



COUNTY OF EL DORADO

Environmental Management Department

River Management Program

2850 Fairlane Ct.
Placerville, CA 95667
(530) 621-5300

El Dorado County

River Management Plan

2012 Annual Report

Prepared by Noah R. Triplett
River Recreation Supervisor

**El Dorado County River Management Plan
2012 Annual Report**

Table of Contents

	Page
Introduction and Report Organization.....	1
2012 River Use and Carrying Capacity Monitoring	2
Implementation of Plan Elements.....	8
Element 1 – Educational Programs.....	8
Element 2 – Safety Programs.....	10
Element 3 – Transportation Programs.....	11
Element 4 – Monitoring and Reporting Programs.....	15
Element 5 – Agency and Community Coordination Programs.....	20
Element 6 – Permits and Requirements.....	22
Element 7 – Carrying Capacity Exceedance Actions and Implementation.....	24
Element 8 – Regulations and Ordinances.....	24
Element 9 – Facilities and Lands Management.....	24
Element 10 – Funding	26
Element 11 – Data Availability.....	26

List of Tables

Table 1.	2012 Daily traffic volumes on County roads in project area.....	13
Table 2.	Caltrans 2011 traffic data for state highways.....	15
Table 3.	Summary of commercial river use permit violations in 2012	18
Table 4.	River Trust Fund fiscal year 2011-2012 budget summary.....	26

El Dorado County River Management Plan 2012 Annual Report

Table of Contents continued

List of Figures

Figure 1.	Annual River Use 1992-2012	2
Figure 2.	2012 Daily Boater Totals – Chili Bar run	3
Figure 3.	2012 Daily Boater Totals – Gorge run	4
Figure 4.	Boat Density Gorge run in 2012	5
Figure 5.	Gorge Run on Saturdays – trends in daily boater totals	6
Figure 6.	Chili Bar Run on Sundays – trends in daily boater totals	7
Figure 7.	Summer weekday DOT average traffic volumes.....	14
Figure 8.	Summer weekend DOT average traffic volumes.....	14

Appendix A	Mitigation Monitoring Plan
Appendix B	River Use Trends
Appendix C	Water Quality Monitoring Program
Appendix D	El Dorado County Sheriff's Department Boating and Safety Unit Summary
Appendix E	River Trust Fund Fiscal Year 2011-2012 Budget Summary & Approved 2012-2013 River Trust Fund Budget
Appendix F	El Dorado County River Management Advisory Committee Comments
Appendix G	Public Comments on 2012 River Season
Appendix H	South Fork American River release schedule below Chili Bar Dam

River Management Plan Mitigation Monitoring Plan

IMPACT	MITIGATION MEASURE	MONITORING/REPORTING ACTION	EFFECTIVENESS CRITERIA	RESPONSIBLE AGENCY	TIMING
	<p>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>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>Impact 11-1 (continued)</p> <p>Action: None required.</p>					
<p>Public Safety:</p>					
<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> <p>(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;</p> <p>(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</p> <p>(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>	<p>To reduce potential safety impacts potentially influenced by the extension of the middle run of the RMP area, the County will:</p> <p>(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;</p> <p>(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</p> <p>(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>	<p>(a) and (b) Document provision of signage (or coordination of signage in the middle-run area.</p> <p>(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>	<p>County Parks Division</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>Action:</p> <p>a) Revised river flow/safety signs were installed at Henningsen Lotus Park, Camp Lotus and Marshall Gold SHP in 2003.</p> <p>b) Signage specific to the middle run was installed at Marshall Gold SHP in 2003. Parks Division staff revised signage after the Bureau of Land Management plan was adopted and the Greenwood Creek access was improved.</p> <p>c) The River Program maintained similar levels of staff time patrolling the quiet zone.</p> <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 Element 4 of 2012 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> <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) Compile incident and accident report 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> <p>1. Institutional Group – Defined as a group organized by a non-profit organization meeting IRS tax-exempt requirements. Institutional groups will</p>	<p>The County will enact the following measures as described in RMP Element 7.3 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) Compile incident and accident report 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> <p>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:</p> <ul style="list-style-type: none"> ➢ Pre-season annual registration with County Parks; ➢ Proof of liability insurance; 	<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>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> <p>Adjust commercial allocations by river segment and develop institutional group allocations.</p>	<p><i>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>			

Action: See action in Impact 13-2, above. See Daily Boater Total table in Element 7.4.

APPENDIX B
2012 RIVER USE TRENDS

APPENDIX B RIVER USE TRENDS

Trends in commercial and noncommercial river use on weekends

The two prior figures have illustrated the overall trend in weekend use, having combined the commercial and noncommercial uses together. This section will examine two components of the overall trends:

1. Trends in the individual commercial and noncommercial categories;
2. Trends in commercial and noncommercial choice of runs on Saturdays and Sundays.

Gorge run on Saturdays: Table 1 below provides data on the average commercial, noncommercial, and total number of boaters during the Memorial Day to Labor Day period during 1996, 2003, 2004, 2006, 2007, 2008, 2009, 2010, 2011 and 2012.

Table 1. Average number of boaters – Gorge run on Saturdays

	Commercial	Noncommercial	Total
1996	1752	544	2296
2003	925	424	1471
2004	925	527	1452
2006	973	408	1381
2007	1096	450	1546
2008	977	463	1440
2009	873*	520	1393
2010	1066	501	1567
2011	1161	486	1647
2012	1146	372	1517
% change 1996-2012	34% decrease	12% decrease	34% decrease

- 1 The decrease in commercial use on the Gorge run is proportionally greater than the decrease in noncommercial use.
- 2 The average numbers of noncommercial boaters on the gorge run in 2012 decreased nearly 2% more compared to 2011. (see Figure 1 below).
- 3 Although the absolute number of noncommercial boaters has declined since 1996, because the percentage decrease in commercial use has been greater, noncommercial boaters had a larger "share of the pie" in 2012 than in 1996:
 - o In 2012, the noncommercial boater share of the pie was 28% of the total daily boaters on the Gorge run on Saturdays.
 - o In the mid-1990s, the noncommercial boater share of the pie was about 25% of the total daily boaters on the Gorge run on Saturdays.

*Commercial data from 2009 did not include guides or whole river trips

Chili Bar run on Sundays: Table 2 below provides data on the average commercial, noncommercial, and total number of boaters during the Memorial Day to Labor Day period in 1996, 2003, 2004, 2006, 2007, 2008, 2009, 2010, 2011 and 2012.

Table 2. Average number of boaters – Chili Bar run on Sundays

	Commercial	Noncommercial	Total
1996	1015	420	1435
2003	506	263	768
2004	500	257	757
2006	525	198	723
2007	480	240	720
2008	325	215	613
2009	324*	214	611
2010	431	262	693
2010	431	262	693
2011	615	232	847
2012	507	228	735
% change 1996-2010	50% decrease	46% decrease	49% decrease

- 1 Noncommercial use on the Chili Bar run on Sundays experienced a slight decrease in 2012. High flows on the South in 2011 may have deterred more private boaters from running the Chili Bar which can be more challenging than the Gorge at those flows. In 2012 the flows were well regulated (not high) and the continued decrease in use may reflect the preference of private boaters to do the lower for reasons pertaining to shuttle logistics, length of run and relative ease of the Gorge.
- 2 On the Chili Bar run, noncommercial boaters’ “share of the pie” had remained a relatively constant 25-30% of the total daily boaters on Sundays from the mid-1990s until 2002. In 2012, the noncommercial share of the pie was about 35%.

*Commercial data from 2009 did not include guides or whole river trips

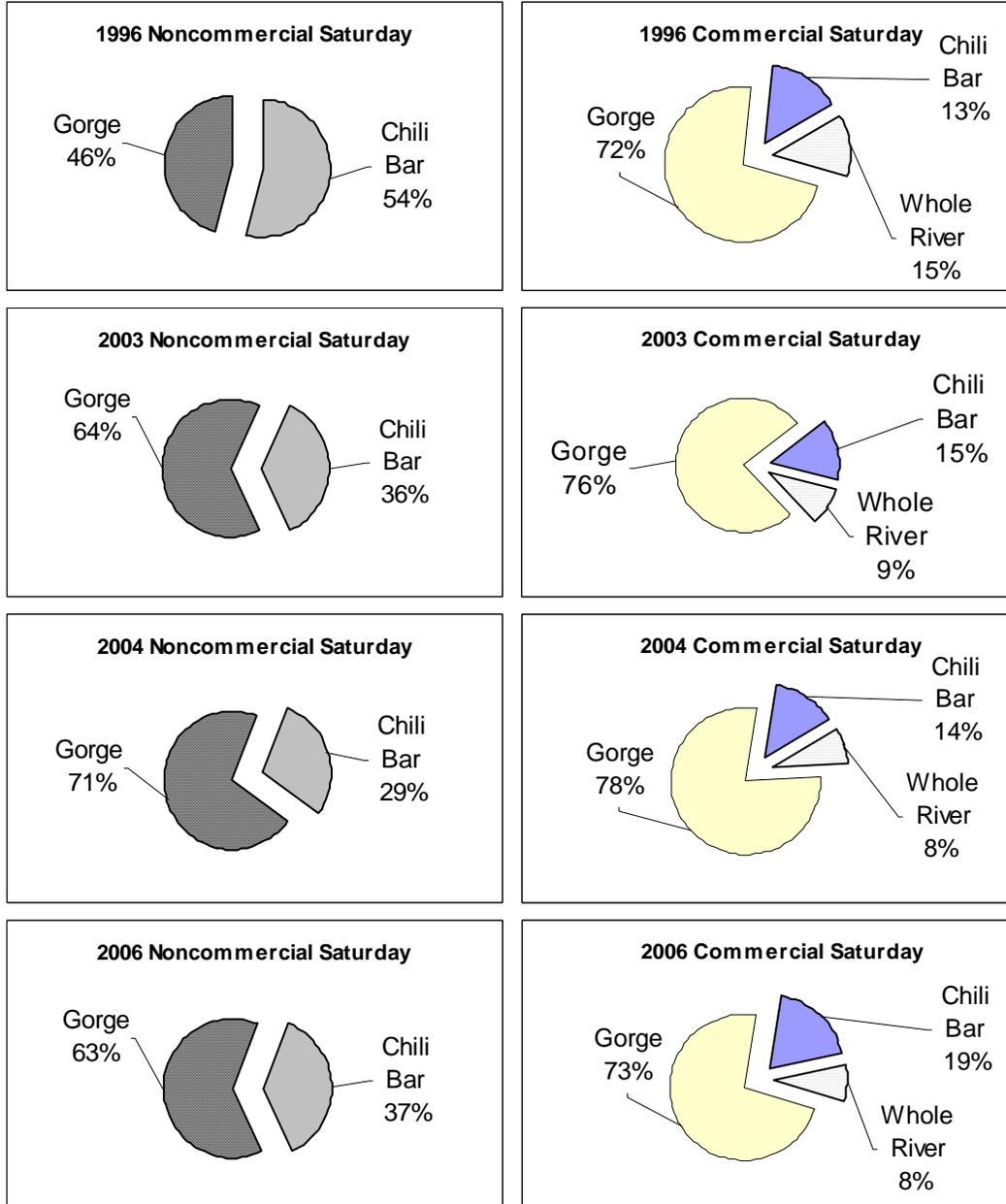
Trends in choice of runs

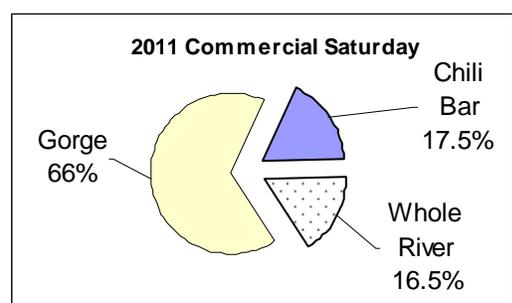
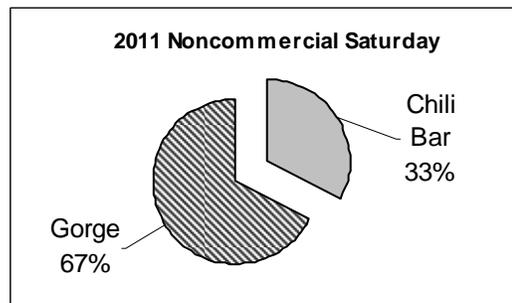
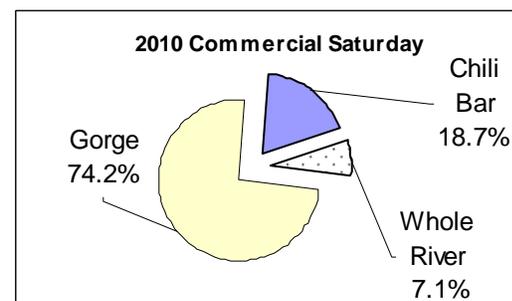
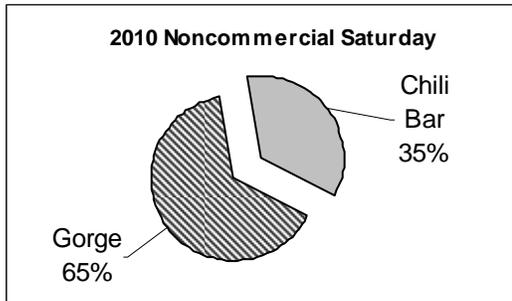
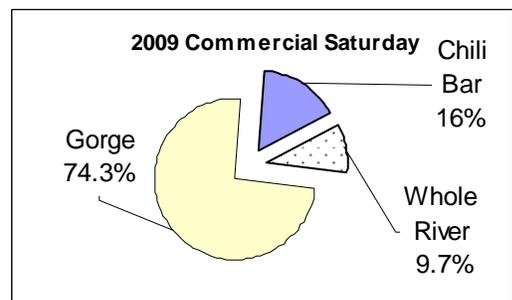
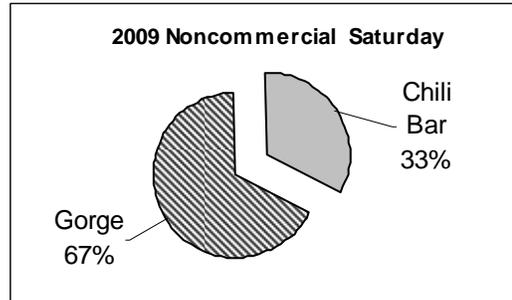
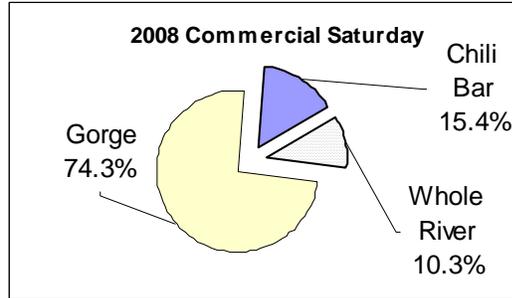
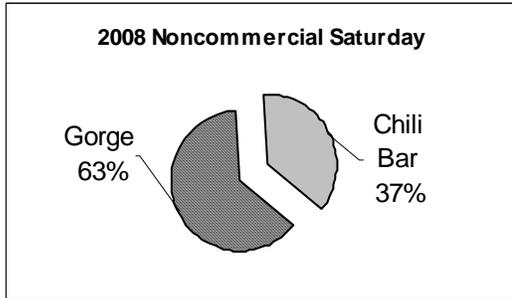
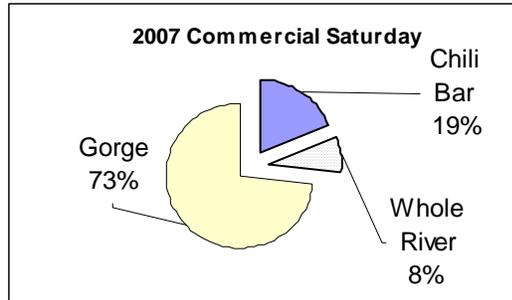
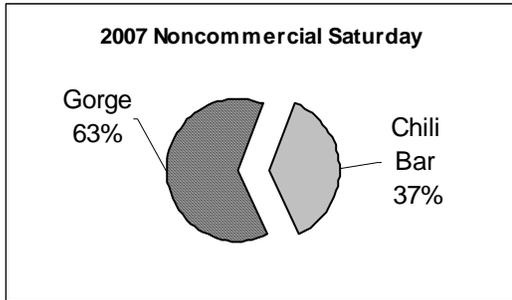
Over the coming years, the trends in choice of runs may guide County education efforts and track whether management actions related to the carrying capacity strategy are effective.

Saturdays: Between 1996 and 2002, noncommercial boaters exhibited a pronounced shift away from running the Chili Bar section and increasingly chose the gorge on Saturdays (see Figure 1). This pattern continued in 2012 albeit less than previous years by about 5%. The percentages in the following pie charts are based on the average river use by commercial and noncommercial boaters during the Memorial Day to Labor Day period.

Strong preference is exhibited by commercial clients and outfitters for Saturday gorge trips. Figure 1 also displays the downward trend in the proportion of whole river trips since the mid-1990s. In 2011 there was a significant increase in commercial whole rivers trips which

may have been a reflection of the higher flows and continues releases generated by the snow pack. Years with better snow pack – a longer runoff seem to reflect this trend. The relative lower flows from a scheduled release do not appear to support a preference toward whole river trips which was the case in 2012.





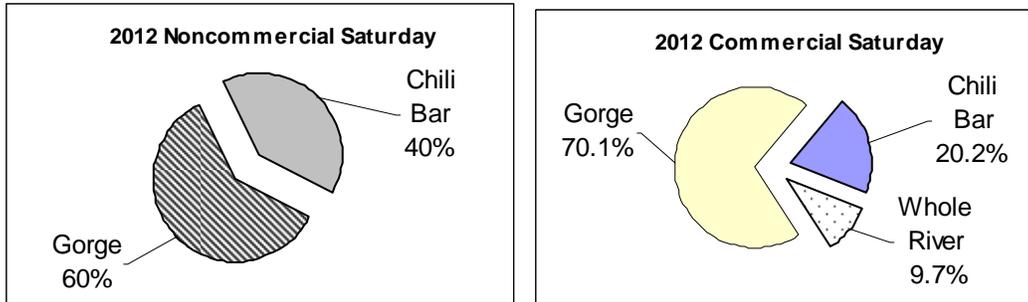
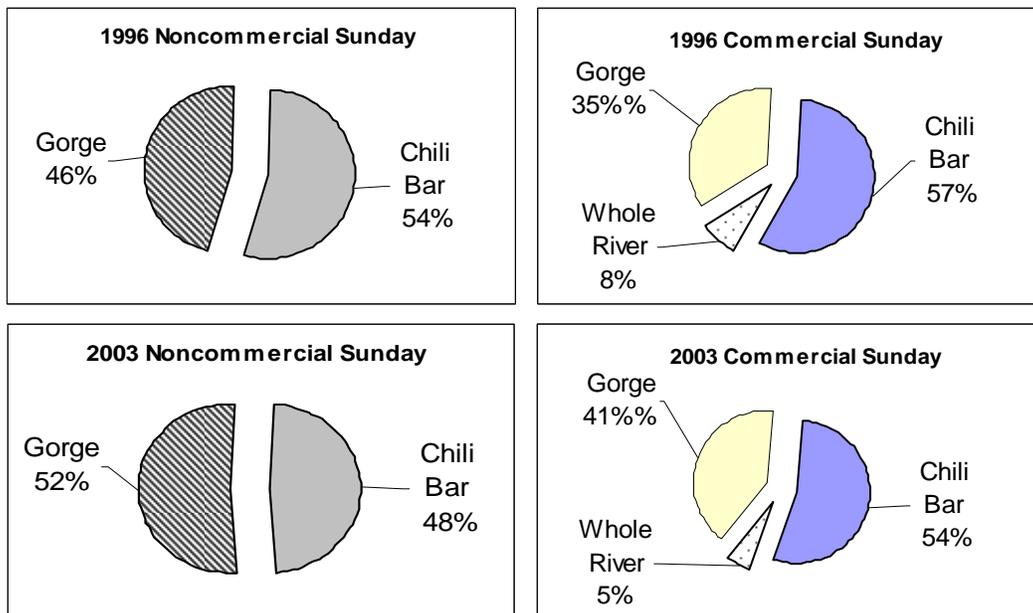
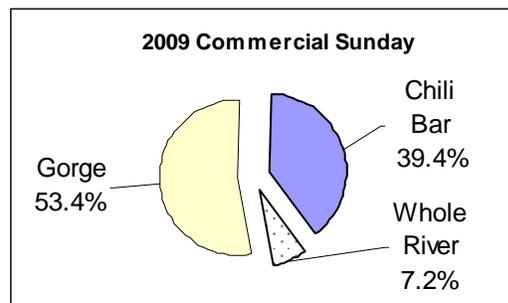
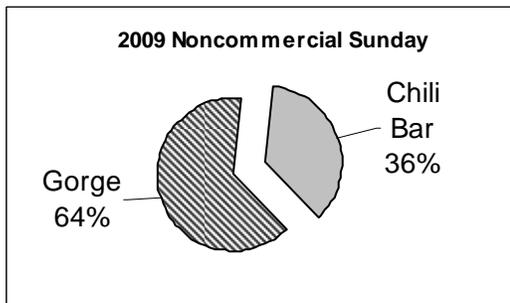
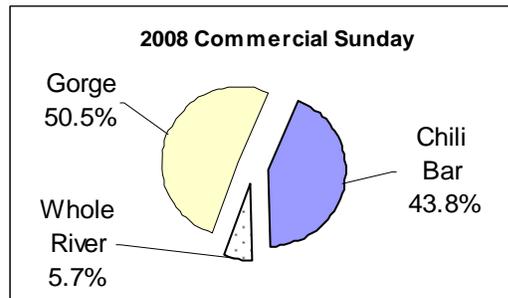
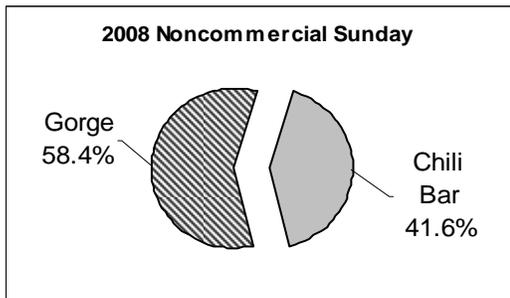
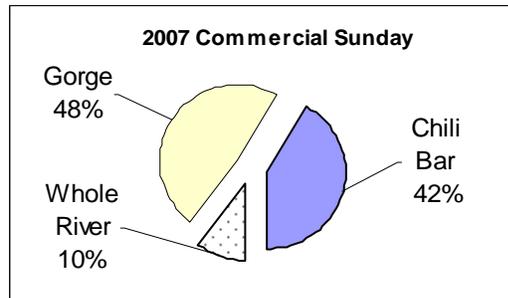
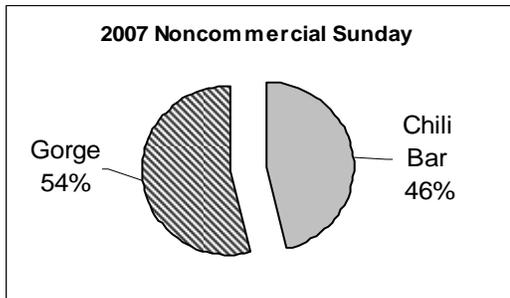
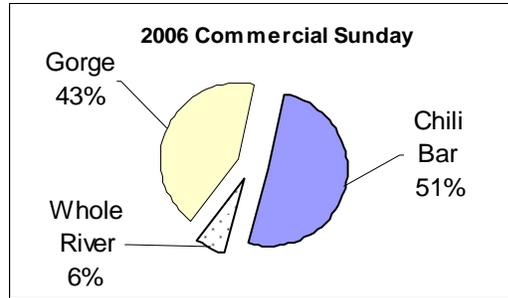
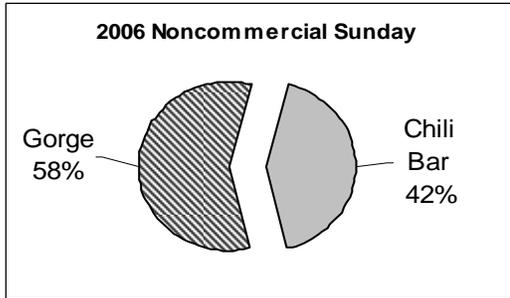
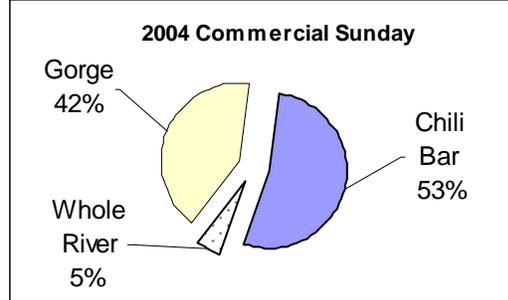
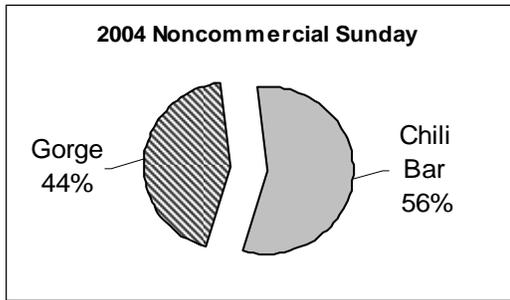


Figure 1. Noncommercial and Commercial choice of runs on Saturdays

Sundays: Since 1996, river use on the Chili Bar run has decreased more than river use on the Gorge run. Through 2002, noncommercial boaters increasingly favored the Chili Bar run over the Gorge run on Sundays. In 2004, however, noncommercial boaters preferred the Chili Bar run which was similar to the noncommercial use pattern in 1996. From 2006-2012 the pattern has shown a preference for the gorge run. (see Figure 2).

Figure 2 displays the increasing percentage of commercial customers choosing the Gorge run over the Chili Bar run for Sunday trips from the years 1996 to 2006. From 2007-2010 the percentage of commercial Gorge trips had been higher than those run solely on the Chili Bar run. In 2011 there was a significant increase in the number of commercial whole river trips which may be attributed to the higher flows and longer (continuous) releases which resulted in fewer commercial Gorge only trips which is also reflected in the drop in whole river trips in 2012.





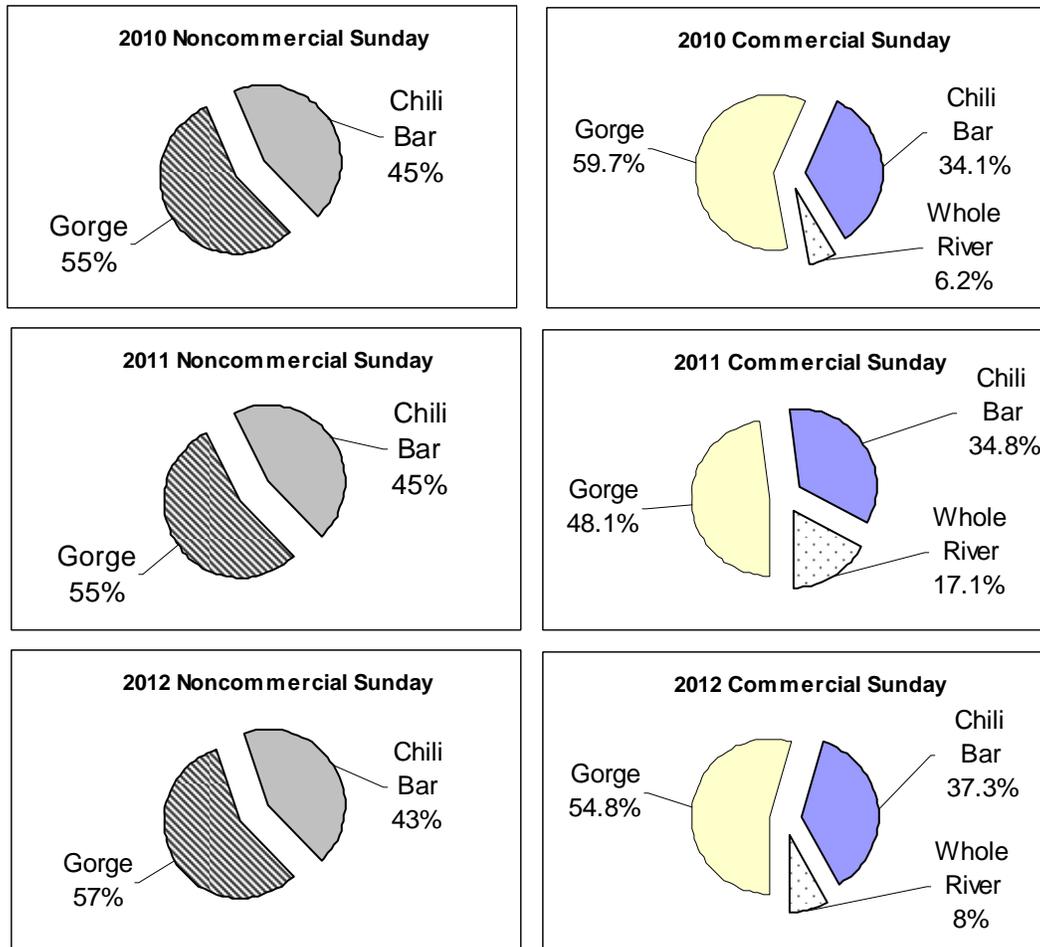


Figure 2. Noncommercial and Commercial choice of runs on Sundays

Sources of data and methods for estimating river use:

Sources

The primary sources of river use data that were used in the preparation of this summary include:

1. Outfitter monthly operating reports (which are audited by County River Program using boat density counts and photo's);
2. River Patrol on-river observations
- Weekend days from June through August, 2012;
3. Hotshot Imaging Photo data of noncommercial river use on the Chili Bar and Gorge runs from April 20, 2012 to September 30, 2012.

Total Daily Boaters

Number of boaters are expressed in “user days” (more commonly referred to as “recreation visits”). One user day or recreation visit is one person on a section of the river during one day. Due to the requirements of the RMP’s carrying capacity strategy, total daily boater

counts are obtained for each section of the river. As figures 1 and 2 above show, a percentage of the commercial trips are running whole river trips from Chili Bar to Salmon Falls. Survey data from the planning process also established that, depending on the river's flow, a varying percentage of noncommercial boaters also run whole river trips. The total daily number of boaters for the entire river is therefore usually less than the sum of the total daily boaters for the Chili Bar run plus the Gorge run. Figure 3 below shows the percentage of user days on Saturdays and Sundays Memorial Day through Labor Day.

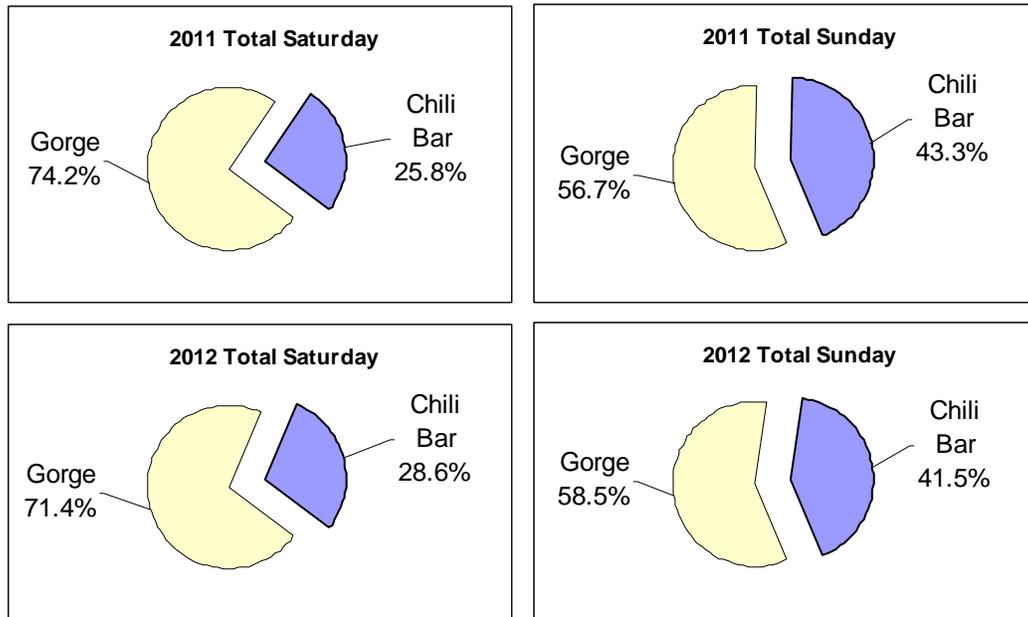


Figure 3. Noncommercial and Commercial Combined use choice of runs on Weekends

Chili Bar run data compilation methods:

- a) Commercial use numbers are complete data compiled from outfitter monthly operating reports.
- b) Noncommercial use numbers data on weekends was compiled from Hotshot Imaging Photo data.
- c) Noncommercial use numbers on weekdays are data compiled from Hot Shot Imaging.

Gorge run data compilation methods:

- a) Commercial use numbers are data compiled from outfitter monthly operating reports.
- b) Noncommercial use numbers on weekends are data compiled from Hotshot Imaging Photo data.
- c) Noncommercial use estimates for weekdays on the Gorge were obtained from Hotshot Imaging and Raft Photo data.

Permitted Institutional and Non-Profit Organizations:

- Institutional and Non-Profit use numbers include passengers and guides (all rafters).
- The use numbers are the total number of people per day regardless if they are the same people (rafting more than one day) or whether it was a training trip.
- Registration and use by Institutional and Non-Profit organizations has increased since 2002 but has leveled out the last few years.

- Use numbers reflect self reported use at the end of each season

Organization	Reported annual river use 2006	Reported annual river use 2007	Reported annual river use 2008	Reported annual river use 2009	Reported annual river use 2010	Reported annual river use 2011	Reported annual river use 2012
Calvary Chapel	562	613	490	420	459	383	347
Sierra Nevada College	83	60	71	75	Received Commercial Permit	Not Reg.	0
Friends of the River	1272	1313	1047	1326	950	225	450
Inner City Outings	514	614	770	551	405	578	605
Healing Waters	424	321	250	310	496	543	358
Prescott College	0	0	0	0	0	0	0
Project Great Outdoors	616	441	797	566	765	342	822
River City Whitewater Club	92	41	Not Reg.	Not Reg.	Not. Reg.	Not Reg.	0
Travis Air Force Base – US Air Force	240	422	354	461	392	230	539
Beale Air Force Base – US Air Force	238	347	302	382	232	252	280
Chico State Adventure Outings	Not Registered	15	100	Not Reg.	Not Reg.	Received Commercial Permit	0
CSU Chico Kinesiology Class (2 days)	Not Reg.	Not Reg.	30	30	0	0	Not. Reg.
UC Santa Cruz Guide School (5-6 days)	Not Reg.	77	70	77	60	72	120
Total	4165	4381	4282	4198	3759	2625	3521

Table 3. Total Annual River Use – Registered Institutional Groups

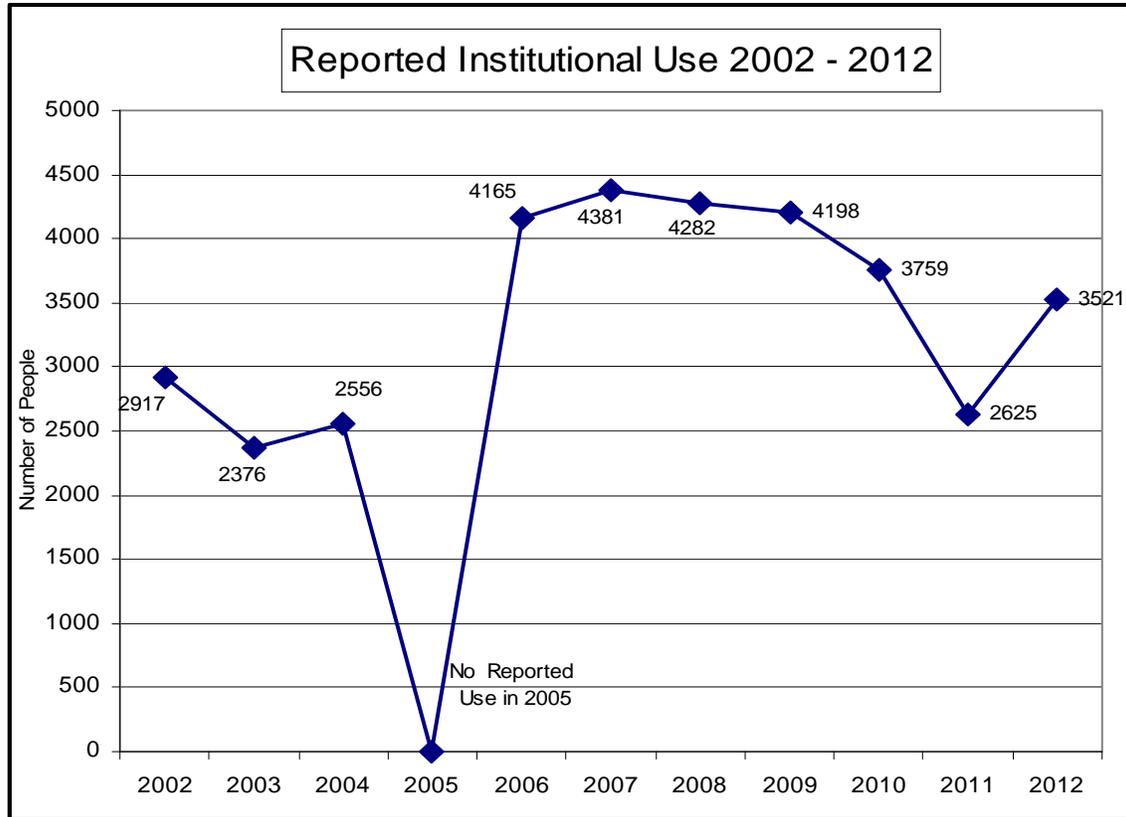


Figure 3.

Peak Boat Density details from fig. 4 page 5 of the Annual Report

7/28/12	Passengers	Total Boats	Rafts	Kayaks	Inflatables	Tubes	Other	Percent of Boats
Total	1369	248.5	218	26	17	0	0	
Private	385	81	57	25	17	0	0	32.6%
Commercial	955	158	155	0	0	0	0	63.6%
Institutional	29	9.5	6	1	0	0	0	3.8%
8/4/12	Passengers	Total Boats	Rafts	Kayaks	Inflatables	Tubes	Other	Percent of Boats
Total	1499	269	244	30	16	3	1	
Private	293	75.5	51	29	16	3	1	28.1%
Commercial	1168	185	185	0	0	0	0	68.8%
Institutional	38	8.5	8	1	0	0	0	3.2%
8/11/12	Passengers	Total Boats	Rafts	Kayaks	Inflatables	Tubes	Other	Percent of Boats
Total	1291	249	205	52	36	0	0	
Private	394	104	60	52	36	0	0	41.8%
Commercial	846	136	136	0	0	0	0	54.6%
Institutional	51	9	9	0	0	0	0	3.6%

Figure 4.

APPENDIX C
2012
WATER QUALITY MONITORING PROGRAM

WATER QUALITY MONITORING PROGRAM

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). Environmental Management (County Parks) is required by the River Management Plan Element 4.6 and 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.

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.

Responsible agencies and roles

The RMP places joint-responsibility for the water quality monitoring program with the Departments of Environmental Management, the Public Health Department and the General Services Department's County Parks Division. All three agencies have contributed to the preparation of this monitoring program. To make optimal use of budget and time resources, County Parks' 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 2011-2012 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 two 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.

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 (below 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' staff are able to obtain samples at each site within one workday and deliver the samples to the County Public Health Lab within the maximum holding time.

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 drained into Skunk Creek, which empties into river within 100+ yards.
Salmon Falls (State Park lot)	No	Skunk Hollow will provide adequate data
Greenwood Cr. (BLM lot)	Yes	Paved lot drains into drainage 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 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

- 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) ▪ First flush (see below) ▪ High flows after winter storm events
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 and river	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.</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. The analytical method for the stormwater runoff have been supplied by California Lab Services, Sacramento, Ca, and describes its procedures for analysis of samples for a suite of stormwater runoff constituents

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. The quality assurance procedures for the stormwater runoff analysis have been supplied by California Lab Services, Sacramento, CA.

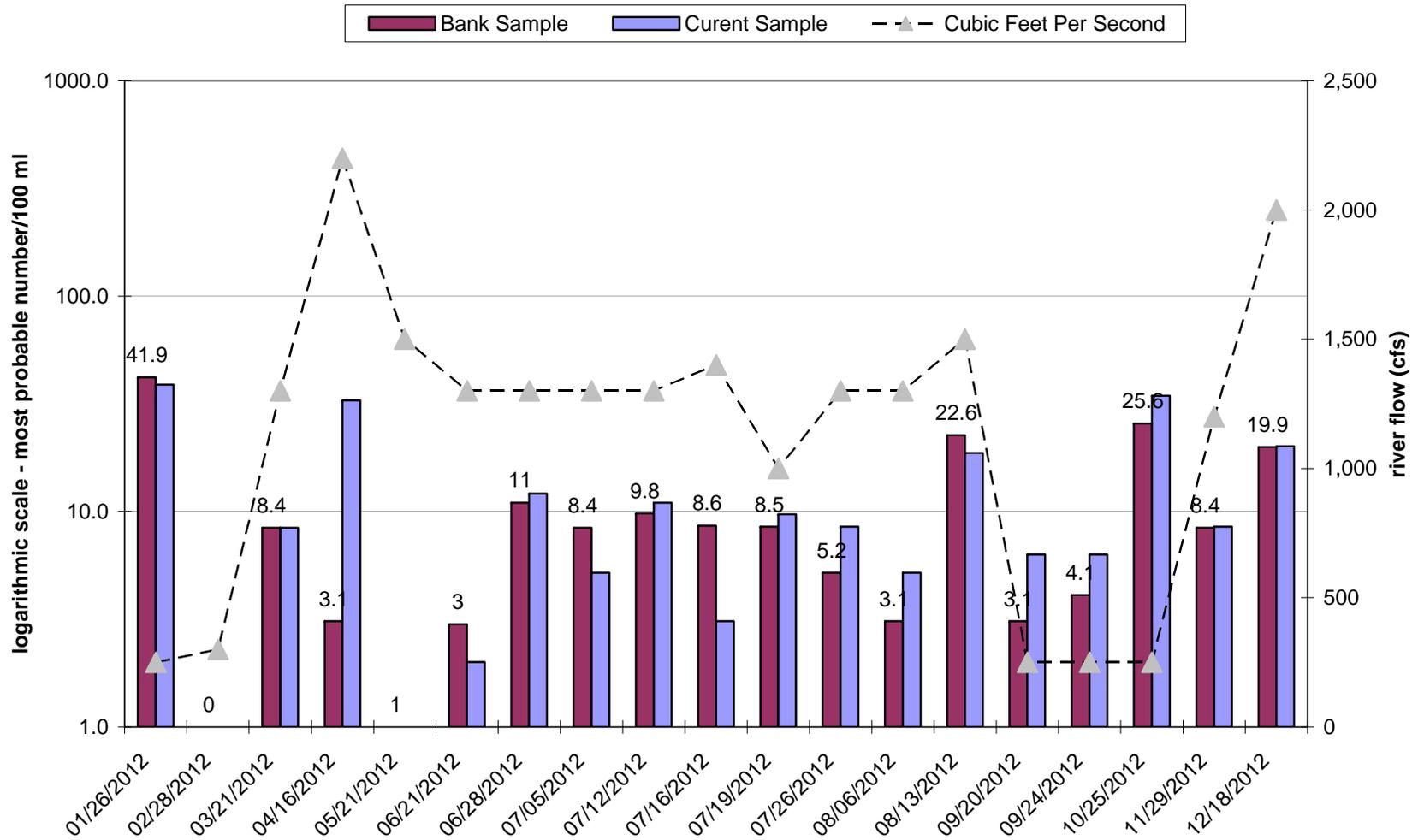
Data Quality Evaluation

- Circulate to Environmental Management for comments

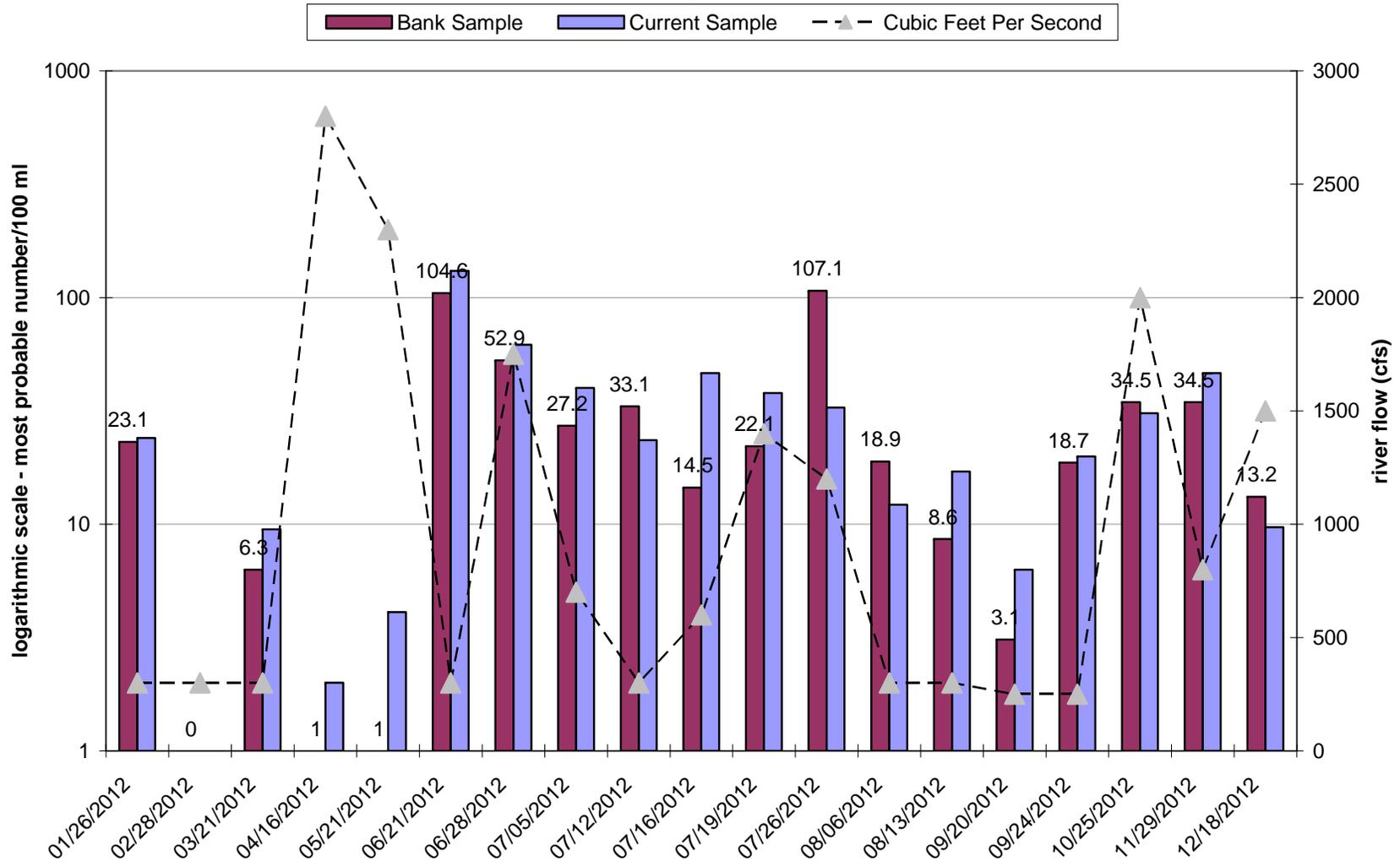
Data Validation and Reporting

- Circulate to Environmental Management for comments

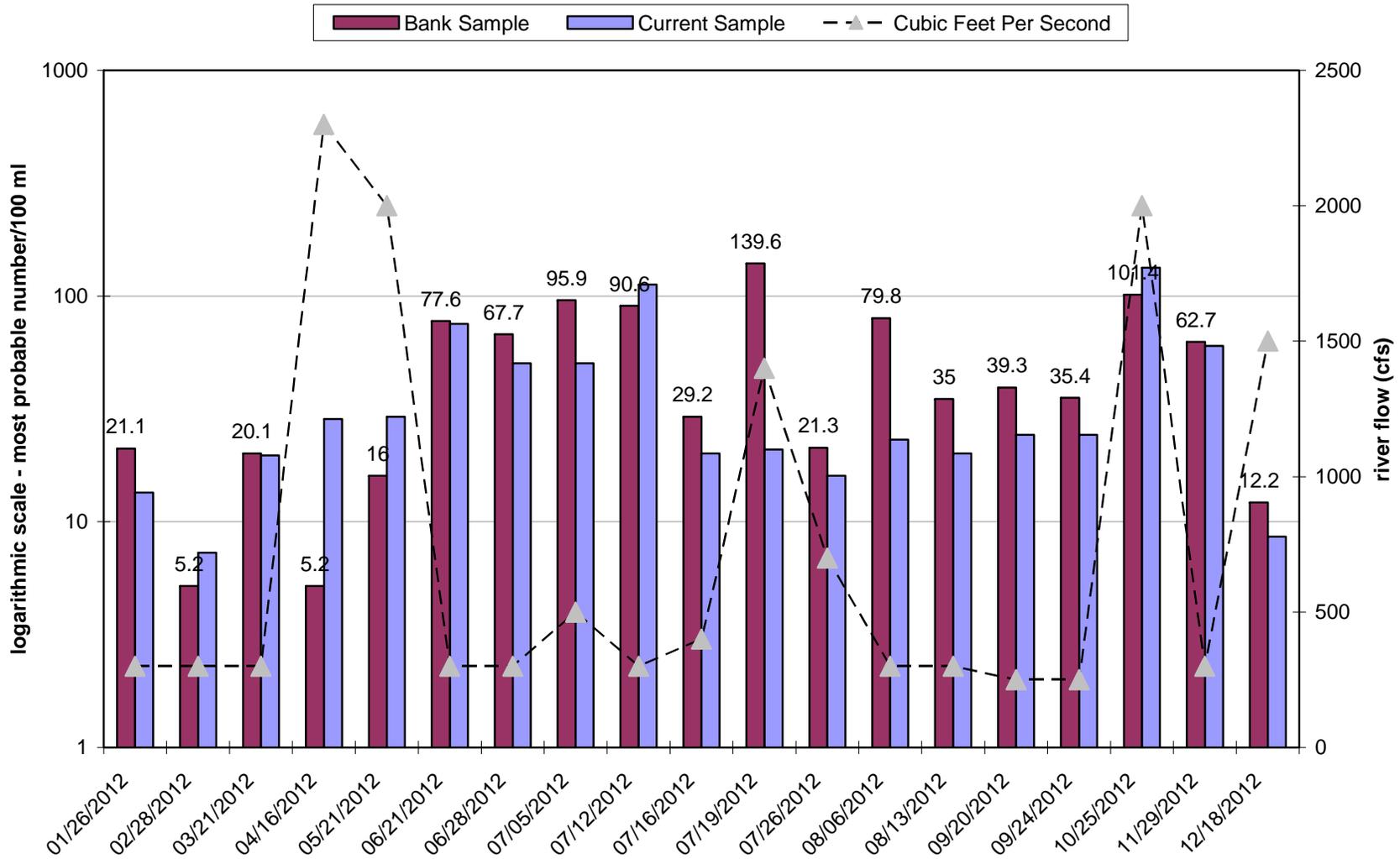
E. Coli levels Below Chili Bar Dam 2012



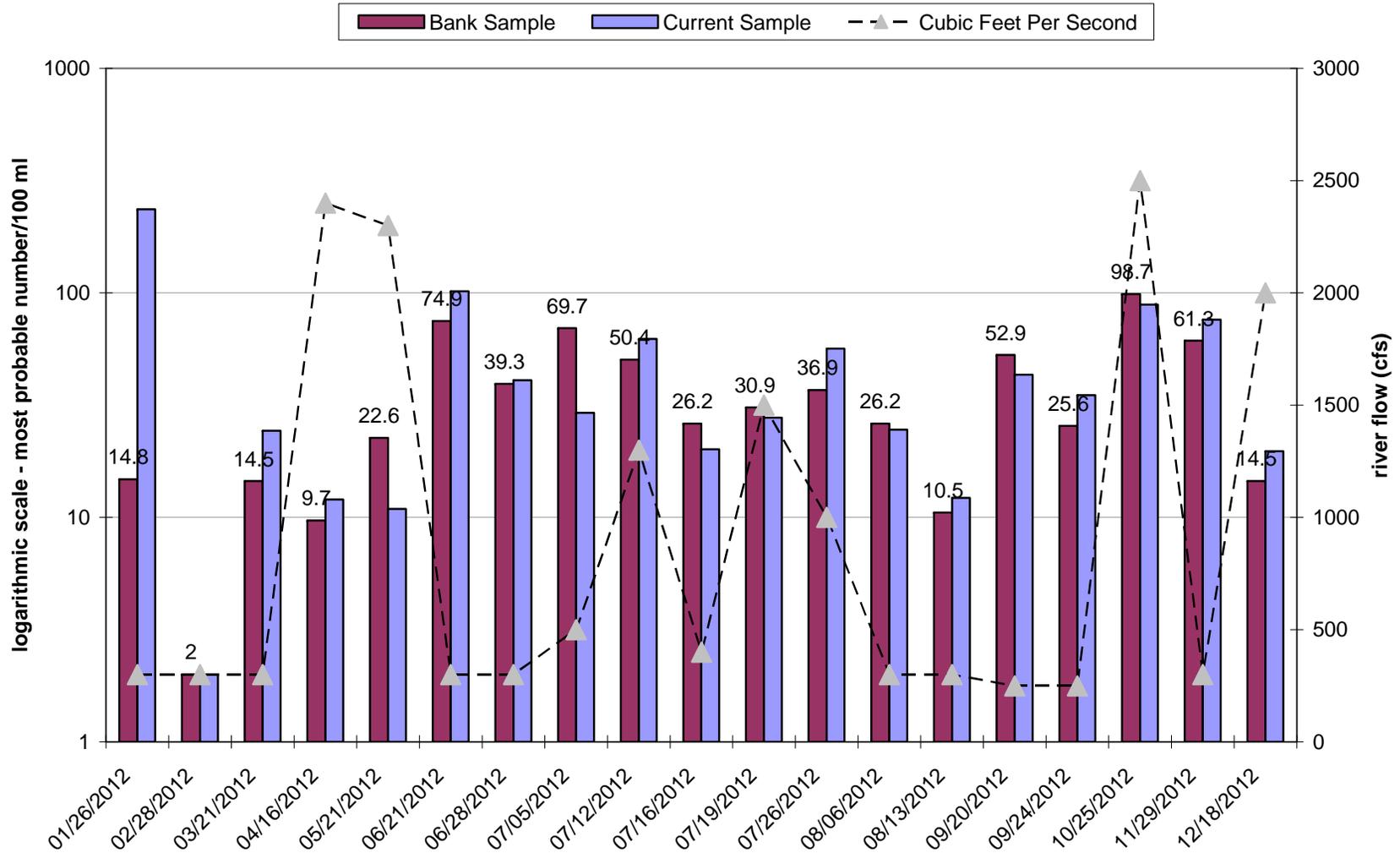
E. Coli levels at Marshal Gold State Historic Park 2012



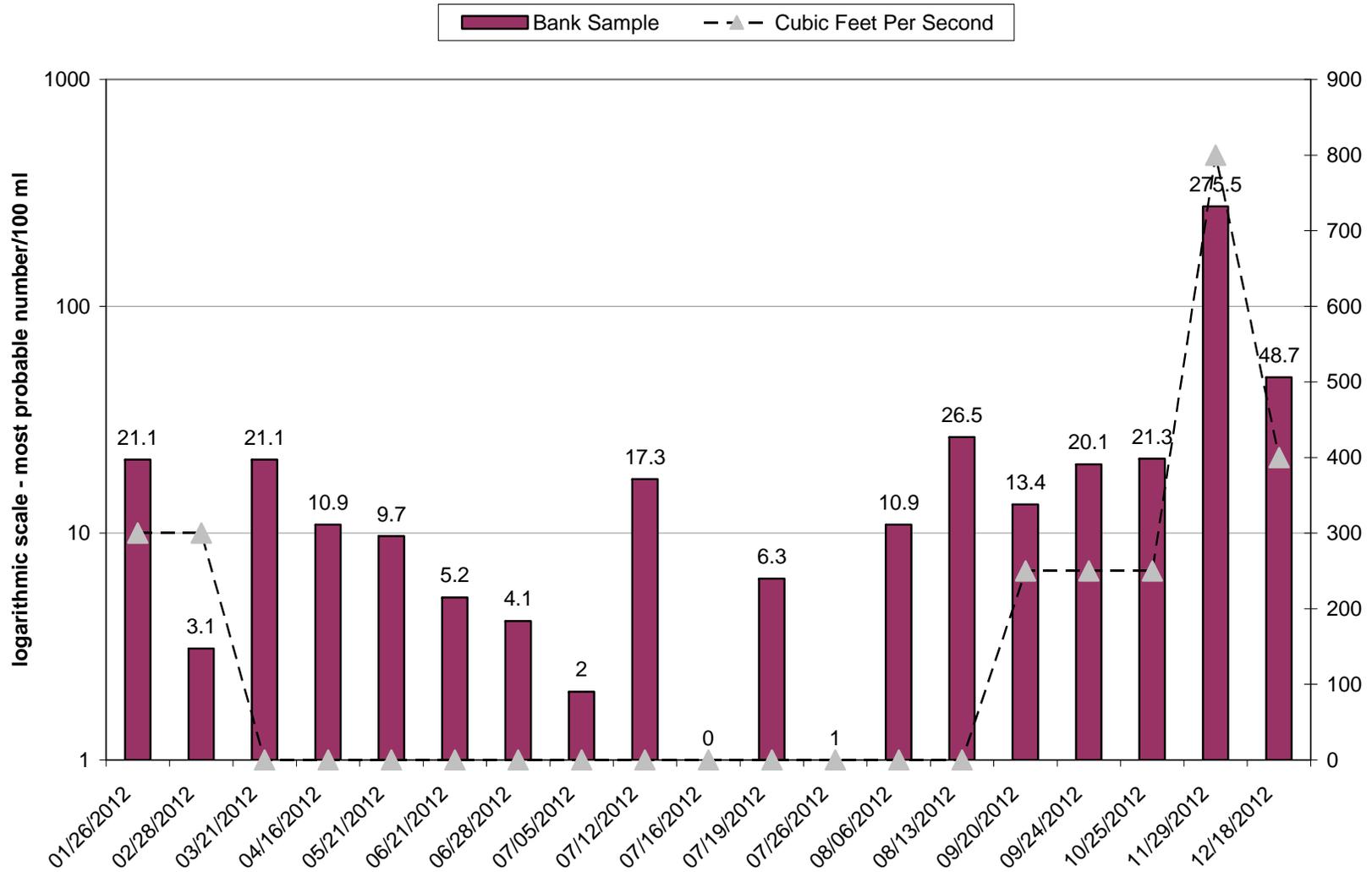
E. Coli levels at Henningsen Lotus Park 2012



E. Coli levels at Turtle Pond Area 2012



E. Coli levels at Salmon Falls 2012



STORM WATER 2012 - 2013

SAMPLE NAME	SAMPDATE	METHOD CODE	METHOD NAME	ANALYTE	RESULT	UNITS
Chili Bar	10/22/2012 09:40:00	Conductivity-120.1	EPA 120.1	Specific Conductance (EC)	96	µmhos/cm
Chili Bar	10/22/2012 09:40:00	O&G-1664 CTA	EPA 1664A	Hexane Extractable Material (HEM, Oil & Grease)	ND	mg/L
Chili Bar	10/22/2012 09:40:00	Nitrate + Nitrite as N 300.0	EPA 300.0	Nitrate/Nitrite as N	740	µg/L
Chili Bar	10/22/2012 09:40:00	TotSuspSolids-SM2540D CTA	SM2540D	Total Suspended Solids	30	mg/L
Chili Bar	10/22/2012 09:40:00	pH water SM4500-H B	SM4500-H B	pH	7.11	pH Units
Chili Bar	10/22/2012 09:40:00	TOC SM5310B	SM5310B	Total Organic Carbon	27	mg/L
HLP	10/22/2012 10:25:00	Conductivity-120.1	EPA 120.1	Specific Conductance (EC)	51	µmhos/cm
HLP	10/22/2012 10:25:00	O&G-1664 CTA	EPA 1664A	Hexane Extractable Material (HEM, Oil & Grease)	ND	mg/L
HLP	10/22/2012 10:25:00	Nitrate + Nitrite as N 300.0	EPA 300.0	Nitrate/Nitrite as N	ND	µg/L
HLP	10/22/2012 10:25:00	TotSuspSolids-SM2540D CTA	SM2540D	Total Suspended Solids	27	mg/L
HLP	10/22/2012 10:25:00	pH water SM4500-H B	SM4500-H B	pH	7.16	pH Units
HLP	10/22/2012 10:25:00	TOC SM5310B	SM5310B	Total Organic Carbon	23	mg/L

STORM WATER 2012 - 2013

SAMPLE NAME	SAMPDATE	METHOD CODE	METHOD NAME	ANALYTE	RESULT	UNITS
Greenwood Cr.	10/22/2012 10:50:00	Conductivity-120.1	EPA 120.1	Specific Conductance (EC)	38	µmhos/cm
Greenwood Cr.	10/22/2012 10:50:00	O&G-1664 CTA	EPA 1664A	Hexane Extractable Material (HEM, Oil & Grease)	ND	mg/L
Greenwood Cr.	10/22/2012 10:50:00	Nitrate + Nitrite as N 300.0	EPA 300.0	Nitrate/Nitrite as N	ND	µg/L
Greenwood Cr.	10/22/2012 10:50:00	TotSuspSolids-SM2540D CTA	SM2540D	Total Suspended Solids	14	mg/L
Greenwood Cr.	10/22/2012 10:50:00	pH water SM4500-H B	SM4500-H B	pH	6.53	pH Units
Greenwood Cr.	10/22/2012 10:50:00	TOC SM5310B	SM5310B	Total Organic Carbon	29	mg/L
Skunk Hollow	10/22/2012 11:25:00	Conductivity-120.1	EPA 120.1	Specific Conductance (EC)	36	µmhos/cm
Skunk Hollow	10/22/2012 11:25:00	O&G-1664 CTA	EPA 1664A	Hexane Extractable Material (HEM, Oil & Grease)	ND	mg/L
Skunk Hollow	10/22/2012 11:25:00	Nitrate + Nitrite as N 300.0	EPA 300.0	Nitrate/Nitrite as N	ND	µg/L
Skunk Hollow	10/22/2012 11:25:00	TotSuspSolids-SM2540D CTA	SM2540D	Total Suspended Solids	41	mg/L
Skunk Hollow	10/22/2012 11:25:00	pH water SM4500-H B	SM4500-H B	pH	6.66	pH Units
Skunk Hollow	10/22/2012 11:25:00	TOC SM5310B	SM5310B	Total Organic Carbon	23	mg/L

APPENDIX D

**2012 EL DORADO COUNTY SHERIFF'S DEPARTMENT
BOATING SAFETY UNIT SUMMARY FOR THE SOUTH FORK OF
THE AMERICAN RIVER**

EL DORADO COUNTY SHERIFF'S OFFICE BOATING SAFETY UNIT 2012 SUMMARY SOUTH FORK OF THE AMERICAN RIVER

The El Dorado County Sheriff's Office boating unit has jurisdiction of the South Fork of the American River as well as other public waterways and lakes within El Dorado County.

The South Fork of the American River from Chili Bar to Folsom Lake is unique in that it offers whitewater rafting, kayaking, river boarding, and other related activities. The South Fork of the American River is rated as a Class III stretch of river which requires skill and proper equipment to navigate safely. During the summer months, the river is extremely active with commercial and private rafting and boating trips.

As it pertains to the river, the boating unit is responsible for law enforcement, rescue, recovery, and boating education. The Sheriff's Office works in conjunction with the El Dorado County Parks River Patrol, California State Parks, BLM, and Fish & Game. The Sheriff's Office has maintained good working relationships with the above agencies and has worked closely with County Parks River Patrol. The County Parks River Patrol has very knowledgeable patrol staff that often assists the Sheriff's Office with rescue work. Additionally, their patrol staff keeps the Sheriff's Office boating unit aware of any enforcement or safety issues that occur on the river.

The 2012 river season was consistent with previous seasons. Common issues from commercial rafting companies and river users were the following:

1. Non-permitted persons running commercial rafting trips.
2. "Tubers" (subjects floating on the river in inner tubes, small pool rafts, and other inflatable objects not intended for whitewater use).
3. Complaints of illegal activities (underage alcohol consumption, marijuana use, bridge jumping, and littering) along the river shoreline from the Lotus Highway 49 Bridge to Hennington Lotus County Park.

In 2012, the boating unit saw multiple groups possibly operating non-permitted commercial rafting trips along the river. One group, an online social networking group dubbed "NorCal Rafter," was seen navigating the South Fork of the American River on at least two occasions.

Additionally, the boating unit made contact with and observed people navigating the river while outfitted in "Canyon Raft Rental" gear on multiple occasions. Canyon Raft Rental is an Auburn-based business and may possibly be shuttling rafts and equipment to and from the river for inexperienced customers.

In 2012, the boating unit noticed a rise in the number of "tubers" and people recreating on the South Fork of the American River without PFDs of the proper fit or type. Tubers and rafters alike were observed wearing Coast Guard approved, Type III, neoprene PFDs

intended to be worn while water skiing or wakeboarding. In several other instances, tubers and rafters were seen donning Coast Guard approved, Type II, near shore buoyant safety vests intended to be worn solely as a safety vest in calm water. Although county ordinance 12.64.070 only requires persons to correctly wear a Coast Guard Approved PFD, the above mentioned PFDs are not intended for whitewater use and do not provide an adequate amount of buoyancy in whitewater.

In 2012, the El Dorado County Sheriff’s Office dispatch center received three calls for service regarding river related incidents on the South Fork of the American River. In each of the calls, inexperienced swimmers, rafters, and kayakers were found and/or rescued by law enforcement personnel. None of the subjects rescued required medical assistance.

In 2012, river conditions were considered average to below average with much lower water flows than in 2011. Because of this, the boating unit noticed a decrease of boating related accidents and saw an increase in the number of boaters successfully navigating many of the river’s most dangerous rapids. The 2012 river season had one reported river-related accident or injury, compared to three in 2011. Additionally, there were no river-related deaths during the 2012 river season. By comparison, 2011 had one fatality, 2010 had none, 2009 had one fatality, 2008 had none, and 2007 had two fatalities.

Included below is the statistical information as it pertains to the South Fork of the American River in 2012.

	VERBAL WARNINGS	CITATIONS	PHYSICAL ARRESTS
PFD Violations	69	2	0
Bridge Jumping	10	22	0

Vessels Assisted	66
Persons Assisted	140
Searches	3
Accident Investigations	1
Organized Water Events	0

Submitted by Deputy Blake Braafladt / El Dorado County Sheriff’s Office
09/24/12

APPENDIX E

RIVER PROGRAM FUND BUDGET FISCAL YEAR 2011/2012

River Program Fiscal Year 2011-2012 Budget Summary

River Trust Fund

Fiscal Year 2011/2012	
Fund Balance as of July 1, 2011	\$177,324
Revenue <i>(July 1, 2011 through June 30, 2012)</i>	\$177,655
Expenditures (FY 2011/2012 approved budget was \$156,559)	
<div style="text-align: right; margin-right: 20px;">River management program →</div> Total Expenditures for Program: \$173,897 General Fund Contribution: \$ 17,388	(Transfer from RTF) \$156,599
Total →	\$156,559
River Trust Fund balance as of June 30, 2012	\$198,420

River Program Revenue by Category July 1, 2011 – June 30, 2012

Private kayak put in/out	\$ 1,432.00	0.81%
Private raft put in/out	\$ 5,886.00	3.31%
Commercial guest use	\$ 143,982.00	81.05%
Commercial raft put in/out	\$ 5,292.00	2.98%
Commercial kayak put in/out	\$ 1,124.00	0.63%
Chili Bar River	\$ 6,457.00	3.63%
River Use Permit	\$ 11,456.00	6.45%
Interest	\$ 836.00	0.47%
Commercial River Permit Violations	\$ 1,200.00	0.68%
	\$ 177,655.00	100.00%

Approved River Trust Fund Budget Fiscal Year 2012/2013

1. Projections based on 70,000 user days annually
 - 2012 commercial use was 73,337 user days

2. Environmental Management Department's final request (and CAO approved budget):
 - \$168,207 for river management program

APPENDIX F

**RIVER MANAGEMENT ADVISORY COMMITTEE
COMMENTS ON THE 2012 RIVER SEASON**

El Dorado County River Management Advisory Committee Comments on the 2012 River Season

The River Management Advisory Committee (RMAC) discussed the 2012 river season at the November 8, 2012 RMAC meeting. The following is a summary of their comments and suggestions and implementation of the RMP. The minutes from the November RMAC meeting can be found on the Co. Rivers web site. These comments were made by individual members and do not necessarily reflect the committee as a whole.

- Concern over incidents associated with inner-tubers was discussed at various meetings in 2012 (trespassing, alcohol, littering, Quite Zone violations)
- Noise and Trespassing in Quite Zone by river users
- Inner tube safety
- Sign at Greenwood Cr. warning of last take out before Gorge (Class III section)
- River Patrol appreciation, river management program
- Thanked the public for participation over the last year and attendance to meetings
- Alcohol & Glass container ban on river needed
- Cooperation between County, State and BLM programs
- Would like more on shore Patrol by Sheriffs Dept.
- Thanked SMUD and PG&E for flow releases
- CA State Parks keep Salmon Falls/Skunk Hollow open year round
- Growth in Community be consciences of environmental impacts
- River Shuttle for keeping going and its business transparency to the RMAC
- County rentals for use on the South Fork American River
- Upper American River Project mitigation funds be used on the S. Fork American River
- A sign be installed at Chili Bar identifying the entrance

APPENDIX G
PUBLIC COMMENTS ON THE 2012 RIVER SEASON

Public Comments on the 2012 River Season

These comments were made at the November 8, 2012 RMAC meeting.

Mike Ranalli spoke on the following subjects:

- Thought the County's implementation of the RMP was OK in 2012 and an OK to RMAC

Melody Lane spoke on the following subjects:

- Asked that the American River Resort get a TUP for the Toe Up Cup fundraiser along with any other event that is not covered by the campgrounds SUP.

-

Howard Penn spoke on the following subjects:

- Thanked the Committee for their public service

Karen Mulvaney spoke on the following subjects:

- Thanked State Parks for N. Beach improvements
- Would like State Parks to keep Skunk Hollow open year round
- Would like graffiti removed from Hwy 49 bridge
- Would like to see more boater etiquette being taught and practiced
- Would like to see a public take out above Fowlers to increase the length of the class II section
- Thinks Trouble Maker should be classified as a Class III+ by the County
- Would like to see the County take action to boats and tubes rented outside the County for use on the S. Fork
- Thanked RMAC and the River Program

APPENDIX H

**SOUTH FORK OF THE AMERICAN RIVER FLOW SCHEDULE
BELOW CHILI BAR DAM BY WATER YEAR TYPE**

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 @ 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	4 Hrs @ 1750	4 Hrs @ 1750				
	Memorial Day - Labor Day	3 Hrs @ 1500	6 Hrs @ 1750	6 Hrs @ 1750				
	Labor Day - September				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	6 Hrs @ 1750	6 Hrs @ 1750				
	Memorial Day - Labor Day	4 Hrs @ 1500	6 Hrs @ 1750	6 Hrs @ 1750				
	Labor Day - September				3 Hrs @ 1500			
	October	3 Hrs @ 1300				3 Hrs @ 1300	3 Hrs @ 1500	3 Hrs @ 1500
	November - February						3 Hrs @ 1500	3 Hrs @ 1500