

Agenda and notes 08/07/2024 Rapid Response Tech Team

Purpose- biweekly technical call including management agencies & GCMRC to relay recent findings and discuss future sampling efforts, needs, and potential actions.

Participants

I. Recent trips and findings

Last meeting/report out was 08/07/2024 and at AMWG

New: Tom Gushue and Carlos Willis will give update on NNF data spreadsheet.

New location and new spreadsheet, because there were some problems with changing data and mis-filtering. As predicted. Kate Behn and Carlos Willis assisted in correcting and creating new spreadsheet. It does look a little different. but filtering has been locked down. Can still enter data. But, to avoid data loss, users should download a copy before filtering, sorting, or doing any analysis, and do your analyses offline.

Added a River Mile to Lat Long sheet, to help with mapping. Have better defined the data types to be more precise. Last meeting, We discussed concerns about accidental modification of data, which has occurred, these changes will protect against that. **If you have a change of staff who need access, email or chat Tom.**

Recall this is a spreadsheet not a relational database, so data entry errors are still possible. Will move this to another platform, Which will help. Will push latest data entry to backup copy every night, to avoid loss of data.

There is a new URL for the data viz tool, will have to change bookmark when you get the new URL (ask Melissa). Changes have made it a bit slower, but they are working on improving speed.

Still questions about how to share the data viz tool. Original thought was to be able to share some up to date info with stakeholders outside this group, but concerns remain about lack of knowledge and understanding of data limitations (such as relative effort or sample locations). Will elevate to leadership team.[update: Leader team agreed only management agencies should have access to data viz tool – Bill Stewart]

Emily – reminder that spreadsheet was never intended to share with public, it was a relatively quick way to inform NPS about new NNF captures, previously done by email, inefficiently.

Recent Capture updates:

GLCA – Jeff provided trip reports for efforts in August (4 reports, provided via email to RRTT, incorporated by reference). In summary, two reports addressed electrofishing first two weeks of August, captured between 15-20 SMB per trip. No Walleye in August. Many GSF, throughout LF.

Two Reports included Netting for 2 weeks in slough, no SMB. We are getting YOY GSF, 40 mm range, could be spawning in both upper and lower slough.

Checked and will check ASB each week. Snorkeled around ABS in slough, no evidence of SMB or other warm water centrarchids. Some seining outside of slough, grass made it ineffective. Backpack shocking in Hidden Slough -6.5 (R) produced a few small GSF.

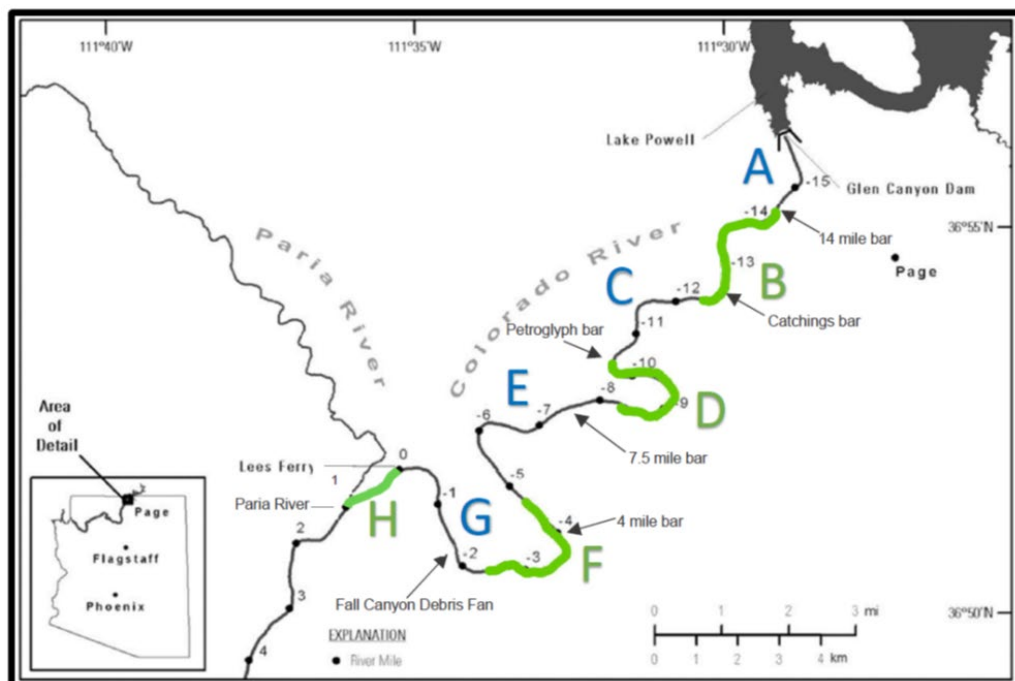
May not be able to get an EF boat into slough due to low water in September, need at least 9000 cfs.

Matt – Observed that the general number of fish in mainstem about the same, but none in slough (SMB). No YOY this year. Point being that cool mix water hasn't made the SMB inaccessible to EF gear.

GRCA – sampling week of Aug 13, conditions turbid due to Paria flows, electrofishing inefficient, so concentrated on seining in PBR. 6 GSF and a lot of adult FMS, no SMB. Set 10 hoop nets in backwaters, did not capture any NNF. Many adult FMS. Checked for tags, no recaps. Scheduled EF for week of Aug 19, but was still very turbid, visibility near zero, looked at 10 sites, caught only 3 GSF. Lots of 'blind sweeping' no luck, it is risky for boats and boatmen with such low visibility, so decided to move effort to GLCA for remainder of week, but bad weather (lightning) precluded much sampling. Only one site completed. In reach H. 7 GSF. No more sampling possible due to weather. More EF in PBR Scheduled for next week.

Ryan – have you had to adjust settings on EF boat? Due to spikes in conductivity due to cool mix bypass releases? Spikes happen mostly in mornings.

Kurt – we assess impacts to fish and adjust as we go. If we are in slow section and roll a lot of trout and flannies, we turn it down a bit, and then back to regular settings in swifter water.



FWS – David Ward reports that Pilar is on the aggregation trip right now, trip includes dedicated seining boat. Mike Pillow hiked out from Phantom, had not caught any SMB in seines or hoops.

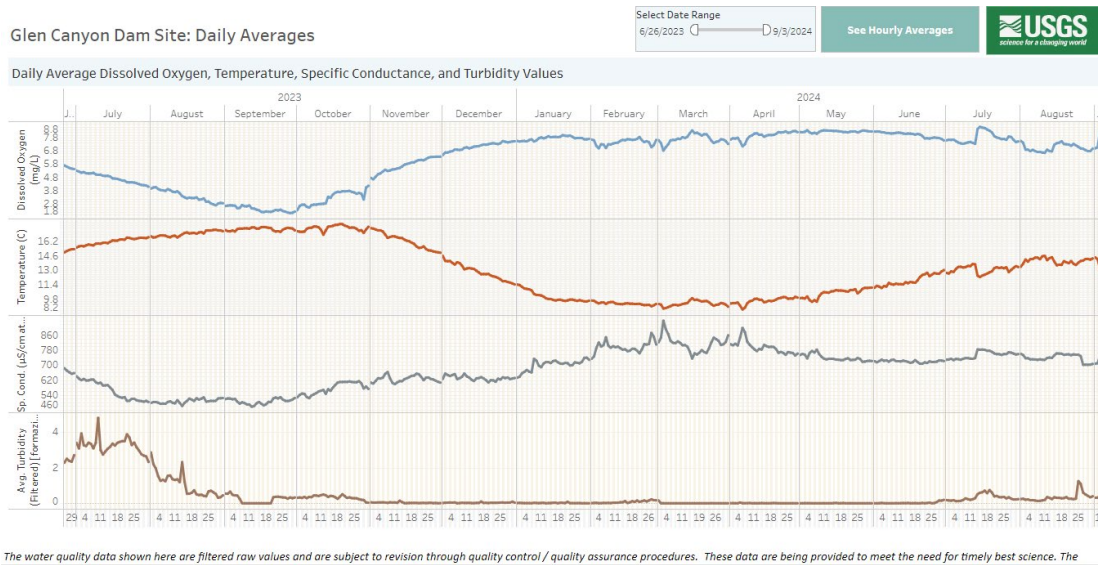
AGFD – Dave R. nothing to report, no trips, next trip in October full downstream.

Reclamation – Brian – Bio-West just returned from a trip, they seined Lees Ferry down to Phantom, caught some GSF, and one SMB, 75 mm, at RM4.5. [location added after meeting adjourned].

Daily average Water temperatures in LF and down to RM61 remain below 15.5C under cool mix operations. See graphs below

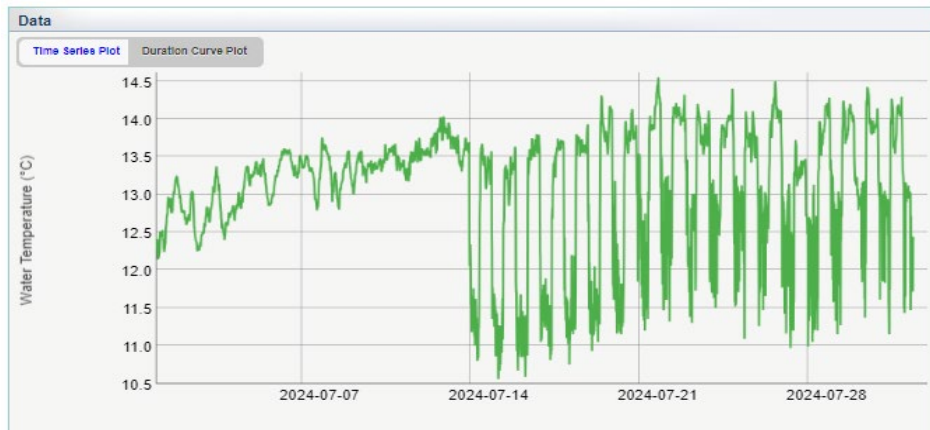
GCMRC – Kim Dibble, no recent trips since July. Drew assisted Reclamation with seining, snorkeling, no SMB.

GCMRC JCM trip Sept 26th will be the last JCM WEST, due to funding shortfalls.

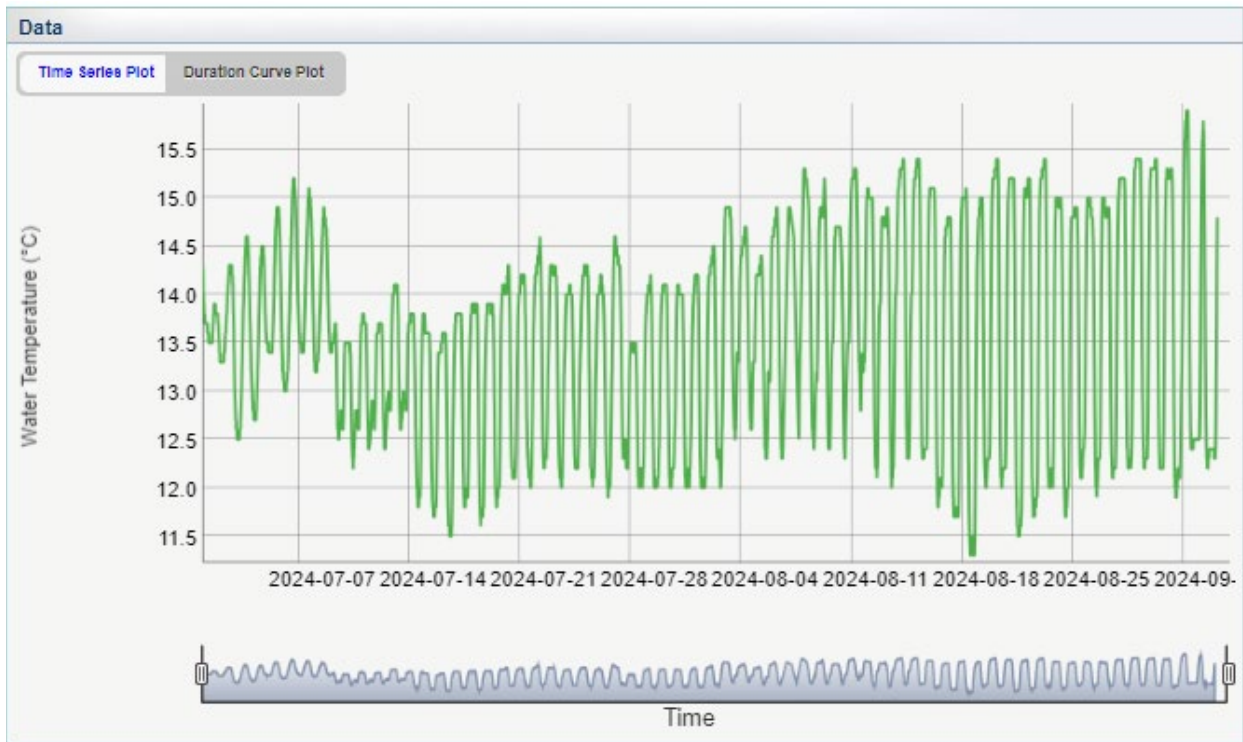
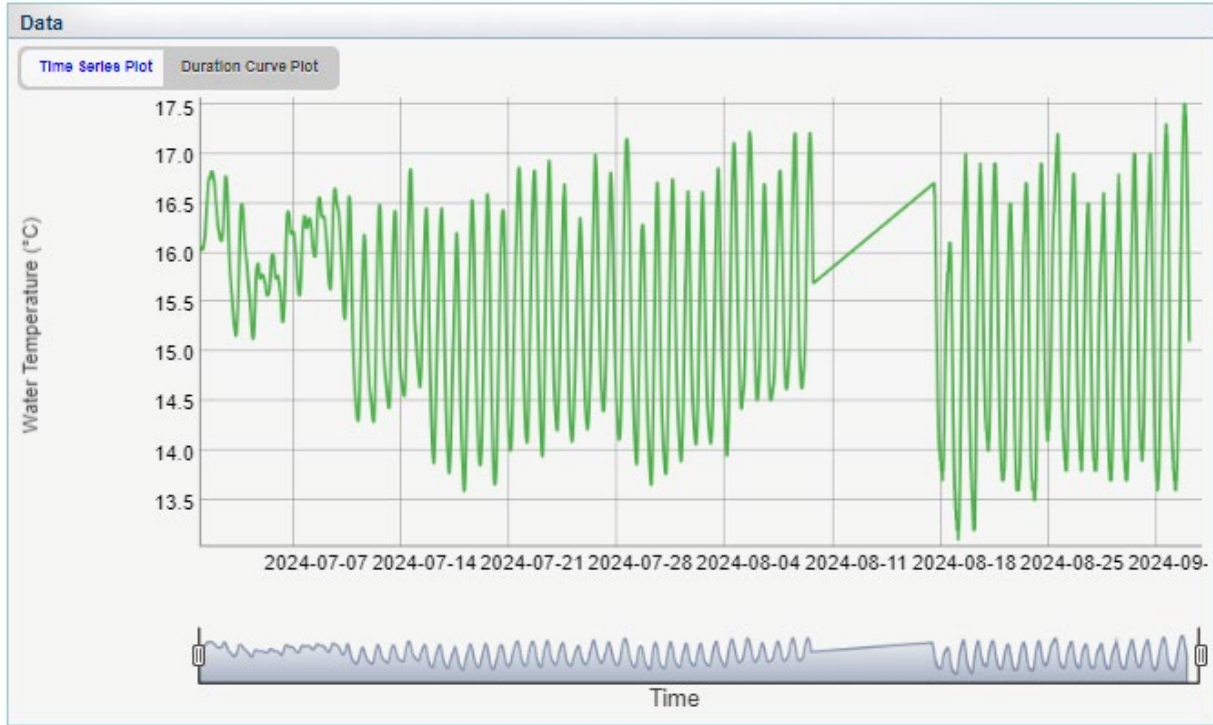


The water quality data shown here are filtered raw values and are subject to revision through quality control / quality assurance procedures. These data are being provided to meet the need for timely best science. The

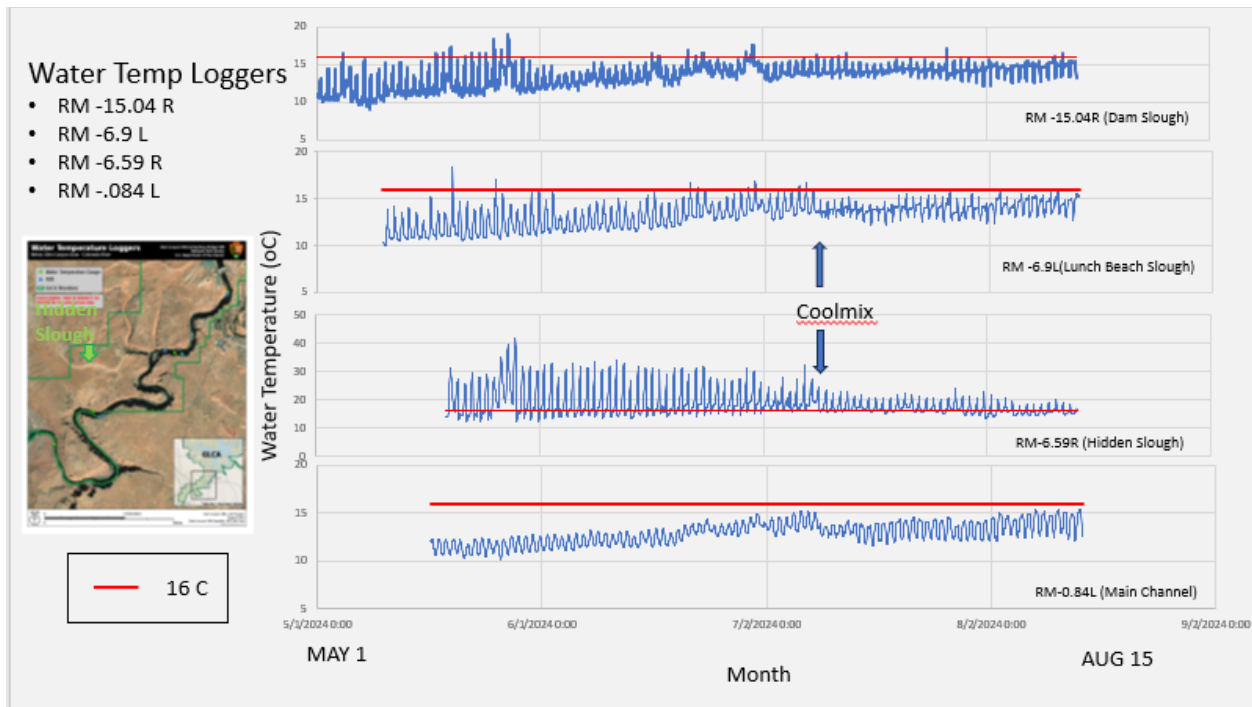
[Workbook: colorado-river-water-quality-gcd](#)



Below GCD. Max temperatures are a good indicator of normal penstock release temperatures, low temperatures include cold bypass releases.



Graphs: Top (previous page) gage below GCD ending 09/02 and 08/01; Middle, Lees Ferry ending 9/3; Bottom – RM61 ending 9/3. **RM61 gage now real time!!! Thanks GCMRC**



NPS temp loggers in Glen Canyon. All below 16C except 'Hidden Slough' at RM -6.59. Through Aug 15

II. DISCUSSION OF NEW FINDINGS

a. General – see above

III. Upcoming trips and other future plans –

2024 sampling and monitoring

GRCA – See Table 1.

GLCA – See Table 2. – New Biologist starts next week, should be onboarded in a couple of weeks.

GCMRC – see Table 3 of GCMRC and cooperator trips

AGFD – see Table 3 –

FWS – see Table 3 –

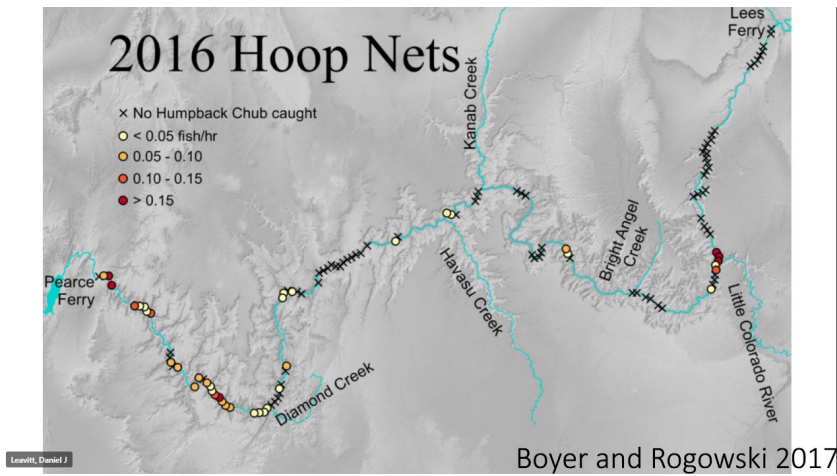
Reclamation – no upcoming trips mentioned, but see 2 more Bio-West trips upcoming, appended to GCMRC schedule.

IV. Old Business –

a. Help needed by GLCA or anyone? Jeff has a few people signed up to help but needs more, see link to 'help need' sign up sheet. Non Fed partners contact Jeff or Melissa if you can't access the sharepoint site.

i. [GLCA Help need Aug to Nov 2024.xlsx \(sharepoint.com\)](#)

- b. Report out on slough channelization discussion. – NPS and Reclamation are proceeding with EA.
 - i. On track. Press Release for public draft soon.
- c. Coordinated effort between NPS and GCMRC regarding sampling protocols for both GLCA and GRCA – Drew – *we have a sampling protocol in place, majority is outlined in appendix of ROD for LTEMP SEIS. If there are changes needed, we can have another focus group and have an updated/formalized document. Let Drew know if there is need for changes (conductivity, eg.)*
- d. Tom Gushue and Carlos are Seeking any and all feedback on the visualization, and other questions.



This map is a Helpful visualization. AGFD still has code. But, If add a lot of samples, soon lose any definition, becomes unreadable. Could do stacked plots of shorter segments.

Kim – we’ve talked briefly about having a mapping feature. It’s on Tom’s radar.

Ryan, important to have records of NFC and/or no SMB caught, but showing all sample locations. Addresses concerns about effort not being standardized because people don’t understand limitations.

Kurt, the NNF spreadsheet doesn’t support ‘effort’ and doesn’t show all ‘NFC’ vs no SMB or GSF, or only Natives. So the map can’t be based off on the NNF spreadsheet data.

Dave R. Don’t want to duplicate effort by entering all sample locations again...it’s in the main database and individual agency reports/spreadsheets.

May not be practical. That information is in the main big boy database but it is not updated frequently enough to respond to stakeholder requests.

- V. Anything else? no
 - a. Let Melissa know if there is anything you’d like to see on next agenda. None mentioned.

Adjourn 4:25 pm (MDT)

Table 1. Grand Canyon NP Sampling Schedule 2024

Dates	Trip	Location
April 9-10	PBR-BW	Paria to Badger
April 15-19	PBR-EF	Paria to Badger
May 7-8	PBR-BW	Paria to Badger
May 20-24	PBR-EF	Paria to Badger
June 4-5	PBR-BW	Paria to Badger
June 10-13	PBR-EF	Paria to Badger
June 19-30	HBC AGG/NN Surveillance Downstream	Lees Ferry to Diamond Creek
July 8-12	PBR-EF	Paria to Badger
July 23-24	PBR-BW	Paria to Badger
July 29- Aug 2	PBR-EF effort transferred to LF	Paria to Badger
Aug 13-14	PBR-BW	Paria to Badger
Aug 19-23	PBR-EF	Paria to Badger
Sept 9-12	PBR-EF	Paria to Badger
Sept 23-30	NN Surveillance SN/eDNA Downstream	Lees Ferry to LCR
Oct 7-10	PBR-EF	Paria to Badger
Oct 21-Nov 1	NN Surveillance EF Downstream	Lees Ferry to LCR
Nov 11-15	PBR-EF	Paria to Badger
Nov 25-29	PBR-EF	Paria to Badger

Occurred, Canceled due to low water temperature

Table 2. Glen Canyon NRA Sampling Schedule 2024. Electrofishing occurs mostly at night. Dates and locations may change in response to monitoring results to focus on high density areas. Trip length is 3 to 4 days/nights. Netting trips focus on the sloughs. Nets are set overnight. Undesired warmwater fishes are removed for beneficial use (except for carp). Rainbow trout are not captured or handled during electrofishing. Brown trout are removed for beneficial use.

WEEK OF:	Description
March 5	GLCA electrofishing
April 1	GLCA electrofishing
April 8	GLCA Netting
April 15	GLCA electrofishing
April 22	GLCA Netting
April 29	GLCA electrofishing
May 6	GLCA Netting
May 13	GLCA electrofishing
May 20	GLCA Netting and Slough Block Net Installation

May 27	GLCA electrofishing
June 3	GLCA Electrofishing
June 10	GLCA Netting
June 17	GLCA Netting
June 24	GLCA electrofishing/Maybe only one boat
July 1	GLCA Electrofishing
July 8	GLCA Netting
July 15	GLCA Electrofishing
July 22	GLCA electrofishing/Maybe only one boat
July 29	GLCA Netting
Aug 5	GLCA electrofishing
Aug 12	GLCA Electrofishing/maybe only one boat
Aug 16-19	Potential chemical treatment of slough if needed
Aug 19	GLCA Netting
Aug 26	GLCA Netting
Sept 3	GLCA electrofishing
Sept 9	GLCA Netting
Sept 16	GLCA electrofishing
Sept 23	GLCA Netting
Sept 30	GLCA electrofishing
Oct 15	GLCA electrofishing
Oct 28	GLCA electrofishing
Nov 18	GLCA electrofishing

Table 3. GCMRC, Cooperator, and Tribal River Trips and Field Activities

VI. **Occurred** or **Planned** 2024

Launch	Take out	Description
25-Jan	30-Jan	Lees Ferry trout population monitoring
14-Feb	1-Mar	Quality of Water/fine sediment monitoring
11-Mar	14-Mar	Lees Ferry fish population monitoring
3-Apr	17-Apr	Mainstem Fish, non-native (electro shocking)-AZGFD
4-Apr	9-Apr	Lees Ferry trout population monitoring
9-Apr	26-Apr	Aquatic Foodbase monitoring (drift)
16-Apr	26-Apr	LCR HBC, camps at three locations on Little Colorado River
20-Apr	29-Apr	Hopi Cultural Monitoring
23-Apr	12-May	Juvenile HBC monitoring-April 27 Launch downstream Lees Ferry
27-Apr	6-May	Navajo Cultural Monitoring

2-May	21-May	Survey Control Network
13-May	30-May	Cultural Resource Monitoring
17-May	31-May	Mainstem Fish, non-native (electro shocking)-AZGFD
21-May	31-May	LCR HBC, camps at 4 locations on Little Colorado River
25-May	3-Jun	Zuni of Pueblo Cultural Monitoring
6-Jun	20-Jun	Grand Canyon Youth-"Partners in Science"
8-Jun	17-Jun	Southern Paiute Consortium Cultural Monitoring
12-Jun	21-Jun	Hualapai Cultural Monitoring
26-Jun	5-Jul	Grand Canyon Youth-"Partners in Science"
13-Jun	17-Jun	TRGD – note dates changed from July 4th
27-Jun	8-Jul	LCR Juvenile HBC monitoring (3 camps)
3-Jul	18-Jul	Grand Canyon Youth-"Partners in Science"
5-Jul	24-Jul	Juvenile HBC monitoring
8-Jul	12-Jul	Lees Ferry trout population monitoring
18-Jul	30-Jul	Mainstem Fish, HBC-Seining
13-Aug	16-Aug	Lees Ferry-Terrestrial Vegetation Monitoring
14-Aug	30-Aug	Fine Grain sediment monitoring
24-Aug	9-Sep	Terrestrial Vegetation Monitoring
9-Sep	11-Sep	Terrestrial Vegetation Monitoring
28-Aug	16-Sep	Mainstem Fish, HBC-aggregations (netting)
5-Sep	10-Sep	TRGD (Cancelled due to likely high water temps and low DO)
*Aug 13		Phantom Ranch to Pearce Ferry Bio-West small bodied sampling
*August 27		Lees Ferry to Phantom Ranch Bio-West small bodied sampling
*Sept 10		Phantom Ranch to Pearce Ferry Bio-West small bodied sampling

*New Trips added by Reclamation