge) section was 1,753 people on August 1, 2015 and 1,004 people on September 6, 2015 on the upper (Chili Bar). Both of those peaks were higher than those in 2014. The peak day on the upper being over Labor Day weekend was the same in 2014.

The boat density safety measure designed to prevent boating safety hazards from occurring due to boat congestion on weekends were also within allowable levels. Boat density is the total number of boats passing a prescribed point on the river in a two-hour period. This level is 300 boats and if river use exceeds this threshold at designated rapids more than twice in one season, a set of incremental management actions will be implemented with the objective of regaining those thresholds. Rafts are counted as one boat, while kayaks, inflatable kayaks and inner tubes are counted as 1/2 a boat. Counts were done on Saturdays on the gorge at Fowlers Rapid or Satan's Cesspool. The highest level of counts within a two-hour period was 228.5 boats at Fowlers Rapid on the Gorge. Counts were done on two days on the upper section to confirm that boat densities were still way below the allowable levels. Counts have not been done on the upper since 2013 and will most likely not be done in 2016. The peak count on the upper section was 121 boats on August 2, 2015. *Figure 2* on the next page reflects the peak density counts on the gorge section for the last five years.



*Two Kayaks or Single Person Crafts are equal to one boat

Figure 2. Gorge 2 Hour Boat Density 2010-2015

No mitigation measures restricting boating use will be required in 2016 by the County due to no exceedances in boat density or in overall use on either section of river in 2015. Sources of data for estimating river use were outfitters monthly operating reports, County Parks on-river observations and Hotshot Imaging Photo data of noncommercial river use on the Chili Bar and Gorge Runs from April 4, 2015 through October 3, 2015.

Preference between the two sections of river is exhibited by outfitters for Saturday Gorge trips and also by noncommercial boaters over the Chili Bar Run since the 1990's. In 2015 there was even a slight increase in this preference from 2014. Commercial whole-river trips have been a reflection of the higher flows and continuous flows generated by the increased runoff from snow pack. Years with better snow pack and a longer runoff reflect this trend. In 2015 there was slight increase in whole-river trips from 2014 which may have been a reflection of the better economy in 2015 as compared to 2014 which had the same water year type.

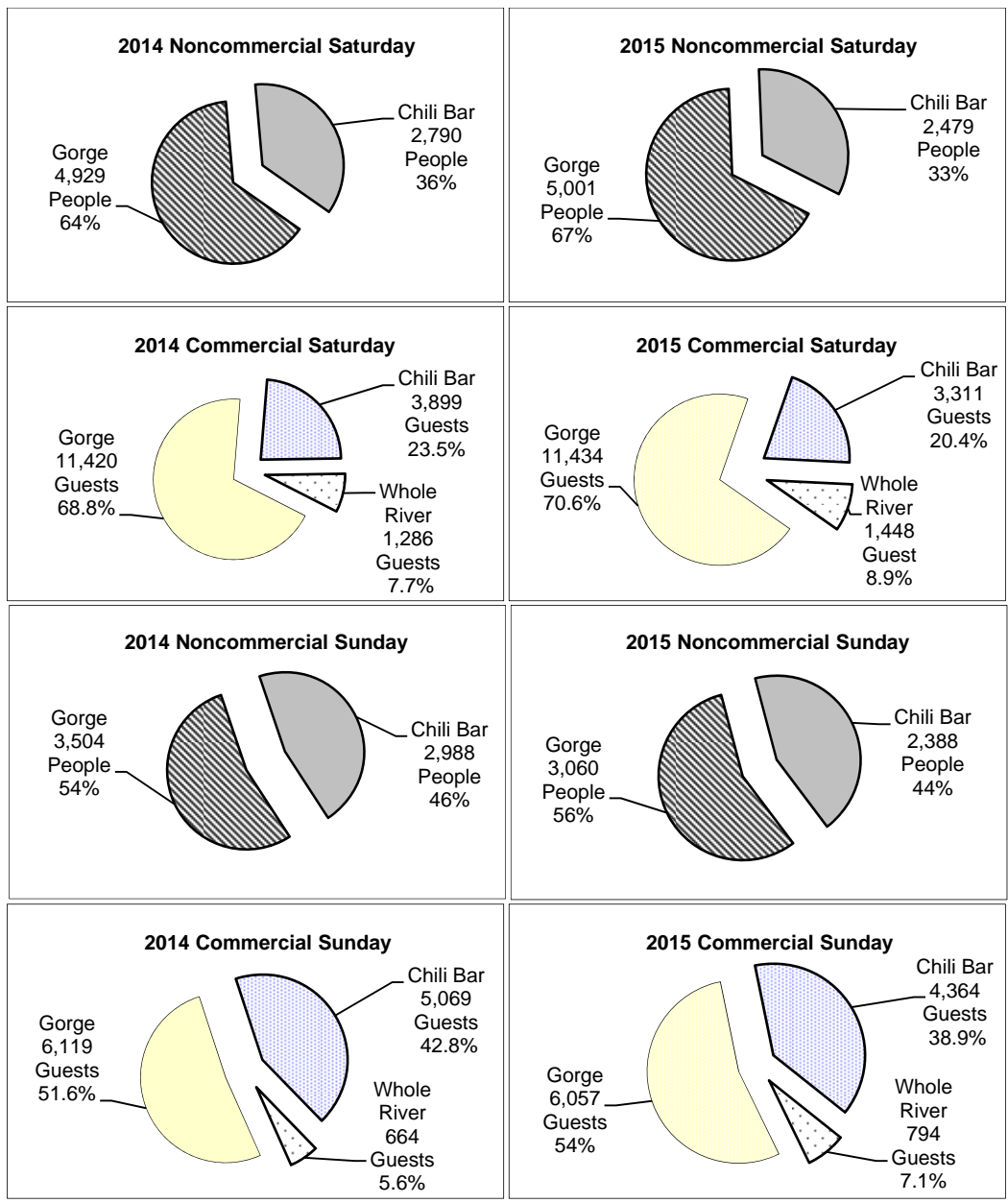


Figure 3. Preferences in Runs Memorial Day to Labor Day Weekend 2014 and 2015

Figure 4 on the following page shows the types and totals for the number of crafts that ran the South Fork American River in 2015.

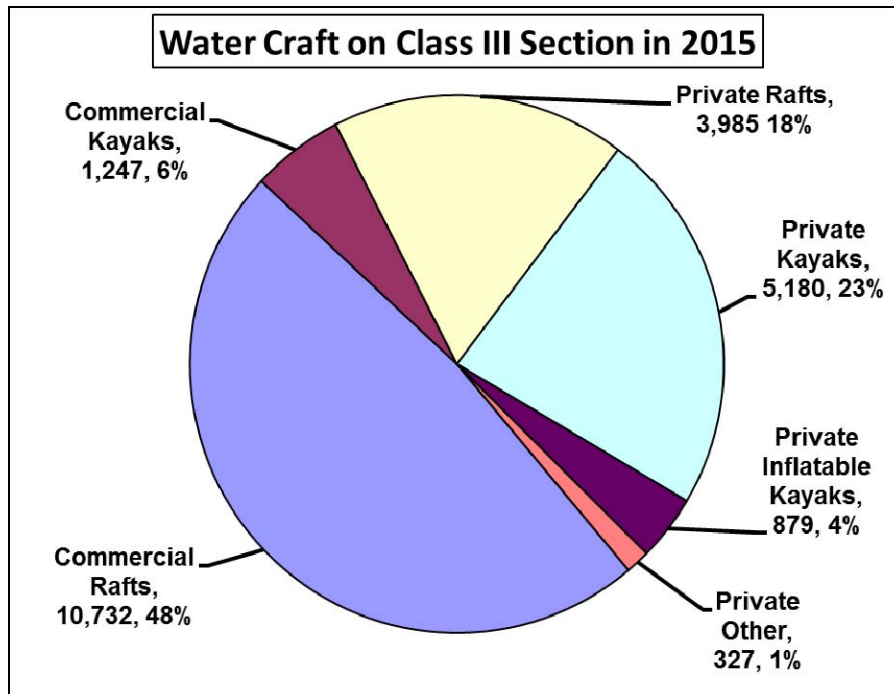


Figure 4. Type of Water Craft on Class III Sections in 2015

There averages fewer than one boating related death on the South Fork a year and in 2015 there were no boating deaths on the river. There were two adult non-boating drownings in the river in Coloma. Both drownings occurred in a class II section of river and did not involve strainers (trapped or caught underwater by a tree).

County Parks River Program was staffed by three people in 2015, the river recreation supervisor and two seasonal river patrol staff, to implement the RMP. The river patrol's daily activities typically included boater education at the river access points, river safety patrol, quiet zone patrol, and river use monitoring. The emphasis among these four activities varied with the season, day of week and river section a patroller was working. On Saturdays, two patrollers usually worked on the Gorge Run, combining aspects from each of these activities during the work day. One patrol staff monitored river use at Chili Bar and performed a patrol on the Chili Bar Run. On Sundays, two patrollers usually worked on the Chili Bar section, while one person patrolled and monitored river use on the Gorge Run section. They also helped maintain the three BLM composting toilets during patrols.

An overview of the river patrol activities in 2015 are outlined below:

Provide boater education for non-commercial boaters:

- Provided boating safety, boater responsibilities, river etiquette, leave no trace education and river flow information to boaters at river accesses and on river patrols.
- Implement private boater registration system.
- Implement large group and institutional group registration system.

- The County River Program interprets the California State Law that requires a life vest on every boat be readily accessible for each person that the life vests (PFD) must be worn in class II whitewater. It is the River Programs opinion that in whitewater you do not have time to put on your life vest when there is an accident in the making and it is easy to become separated from your boat and equipment (life vest) in moving water. The County may want to request the State change the PFD law to require wearing a PFD on Class II whitewater or on specific water bodies.
- Stocked kiosks with free waterproof river maps with the locations for restrooms, put-ins and take-out locations, quiet zone locations, names of rapids, public and private land designations, agency and campground phone numbers along with a boating checklist.

River safety patrol:

- Aided boaters (i.e. wrapped boats and swimmers) at key rapids while monitoring river use.
- Provided a safety/sweep function by running the Class III sections late in the day.
- Placed a backboard, c-collar and head stabilizers below Meat Grinder, Satan's Cesspool and Fowlers Rock rapids for the regular (May-October) boating season.
- Remove hazard trees that created obvious hard-to-avoid strainers.
- Assist in body recovery and missing person searches.
- Assist and coordinate with BLM, State Parks, El Dorado Co. Sherriff and CHP Helicopter unit.
- Assisted with the [Primal Quest Expedition Race](#) inflatable kayaking portion on the South Fork.

Quiet Zone patrol:

- On-river Patrol provides both education and enforcement through the Coloma to Greenwood section.
- Emphasis on controlling quiet zone noise, use of public lands, litter education and use of lifejackets by all boaters and inner-tubers.
- Provide safety information and aid to people floating/boating on the class II section.

River use monitoring:

- Conducted monitoring on weekends for the carrying capacity system.
- Conducted monitoring on 4th of July and Memorial Day weekends in the Coloma to Greenwood section for alcohol use.
- Audited commercial river use.
- Tracked non-commercial river use levels

Education and Outreach

- Two Newsletters printed in 2015. They can be found online here: www.edcgov.us/Government/EMD/Rivers/River_Management_Newsletter.aspx
- Held beginning of the season meeting with State Parks and BLM for outfitters guides and managers. In addition to outfitter rules and regulations education the day included discussion by RMAC Member on boater etiquette, a helicopter rescue training orientation from CHP, a State Parks led tour of Marshall Gold Discovery State Historic Park and a seminar on the geology of south fork by Sam Hawkins from UC Davis

- Installed and removed “entering and leaving public lands” and “quiet zone” signs for the season.
- Held a River Education Workshop with participation from the American River Conservancy and State Parks which included a tour of the new mill in Coloma along with a history of Coloma, a naturalist led interpretive float from Coloma to Henningsen Lotus Park, a presentation overview of the County River Management Program, a presentation by two signatories of the new FERC license on the Upper American River Project (UARP) on that new UARP license along with a basic presentation of the geology of the South Fork provided by County staff.
- Executed a river clean up each section of the river (upper, lower and Coloma to Greenwood) that had close to 100 volunteers in total.

Parks River Patrol enforcement powers are limited and staff cannot:

- Issue citations for State, Federal or County laws
- Issue violations to private boaters or other private river users
- Write parking tickets
- Issue violations for Special Use Permits (Code Enforcement)

The Parks River Patrol staff spent time training a member of the Sheriffs Boating unit to inflatable kayak in 2015 which allowed the Sheriffs Boating unit to safely use inflatable kayaks to patrol from Coloma to Henningsen Lotus Park starting in August. In 2015, the Sheriffs boating unit typically ran the whole river on most Saturdays and Sundays in June, and July. In August the Sheriffs boating unit typically ran the Chili Bar section and then did Inflatable Kayak patrols from Marshall Gold State Historic Park to Henningsen Lotus Park. Currently there is not a location for the Sheriffs Boating unit to put in or take out their raft unassisted in Coloma which makes responses to emergencies less efficient. They also have this challenge for put in’s or take out’s in the Greenwood Cr. area. The County Sheriff has the authority to issue citations for both State and County life jacket violations along with other related County Ordinances like private boaters violations of the quiet zone. A summary of the Sheriffs Boating Unit activities can be found in Appendix C.

County River Program staff also performs an annual audit of outfitter reports and resolves discrepancies between reported and observed commercial river use after the September operation reports are submitted.

The list of permit violations can be found in Element 6.2.10 but does not list all the permit requirements. It should be considered a violation for not meeting any of the permit requirements in the RMP for example not having a first aid kit on a trip is not on the list of violations. The County has struggled with restricting of outfitters to work together to take customers rafting which has been construed as illegal loaning or borrowing of user days. A proposal to the RMAC by the outfitter representative to allow the temporary loaning or borrowing of user days between outfitters was withdrawn for consideration by that member. Another permit user day issue which needs further definition or should be considered for elimination is the additional 8% guest allowance allowed for outfitters. It is difficult for the County to ensure that this additional 8% is not being used for paying guest (customers) but the current RMP does not define who this 8% guest allowance is target for. If it is for guides to take family or friends on an outfitter river trip then asking these guests to pay the

\$2.00-\$8.00 in use fees is a very reasonable expectation. A guide could also borrow or rent a raft to take their family or friends rafting. Allowing outfitters to essentially exceed their permit allocation by 8% allows for added use on the river which currently has high levels of use. Both of these permit user day issues will hopefully be vetted out in the RMP update to make enforcement and reporting clearer for all parties involved.

River Use Permit compliance violations are summarized in *Table 2* below.

Class I River Use Permit violation category	# warnings issued	# final violations
Boat markings inadequate	4	2
Group size limits exceeded	2	2
Land use without authorization	2	0
Operating after sunset	0	0
Operating reports filed late	1	1
Permit/group allocations exceeded	0	6
Quiet Zone	6	0
Class II River Use Permit violations:	None	

Table 2. Summary of Commercial River Use Permit Violations in 2015

Vehicle traffic monitoring results have all been below their respective acceptable limits as prescribed in the RMP EIR since the adoption of the 2001 RMP. Traffic counts are performed by the County Department of Transportation (DOT) and CalTrans on roads within the project area and it is anticipated that traffic counts will be again be within in the acceptable range for 2015. The traffic counts for DOT and CalTrans can be found here edcapps.edcgov.us/dot/trafficcounts.asp and here traffic-counts.dot.ca.gov/. When traffic counts are publicized and if they identify exceedances per the County General Plan Traffic and Circulation Element then mitigation measures will be explored for those road segments. The use of the County Travel Demand Model provides further analysis of traffic in the County as well. No recommended changes are recommended for 2016 for traffic mitigation measures relating to whitewater recreation. For the update of the RMP removal of this section should be considered as this monitoring and reporting is being done by DOT and CalTrans. There was a private boater shuttle which operated in 2015 with help from an Air Quality Management District Grant which also provided shuttles for the County’s river clean ups in 2016.

The water quality monitoring bacterial test results in 2015 overall had had lower readings and no sample results were over 100/100ml. for E. coli. In 2014 there were 16 samples which had results higher than 100/100ml of E. coli. The 2014 higher readings we theorized may have been due to the lower minimum flows allowed in Super Dry Years as compared to prior Dry Years which required 50 to 100 more cfs minimum flow than in previous years. This program also theorized that the resident Canada Geese population which appears to continue to increase is a significant contributor of bacterial pollution to the river although in 2015 this population appeared to go down which may explain the lower results. There were no days which had test results above 400/100 ml which would have resulted in a sampling retest per this program’s protocols. Bacteria testing will be done by the Sacramento Municipal Utility District (SMUD) and PG&E as prescribed in their new FERC licenses once their implementation plans are approved by the Federal Energy Regulatory Commission. The County will consider eliminating or reducing the number of bacteria tests due to SMUD’s and

PG&E's a testing plan's in the update to the RMP. Bacterial water testing results can be found in Appendix B.

Storm water testing and the effectiveness of the RMP storm water monitoring plan is being re-evaluated and as a result testing will not be done in 2015/16 by this program. The County has a county wide Storm water Program which monitors and implements storm water mitigation and best management practices (BMP's) for the County as prescribed by the County Storm water Management Plan. The River Program storm water testing was not consistent with the County Storm water Program and spending the time continuing to implement an alternative program is not seen as beneficial because it did not have an effective study design. It aimed to sample parking lot runoff near the river and make some correlations to river users; however the parking lots could be used by anyone, not just rafters. Additionally, the parking lots receive runoff from adjacent highways, roads, and neighboring properties.

The overall goal of the RMP is to collect data that provides defensible answers to two main questions: 1) Is the river safe for contact recreation? and 2) Is whitewater recreation creating significant impacts to the water quality of the South Fork? It was decided that the storm water testing portion of this program is not providing defensible data and therefore continuing the efforts was not fiscally prudent at this time. The update to the County River Management Plan will re-evaluate if a storm water element will be continued or modified as part of the update to the RMP.

The County does have a comprehensive Storm water Program that implements storm water mitigation measures and best management practices (BMPs) as prescribed by the County Storm water Management Plan and the Phase II Municipal National Pollutant Discharge Elimination System (NPDES) Permit. It is possible that continued monitoring could occur through this Program in some fashion in the future.

There are goals identified in the current RMP and other annual reports that have been brought up that the County will be continuing to evaluate to make efforts to implement. An ongoing goal is to update and provide uniform boating information kiosks at all the public and private river egresses. This would help educate the public on boating safety, life jacket requirements, public river access, private property locations, permit requirements and approved outfitters. There were new signs designed and purchased on life jacket requirements, flow safety and a glass container ban in 2015 and will be installed before the 2016 river season. These new signs are bilingual (English/Spanish) unlike the previous signs. The river program would also benefit by addition of at least one more river patrol seasonal person along with the funding for overtime which currently does not exist. This would allow for better staff coverage and provide for an increased presence in the Coloma to Greenwood Cr. section of the river. The update to the River Management Plan will provide the direction on these efforts along with whether more educational opportunities for the public are needed.

One goal of the RMP that has not been fully implemented is in the inclusion of river user and incident data into the County GIS database. County Parks has been working with the GIS division to create data points along the river since there are not numbered addresses to attach data to currently thus making it difficult to accurately input and analyze data.

Based on staff observations and public comments there are a few facilities and improvements that the County should consider supporting if so proposed by the BLM and State Parks. An additional restroom below African Queen Rapid on the upper would provide a bathroom at a popular lunch and camping location and a restroom across from Alligator Rock on lower would help spread out use on the lower. Both of these locations are managed by the BLM. Another improvement that is needed is to the take out ramps at Skunk Hollow and at Salmon Falls on Folsom Lake. In most years the lake drops below the end of the ramps at these locations by the middle of the summer. For the last few years these ramps have been out of the water for the entire boating season. There are a number of issues observed at these locations by not having a gravel or a cement ramp to the water's edge.

- At Salmon Falls the permitted outfitters are allowed to drive as close to the water's edge as they feel comfortable. The river bank is steep and sandy so vehicles occasionally get stuck, customers along with guides struggle to get rafts up to the equipment vehicles which has resulted in injuries, vehicles stage at different angles and proximities to water's edge which makes for an inefficient and less safe of an environment as possible, vegetation is driven on which could be a fire hazard and much of the vegetation may be considered invasive which then could hitchhike to the users next river trip location.
- At the Skunk Hollow take out the public is not allowed to drive down the boat ramp unlike all the other boat ramps for motorized boaters on Folsom Lake and unlike other popular rivers throughout the United States. The current ramp at this location is narrow and short so the public creates a path by walking up from the water's edge which is much steeper than a redesigned full length ramp would be.

Much of the vegetation that the boaters walk through due to no ramp is invasive of which seeds then could be getting transferred to other rivers. Additionally the difficult take out may discourage people from running trips with elderly, young or disabled individuals. And also may discourage people rowing rafts with only one or two people from running this section as well. Recreational mining and other shoreline recreationists can also add another challenge to having a safe and efficient take out at this location. Improvements on both of these boat ramps would have benefited the over 55,700 outfitter guests and employees along with the 14,150 private boaters who used these State Parks facilities in 2015. The parking at Skunk Hollow is also not sufficient for the current demand by the public on most weekends during the summer which forces people to park on the shoulder of Salmon Falls road which is another facility improvement that should be evaluated further. The RMP update may identify other facility improvement opportunities that the County should evaluate for support or development.

Public Comments and RMAC comments on the season and implementation of the RMP in 2015 can be found in Appendix C and D. RMAC meeting agendas, minutes and audio recordings can be found online at <https://eldorado.legistar.com/Calendar.aspx>.

The budget for the Parks River Program is a non-general fund program and continues to struggle to accomplish the current RMP element objectives with the present level of funding. The primary source of funding is a \$2.00 per guest user fees paid by permitted outfitters which was established in 1997. The County needs to consider raising outfitter fees, instituting a private boater fee or coming

up with an alternative funding source in order to continue to implement the RMP as prescribed and further meet RMP element implementation needs. It has been suggested that the County use annual SMUD Upper American River Project (UARP) mitigation funds and Transient Occupancy Taxes (TOT) from campgrounds (this would need to be created by ordinance), local vacation rentals and lodging for additional funds. Funding for implementation of the RMP will be evaluated in the RMP update process which will take into consideration changes which could increase or decrease the current level of funding needed. *Table 3* and *figure 5* below provide a snapshot of the Parks 2015/2016 River Program budget and River Trust Fund balance. The \$27,282 for the RMP update was rolled over from last year's budget and is not in addition to the original budgeted amount of \$65,000.

Fiscal Year 2014/2015	
Fund Balance as of July 1, 2014	\$219,280
Revenue (July 1, 2014 through June 30, 2015)	\$158,259
Expenditures (FY 2014/2015 approved budget was \$211,169)	\$187,186
River Trust Fund balance as of June 30, 2015	\$190,353
2015/2016 Approved Budget	\$193,585

Table 3. River Trust Fund Balance and Budget Summary

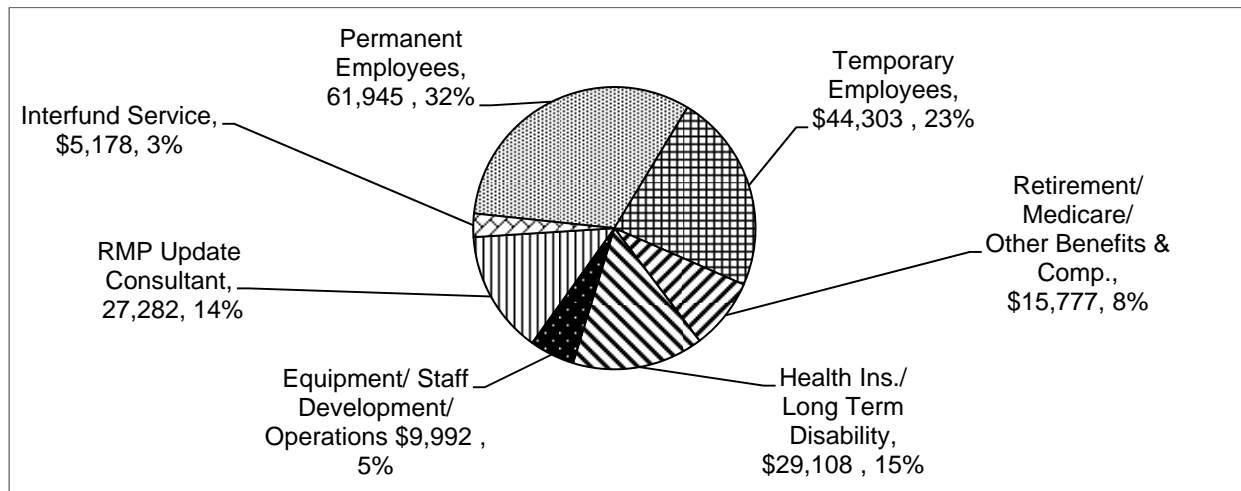


Figure 5. 2015/2016 River Program Budget

Overall, the County's River Program in coordination with the BLM, State Parks and El Dorado County Sheriffs Boating Unit was successful in managing the South Fork American River's whitewater recreation from Chili Bar Dam to Folsom Lake. The implementation of the County's River Management Plan in 2015 met the minimum mitigation requirements but was unable to fully implement the RMP as currently prescribed. The update to the RMP will make recommended changes and provide direction on how the County should move forward with its roll on the management of whitewater recreation on the South Fork of the American River.

APPENDIX A
2015 MITIGATION MONITORING PLAN

Appendix A. River Management Plan Mitigation Monitoring Plan

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
Land Use					
Impact 4-1. The River Management Plan (RMP) would be inconsistent with Program 10.2.2.2.1 of the El Dorado County General Plan.	Mitigation Measure 4-1. The County will ensure that adequate funding is secured prior to the implementation of elements that may require increased County expenditures or elements that could result in decreased revenue to levels below that necessary to conduct river management activities identified in the RMP.	Develop projection of RMP implementation expenditures and possible revenue reductions. Review River Trust Fund status and projections. Compare each analysis and prepare findings and 3-year projection. Adjust fees to ensure adequate RMP funding.	Document projected cost neutrality to the General Plan of the RMP over the 3-year projection period.	County Department of General Services	Within 6 months of RMP adoption and each 3 years thereafter
Action: A projection of RMP implementation expenditures for FY 2015/2016 was incorporated into the river management program budget prepared in March, 2014. This fiscal year 2015/2016 budget was adopted by the Board of Supervisors in November 2015.					
Impact 4-2. Increased river use could result in an increased occurrence of trespass on private lands within the river corridor.	Mitigation Measure 4-2. To reduce the occurrence of trespass the County shall: (a) Increase prosecution of trespass violations; (b) Increase on-river and roadway signage to indicate private property boundaries and to warn trespassers of prosecution; (c) Increase towing of vehicles parked in unauthorized areas; and (d) Provide prompt response, towing and substantial fines and/or prosecution when property owners report vehicles blocking access to driveways.	(a) Provide rapid response to reports of trespassing. Record locations and timing of each occurrence and transmit summaries to County Division of Airports, Parks and Grounds (Parks). (b) Post private property signage at prominent locations. (c) Provide rapid citation and towing company dispatch to illegally parked vehicles. Record locations and timing of each occurrence and transmit summaries to County Parks Division. (d) Provide rapid citation (including substantial fines and /or prosecution) and towing company dispatch to illegally parked vehicles. Record locations and timing of each occurrence and transmit summaries to County Parks Division.	(a) Provide rapid response to reports of trespassing. Record locations and timing of each occurrence and transmit summaries to County Division of Airports, Parks and Grounds (Parks). (b) Post private property signage at prominent locations. (c) Provide rapid citation and towing company dispatch to illegally parked vehicles. Record locations and timing of each occurrence and transmit summaries to County Parks Division. (d) Provide rapid citation (including substantial fines and /or prosecution) and towing company dispatch to illegally parked vehicles. Record locations and timing of each occurrence and transmit summaries to County Parks Division.	(a), (c), and (d) Documentation of trespassing complaints and citations, and transmittal of summaries to the County Parks Division, Planning Department, and Department of Transportation. (b) Document signage installation at key locations.	(a), (c), and (d) Ongoing, in response to facility development. (b) Within 12 months of RMP adoption. Ongoing, in response to repeated incidence of trespass
Action: a) County River Program maintained signage along the river that notifies boaters when boaters are entering and leaving public lands through the Quiet Zone. Signage includes the Quiet Zone noise ordinance that applies to non-commercial boaters. b) The Sheriff's Department is responsible for reports on towed vehicles.					

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
<p>Impact 4-3. Conducting Special Use Permit (SUP) inspections on a complaint-driven basis only could result in repeated violations of unreported SUP violations.</p>	<p>Mitigation Measure 4-3. Upon adoption of the updated RMP, the County shall incorporate an element that requires annual inspections for SUP violations on all privately owned lands within the RMP area subject to SUPs. Inspections based on complaints will also continue to be conducted. 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.</p> <p>In addition to enforcement actions taken by Enforcement Officer, upon observation of violations of two or more permit conditions in successive years, a formal recommendation for revocation of the SUP shall be provided to the County Code Enforcement Officer and the Planning Director.</p>	<p>Inspect all RMP-related SUP areas and assess permit holder compliance with SUP standards. Report findings to County Code Enforcement Officer for enforcement action, if required, for remediation and sanctions.</p>	<p>Documentation of SUP inspections and observation of violations. Transmit SUP inspection summaries to County Code Enforcement Officer (County Planning Department).</p>	<p>County Parks Division, in coordination with County Code Enforcement Officer</p>	<p>Annually, or in response to complaints</p>
<p>Action: RMP element 6.5.3 establishes the inspection requirement for properties with SUPs. The Planning Department conducted inspections of riverside campgrounds during the summer of 2002. A report on those inspections was presented to the Planning Commission in December 2002. SUP violations are investigated by County Code Enforcement and Planning on a case by case basis.</p> <p>The responsible agency for Special Use Permit inspections in this Mitigation Monitoring Plan is the County Planning Department.</p>					

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
Geology and Soils					
<p>Impact 5-1. The construction of new facilities could result in temporary increases in wind and water erosion.</p>	<p>Mitigation Measure 5-1.</p> <p>(a) The County shall ensure that contracts for grading and other activities resulting in ground disturbance require the contractor to implement airborne dust suppression strategies.</p> <p>(1) Submit a construction emission/dust control plan for approval by the County prior to ground disturbance activities;</p> <p>(2) Water all disturbed areas in late morning and at the end of each day during clearing, grading, earth-moving, and other site preparation activities;</p> <p>(3) Increase the watering frequency whenever winds at the RMP site exceed 15 mph;</p> <p>(4) Water all dirt stockpile areas;</p> <p>(5) Use tarpaulins or other effective covers for haul trucks that travel on public streets and roadways;</p> <p>(5) Sweep streets adjacent to the construction entrance at the end of each day; and</p> <p>(6) Control construction and other vehicle speeds onsite to no more than 15 mph.</p> <p>(b) The contractor shall also implement Mitigation Measure 6-1</p>	<p>(a) Require that all RMP-related construction activities demonstrate evidence of an applicable County Grading Permit per the El Dorado County Grading, Erosion, and Sediment Control Ordinance and El Dorado Resource Conservation District's Erosion and Sediment Control Plan. The plan should include Best Management Practices (BMPs) to minimize and control pollutants in storm water runoff. The contractor will:</p> <p>(1) Submit a construction emission/dust control plan for approval by the County prior to ground disturbance activities;</p> <p>(2) Water all disturbed areas in late morning and at the end of each day during clearing, grading, earth-moving, and other site preparation activities;</p> <p>(3) Increase the watering frequency whenever winds at the RMP site exceed 15 mph;</p> <p>(4) Water all dirt stockpile areas;</p> <p>(5) Use tarpaulins or other effective covers for haul trucks that travel on public streets and roadways;</p> <p>(6) Sweep streets adjacent to the construction entrance at the end of each day; and</p> <p>(7) Control construction and other vehicle speeds onsite to no more than 15 mph.</p> <p>(b) The contractor will also implement Mitigation Measure 6-1.</p>	<p>Document delivery of applicable County Grading Permit, per the El Dorado County Grading, Erosion, and Sediment Control Ordinance and El Dorado Resource Conservation District's Erosion and Sediment Control Plan, to County Parks Division for RMP-related construction projects. Include BMPs to minimize and control pollutants in storm water runoff.</p>	<p>County Parks Division</p>	<p>Ongoing, in response to facility development</p>
<p>Action: No changes in 2015</p>					

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
<p>Impact 5-2. Ground disturbance on private lands within the river corridor could result in temporary or long-term increases in wind or water erosion.</p>	<p>Mitigation Measure 5-2. In the event that annual SUP monitoring associated with Mitigation Measure 4-3, or other monitoring based on complaints, identifies evidence of erosion or unpermitted grading in Special Use Permit and other areas, the County shall take the following actions:</p> <p>(a) Photograph erosion/grading areas and transmit with written report to County Environmental Management and Planning Departments for possible enforcement action.</p> <p>(b) Conduct water quality sampling in river downstream of subject site and report results to County Environmental Management Department.</p>	<p>(a) Photograph erosion/grading areas and transmit with written report to County Environmental Management and Planning Departments for possible enforcement action.</p> <p>(b) Conduct water quality sampling in river downstream of subject site and report results to County Environmental Management Department.</p>	<p>(a) Document transmittal of erosion/grading area photographs and written report to the County Environmental Management and Planning Departments.</p> <p>(b) Document water quality sampling in river downstream of subject site and transmittal of report results to County Environmental Management Department.</p>	<p>County Parks Division</p>	<p>Ongoing, in response to facility development on private lands within the RMP area.</p>
<p>Action: The Planning Department campground inspection report provided information on any unpermitted grading identified through the 2002 SUP inspection process.</p>					
<p>Hydrology and Water Quality</p>					
<p>Impact 6-1. Potential short-term impacts to surface water quality could result from construction and operation of new facilities.</p>	<p>Practices to minimize and control pollutants in storm water runoff. Water quality control practices should include the following:</p> <p><i>Construction Measures</i></p> <ul style="list-style-type: none"> • Native vegetation will be retained where possible. Grading and excavation activities will be limited to the immediate area required for construction. • Stockpiled topsoil shall be placed in disturbed areas outside natural drainage ways. Stockpile areas shall be designated on project grading plans. Stockpiles will be stabilized, using an acceptable annual seed mix prepared by a qualified botanist. • No construction equipment or vehicles will disturb natural drainage ways without temporary or permanent culverts in place. Construction equipment and vehicle staging areas will be placed on disturbed areas and will be identified on project grading plans. 	<p>Water quality control practices will include the following:</p> <p><i>Construction Measures</i></p> <ul style="list-style-type: none"> • Native vegetation will be retained where possible. Grading and excavation activities will be limited to the immediate area required for construction. • Stockpiled topsoil shall be placed in disturbed areas outside natural drainage ways. Stockpile areas shall be designated on project grading plans. Stockpiles will be stabilized, using an acceptable annual seed mix prepared by a qualified botanist. • No construction equipment or vehicles will disturb natural drainage ways without temporary or permanent culverts in place. Construction equipment and vehicle staging areas will be placed on disturbed areas and will be identified on project grading plans. • If construction activities are conducted during winter or spring, temporary on-site detention basins will regulate storm 	<p>Document delivery of applicable County Grading Permit, per the El Dorado County Grading, Erosion, and Sediment Control Ordinance and El Dorado Resource Conservation District's Erosion and Sediment Control Plan, to County Parks Division. Include BMPs to minimize and control pollutants in storm water runoff.</p>		

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
<p>Impact 6-1 continued</p>	<ul style="list-style-type: none"> • If construction activities are conducted during winter or spring, temporary on-site detention basins will regulate storm runoff. • Temporary erosion control measures (such as silt fences, staked straw bales, and temporary revegetation) will be used for disturbed slopes until permanent revegetation is established. • No disturbed surfaces will be left without erosion control measures during winter and spring, including topsoil stockpiles. • Sediment will be retained onsite by a system of sediment basins, traps, or other appropriate measures. • Immediately after the completion of grading activities, erosion protection will be provided for finished slopes. This may include revegetation with native plants (deep-rooted species for steep slopes), mulching, hydroseeding, or other appropriate methods. • Energy dissipaters will be employed where drainage outlets discharge into areas of erodible soils or natural drainage ways. Temporary dissipaters may be used for temporary storm runoff outlets during the construction phase. • A spill prevention and countermeasure plan will be developed, identifying proper storage, collection, and disposal measures for pollutants used onsite. No-fueling zones will be indicated on grading plans and will be situated at least 100 feet from natural drainage ways. <p><i>Operation Measures</i></p> <ul style="list-style-type: none"> • All storm drain inlets will be equipped with silt and grease traps to remove oil, debris, and other pollutants, which will be routinely cleaned and maintained. Storm drain inlets will also be labeled "No Dumping - Drains to Streams and Lakes." • Parking lots will be designed to allow 	<p>runoff.</p> <ul style="list-style-type: none"> • Temporary erosion control measures (such as silt fences, staked straw bales, and temporary revegetation) will be used for disturbed slopes until permanent revegetation is established. • No disturbed surfaces will be left without erosion control measures during winter and spring, including topsoil stockpiles. • Sediment will be retained onsite by a system of sediment basins, traps, or other appropriate measures. • Immediately after the completion of grading activities, erosion protection will be provided for finished slopes. This may include revegetation with native plants (deep-rooted species for steep slopes), mulching, hydroseeding, or other appropriate methods. • Energy dissipaters will be employed where drainage outlets discharge into areas of erodible soils or natural drainage ways. Temporary dissipaters may be used for temporary storm runoff outlets during the construction phase. • A spill prevention and countermeasure plan will be developed, identifying proper storage, collection, and disposal measures for pollutants used onsite. No-fueling zones will be indicated on grading plans and will be situated at least 100 feet from natural drainage ways. <p><i>Operation Measures</i></p> <ul style="list-style-type: none"> • All storm drain inlets will be equipped with silt and grease traps to remove oil, debris, and other pollutants, which will be routinely cleaned and maintained. Storm drain inlets will also be labeled "No Dumping - Drains to Streams and Lakes." • Parking lots will be designed to allow as much runoff as feasible to be directed toward vegetative filter strips, to help control sediment and improve water quality. • Permanent energy dissipaters will be included for permanent outlets. 			

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
<p>Impact 6-1 continued</p>	<p>as much runoff as feasible to be directed toward vegetative filter strips, to help control sediment and improve water quality.</p>	<ul style="list-style-type: none"> • The detention/retention basin system on the site will be designed to provide effective water quality control measures. Design and operation features of detention/retention basins will include: <ul style="list-style-type: none"> – Constructing basins with a total storage volume that permits adequate detention time for settling of fine particles even during high flow conditions. – Maximizing the distance between basin inlets and outlets to reduce velocities, perhaps by using an elongated basin shape. • 			
<p>Action: There were no site development/construction activities in 2015 that required a County grading permit.</p>					
<p>Impact 6-2. Increased use of the river, roads and trails in the watershed would continue the degradation of water quality on the South Fork of American River.</p>	<p>Mitigation Measure 6-2. The County shall:</p> <p>(a) Sample 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.</p> <p>(b) Sample human fecal coliform (as a key indicator of water quality impacts and management action needs) during peak-season weekend days.</p> <p>(c) Enhance water quality management and monitoring by the development of parking lot drainage collection and filter systems for new SUPs and SUP revisions with parking areas within the 100-year floodplain.</p> <p>In the event that water quality monitoring indicates an exceedance of any water quality standard defined by the Basin Plan, the County will:</p> <p>(1) Report exceedance(s) of standards to County Departments of Planning, Environmental Management, and Environmental Health and the California RWQCB for possible enforcement action.</p>	<p>(a) Sample 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.</p> <p>(b) Sample human fecal coliform (as a key indicator of water quality impacts and management action needs) during peak-season weekend days.</p> <p>(c) Enhance water quality management and monitoring by the development of parking lot drainage collection and filter systems for new SUPs and SUP revisions with parking areas within the 100-year floodplain.</p> <p>(d) In the event that water quality monitoring indicates an exceedance of any water quality standard defined by the Basin Plan, the County will:</p> <p>(1) Report exceedance(s) of standards to County Departments of Planning, Environmental Management, and Environmental Health and the California RWQCB for possible enforcement action.</p> <p>(2) Investigate and report relationship between exceedance of standards and river-related SUP permitted activities.</p>	<p>(a), (b), and (c (1)) Document transmittal of water quality sampling results to County Environmental Management Department and posting on the County RMP web site.</p> <p>(c) Document installation of parking lot drainage collection and filter systems for new SUPs and SUP revisions with parking areas within the 100-year floodplain, and transmittal of these observations to the County Environmental Management and Planning Departments.</p> <p>(d) Document exceedance of standards and river-related SUP permitted activities and transmittal of these observations to the County Environmental Management and Planning Departments.</p>	<p>County Parks Division</p>	<p>(a) and (b) Biweekly on Saturdays or Sundays, between May 1 and September 30 or by request</p> <p>(c) Ongoing, in response to facility development</p> <p>(d) Ongoing, in response to observations and requests</p>

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
Impact 6-2 continued	(2) Investigate and report relationship between exceedance of standards and river-related SUP permitted activities.				
<p>Action:</p> <p>a) Stormwater testing by the Parks River Program was not conducted in 2015. Testing results have shown that parking at unpaved and paved parking areas does not contribute significant vehicle contamination to the river.</p> <p>b) The South Fork through the project boundaries has water designated by the state for contact recreation (REC-1). The County has had a program of monitoring for bacteria in the S Fork for a number of years. Since 1998, the County Public Health lab has used the indicator organism E.coli to predict the health risk from pathogens residing in the South Fork. Please refer to the water quality monitoring program document for a description of bacteria monitoring program.</p> <p>c) There were no applications for new or revised Special Use Permits in 2015 that proceeded to the design phase.</p>					
<p>RECREATION</p>					
<p>Impact 7-1. Increased whitewater recreation use levels could create conflicts with other river corridor recreational activities.</p>	<p>Mitigation Measure 7-1. Evaluate potential conflicts between increased whitewater recreation use and other river corridor recreation activities. The County shall:</p> <p>(a) Coordinate with California State Parks and U.S. Bureau of Land Management (BLM) recreation 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 potential limitation of recreational opportunities resulting from whitewater recreation use.</p> <p>(b) If RMP impacts on non-whitewater recreation, historic interpretation, or mining are identified by the above activities, County Parks shall conduct focused recreation conflict/impact surveys during the following season to identify and define specific conflicts. If focused recreation conflict/impact surveys identify potentially significant impacts on non-whitewater recreation, historic interpretation, or mining uses, the County will develop mitigation plan and/or modify facilities or management strategies and present mitigation plan to the RMAC and the Planning</p>	<p>(a) Coordinate with California State Parks and U.S. Bureau of Land Management (BLM) recreation 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 potential limitation of recreational opportunities resulting from whitewater recreation use.</p> <p>(b) If RMP impacts on non-whitewater recreation, historic interpretation, or mining are identified by the above activities, County Parks shall conduct focused recreation conflict/impact surveys during the following season to identify and define specific conflicts. If focused recreation conflict/impact surveys identify potentially significant impacts on non-whitewater recreation, historic interpretation, or mining uses, the County will develop mitigation plan and/or modify facilities or management strategies and present 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. Impact analysis of any proposed management actions will be conducted as necessary to comply with CEQA or other legal requirements. A focused recreation conflict/impact survey in addition to</p>	<p>(a) Document annual coordination with California State Parks and BLM recreation staff to identify the occurrence of conflicts between non-white-water recreation, historic interpretation, mining, and uses administered by the RMP.</p> <p>(b) Document informal survey of Henningsen Lotus Park users about intended recreational uses and the potential limitation of recreational opportunities resulting from whitewater recreation use</p>	<p>County Parks Division</p>	<p>Annually</p>

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
	<p>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. Impact analysis of any proposed management actions will be conducted as necessary to comply with CEQA or other legal requirements. A focused recreation conflict/impact survey in addition to standard RMP monitoring and canvassing will continue following the implementation of mitigating actions, until such monitoring indicates that the impact is mitigated.</p>	<p>standard RMP monitoring and canvassing will continue following the implementation of mitigating actions, until such monitoring indicates that the impact is mitigated.</p>			
<p>Action: a) Coordination with California State Parks and Bureau of Land Management staff are summarized in RMP Element 4.9 . b) County Parks did not survey Henningsen Lotus Park users in 2015 because whitewater recreation use levels were lower this past season than the use levels analyzed in the Environmental Impact Report. See discussion in Element 4.9 of the Annual Report.</p>					
<p>Biological Resources</p>					
<p>Impact 8-1. The construction of parking areas, restrooms, and trails could result in loss or degradation of various habitats, direct loss of individual special-status plants, filling of wetland areas, or increased disturbance or degradation of riparian habitats.</p>	<p>Mitigation Measure 8-1. The County shall minimize the potential for the construction of parking areas, restrooms, and trails to impact biological resources. The County Shall: (a) Ensure that biological surveys are conducted on lands which may be disturbed during construction of facilities; (b) Avoid to the extent practicable, through design or site selection, special-status species, important habitats, and wetlands areas; (c) Avoid construction of facilities in areas containing gabbro soils and endemic plant species; (d) Initiate consultation with the appropriate state or federal jurisdictional agency if the potential for special-status species disturbance exists following final site selection; and (e) Appropriately mitigate for any impacts not avoided according to agreements with the appropriate</p>	<p>The County will: (a) Ensure that biological surveys are conducted on lands which may be disturbed during construction of facilities; (b) Avoid to the extent practicable, through design or site selection, special-status species, important habitats, and wetlands areas; (c) Avoid construction of facilities in areas containing gabbro soils and endemic plant species; (d) Initiate consultation with the appropriate state or federal jurisdictional agency if the potential for special-status species disturbance exists following final site selection; and (e) Appropriately mitigate for any impacts not avoided according to agreements with the appropriate local, federal, or state agency(ies).</p>	<p>(a), (b), and (c) Document completion of biological surveys of lands proposed for the construction of facilities and transmittal of surveys to the County Planning Department. (d) and (e) Document successful completion of consultation with the appropriate state or federal jurisdictional agency if the potential for special-status species disturbance could occur during or after the construction of facilities. This documentation shall be transmitted to the County Planning Department.</p>	<p>County Parks Division</p>	<p>Ongoing, in response to facility development</p>

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
Impact 8-1 continued	local, federal, or state agency(ies).				
Action: No changes in 2015. See Impact 5-1.					
Impact 8-2. Increased whitewater boating use and associated public access could degrade riparian habitats.	The County shall: a) Request annual reports from the California State Parks and Recreation Department and 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. (b) Institute an educational program designed to provide the various stakeholders information about the value of plant, fish, and wildlife resources and the habitats on which they depend, encourage landowners to protect riparian vegetation, and include requirements in new or renewed SUPs for property managers to provide appropriate	The County will: (a) Request annual reports from the California State Parks and Recreation Department and 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. (b) Institute an educational program designed to provide the various stakeholders information about the value of plant, fish, and wildlife resources and the habitats on which they depend, encourage landowners to protect riparian vegetation, and include requirements in new or renewed SUPs for property managers to provide appropriate levels of signage related to restrooms, stopping locations and take-out points.	(a) Document receipt of annual reports from the California State Parks and Recreation Department and 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. (b) Document development, implementation, and maintenance of an educational program focused on plant, fish, and wildlife habitats. (c) Completed with the	County Parks Division	(a) Annually (b) One year after the adoption of the RMP; updated each third year thereafter (c) Not applicable (d) Periodically, in response to observation results and incidents (e) Periodically, in response to the proposals of willing program participants

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
<p>Impact 8-2 continued</p>	<p>levels of signage related to restrooms, stopping locations and take-out points.</p> <p>(c) Ensure no net loss of riparian habitat (including wetlands) as a result of RMP-related facilities development.</p> <p>(d) In the event that photographic monitoring associated with Mitigation Measure 5-2 or other monitoring and reporting requirements indicate a loss of riparian resources suspected to be attributable to the whitewater boating-related activities, the County will:</p> <ol style="list-style-type: none"> (1) Report potential impact to California Department of Fish and Game. (2) Coordinate biological monitoring program protocol development with California State Parks and Recreation Department and BLM recreation staff. (3) Conduct focused monitoring of impact site in conjunction with the following season's monitoring. (4) Identify ownership of subject property and report impact to County Planning Department if the impact occurs in Special Use Permit area. 	<p>(c) Ensure no net loss of riparian habitat (including wetlands) as a result of RMP-related facilities development.</p> <p>(d) In the event that photographic monitoring associated with Mitigation Measure 5-2 or other monitoring and reporting requirements indicate a loss of riparian resources suspected to be attributable to the whitewater boating-related activities, the County will:</p> <ol style="list-style-type: none"> (1) Report potential impact to California Department of Fish and Game. (2) Coordinate biological monitoring program protocol development with California State Parks and Recreation Department and BLM recreation staff. (3) Conduct focused monitoring of impact site in conjunction with the following season's monitoring. (4) Identify ownership of subject property and report impact to County Planning Department if the impact occurs in Special Use Permit area. (5) Provide signage (or coordinate signage with State Parks, Recreation Department, or BLM recreation staff) and other management disincentives to minimize human use of affected areas. <p>(e) Coordinate and provide funding contribution to focused habitat restoration project(s) with willing landowners, California State Parks and Recreation Department and/or BLM recreation staff, as appropriate.</p>	<p>adoption of RMP Element 9.</p> <p>(d) Documentation of:</p> <ol style="list-style-type: none"> (1) Reporting potential impact to California Department of Fish and Game. (2) Coordination of a biological monitoring program protocol development with California State Parks and Recreation Department and BLM recreation staff. (3) Focused monitoring of impact site in conjunction with the following season's monitoring. (4) Identification of ownership of subject property and reporting the impact to County Planning Department (if the impact occurred in an SUP area). (5) Provision of signage (or coordination of signage with State Parks, Recreation Department or BLM recreation staff) and other management disincentives to minimize human use of affected areas. <p>(e) Document coordination and provision of funding contributions (as feasible) to focused habitat restoration project(s) with willing landowners, California State Parks and Recreation Department and/or BLM recreation staff.</p>		

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING																								
Impact 8-2 Action:																													
<p>a) See Discussion in Element 5.7 of the 2001 Plan implementation summaries.</p> <p>b) County Parks participated in the development of the annual outfitter guides seminar.</p> <p>c) Completed with the adoption of RMP Element 9.</p> <p>d) 1) Monitoring and reporting on this mitigation measure will be completed in coordination with the Planning Department upon its release of the SUP inspection report. 2) BLM's management plan includes mitigation measures and monitoring programs for the Greenwood Creek and Weber Creek areas. This action by the BLM fulfills the monitoring and reporting requirements of sections 2 and 3.</p> <p>e) No habitat restoration projects have been proposed or funded for fiscal year 2014/2015.</p>																													
Transportation and Circulation:																													
<p>Impact 9-1. Approval of the RMP and the subsequent implementation of the Interim Shuttle Program may increase weekday and weekend traffic volumes on RMP area roadways such as SR 49 to an extent that would exceed the adopted level of service thresholds of El Dorado County.</p>	<p>Mitigation Measure 9-1. When individual programs or actions of the RMP area advanced to implementation, El Dorado County shall conduct detailed transportation impact studies to ensure that the following performance measures are met.</p> <p>Project generated traffic will not cause study area roadways to operate worse than the levels of service (LOS) thresholds established by the El Dorado County General Plan, which are currently as follows.</p>	<p>El Dorado County shall conduct detailed transportation impact studies to ensure that the following performance measures are met. Project generated traffic will not cause study area roadways to operate worse than the levels of service (LOS) thresholds established by the El Dorado County General Plan, which are currently as follows.</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Roadway Segment</u></th> <th style="text-align: left;"><u>LOS</u></th> </tr> </thead> <tbody> <tr> <td>Cold Springs Road from Cool Water Creek to SR 49</td> <td>E</td> </tr> <tr> <td>Lotus Road between Gold Hill Road and SR 49</td> <td>D</td> </tr> <tr> <td>Marshall Road north of SR 49</td> <td>E</td> </tr> <tr> <td>Salmon Falls Road south of Manzanita Lane</td> <td>C</td> </tr> <tr> <td>Salmon Falls Road north of Manzanita Lane</td> <td>E</td> </tr> <tr> <td>SR 193 south of American River bridge</td> <td>E</td> </tr> <tr> <td>SR 49 Gold Hill Road to Coloma</td> <td>E</td> </tr> <tr> <td>SR 49 Coloma to Marshall Grade Road</td> <td>E</td> </tr> <tr> <td>SR 193 south of American River bridge</td> <td>E</td> </tr> <tr> <td>SR 49 Gold Hill Road to Coloma</td> <td>E</td> </tr> <tr> <td>SR 49 Coloma to Marshall</td> <td>E</td> </tr> </tbody> </table>	<u>Roadway Segment</u>	<u>LOS</u>	Cold Springs Road from Cool Water Creek to SR 49	E	Lotus Road between Gold Hill Road and SR 49	D	Marshall Road north of SR 49	E	Salmon Falls Road south of Manzanita Lane	C	Salmon Falls Road north of Manzanita Lane	E	SR 193 south of American River bridge	E	SR 49 Gold Hill Road to Coloma	E	SR 49 Coloma to Marshall Grade Road	E	SR 193 south of American River bridge	E	SR 49 Gold Hill Road to Coloma	E	SR 49 Coloma to Marshall	E	<p>Document analysis of potential for proposed individual RMP-related programs or actions that exceed current General Plan LOS standards and transmittal of this analysis to the County Department of Transportation for review and comment. Document attainment of LOS thresholds defined by current, adopted County General Plan.</p>	<p>County Parks Division</p>	<p>Ongoing, in response to program action, or facility development</p>
<u>Roadway Segment</u>	<u>LOS</u>																												
Cold Springs Road from Cool Water Creek to SR 49	E																												
Lotus Road between Gold Hill Road and SR 49	D																												
Marshall Road north of SR 49	E																												
Salmon Falls Road south of Manzanita Lane	C																												
Salmon Falls Road north of Manzanita Lane	E																												
SR 193 south of American River bridge	E																												
SR 49 Gold Hill Road to Coloma	E																												
SR 49 Coloma to Marshall Grade Road	E																												
SR 193 south of American River bridge	E																												
SR 49 Gold Hill Road to Coloma	E																												
SR 49 Coloma to Marshall	E																												

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
	<p>Grade Road E SR 49 Marshall Grade Road to SR 193 C</p> <p>These thresholds represent the LOS that are projected to occur after implementation of the 2015 capital improvement program (CIP) developed for the 1996 General Plan. County Counsel has determined that these thresholds are also consistent with the policies added to the 1996 General Plan by Measure Y.</p> <ul style="list-style-type: none"> • Modification of intersection traffic control devices such as installation of a traffic signal; • Addition of paved shoulders to roadway segmentsModification of horizontal or vertical curves; • Addition of new travel lanes to roadway segments; <p>Alterations in local circulation patterns through traffic calming devices to maintain traffic volumes under established maximum thresholds</p>	<p>2015 capital improvement program (CIP) developed for the 1996 General Plan. County Counsel has determined that these thresholds are also consistent with the policies added to the 1996 General Plan by Measure Y.</p> <ul style="list-style-type: none"> • Project-generated traffic will not cause traffic volumes on a collector street with fronting residences to increase above 4,000 vehicles per day, or increase traffic on a collector street with fronting residences that currently carries in excess of 4,000 vehicles per day. <p>Typical actions associated with maintaining a desired LOS or desired maximum traffic volume include the following:</p> <ul style="list-style-type: none"> • Construction of new intersection turn lanes; • Modification of intersection traffic control devices such as installation of a traffic signal; • Addition of paved shoulders to roadway segments; • Modification of horizontal or vertical curves; • Addition of new travel lanes to roadway segments; <p>Alterations in local circulation patterns through traffic calming devices to maintain traffic volumes under established maximum thresholds.</p>			
<p>Action:</p> <p>a) No additional RMP-related programs or actions were implemented in 2015 that would have required detailed transportation impact studies:</p> <ul style="list-style-type: none"> ▪ The “interim shuttle” parking area was not developed in 2015 ▪ There were no applications for additional public access to the middle run through river access facilities near Highway Rapid in 2015; <p>b) The County Department of Transportation monitored traffic volumes on the County roadway segments listed above on various dates in 2015. The traffic counts on Level of Service (LOS) information are summarized in the comments on RMP Element 3.5 in the 2014 Annual Report. Bassi Road is the only collector street with fronting residences regularly used by boating shuttle traffic.</p>					

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
<p>Impact 9-3. Approval of the RMP and the subsequent implementation of allowing put-ins and take-outs near Highway Rapid through SUP modifications may increase weekday and weekend traffic volumes on RMP roadways to an extent that would exceed the adopted level of service thresholds of El Dorado County.</p>	<p>Mitigation Measure 9-3. Implement Mitigation Measure 9-1.</p>	<p>See Mitigation Measure 9-1.</p>	<p>Meet requirements of Mitigation Measure 9-1.</p>	<p>See Mitigation Measure 9-1.</p>	<p>See Mitigation Measure 9-1.</p>
<p>Action: None required. There were no modifications to Special Use Permits near Highway Rapid in 2015.</p>					
<p>Impact 9-4. Approval of the RMP and the subsequent implementation of allowing put-ins and take-outs near Highway Rapid through SUP modifications may increase parking demand in the vicinity of the new access point that could exceed available supply or cause illegal parking.</p>	<p>Mitigation Measure 9-4. When individual programs or actions of the RMP are advanced to implementation, El Dorado County shall conduct detailed transportation impact studies, to ensure that the following performance measure is met:</p> <p>c) RMP-generated parking demand will not exceed available supply or cause illegal parking at river accesses.</p>	<p>Conduct detailed transportation impact studies to ensure that: RMP-generated parking demand will not exceed available supply or cause illegal parking at river accesses</p>	<p>Document detailed transportation impact studies to ensure that RMP-generated parking demand will not exceed available supply or cause illegal parking at river accesses and transmittal of study results to County Department of Transportation for comment.</p>	<p>County Parks Division</p>	<p>Ongoing, in response to program, action, or facility development</p>
<p>Action: None required. There were no modifications to Special Use Permits near Highway Rapid in 2015.</p>					
<p>Impact 9-5. Approval of the RMP and the subsequent implementation of new trail construction may increase weekday and weekend traffic volumes on RMP area roadways to an extent that would exceed the adopted level of service thresholds of El Dorado County.</p>	<p>Mitigation Measure 9-5. Implement Mitigation Measure 9-1.</p>	<p>See Mitigation Measure 9-1.</p>	<p>Meet the requirements of Mitigation Measure 9-1.</p>	<p>See Mitigation Measure 9-1.</p>	<p>See Mitigation Measure 9-1.</p>
<p>Action: None required.</p>					

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
Impact 9-6. Approval of the RMP and the subsequent implementation of new trail development along the river may increase parking demand that could exceed supply or cause illegal parking.	Mitigation Measure 9-6. Implement Mitigation Measure 9-4.	See Mitigation Measure 9-4.	Meet the requirements of Mitigation Measure 9-4.	See Mitigation Measure 9-4.	See Mitigation Measure 9-4.
<p>Action: None required. There was a new connector trails built by the BLM between Greenwood Cr. and Magnolia Ranch parking areas. The County and BLM have requested CalTrans to ban parking along Hwy 49 in this area due to safety concerns. The trail completed in 2010 ending at Skunk Hollow (Salmon Falls bridge) parking is monitored for exceedance problems by State Parks of which none have been reported. County Parks River Patrol staff has observed exceedance problems at this location.</p>					
Impact 9-7. Approval of the RMP and the subsequent implementation of the various individual plan elements may increase weekday and weekend traffic volumes on RMP area roadways to an extent that would exceed the adopted level of service thresholds of El Dorado County.	Mitigation Measure 9-7. Implement Mitigation Measure 9-1.	See Mitigation Measure 9-1.	Meet the requirements of Mitigation Measure 9-1.	See Mitigation Measure 9-1.	See Mitigation Measure 9-1.
<p>Action: The County Department of Transportation monitored weekday and weekend traffic volumes on RMP area roadways in 2015. No Level of Service thresholds was exceeded.</p>					
Impact 9-8. Approval of the RMP and the subsequent implementation of the various plan elements may increase parking demand in the vicinity of river access points that could exceed available supply or cause illegal parking.	Mitigation Measure 9-8. Implement Mitigation Measure 9-4.	See Mitigation Measure 9-4.	Meet the requirements of Mitigation Measure 9-4.		
<p>Action: None required in 2015. River use levels in 2015 were lower than use levels analyzed in the RMP EIR.</p>					
Noise:					
Impact 10-1. Noise generated during construction of new facilities or improvements to existing facilities could cause short-term increases to ambient noise levels and could exceed County noise standards.	Mitigation Measure 10-1. (a) All construction vehicles will be equipped with properly operating and maintained mufflers. (b) Construction activities will only occur between the hours of 7:00 a.m. to 6:00 p.m., Monday through Friday and 8:00 a.m. to 6:00 p.m. on Saturdays. No noise-generating	The County will ensure that: (a) All construction vehicles will be equipped with properly operating and maintained mufflers. (b) Construction activities will only occur between the hours of 7:00 a.m. to 6:00 p.m., Monday through Friday and 8:00 a.m. to 6:00 p.m. on Saturdays. No noise-generating construction activities	Document written receipt of contractor commitment(s) to these actions and limitations, and transmittal of this information to the County Planning Department.	County Parks Division	Ongoing, in response to facility development

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
	<p>construction activities will occur on Sundays or Holidays.</p> <p>(c) Construction vehicle staging areas will be located as far from adjacent residences or businesses as practicable.</p>	<p>will occur on Sundays or Holidays.</p> <p>(c) Construction vehicle staging areas will be located as far from adjacent residences or businesses as practicable.</p>			
<p>Action: None required. There was no new construction or improvements to existing facilities in the RMP area in 2015.</p>					
<p>Impact 10-2. Increased use could result in noise level increases at and near existing and new facilities and at shoreline locations along the river.</p>	<p>Mitigation Measure 10-2.</p> <p>(a) When determining locations for the parking areas and restrooms, the County will avoid selecting sites adjacent to sensitive noise receptors whenever feasible.</p> <p>(b) When determining routes for trail systems, the County will avoid selecting routes adjacent to sensitive noise receptors whenever feasible.</p>	<p>The County will ensure that:</p> <p>(a) When determining locations for the parking areas and restrooms, the County will avoid selecting sites adjacent to sensitive noise receptors whenever feasible.</p> <p>(b) When determining routes for trail systems, the County will avoid selecting routes adjacent to sensitive noise receptors whenever feasible.</p>	<p>Document implementation of noise control actions, and transmittal of this information to the County Planning Department.</p>	<p>County Parks Division</p>	<p>Ongoing, in response to increased RMP area use</p>
<p>Action: None required. River use levels in 2015 were below those use levels analyzed for the RMP EIR.</p>					
<p>Impact 10-3. Increased use of the middle reach, as a result of a private boater put-in and take-out near Highway Rapid, could increase noise levels within Quiet Zones.</p>	<p>Mitigation Measure 10-3.</p> <p>(a) The County will increase efforts to educate boaters (especially those putting in at Marshal Gold State Historic Park and at Henningsen-Lotus Park) of the requirements and sensitivities of the Quiet Zone.</p> <p>(b) The County will increase on-river signage as a reminder to rafters when they are within the Quiet Zone.</p> <p>(c) The County will amend Quiet Zone regulations and enforcement mechanisms to enable the issuance of citations to private rafters violating Quiet Zone requirements.</p> <p>(d) The County will develop and implement a system for conducting noise monitoring and reporting for sensitive locations along the river, with focus on areas within the Quiet Zone. Observed or reported violations of Quiet Zone regulations or County noise standards will be reported to the County Code</p>	<p>The County will:</p> <p>(a) Increase efforts to educate boaters (especially those putting in at Marshal Gold State Historic Park and at Henningsen-Lotus Park) of the requirements and sensitivities of the Quiet Zone.</p> <p>(b) Increase on-river signage as a reminder to rafters when they are within the Quiet Zone.</p> <p>(c) Amend Quiet Zone regulations and enforcement mechanisms to enable the issuance of citations to private rafters violating Quiet Zone requirements.</p> <p>(d) Develop and implement a system for conducting noise monitoring and reporting for sensitive locations along the river, with focus on areas within the Quiet Zone. Observed or reported violations of Quiet Zone regulations or County noise standards will be reported to the County Code Enforcement Officer or the Sheriff Department, as appropriate, within 2 days of the occurrence</p>	<p>Document implementation of noise control actions, and transmittal of this information to the County Planning Department.</p>	<p>County Parks Division</p>	<p>Ongoing, in response to increased use of the middle reach of the RMP area</p>

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
	Enforcement Officer or the Sheriff Department, as appropriate, within 2 days of the occurrence				
Impact 10-3 Action: a) The Parks Division staffed Henningsen Lotus Park with a river patrol staff person each Saturday and Sunday during the boating season before putting on for patrol. Staff educated non-commercial boaters about the RMP and provided a staggered patrol of the Quiet Zone on occasion in 2015. See discussion in River Patrol Summary. b) Quiet Zone signage was consistent with 2014. c) Ordinance Chapter 5.50 was amended in March 2002 to extent Quiet Zone regulations and fine system to non-commercial boaters. EDSO has citation authority.					
Impact 10-5. Campground noise levels could exceed County noise standards as a result of river-related visitation.	Mitigation Measure 10-5. (a) The County will develop and implement a system for conducting noise monitoring and reporting for noise-sensitive areas near RMP area campgrounds. (b) Observed or reported violations of Quiet Zone regulations or County noise standards will be reported to the County Code Enforcement Officer or the Sheriff Department, as appropriate, within 2 days of the occurrence. (c) More than two noise exceedance citations per year issued to SUP holders will result in the imposition of fines and other disciplinary measures on violators. (d) More than two noise exceedance citations in two consecutive years shall result in a formal recommendation for limitation or revocation of SUP to County Code Enforcement Officer and Planning Director.	The County will (a) Develop and implement a system for conducting noise monitoring and reporting for noise-sensitive areas near RMP area campgrounds. (b) Report observed or reported violations of Quiet Zone regulations or County noise standards to the County Code Enforcement Officer or the Sheriff Department, as appropriate, within 2 days of the occurrence. (c) Request that the Sheriff's Department impose fines and other disciplinary measures in response to more than two noise exceedance citations per year issued to SUP holders. (d) Formally recommend a limitation or revocation of SUP to County Code Enforcement Officer and Planning Director in the event that more than two noise exceedance citations in two consecutive years have occurred.	(a) Document development, implementation, and monitoring of an RMP area campground noise-monitoring program. (b) Documentation of observed or reported violations and transmittal of documentation to the County Code Enforcement Officer or the Sheriff Dept. as appropriate, within 2 days of the occurrence. (c) and (d) Documentation of observed or reported violations and transmittal of documentation to the County Code Enforcement Officer or the Sheriff Dept. County Parks will cite the applicable County Ordinance that fines or other disciplinary measures are required. In the event of multiple noise exceedance events in 2 consecutive years, County Parks will provide a recommendation to limit or revoke the subject SUP to County Code Enforcement Officer and Planning Director.	County Parks Division	(a) One year after the adoption of the RMP; updated each third year thereafter (b), (c), and (d) Periodically, in response to observation results and incidents
Action: a) Noise monitoring of campgrounds was not conducted in 2015 by County Parks. b) The River Patrol staff has the authority to issue Quiet Zone violations to commercial outfitters only. The County Sheriff would have to witness a non-commercial boater in the act of a quiet zone violation in order to issue a citation.					
Aesthetics:					

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
<p>Impact 11-1. The construction or expansion of parking areas and restroom facilities could detract from the visual quality of areas adjacent to or within the river corridor.</p>	<p>Mitigation Measure 11-1. The County will work to ensure that the construction or expansion of parking areas and restroom facilities does not detract from the visual quality of areas adjacent to or within the river corridor.</p> <p>(a) To reduce potential impacts of parking area development the County will:</p> <ol style="list-style-type: none"> (1) Select parking areas that have been previously graded, cleared, or otherwise disturbed whenever possible; or select sights with low visual quality and limited visibility; (2) Design parking areas in a visually unobtrusive manner; (3) Retain natural features and vegetation (especially trees) whenever possible; (4) Provide refuse receptacles for parking area users to reduce litter and the scattering of debris; and (5) Use native plant species for landscaping. <p>(b) To reduce the potential impacts of restroom facility construction the County will:</p> <ol style="list-style-type: none"> (1) Select locations that are setback from the shoreline and allow vegetation to screen structures as viewed from the river, and (2) Design facilities with a simple unobtrusive architectural appearance and with exterior colors that blend with the surrounding areas. 	<p>To reduce potential impacts of parking area development the County will:</p> <ol style="list-style-type: none"> (1) Select parking areas that have been previously graded, cleared, or otherwise disturbed whenever possible; or select sights with low visual quality and limited visibility; (2) Design parking areas in a visually unobtrusive manner; (3) Retain natural features and vegetation (especially trees) whenever possible; (4) Provide refuse receptacles for parking area users to reduce litter and the scattering of debris; and (5) Use native plant species for landscaping. <p>To reduce the potential impacts of restroom facility construction the County will also:</p> <ol style="list-style-type: none"> (1) Select locations that are setback from the shoreline and allow vegetation to screen structures as viewed from the river, and (2) Design facilities with a simple unobtrusive architectural appearance and with exterior colors that blend with the surrounding areas. 	<p>Document development, implementation, and monitoring of use of design and construction features described in Mitigation Measure 11-1 (a)-(b), as applicable, to the development of RMP area parking and restroom facilities. Transmittal of documentation to the County Planning Department for comment prior to finalization of grading or building permits.</p>	<p>County Parks Division</p>	<p>(a) Periodically, in response to facilities development projects</p>
<p>Action: None required. BLM's 2004 Greenwood Creek restroom project was consistent with (a)(1) through (a)(5) above.</p>					
<p>Cultural Resources:</p>					
<p>Impact 12-1. Construction of the new facilities could affect cultural or paleontological resources.</p>	<p>Mitigation Measure 12-1.</p> <p>(a) On-site cultural and paleontological resources surveys will be conducted by a qualified archaeologist and paleontologist prior to construction of a new facility. The purpose of this</p>	<p>To reduce potential impacts of new facilities on cultural or paleontological resources, the County will ensure that:</p> <p>(a) On-site cultural and paleontological resources surveys will be conducted by a qualified archaeologist and paleontologist</p>	<p>Document implementation of:</p> <p>(a) Cultural and paleontological resources surveys during facilities planning activities and transmittal of survey</p>	<p>County Parks Division</p>	<p>(a) Periodically, in response to facilities development projects (b) and (c)</p>

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
	<p>survey will be to more precisely locate and map significant cultural and paleontological resources.</p> <p>(b) In the event that unanticipated cultural or paleontological resources are encountered during project construction, all earth-moving activity will cease until the County retains the services of a qualified archaeologist or paleontologist. The archaeologist or paleontologist will examine the findings, assess their significance, and offer recommendations for procedures deemed appropriate to either further investigate or mitigate adverse impacts on those cultural or paleontological archaeological resources that have been encountered (e.g., excavate the significant resource). These additional measures will be</p> <p>(c) If human bone or bones of unknown origin is found during project construction, all work will stop in the vicinity of the find and the County Coroner, the County of El Dorado, and the County will be contacted immediately. If the remains are determined to be Native American, the Coroner will notify the Native American Heritage Commission, who will notify the person believed to be the most likely descendant. The most likely descendant will work with the County to develop a program for re- internment of the human remains and any associated artifacts. No additional work will take place within the immediate vicinity of the find until the identified appropriate actions have been completed</p>	<p>prior to construction of a new facility. The purpose of this survey will be to more precisely locate and map significant cultural and paleontological resources.</p> <p>(b) In the event that unanticipated cultural or paleontological resources are encountered during project construction, all earth-moving activity will cease until the County retains the services of a qualified archaeologist or paleontologist. The archaeologist or paleontologist will examine the findings, assess their significance, and offer recommendations for procedures deemed appropriate to either further investigate or mitigate adverse impacts on those cultural or paleontological archaeological resources that have been encountered (e.g., excavate the significant resource). These additional measures will be implemented.</p> <p>(c) If human bone or bones of unknown origin is found during project construction, all work will stop in the vicinity of the find and the County Coroner, the County of El Dorado, and the County will be contacted immediately. If the remains are determined to be Native American, the Coroner will notify the Native American Heritage Commission, who will notify the person believed to be the most likely descendant. The most likely descendant will work with the County to develop a program for re-internment of the human remains and any associated artifacts. No additional work will take place within the immediate vicinity of the find until the identified appropriate actions have been completed</p>	<p>results to the County Planning Department.</p> <p>(b) and (c) Implementation of procedures defined by this mitigation measure in the event of unexpected discovery of on-site cultural and paleontological resources.</p>		<p>Periodically, in response to unexpected discovery of on-site cultural and paleontological resources</p>
<p>Action: None required.</p>					

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
Public Safety:					
<p>Impact 13-1. Extension of the middle run could increase the number of less experienced river users creating the potential for increased whitewater-related injury.</p>	<p>Mitigation Measure 13-1. In addition to the educational and safety programs identified in the RMP, the County would:</p> <ul style="list-style-type: none"> (a) 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; (b) Install signage at middle run put-ins and up-river 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; and (c) Increase staffing at middle run put-ins and at the Highway Rapid take-out to provide safety equipment checks and to inform rafters of the dangers of the lower reach. 	<p>To reduce potential safety impacts potentially influenced by the extension of the middle run of the RMP area, the County will:</p> <ul style="list-style-type: none"> (a) 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; (b) Install signage at middle run put-ins and up-river 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; and (c) Increase staffing at middle run put-ins and at the Highway Rapid take-out to provide safety equipment checks and to inform rafters of the dangers of the lower reach. 	<ul style="list-style-type: none"> (a) and (b) Document provision of signage (or coordination of signage in the middle-run area. (c) Document increased staffing at middle-run put-ins and at the Highway Rapid take-out to provide safety equipment checks and to inform rafters of the dangers of the lower reach. 	<p>County Parks Division</p>	<p>Within the first year after the adoption of the RMP</p>
<p>Action:</p> <ul style="list-style-type: none"> a) Revised river flow/safety signs were installed at Henningsen Lotus Park, Camp Lotus and Marshall Gold SHP in 2003. There is a need to update this. b) Signage specific to the middle run was installed at Marshall Gold SHP in 2003 and renewed in 2013. River Program Division staff revised signage after the Bureau of Land Management plan was adopted and the Greenwood Creek access was improved. c) The River Program maintained similar levels of staff time patrolling the quiet zone. <ul style="list-style-type: none"> ▪ County River Patrol coordinated with BLM to provide occasional monitoring at Greenwood Creek. ▪ Although staff does observe people with the intention of running the gorge who do not possess any knowledge of Class III boating skills, more prevalent are people floating the river from the Coloma access points to the County Park without either a lifejacket or moving water skills. River Program patrols have continued to emphasize the upper half of the Coloma-Greenwood section. <p>See comments on use levels on the Coloma-Greenwood section in 2015 Annual Report.</p>					
<p>Impact 13-2. Increased boat densities due to the absence of use restriction mechanisms in the RMP could increase the number of on river incidents.</p>	<p>Mitigation Measure 13-2. County Parks shall:</p> <ul style="list-style-type: none"> (a) Perform boater and boat counts at Troublemaker, Barking Dog, and Satan's Cesspool rapids. Peak-use period measurements will be conducted using a rolling two-hour period with 1/4-hour (15-minute) increments. For counting craft, two kayaks will be counted as one craft because of their superior maneuverability. (b) Compile incident and accident report 	<p>The County will enact the following measures as described in RMP Element 7.3 and related elements, and summarized below:</p> <ul style="list-style-type: none"> (a) Perform boater and boat counts at Troublemaker, Barking Dog, and Satan's Cesspool rapids. Peak-use period measurements will be conducted using a rolling two-hour period with 1/4-hour (15-minute) increments. For counting craft, two kayaks will be counted as one craft because of their superior maneuverability. (b) Compile incident and accident report summary and respondent 	<p>Documentation of the results of the actions described herein and reporting this information in an annual summary, on the County Geographic Information System (GIS), and on the County RMP web site.</p>	<p>County Division of Parks</p>	<p>Within the first year after the adoption of the RMP</p>

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
	<p>summary and respondent recommendations as part of annual report, and present findings to the RMAC.</p> <p>(c) Institute non-commercial large group registration requirements (large groups are defined as four or more multiple-occupancy boats or 18 or more people). All registered groups will be provided information on boat dispersion techniques and river etiquette. Large groups shall be categorized as follows and will include the following initial requirements:</p> <ol style="list-style-type: none"> 1. Institutional Group – Defined as a group organized by a non-profit organization meeting IRS tax-exempt requirements. Institutional groups will be subject to following: <ul style="list-style-type: none"> ➢ Pre-season annual registration with County Parks; ➢ Proof of liability insurance; ➢ Designation of trip leader having proof of guide certification on rescue training, first aid, and knowledge of County regulations; and ➢ Post-season annual reporting of river use, by date. 2. Large Group – Defined as non-institutional group meeting the size criteria discussed above. Large groups will be subject to the following requirement: <ul style="list-style-type: none"> ➢ Pre-trip registration with County Parks. <p>No fees or insurance requirements will be imposed on non-institutional groups at this time.</p> <p>In the event that boat counts exceed a threshold of 300 boats in two hours on any rapid twice in any season, the County shall develop management actions to allocate commercial and institutional groups (as defined in (b), above) use by river segment, and will conduct CEQA or other legal analysis as</p>	<p>recommendations as part of annual report, and present findings to the RMAC.</p> <p>(c) Institute non-commercial large group registration requirements (large groups are defined as four or more multiple-occupancy boats or 18 or more people). All registered groups will be provided information on boat dispersion techniques and river etiquette. Large groups shall be categorized as follows and will include the following initial requirements:</p> <ol style="list-style-type: none"> 1. Institutional Group – Defined as a group organized by a non-profit organization meeting IRS tax-exempt requirements. Institutional groups will be subject to following: <ul style="list-style-type: none"> ➢ Pre-season annual registration with County Parks; ➢ Proof of liability insurance; ➢ Designation of trip leader having proof of guide certification on rescue training, first aid, and knowledge of County regulations; and ➢ Post-season annual reporting of river use, by date. 2. Large Group – Defined as non-institutional group meeting the size criteria discussed above. Large groups will be subject to the following requirement: <ul style="list-style-type: none"> ➢ Pre-trip registration with County Parks. <p>No fees or insurance requirements will be imposed on non-institutional groups at this time.</p> <p>In the event that boat counts exceed a threshold of 300 boats in two hours on any rapid twice in any season, the County shall develop management actions to allocate commercial and institutional groups (as defined in (b), above) use by river segment, and will conduct CEQA or other legal analysis as required prior to implementation of the management actions under consideration. Note that the management actions discussed below provide general actions that would be implemented under each level. Prior to the implementation of each action, specific conditions and implementation methods</p>			

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
	<p>required prior to implementation of the management actions under consideration. Note that the management actions discussed below provide general actions that would be implemented under each level. Prior to the implementation of each action, specific conditions and implementation methods would be defined by the County.</p> <p><i>Level One (to be implemented in year following observed exceedance of threshold identified above):</i></p> <ul style="list-style-type: none"> ➤ Use incentives and/or disincentives, such as access fees for County operated facilities or commercial surcharge fee adjustments on peak days to encourage or discourage use of specific river reaches. <i>Level One</i> management actions will focus on commercial and institutional group use. <p><i>Level Two (to be implemented in year following observed exceedance of threshold with Level One management actions in place):</i></p> <ul style="list-style-type: none"> ➤ Develop and implement commercial and institutional group density standards, such as trip time scheduling. <p><i>Level Three (to be implemented in year following observed exceedance of threshold with Level Two management actions in place):</i></p> <p>Adjust commercial allocations by river segment and develop institutional group allocations.</p>	<p>would be defined by the County.</p> <p><i>Level One (to be implemented in year following observed exceedance of threshold identified above):</i></p> <ul style="list-style-type: none"> ➤ Use incentives and/or disincentives, such as access fees for County operated facilities or commercial surcharge fee adjustments on peak days to encourage or discourage use of specific river reaches. <i>Level One</i> management actions will focus on commercial and institutional group use. <p><i>Level Two (to be implemented in year following observed exceedance of threshold with Level One management actions in place):</i></p> <ul style="list-style-type: none"> ➤ Develop and implement commercial and institutional group density standards, such as trip time scheduling. <p><i>Level Three (to be implemented in year following observed exceedance of threshold with Level Two management actions in place):</i></p> <p>Adjust commercial allocations by river segment and develop institutional group allocations.</p>			
<p>Action:</p> <p>a) See River Patrol Summary and Carrying Capacity Monitoring tables in of the 2015 Annual Report.</p> <p>b) Large group and Institutional group registration requirements were implemented through Ordinance Chapter 5.50.</p> <p>The Carrying Capacity boat density thresholds were not reached in 2015. See discussion in 2014 Annual Report.</p>					

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
Public Services					
Impact 14-1. Implementation of certain elements of the RMP and proposed mitigation measures to reduce potential impacts would increase the need for County Parks & Planning Dept. staff.	Mitigation Measure 14-1. Mitigation Measure 4-1 will serve to reduce this impact.	See Mitigation Measure 4-1.	Meet the requirements of Mitigation Measure 4-1.		
Action: None taken. Overall River Program budget outlook has prevented the hiring of additional staff.					
Air Quality					
Impact 15-1. The construction or expansion of parking areas would result in short-term construction vehicle emissions and fugitive dust that could exceed criteria pollutant thresholds of significance.	Mitigation Measure 15-1. Mitigation Measure 5-1 will serve to reduce this impact.	See Mitigation Measure 5-1.	Meet the requirements of Mitigation Measure 5-1.	See Mitigation Measure 5-1.	See Mitigation Measure 5-1.
Action: See Impact 5-1					
Impact 15-2. Construction of restroom facilities could create a new concentrated objectionable odor source that may result in nuisance complaints from area residents and facility users.	Mitigation Measure 15-2. (a) Select a location that is convenient to river users, yet not located near existing residences; and (b) Ensure that the type of facility constructed is designed to contain or suppress objectionable odors adequately in order to avoid nuisance to surrounding areas.	Prior to construction of restroom facilities, the County will: (a) Select a location that is convenient to river users, yet not located near existing residences; and (b) Ensure that the type of facility constructed is designed to contain or suppress objectionable odors adequately in order to avoid nuisance to surrounding areas.	Document compliance with the requirements of this mitigation measure and report this information in an annual summary and on the County GIS.	County Parks Division	Periodically, in response to facilities development projects
Action: Mitigation Measures 15-2, a-b were followed in the construction of BLM's restroom facilities at Greenwood Creek in 2004.					
Impact 15-3. Increased traffic in the RMP area would increase vehicle emissions, which could exacerbate AAQS non-attainment.	Mitigation Measure 15-3. Mitigation Measure 9-1 will serve to reduce this impact.	See Mitigation Measure 9-1.	Meet the requirements of Mitigation Measure 9-1.	See Mitigation Measure 9-1.	See Mitigation Measure 9-1.
Action: See Impact 9-1.					
Cumulative Impacts note: no mitigation has been proposed for impacts 16-1 and 16-2 in the RMP EIR.					
Impact 16-3. Increased short-term emissions related to construction activities could be significant when combined with	Mitigation Measure 16-3. The County will work to ensure that Increased short-term emissions related to construction activities could be significant when	Construction activities associated with development of new facilities under the RMP will be scheduled to avoid the occurrence of high-emission activities, such as ground	Document project scheduling used to minimize the concentration of emissions and report this information in an	County Parks Division	Periodically, in response to facilities development

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
emissions from concurrent construction activities within the RMP area.	combined with emissions from concurrent construction activities within the RMP area.	disturbance and heavy vehicle use, concurrently with other similar activities within the RMP area.	annual summary and on the County GIS.		projects
Action: None required.					
<p>Impact 16-5. General impacts identified in this Revised Draft EIR resulting from increased river use associated with elements of the RMP and potential future growth.</p>	<p>Mitigation Measure 16-5.</p> <p>(a) Perform boater and boat counts at Troublemaker, Barking Dog, and Satan's Cesspool rapids. Peak-use period measurements will be conducted using a rolling two-hour period with 1/4-hour (15-minute) increments. For counting craft, two kayaks will be counted as one craft because of their superior maneuverability.</p> <p>(b) Institute non-commercial large group registration requirements (large groups are defined as four or more multiple-occupancy boats or 18 or more people). All registered groups will be provided information on boat dispersion techniques and river etiquette. Large groups shall be categorized as follows and will include the following initial requirements:</p> <ol style="list-style-type: none"> 1. Institutional Group – Defined as a group organized by a non-profit organization meeting IRS tax-exempt requirements. Institutional groups will be subject to following: <ul style="list-style-type: none"> • Pre-season annual registration with County Parks; • Proof of liability insurance; • Designation of trip leader having proof of guide certification on rescue training, first aid, and knowledge of County regulations; and • Post-season annual reporting of river use, by date. 2. Large Group – Defined as a non-institutional group meeting the size criteria discussed above. Large Groups will be subject to the following requirement: <ul style="list-style-type: none"> • Pre-trip registration with 	<p>The County will enact the following measures as described in RMP Element 7.4 and related elements, and summarized below:</p> <p>(a) Perform boater and boat counts at Troublemaker, Barking Dog, and Satan's Cesspool rapids. Peak-use period measurements will be conducted using a rolling two-hour period with 1/4-hour (15-minute) increments. For counting craft, two kayaks will be counted as one craft because of their superior maneuverability..</p> <p>(b) Institute non-commercial large group registration requirements (large groups are defined as four or more multiple-occupancy boats or 18 or more people). All registered groups will be provided information on boat dispersion techniques and river etiquette. Large groups shall be categorized as follows and will include the following initial requirements:</p> <ol style="list-style-type: none"> 1. Institutional Group – Defined as a group organized by a non-profit organization meeting IRS tax-exempt requirements. Institutional groups will be subject to following: <ul style="list-style-type: none"> • Pre-season annual registration with County Parks; • Proof of liability insurance; • Designation of trip leader having proof of guide certification on rescue training, first aid, and knowledge of County regulations; and • Post-season annual reporting of river use, by date. 2. Large Group – Defined as a non-institutional group meeting the size criteria discussed above. Large Groups will be subject to the following requirement: <ul style="list-style-type: none"> • Pre-trip registration with County Parks. No fees or insurance requirements 	<p>(a) Document execution of boat counts and report this information in an annual summary, on the County's RMP web site, and on the County GIS.</p> <p>(b) Document execution of large group registration provisions and report this information in an annual summary, on the County's RMP web site, and on the County GIS.</p>	County Parks Division	Within the first year after the adoption of the RMP

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
	<p>County Parks. No fees or insurance requirements will be imposed on non-institutional groups at this time.</p> <p>In the event that data collected in a single year indicate daily boater totals are in excess of 2,100 in the upper reach or 3,200 in the lower reach twice in any season, the County shall develop management actions to allocate commercial and large groups (as defined in (b), above) use by river segment, and will conduct CEQA and or other legal analysis as required prior to implementation of the management actions under consideration. Note that the management actions discussed below provides general actions that would be implemented under each level. Prior to the implementation of each action, specific conditions and implementation methods would be defined by the County.</p> <p><i>Level One (to be implemented in year following observed exceedance of thresholds identified above):</i></p> <ul style="list-style-type: none"> • Use incentives and/or disincentives, such as access to County operated facilities or commercial surcharge fee adjustments on peak days to encourage or discourage use of specific river reaches. <i>Level One</i> management actions will focus on commercial and institutional group use; and • Eliminate commercial outfitter guest allocations. <p><i>Level Two (to be implemented in year following observed exceedance of threshold with Level One management actions in place):</i> Adjust commercial allocations by river segment and develop institutional group allocations.</p>	<p>will be imposed on non-institutional groups at this time.</p> <p>In the event that data collected in a single year indicate daily boater totals are in excess of 2,100 in the upper reach or 3,200 in the lower reach twice in any season, the County shall develop management actions to allocate commercial and large groups (as defined in (b), above) use by river segment, and will conduct CEQA and or other legal analysis as required prior to implementation of the management actions under consideration. Note that the management actions discussed below provide general actions that would be implemented under each level. Prior to the implementation of each action, specific conditions and implementation methods would be defined by the County.</p> <p><i>Level One (to be implemented in year following observed exceedance of thresholds identified above):</i></p> <ul style="list-style-type: none"> • Use incentives and/or disincentives, such as access to County operated facilities or commercial surcharge fee adjustments on peak days to encourage or discourage use of specific river reaches. <i>Level One</i> management actions will focus on commercial and institutional group use; and • Eliminate commercial outfitter guest allocations. <p><i>Level Two (to be implemented in year following observed exceedance of threshold with Level One management actions in place):</i></p> <ul style="list-style-type: none"> • Adjust commercial allocations by river segment and develop institutional group allocations. <p><i>Level Three (to be implemented in year following observed exceedance of threshold with Level Two management actions in place):</i></p>			

**River Management Plan
Mitigation Monitoring Plan**

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
Action: See action in Impact 13-2, above.					

APPENDIX B
2015
WATER QUALITY MONITORING

Appendix B. Water Quality Monitoring Program and Test Results

WATER QUALITY MONITORING

PROGRAM OVERVIEW

Purpose and Scope of the Document

This water quality monitoring program is an implementation measure of the El Dorado County River Management Plan (RMP). Parks Division is required by the River Management Plan Element 4.6 and the RMP Mitigation Monitoring Plan to implement a water quality monitoring program for the South Fork of the American River.

The overall goal of the monitoring program is to collect data that provides defensible answers to two main questions: 1) is the river safe for contact recreation; 2) is whitewater recreation creating significant impacts to the water quality of the South Fork? The RMP EIR identified three potential types of water quality degradation that could result from whitewater recreation. First, bacterial contamination of the river could result from either discharges from faulty septic systems or human defecation along the river banks. Second, storm water runoff may carry vehicle-related contaminants from parking lots into the river. Third, erosion from campgrounds, access facilities and trails may increase the river's turbidity. The RMP's mitigation monitoring plan requires that a monitoring program be implemented for the first two water quality indicators, bacteria levels and stormwater runoff. This document describes the monitoring plans for the first two indicators that, combined, form the overall monitoring program. The third indicator, erosion and turbidity, are monitored through the County's grading permit and Special Use Permit inspection programs.

Stormwater testing and the effectiveness of the RMP stormwater monitoring plan is being reevaluated and testing was not be done in 2015/16 by this program. The County has a county wide Stormwater Program which monitors and implements stormwater mitigation and best management practices (BMP's) for the County as prescribed by the County Stormwater Management Plan. The River Program stormwater testing was not consistent with the County Stormwater Program and spending the time continuing to implement an alternative program is not seen as being beneficial or fiscally prudent at this time. The update to the County River Management Plan will re-evaluate if a stormwater element will be continued or modified as part of the update to the RMP.

Resources and Constraints

Regulatory

Physical area of the monitoring program is constrained by the project area of the RMP: Chili Bar to Salmon Falls. RMP Mitigation monitoring plan establish a requirement for a bacteria and stormwater runoff monitoring program. There are no SWQCB or RWQCB permit requirements for the County's RMP.

Responsible agencies and roles

The RMP places joint-responsibility for the water quality monitoring program with the Division of Parks River Program and the Public Health Department. Both have contributed to the preparation of this monitoring program. To make optimal use of budget and time resources, County River Program staff will conduct all sampling, the Public Health lab will analyze all samples obtained for bacteria monitoring, and the independent lab, California Laboratory Services, will analyze all samples obtained for stormwater runoff monitoring.

Fiscal

The monitoring program will be funded through the County's River Trust Fund. This Fund is managed by the County River Program to provide a source of long-term funding for the implementation of the RMP. Fiscal Year 2014-2015 River Trust Fund appropriations include \$4000 for Public Health lab analysis of e. coli samples and approximately \$1000 for California Laboratory Service's analysis of stormwater runoff samples. County River Program staff time is paid by the River Trust Fund.

Document Organization

The RMP monitoring program is comprised of two distinct monitoring plans, one for bacteria monitoring and the second for stormwater runoff monitoring. Each section of this document contains a description for both monitoring plans.

PROGRAM GOALS AND PURPOSE

- *Goals are broadly defined results*
- *Objectives are specific, measurable, or time-bound results*
- *Strategy is the method or process used to reach the goals*
- *Program is the combined set of monitoring plans for bacteria and stormwater runoff*
- *Plan is the set of actions or methods to monitor bacteria and stormwater runoff*

The program's goals and purpose are derived from the RMP mitigation monitoring plan. The mitigation monitoring plan requires the County to provide data from the project area on several constituents in order to determine whether there is attainment of the RWQCB Basin Plan Objectives for bacteria and oil and grease. Therefore, the program's first goal is to comply with RMP mitigation monitoring plan. The second program goal is to allow comparison of the results to other studies, particularly the SMUD UARP relicensing *Water Quality Study Plan*. The third goal is to advance the state of knowledge of the water quality implications of stormwater flows from project area parking lots and tributary streams on South Fork.

Study Questions

Three main study questions have been developed from the discussion and analysis contained in the EIR. They state the primary issues related to the potential effects of whitewater recreation on the South Fork of the American.

- Question 1: Do bacteria levels exist on the South Fork that indicate a potential human health threat to boaters and swimmers?
- Question 2: Do bacteria levels indicate potential problems with septic leach fields of whitewater recreation-related campgrounds and facilities that would trigger a more detailed sanitary survey?
- Question 3: Does runoff from project area parking lots impact the water quality of the South Fork?

Objectives

From these questions, a set of monitoring plan objectives are proposed:

- Objective 1: Bacteria monitoring frequency that provides information on whether Basin Plan standards for bacteria are being attained in the project area. Monitoring will have a primary focus on the May through September boating and swimming season of high recreation contact. A secondary focus will be placed on monitoring during the first major storm events each fall.
- Objective 2: The bacteria monitoring will be adequate to detect a failing septic system or leach field from any whitewater recreation-related campgrounds. This detection would trigger a more detailed sanitary survey by the County's Environmental Management Department.
- Objective 3: Monitor stormwater runoff from the parking lots of project area campgrounds and river access facilities to determine whether the runoff contains oil and grease levels that result, once the runoff enters the South Fork, in the river exceeding Basin Plan standards for oil and grease.

PROGRAM STRATEGY

Bacteria monitoring:

The strategy to monitor bacteria in this program has been developed to address Study Questions 1 & 2. Three inter-related sampling plans are proposed for bacteria monitoring: periodic screening, Basin Plan compliance, and First Flush. The three sampling plans are the process that will be used to provide data to answer the study questions. The rationale for the sampling plans is based on existing monitoring data, the Basin plan standards, and the *Water Quality Study Plan* adopted by SMUD for its UARP hydroelectric relicensing process.

Periodic screening

The County has conducted a periodic screening program to monitor the South Fork for levels of bacteria since 1995. Inferences from data collected from this monitoring appear to reveal some potential variations in water quality. Conditions causing or related to those variations have not been well established. The RWQCB has indicated that the continuation of the periodic screening would be adequate to meet that agency's interest in monitoring the river for potential long-term or chronic water quality impacts. The periodic screening will capture data on bacteria levels in the South Fork under a variety of flow regimes, which are described below in the Sampling Plan section.

Basin Plan compliance

The South Fork's state-designated beneficial uses include contact recreation. The Basin Plan prescribes bacteria standards for contact recreation, and a monitoring protocol (five samples in a 30-day period) to provide data to determine whether the standards are being met.

- Basin Plan compliance monitoring for fecal coliform will be conducted during the peak-use period of June-July-August each year.

Stormwater runoff:

The Caltrans Guidance Manual: *Stormwater Monitoring Protocols – July 2000* has been adapted to provide the approach to monitoring the whitewater recreation-related parking lots within the 100-year floodplain or parking areas that discharge runoff into the South Fork. This monitoring will occur during the first significant rain events of each fall season.

The strategy to monitor stormwater runoff employs a two-phased approach. The first phase each fall season is an initial screening, which samples a broad set of constituents of potential concern. Constituents not detected, or measured at levels well below thresholds of concern, can be excluded from the second set of runoff monitoring. Thresholds have been well below the thresholds of concern so second runoff monitoring has not been necessary.

ANALYTICAL CONSTITUENTS

The bases for the selection of the analytical constituents for the monitoring program are: the RMP mitigation monitoring plan; the state's Basin Plan objectives; an EPA bacteria monitoring guidance document; the Caltrans Guidance Manual noted above; and input from the County Environmental Management Department and Public Health Lab.

Bacteria monitoring

E. coli will be used as the constituent for periodic or screening program. Although the current Basin Plan standard for bacteria is based on the constituent fecal coliform, the bacteria e. coli has been selected for the screening program for the following reasons:

- County Public Health Lab capabilities, cost efficient,

- EPA's draft *Implementation Guidance for Ambient Water Quality Criteria for Bacteria* (May 2002) recommends the adoptions of e. coli criteria to better protect waters designated for recreation.
- The RWQCB advised the County in 10/2002 that the SWRCB Basin Plan is expected to be revised in the future to include this constituent in the definition of water quality objectives for bacteria.

The Basin Plan compliance monitoring will use e. coli as the constituent. If any samples during the 30 day period exceed the EPA standard for bacteria, the County will switch to analysis of fecal coliform, and obtain five samples during a 30-day period.

Stormwater runoff

The RMP mitigation monitoring plan drew upon the Basin Plan standards to require that oil and grease be the analytical constituents for monitoring storm water runoff from parking areas.

The County Environmental Management Department recommended several additional constituents be included in the storm water runoff monitoring plan:

- Electrical Conductivity (EC): EC measurements can give an estimate of the variations in the dissolved mineral content of storm water in relation to receiving waters (Caldrons)
- pH: pH is universally used to express the intensity of the acid or alkaline condition of a water sample. The pH of natural waters ranges between the values of 6 and 9. Extremes of pH can have deleterious effects on aquatic ecosystems.
- Total Suspended Solids (TSS): TSS In general, suspended solids are considered a pollutant when they significantly exceed natural conditions and have a detrimental effect on the beneficial uses designated for the receiving waters.
- Total Organic Carbon (TOC): TOC is a general indicator of the organic content of a sample.

MONITORING SITE SELECTION CRITERIA

Bacteria Monitoring

Sites have been selected for bacteria periodic screening according to the following criteria:

- Control site: The **Nugget site** is immediately below Chili Bar dam and immediately above the project area. The Nugget functions as a control site for bacteria monitoring. Data from this site provides bacteria values for the water before the river enters the project area. The bacteria values may indicate potential water quality impacts from upstream sources, which will have to be considered in the analysis of the monitoring results from the project area.
- Representative of project area: The **Marshall Gold Discovery State Historic Park (Marshall Gold SHP), Henningsen Lotus County Park (County Park), Turtle Pond (at Greenwood**

Cr. confluence) and Skunk Hollow sites represent the most popular swimming areas (both boating and non-boating related swimming) in the project area. These sites have been selected in the study design to achieve Objective 1 and provide data on Question 1.

- Sampling locations able to detect potential bacteria discharges from project campgrounds: The Marshall Gold SHP, County Park, and Turtle Pond sites are immediately downstream (within ½ mile) of significant concentrations of campgrounds and/or river access sites. These sampling locations will provide data to allow analysis of Question 2 and Objective 2.
- Site access: Each site is easily accessible year-round to County Parks' staff.
- Personnel safety: County Parks' staff can safely ferry boats across the river channel at each site at a wide range of flows in order to obtain samples.
- Time: County Parks obtain samples at each site within one workday and deliver the samples to the County Public Health Lab within the maximum holding time. Staff typically sample on Monday or Tuesday so that if there is an exceedance resampling is possible before the weekend.

Stormwater monitoring

The EIR mitigation monitoring plan for mitigation measure 6-2 requires the County to sample runoff from unpaved parking areas during initial season rainstorms and during the peak season afternoons for petroleum contamination(emphasis added). The River Program has determined that there is no rationale for eliminating paved parking areas from the monitoring plan. In fact, paved parking areas probably contribute a greater portion of a season's initial rain event to runoff than do unpaved parking areas.

Figure 1 shows the location of all properties with parking lots utilized for whitewater recreation. The parking lots include the properties with Special Use Permits (shown in pink), Marshall Gold SHP, the County Park and the Skunk Hollow lot within the Folsom Lake State Recreation Area. The properties selected for monitoring include: 1) properties where vehicle parking occurs within 100-year floodplain; 2) properties with lots above the floodplain, but the runoff appears to discharge directly into the South Fork. Following below, each parking lot from Chili Bar dam downstream to Folsom Lake will be listed, and a rationale for inclusion or exclusion from the monitoring plan will be provided.

Table 1 Stormwater runoff site selection

Property name	Monitoring site	Rationale for inclusion/exclusion
Nugget	No	Floodplain area not used for parking Parking areas (gravel) lightly utilized.
Chili Bar	Yes	Parking area (river cobbles) in floodplain. Little to no surface runoff going directly into river. Primary put in for private boaters on the upper section of river.
American River Resort	No	Most camping and parking areas (paved and gravel) above floodplain; no discharge to river observed during initial rain events.
Coloma Resort	No	Main camping and parking area (gravel and decomposed granite) discharges into South Fork. No rafting companies use campground.
Marshall Gold SHP	No	Parking areas (paved) do not drain towards river No discharge to river observed during rain events.
Point Pleasant	No	Parking areas (gravel) not in floodplain. Not open to the public.
Ponderosa RV Resort	No	Camp and parking area (gravel and decomposed granite) in floodplain; did not have runoff when visited in fall 2002. No rafting companies use campground and campground not open to the general public.
Beaver Point area – 3 SUPs	No	Parking areas (gravel) above the floodplain; no runoff towards river observed.
Henningsen Lotus County Park	Yes	Parking area (paved) within 10 year floodplain drains into vegetation and cobble.
Camp Lotus	No	Parking area (decomposed granite) within floodplain with large vegetation buffer from river.
Environmental Traveling Co	No	Parking area (gravel) above floodplain; no runoff towards river observed.
Bacchi Ranch	No	Parking area (gravel and decomposed granite) above floodplain; no runoff towards river observed during site visit.
River Bend	No	Parking area (gravel) within floodplain; did not have runoff when visited. Vegetation buffer between parking area and river.
Mother Lode	No	Parking area (gravel) above floodplain; additional parking may be within floodplain; no runoff towards river observed. Vegetation buffer between parking areas and river.
Skunk Hollow (State Park lot)	Yes	Parking area (paved) above floodplain; discharge from lot drains into vegetation buffer then into Skunk Creek, which empties into river within 300 yards.
Salmon Falls (State Park lot)	No	Skunk Hollow will provide adequate data
Greenwood Cr. (BLM lot)	Yes	Paved lot drains into drainage gully that flows into Greenwood Cr. 300 yards above S. Fork Confluence.

SAMPLING PLANS

Bacteria Periodic screening:

Frequency:

The periodic screening sampling plan incorporates event-based monitoring within a plan that divides the calendar year into two segments:

- Monthly sampling and analysis for E.coli from October through May at each monitoring site.
- Twice monthly sampling and analysis for E. coli from June, August and September at each monitoring site.
- Five samples taken in the month of July.

The sampling conducted for the screening effort will adjust the dates of collection to obtain data for several types of flow regimes the river has operated under in recent years:

- River experiencing daily fluctuating flows from fish flow (250) to 4000 cfs (this regime has occurred throughout the year).
- River experiencing extended periods on fish flow releases (typically during the fall or periods of hydro facility maintenance)
- River experiencing extended periods of flow of at least 2000 cfs (spring runoff)
- River experiencing high flows after winter storm events

Reviewers' input is requested on the number of samples that would have to be collected to conduct statistical analysis of differences in water quality for each flow regime.

Methods:

Shore grab samples and transect composite samples listed in Table 2

Sample collection methods

Five river transect composite samples are collected, with two near-shore grab samples collected at Marshall Gold Discovery SHP and the County Park. Transect composite samples are obtained by drawing five individual samples: one near each bank, and three mid-river samples at the quarter, half and three quarter distance across the channel. The five samples are combined into a single sample that represents the cross-section of the river at that site.

Sample containers used for the individual grab samples are sealed and sterilized 120 ml obtained from the County Health lab. 500 ml polypropylene bottles are used to mix the transect samples. Sampling is done when the County Public Health Lab is open, Monday-Thursday.

Grab sample methodology

Caps are removed from sample bottles, avoiding contamination of the inner surface of the cap or bottle. Samples are drawn from about one foot below the surface of the river. The container is filled without rinsing, and the cap is replaced immediately.

For the transect samples, the five individual samples for each transect are combined into the 500 ml polypro bottle. Sufficient air space is left in the large bottle to allow thorough mixing by shaking. 100 ml of the mixed sample is poured back into the bottle that was used to draw the individual samples.

All samples are placed in a cooler of ice and transported to the County Public Health Lab within five hours.

Sample records and chain of custody

Sample bottles are numbered with an indelible marker to record the sampling location. A County Public Health Lab form is used to record information on each sample submitted (date and time collected; sampling point; river flow). Sample information (date and time collected and submitted) is also listed on a log-in sheet at the Public Health Lab.

These methods will also be utilized for the basin plan compliance.

Bacteria Basin Plan compliance:

Frequency: 5 samples in 30 days during peak summer season

STORMWATER SAMPLING PLAN

This Program did not perform Stormwater testing in 2015.

- Stormwater sampling plan is derived from the two-phased approach.
- First phase outlined in the table below.
- Second phase sampling plan will be an outcome of results of first phase.

**Table 2
Summary of the proposed monitoring program**

Monitoring activity	Monitoring sites	New, revised or ongoing	Constituents analyzed	Sampling frequency
Bacteria screening	<ul style="list-style-type: none"> ▪ Nugget bank ▪ Nugget transect ▪ Marshall Gold park bank ▪ Marshall Gold park transect ▪ County Park bank ▪ County Park transect ▪ Turtle Pond bank ▪ Turtle Pond transect ▪ Salmon Falls bank 	Ongoing	E.coli	Monthly October through April, twice monthly May, June, September with sampling conducted to capture the following flow regimes: <ul style="list-style-type: none"> ▪ Daily fluctuating flows from fish flow (200 cfs) to 4000 cfs (event possible throughout the year). ▪ Extended periods of fish flow releases (typically during the fall or periods of hydro facility maintenance). ▪ Extended periods of flow of at least 2000 cfs (spring runoff)
Bacteria Basin Plan Compliance	<ul style="list-style-type: none"> ▪ Nugget bank ▪ Nugget transect ▪ Marshall Gold park bank ▪ Marshall Gold park transect ▪ County Park bank ▪ County Park transect ▪ Turtle Pond bank ▪ Turtle Pond transect ▪ Salmon Falls bank 	Ongoing	Fecal coliform	5 samples in 30-day period with the third set of samples obtained during third week of July. Justification: Basin Plan standards for a sampling plan.

Monitoring activity	Monitoring sites	New, revised or ongoing	Constituents analyzed	Sampling frequency
Stormwater runoff from project area parking lots	Chili Bar parking lot - outflow County Park - outflow Greenwood Cr. parking lot - outflow Skunk Hollow - outflow	Ongoing	Oil and Grease PH EC TSS TOC	<p>For paved parking areas, first rain event each season that produced more than .10" of rain as measured at the Auburn Dam Ridge site on the NOAA California Nevada River Forecast Center web page.</p> <p>For gravel and decomposed granite parking areas, first rain event each season that produces runoff from these parking areas. 2002 observations indicated that a least 1" of rain in 24 hours preceding the sampling would have to occur to produce runoff from typical project parking areas. Staff attempts to capture a sample during the first rain event.</p>

LABARATORY ANALYTICAL METHODS

The analytical method for the bacteria analysis has been supplied by the County Health Lab and describes its procedures for analysis of samples for levels of E. Coli.

Quality Assurance

The quality assurance procedures for the bacteria analysis has been supplied by the County Health Lab and describes its quality assurance procedures for analysis of samples for levels of E. Coli.

Data Quality Evaluation

- Circulated to Environmental Management for comments

Data Validation and Reporting

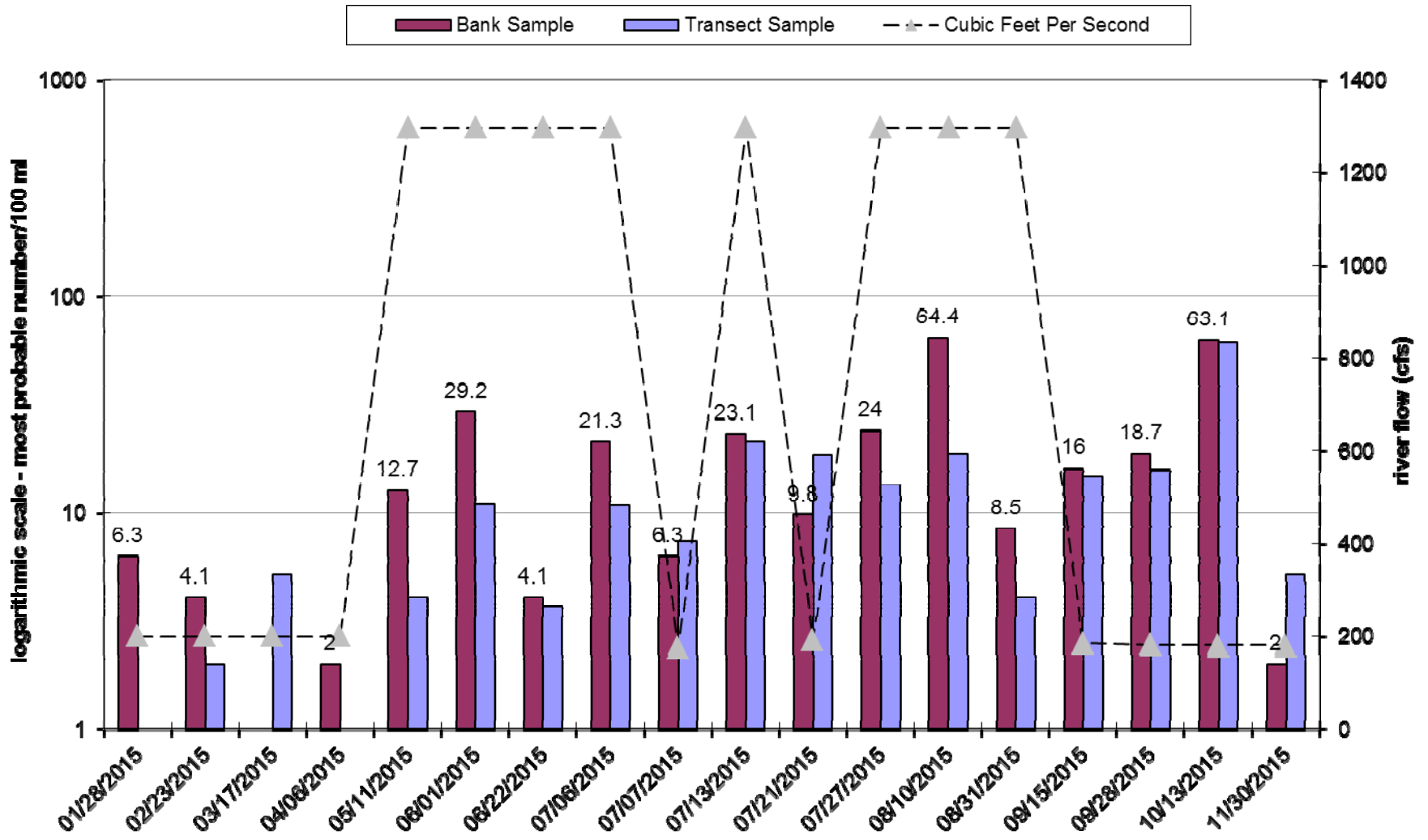
- Circulated to Environmental Management for comments

RESULTS

The graphs on the following pages show the results of the water quality testing for bacteria during the 2015. The bacteria levels existing on the South Fork of the American River below Chili Bar Dam samples indicated minimal potential human health threat to boaters and swimmers in 2015.

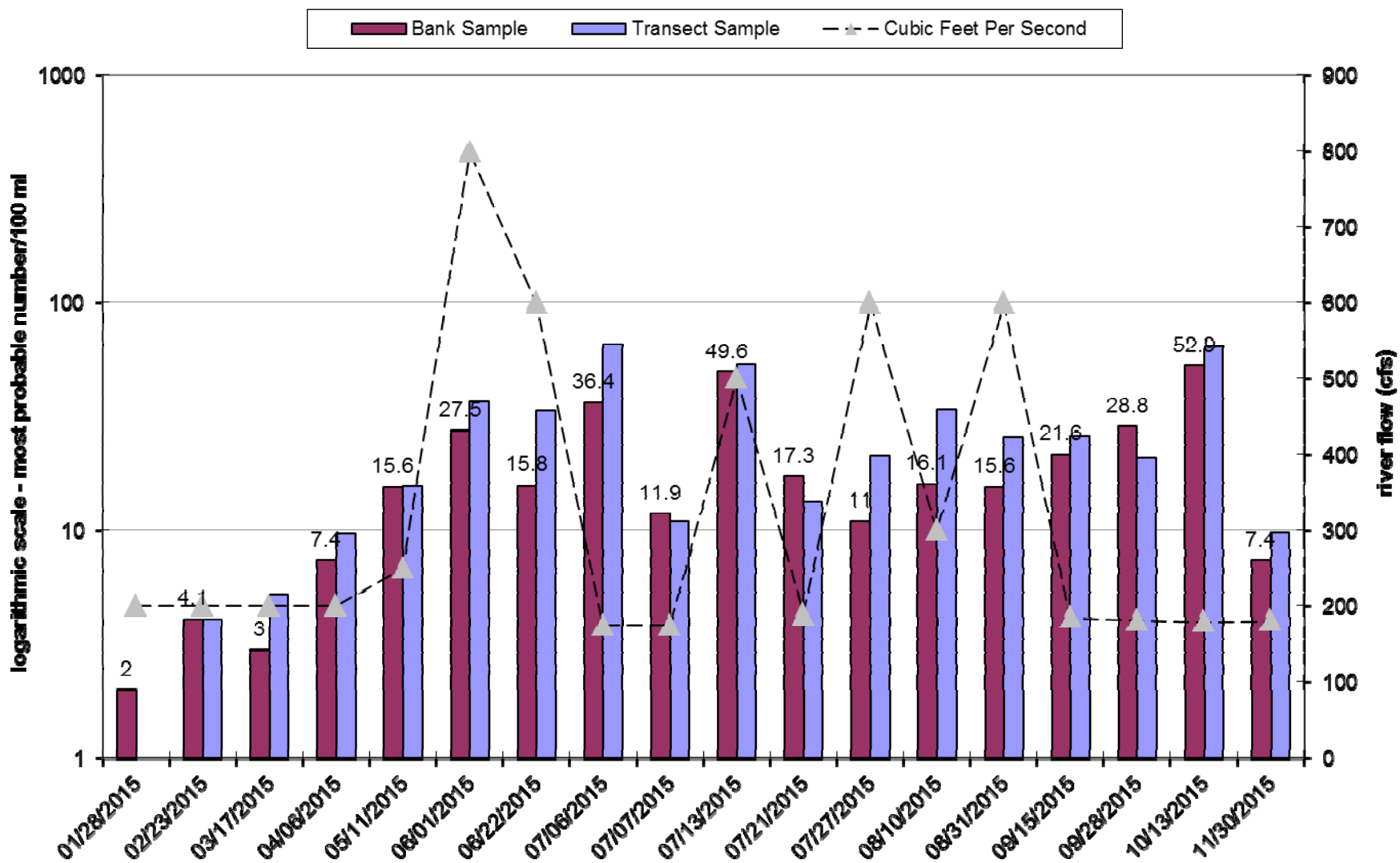
Past testing for oil and grease from parking areas has not shown any significant and in many cases no oil and grease running off since the implementation of the 2001 RMP and therefore it can be inferred that parking by boaters does not contribute significant oil and grease pollution into the South Fork American River.

E. Coll levels Below Chilli Bar Dam 2015



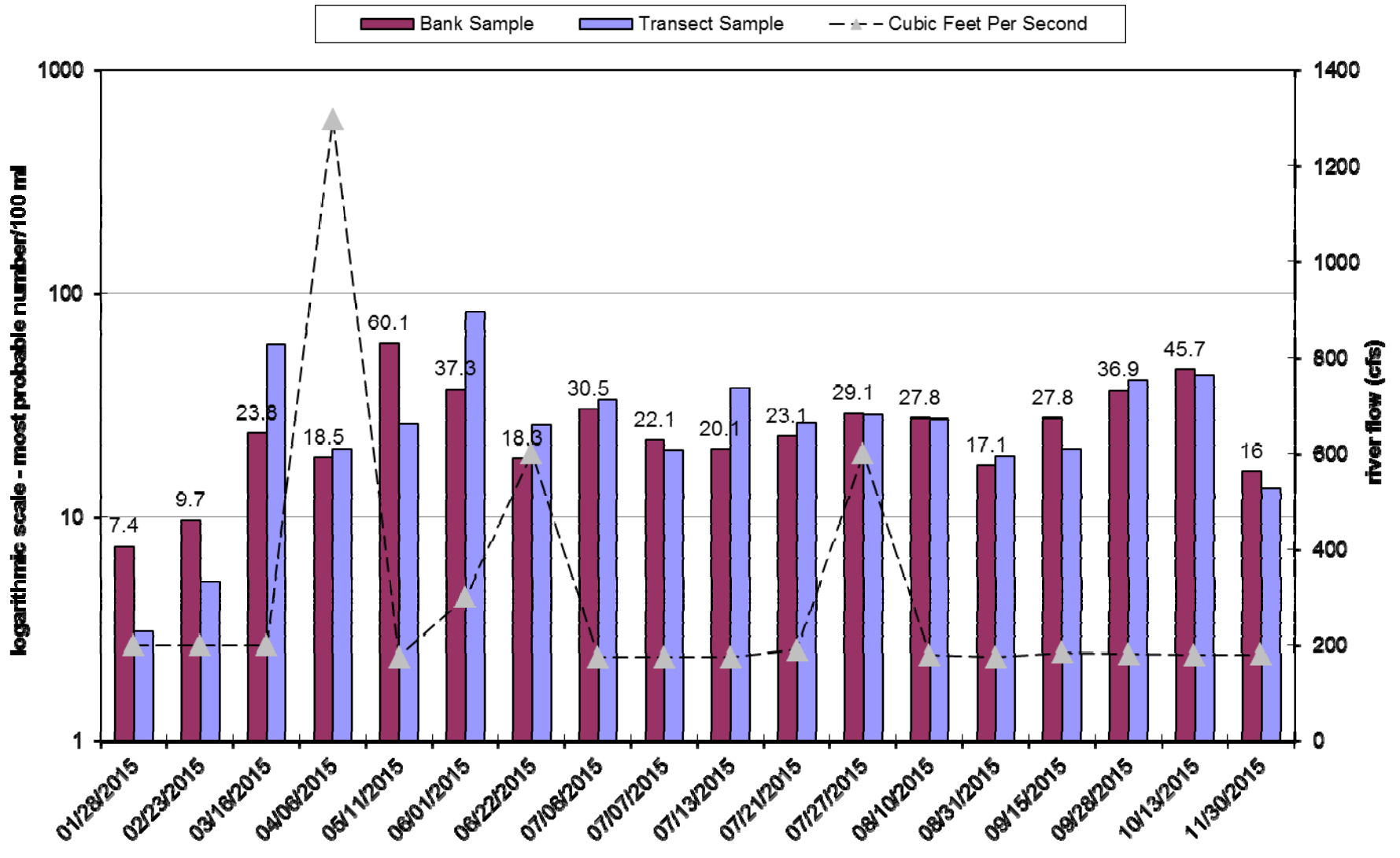
Appendix B. Water Quality Monitoring Program and Test Results

E. Coll levels at Marshal Gold State Historic Park 2015



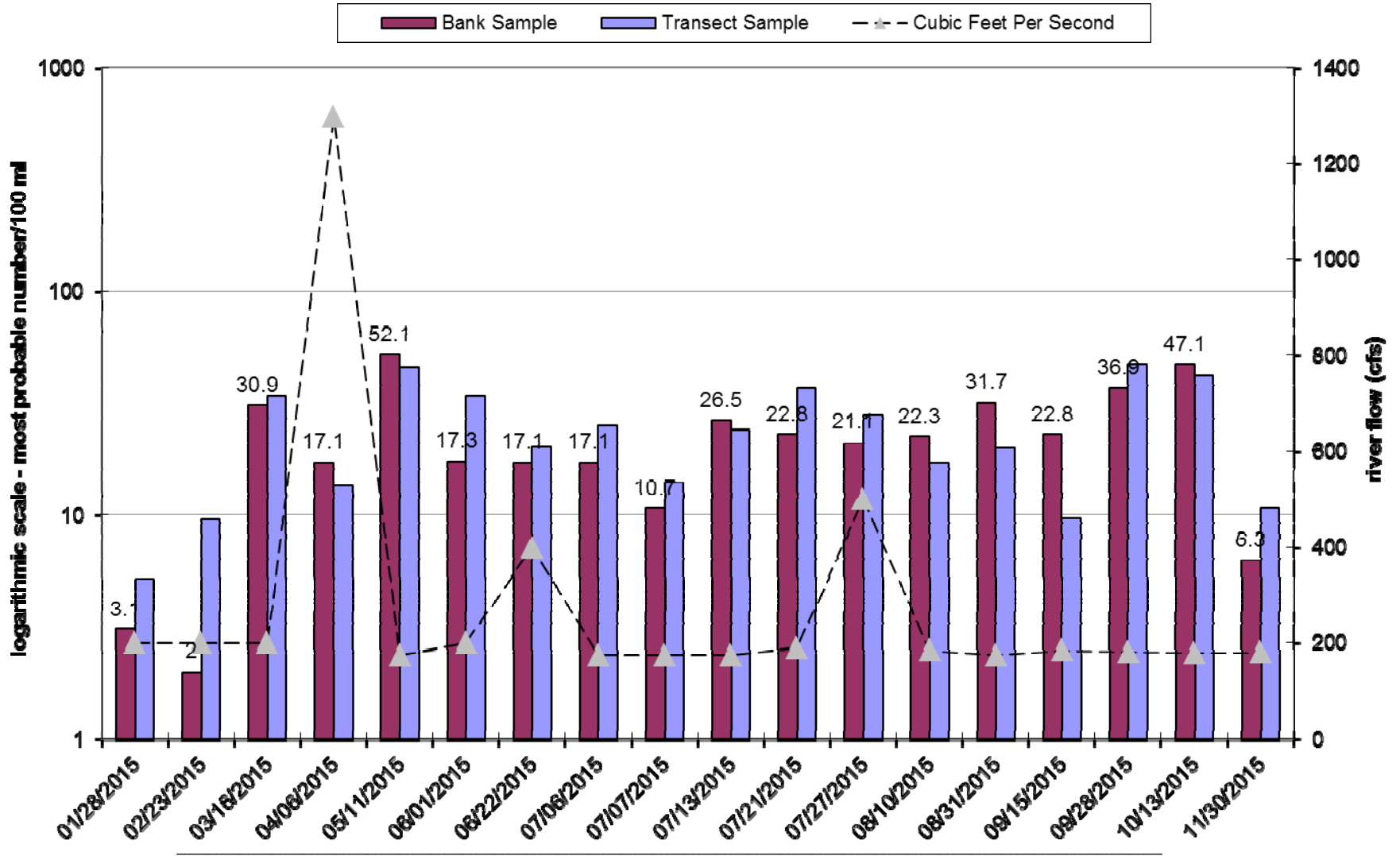
Appendix B. Water Quality Monitoring Program and Test Results

E. Coll levels at Henningsen Lotus Park 2015



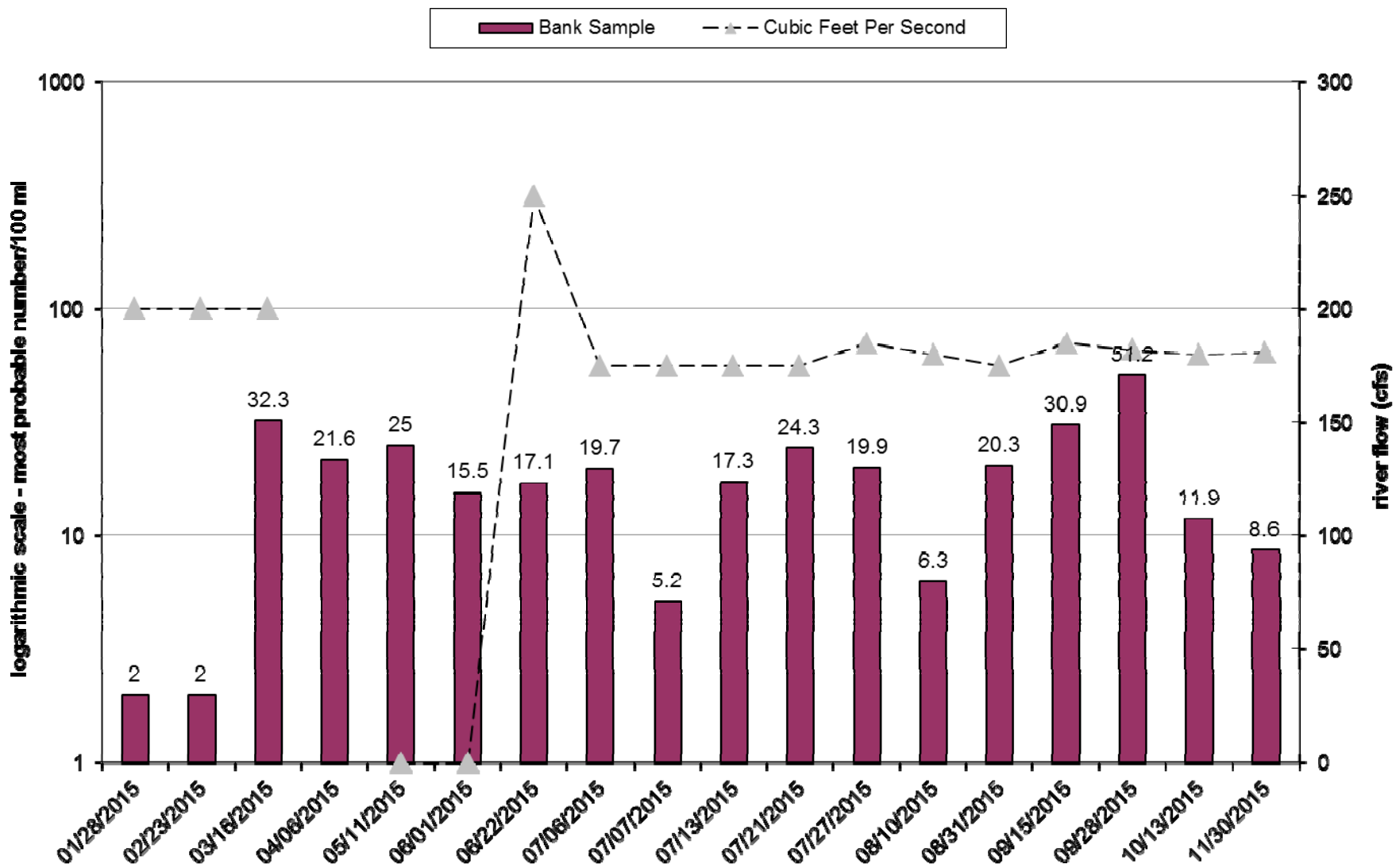
Appendix B. Water Quality Monitoring Program and Test Results

E. Coll levels at Turtle Pond Area 2015



Appendix B. Water Quality Monitoring Program and Test Results

E. Coll levels at Salmon Falls 2015



Appendix B. Water Quality Monitoring Program and Test Results

Appendix B. Water Quality Monitoring Program and Test Results

APPENDIX C

**2015 EL DORADO COUNTY SHERIFF'S DEPARTMENT
BOATING SAFETY UNIT SUMMARY FOR THE SOUTH FORK OF
THE AMERICAN RIVER**

Appendix C. Sheriff's Boating Safety Unit Summary Report

EL DORADO COUNTY SHERIFF'S OFFICE BOATING SAFETY UNIT 2015 SUMMARY SOUTH FORK OF THE AMERICAN RIVER

The El Dorado County Sheriff's office boating unit has jurisdiction of the South Fork of the America River from the Chili Bar dam area to Lake Folsom. This section of the river offers many river related water activities to include; white water rafting, (both commercial and private companies) river boarding, kayaking, including several companies offering lessons and large groups of people floating in tubes.

Due to the increase of activity in the summer months, the El Dorado County Sheriff's office will focus patrol operations on the river from Chili Bar to the Salmon Falls commercial take out in Lake Folsom. The Sheriff's office is responsible for law enforcement, search and rescue, recovery operations and boating education. The main focus during normal operations is education on the county ordinance of wearing personal floatation devices while on the river and general safety compliance.

The 2015 season was consistent with previous seasons, with an increase in the amount of subjects floating on the river in inner tubes, pool rafts and toys and other inflatable items not really intended for white water rafting. Another area of increase on the river is surfers. (Surfers will ride a short ocean type of surf boards on the back wave of an eddy.) Common issues and complaints from commercial companies, river users, and property owners included:

1. Non-permitted person running for hire commercial rafting trips
2. Complaints of illegal activities; underage drinking, trespassing, littering, bridge jumping
3. Surfers not moving or yielding the right of way to other boaters
4. "Tubers" not wearing personal floatation devices and drinking alcohol on the river, mainly between the Coloma to Greenwood section of the river

The section of river from North Beach in Marshall Gold Discovery State Historic Park in Coloma to the Bureau of Land Management takeout at Greenwood Creek is commonly referred to as "C-G." This section of the river is easily navigable without any need of training or knowledge. Therefore it is an area of high traffic flow for weekend visitors. The Sheriff's Office normally patrols this section of river using a 14' Hyside raft and the raft only passes through the area once while en-route to Lake Folsom. This year the Sheriff's Office did a saturation patrol of the area using inflatable kayaks. Two deputies were assigned to patrol this section of the river. The deputies made several trips down the river in a day, increasing patrol and awareness.

Stats for 2015:

Life Jacket Warnings: 83 (most of which were on land before going onto the river)

Life Jacket Citations: 1

Negligent Operations Warnings: 3

Other Violations / Warnings: 49

Other Violations / Citations: 2

Persons Assisted: 72

Vessels Assisted: 24

Search / Rescue Operations: 4

Compliance / Inspections: 4

APPENDIX D

**RIVER MANAGEMENT ADVISORY COMMITTEE
COMMENTS ON THE 2015 RIVER SEASON**

El Dorado County River Management Advisory Committee Comments on the 2015 River Season

The River Management Advisory Committee (RMAC) discussed the 2015 river season at the November 9, 2015 RMAC meeting. The following is a summary of their comments and suggestions. The audio and minutes from the November RMAC meeting can be found on the County RMAC Agendas and Minutes web site at <https://eldorado.legistar.com/Calendar.aspx>.

The comments below were made by individual members and do not necessarily reflect the committee as a whole.

- Thanked public for the submitted comments to RMAC and County of El Dorado
- Concern about inner tubers safety and suggested that local retailers be required sell life jackets and advise customers that the Coloma to Greenwood Cr. section is mostly private property and to show them a map the public river access location.
- More significant presence by the Sheriff's Department in the Coloma to Greenwood section of river which could be funded by transient occupancy tax (TOT) from local campgrounds, vacation rentals and other area lodging
- Quite zone complaints and concerns are ongoing issues
- The Chili Bar to Lake Folsom section of river should qualify for the use of SMUD mitigation money and some should be redirected for use of increased Sheriff's presence on the Coloma to Greenwood Cr. section of river and for the Parks River Program for more education for river users, additional staff, more on river observation, and enforcement and more data collection to help with management decisions and for paying for river access infrastructure
- The present practice of the Sheriff's Department boating the entire 21 mile section in a day is not very effective and would like them to instead inflatable kayak the Coloma to Greenwood Cr. section
- Thanked County River Program staff for patrolling the river as much as they do with their small staff and thanked them for their professionalism and efforts to educate the public about private property and river safety
- Appreciate the river clean up days and thank you to the volunteers who came out for those
- Would like to see all the RMAC meeting announcements and attachments go out on the google group CLNews list serve
- Thank you to the other RMAC members for volunteering
- Concern about mega trips (one outfitters rafts all together on the river – 10 or more rafts) and this becoming more prevalent with the trend of outfitter consolidation
- Would like to see more outfitters practicing better boater etiquette which would set the example for private boaters
- Agencies running the river for a purpose and not just to go down the river
- The sheriff's department should make more of an effort to contact and educate the public on what is permissible and what is not along with more focus on crime (vehicle break-ins) and trespassing
- Would like to see RMAC meetings held back in the Coloma area
- That it is legal for outfitters to work together to take each other's customers rafting
- That private boaters are required to pay to access the river is a hardship for some people

Appendix D RMAC Comments

APPENDIX E

PUBLIC COMMENTS ON THE 2015 RIVER SEASON

Public Comments on the 2015 River Season

These public comments were made at the November 9, 2015 River Management Advisory Committee (RMAC) meeting on the River Management Plan Implementation and the 2015 River Season.

Written comments were also received which begin on the following page.

- Trespassing on private property by river users
- Littering from river users
- More monitoring was observed by the Sherriff staff in the Coloma to Greenwood Cr. section
- Noise from both private and commercial boaters in the Coloma to Greenwood Cr. section
- Would like to see RMAC meetings moved back to the Coloma area



Noah Triplett <noah.triplett@edcgov.us>

Monday RMAC meeting

Sara SK <skpriority@earthlink.net>

Mon, Nov 9, 2015 at 2:27 PM

To: Marilyn Tahl

Cc: Noah Triplett <noah.triplett@edcgov.us>, "Smith, Barry@Parks" <barry.smith@parks.ca.gov>, "Matin, Suzanne@Parks" <Suzanne.Matin@parks.ca.gov>

Hi Marilyn, thank you for this reminder. I cannot attend the meeting but wonder if I can share 2 concerns with you to share with the committee?

First, the Coloma Resort packs in more and more campers, RVs, etc, every year it seems. I have several concerns with their high summer volume:

1. I am a neighbor about 1/2 mile away, and I am concerned that in case of emergency, there are so many campers at the Coloma Resort that I, my neighbors, and most of the campers will not be able to exit/ escape in a timely manner. Fire, flood, what have you.
2. Also regarding emergencies, the Coloma Resort has only ONE exit for all those campers: the main gate onto Mt Murphy Road right at the bridge. Their secondary "exit" is chained, locked, and fenced over. I have a photo if you would like to see, or maybe you have noticed this while traveling Bayne Road. I cannot believe this is legal. It certainly is a dangerous situation to pack so many people and so many large vehicles into one small space with only one exit.
3. The Coloma Resort has changed what used to be their own beach spaces into camping spaces, so their guests who want to go to the river have been spilling over to the gold panning beach that is state park property just downstream. It is an ongoing concern for the park, and is a hassle for local residents too.

Second, I think all the campgrounds should make sure that their guests are aware of river hazards. We get more people coming up who don't understand river flows, and there have been a number of dangerous and near/fatal incidents this last summer because of their ignorance and not being informed when they are here. It is the responsible thing to do, and an obligation to my mind.

Thank you for bringing these concerns to the committee. I'm happy to talk with you about them if you like, 530.295.3488.

I appreciate your service,
Sara SK

Sara Schwartz Kendall

SKpriority@earthlink.net

Tel: (530) 295-3488

Mail: PO Box 172, Coloma CA 95613

Marilyn Tahl

[Add to Address Book]

To: coloma lotus news <clnews@googlegroups.com>

Subject: [CLNews] Reminder: Input wanted on the 2015 river season THIS Monday

Date: Nov 8, 2015 5:38 PM

Hi Community,

11/9/2015

Edcgov.us Mail - Monday RMAC meeting

Just a reminder for river-front property owners, boaters, business folks and anyone else with a comment on the 2015 river season -

The annual "end of season" meeting of River Management Advisory Committee (RMAC) is THIS Monday, November 9 at 7:00 pm in the Board of Supervisor's Chamber in Placerville.

How did the river season, the different groups of users, traffic, or anything else associated with river use affect you? What were your experience -s good and bad? In order to plan the coming year's focus, it helps to know what this past season was like for the community. We really want your input.

Please see Noah's message below for details.

Hope to see you there!

Marilyn Tahl
RMAC Member-At-Large



Noah Triplett <noah.triplett@edcgov.us>

Public Comments Re: River Managment Plan

John Fonseca <john@fonsecaaroub.org>

Mon, Nov 9, 2015 at 3:52 PM

To: Noah Triplett <noah.triplett@edcgov.us>, "Suzanne@Parks\\"" <Suzanne.Watkin@parks.ca.gov>

As a long time river front resident I would like to request your attention to the following:

- 1) Blocking the access to Little Rd by illegally parked vehicles
- 2) Trespassing by river users on Little Rd.

Both of these issues have been brought to the attention of RMAC in the past. What will it take to get something done?

John Fonseca
4946 Little Rd
Coloma, CA

2015 River Management Season Comments

2015 was determined to be a super dry water year which is the most critical of the water year types and flows were limited to 5 hours a day so crowding and congestion were sometimes an issue as trips were given a shorter window on which to run the river.

There was a tremendous increase of users in the middle section of the river, particularly the bridge to bridge section to include tubes, float toys, inflatables, etc. These types of users are not as limited in flow requirements as other users so their time on the river was more extensive than the 5 hour release window. The campgrounds in the area do not pay any type of user fee when these individuals use the river like Commercial or public boaters running the river from usual put-ins (including Henningson Lotus Park and Chili Bar). The campgrounds also do not pay any transient occupancy tax (TOT) like hotels, bed and breakfast, or short term rental businesses in the area do. The casual middle run users contribute a great deal to congestion, noise, litter, trespass and other issues on the river and do not contribute to the necessary management by the County and the Sheriff. There needs to be an equitable share of the burden of river management and the campgrounds, Air BNB homes, and other similar short term rentals should all contribute to this. The funds raised by these additional TOT fees could add an additional seasonal river Patrol to the middle section to address any problems arising from the increase in use.

My observation was that there is also a large increase in large trips and group sizes. The continued sharing, trading, and selling Commercial river use days among Outfitters contributes to this. The current RMP does not allow this practice but the County has never enforced the rule so it gets abused on a regular basis. Outfitters with 40 days and less regularly run trips with double that number by borrowing and buying other companies river use days.

The updated RMP has not been submitted to the public, if it has even been submitted to the County. Hopefully the contract with the County included delay penalties but an update would be appreciated.

I have also not seen the River Program Annual Report for 2015 which would be helpful to the public submitting comments to the Planning Commission.

The RMAC meetings were also officially moved to Placerville and that tremendously affected the ability of the people most affected by the RMP to attend meetings. The quality of the audio of the meetings is also unintelligible at times making it impossible for people unable to attend meetings to keep informed. One glaring example was the meeting where the upcoming RMP update was discussed by the consultant which was entirely unintelligible.

The Sheriff Patrol was basically non existent this season in terms of effectiveness. They put on the river before most trips had started and did speed runs to the take out. The last month before Labor Day they did use inflatables and patrolled the middle section from Park to Park and it was greatly appreciated. I would like to see the middle run be patrolled more next season. This gives the Sheriff, who has the only authority to cite problems on the river, the ability to be more mobile and address problems in a more timely fashion. Doing the entire river did little in terms of real help where it is most needed.

To summarize, additional river patrol needs to occur in the middle section of the river. There also needs to be a means for these users to contribute to the cost of managing the river, just like Commercial and other Public users do. Campgrounds need to collect TOT tax since they are all on the river and the occupants use the river.

Thank you for the ability to comment on the 2015 river season,
Hilde Schweitzer



Noah Triplett <noah.triplett@edcgov.us>

Re: 11/9/15 RMAC Public Comment

Vickie Sanders <vickie.sanders@edcgov.us>

Mon, Nov 9, 2015 at 3:18 PM

To: Melody Lane <melody.lane@reagan.com>, Noah Triplett <noah.rucker-triplett@edcgov.us>

Cc: EDC COB <edc.cob@edcgov.us>, Michael Ranalli <michael.ranalli@edcgov.us>, Donna Mullens <donna.mullens@edcgov.us>, Pamela Knorr <pamela.knorr@edcgov.us>, Paula Frantz <paula.frantz@edcgov.us>, Robyn Drivon <robyn.drivon@edcgov.us>, Roger Trout <roger.trout@edcgov.us>, Sheriff DAgostini <john.dagostini@edso.org>, The BOSFIVE <bosfive@edcgov.us>, The BOSFOUR <bosfour@edcgov.us>, The BOSONE <bosone@edcgov.us>, The BOSTHREE <bosthree@edcgov.us>, The BOSTWO <bostwo@edcgov.us>

Noah, can you please get this posted?

Thank you Melody for your input, it will be attached to the item and given to the committee member tonight.

Vickie Sanders
 Parks Manager
 County of El Dorado
 Chief Administrative Office
 530-621-7538
 FAX: 530-642-0301



On Mon, Nov 9, 2015 at 3:03 PM, Melody Lane <melody.lane@reagan.com> wrote:

Since it is uncertain whether I'll be able to attend tonight's RMAC meeting, please ensure the entirety of this correspondence and attachments are publicly posted ASAP to the BOS calendar.

It has become apparent over the years that RMAC representatives do not operate in the best interests of the river community or in accordance with the RMP. Their predetermined outcomes and maintenance of illicit control was again made glaringly apparent during the September 14, 2015 RMAC meeting.

The BOS has an ethical duty to constituents to demonstrate leadership by authentic transparency and accountability of their delegated RMAC representatives. Without the support of the BOS the RMAC lacks credibility or authorization to make recommendations to the Planning Commission insofar as it pertains to the revocation of the Coloma Resort and American River Resort Special Use Permits.

It is a matter of public record that Roger Trout, county staff and RMAC reps have

16-0203 B 74 of 76

remained uncooperative and openly hostile over the years toward certain residents. The reoccurring RMP issues involve the following:

1. Censoring of RMAC minutes
2. Blatant lying by county staff and RMAC representatives
3. Frequent arson fires
4. Trespassing
5. Vandalism
6. Littering/dumping
7. Egress
8. Public Safety
9. Lack of Code and Law Enforcement along the SFAR
10. No valid Oath of Office on file with HR for Noah Rucker or Vickie Sanders.
11. Failure to respond appropriately to CPRAs as required by law
12. Retaliation, bullying and harassment

Presently taxpayers are bearing the burden for unnecessary lawsuits relevant to the RMP. The most significant involves Chili Bar, county employee Noah Rucker, and American River Conservancy. Note this lawsuit represents a threat to every SFAR resident as presented by Jack Sweeney during the 5/15/15 BOS (attached).

Also note there has been no response to the attached CPRA which was due 10/26/15.

The solution is very simple: ***Just do the right thing.***

Melody Lane

Founder - Compass2Truth

~ By identifying the people's sovereign will not with its latest but its oldest expression, the Framers succeeded in identifying the people's authority with the Constitution, not with the statutory law made by their representatives. ~

