

Agenda and notes 04/17/2024 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 (from Teams app): Gregory Anderson, Nicole Gibney, Brian Hines, Daniel Leavitt, Matt O'neill, Scott R, Kurt Shollenberger, Jeff Arnold, Drew Eppehimer, Ryan Mann, Skye Hedden, Kim Dibble, Jess Newton, Rob Billerbeck

I. Recent trips and findings

Last meeting/report out was 03/27/2024.

Quick report on sampling as of 04/17/2024:

GRCA – Emily Thomas and Kurt went out to do PBR BW sampling on the 9th. Seined 7 backwaters. 6/7 didn't catch anything. Cold, 10-12 degrees in backwaters. Caught one trout at RM1.4 (TL: 20mm), not ID'd to species. Set out 5 collapsible nets (4 in cathedral slough, i.e., RM 3.21); caught 2 large FMS in one net, and one of other three nets had 70 mm TL GSF. Other nets = NFC. Water being super clear leads to low catches in seining efforts. Set 2 hobo loggers set on river right below Paria Beach at cliffs in backwater, the other at 3.21 (cathedral slough on the left). Slough = potential spawning ground for bass. Will download temp loggers every month.

GLCA – Setting nets that caught a couple GSF. Want to catch salamanders in HP nets in slough. Went out 2 weeks ago and electrofished below 4 mile – caught one SMB there and 4 at dam. Electrofished during daylight hours. Below 4 mile caught some BNT and GSF. Saw a lot of FMS. Army Corp of Eng. and BOR at slough conducted delineation of wetland for report. Electrofished slough during daylight – lots of turbidity – saw lots of carp. Electrofished last night (4/16) – no SMB but decent amount of GSF (~30) at 12 sites. Tonight (4/17) sampling at Reaches A & B, and 4/18 will e-fish at Reaches C and D. Has a specialized block net ordered – should arrive by May 1st and will block off slough. Has 2 hobo loggers in there. One employee will be hired this week and two in early July. Had a meeting with USGS on ways to evaluate the efficacy of spike flows. Jeff said that there were some smaller SMB captured on his trips and will send to GCMRC to go to Kevin B.

GCMRC – TRGD (April 5-9)

Kim was on TRGD – had low catch rates with BNT and RBT. See summary below. Not sure when that smaller SMB was spawned – will send to Kevin Bestgen – along with Jeff A. SMB he captured.

SMB (TL): 112, 49

WAL (TL): 360, 331 (not in spawning condition)

Count of SPECIES							
Species	1A		1A Total	1C		1C Total	Grand Total
	Pass 1	Pass 2		Pass 1	Pass 2		
BGS	2	1	3				3
BKC				1		1	1
BNT	23	17	40	97	71	168	208
CRP				3	3	6	6
FMS	15	10	25	46	25	71	96
GSF	71	136	207	26	17	43	250
NFC	1	2	3	1		1	4
RBT	53	70	123	198	216	414	537
SMB	1	1	2				2
WAL		2	2				2
Total	166	239	405	372	332	704	1109

AGFD – Ryan said there’s a trip report for March. Trip was March 11-13 caught 164 GSF; caught more GSF than RBT (first time it happened); handful of BGS; 48 FMS; 1 CRP; RBT and BNT numbers seem split. No SMB captured.

FWS – Jess: have funding to support NPS in RR efforts so had Emily Thomas participate last week in PBR sampling. Have two people dedicated to that – not sure of their availability. IF their availability is not enough to meet the needs of GLCA and GRCA RR efforts, please contact Jess N. or David W. so they can find people to fill in and help out. Most of SMB RR funding is going to be going to a downstream seining trip later this summer (Emily and Roger will be on that trip most likely) that is focused on backwaters.

II. DISCUSSION OF NEW FINDINGS

Smaller SMB captured is an interesting finding and we are all curious to see when they were spawned/what hatch date is.

III. Upcoming trips and other future plans –

2024 sampling and monitoring

GRCA – Rethinking allocation of some earlier scheduled trips (in April) to make certain we are conducting most effective sampling. Since Jeff didn’t find any SMB last night, will see what they find for the rest of the week since a trip is scheduled for next week. Boatman scheduled this week doesn’t have approval to go downstream so might focus on GLCA electrofishing. May postpone trip for now since water temps cooler and reschedule to later this summer. Ultimately, UNCERTAIN right now as to sampling (4/22-4/26). Concerned with oversampling in GLCA and just might wait since GLCA sampled recently.

GLCA – Netting on the schedule but not entirely certain what is happening next week. May borrow GRCA electrofishing boats and set hoop nets if not e-fishing.

GCMRC – JCM trip out 4/23. Not out again in terms of fish work for TRGD until June 13th.

AGFD – Dave downstream conducting system wide sampling right now. Next GLCA trip isn't until July (1 day of sampling nonnative sites).

FWS – no trips.

Reclamation -

- a. Got out to slough and looked at the area. Will get report out in 1-2 weeks. Would like to know about young SMB – when hatched/spawned so can alter flows if necessary. Brian said if we need people for electrofishing sampling in spring/early summer to let Matt and Brian H. know. They are both MOCC trained – Brian can drive boats/e-fished trained; Matt can net.
- b. Ryan M – are nets being ordered for outflow of turbines (tail race)? Brian said no nets on order right now. BOR have a draft from the NW that they are reviewing. Report is looking at feasibility and cost. Ryan believes that focusing on netting at the outflow is important and we need to be strategic about that spot in particular since we may be seeing more SMB being entrained.

IV. Old Business –

- a. Concerns from anglers – trout fishery in GLCA.
 - i. Scott Rogers: last technical work group Dave Foster addressed meeting with several requests. One reasonable request is dates and locations of electrofishing since fish sulk and angling can be worse in those areas after sampling. Understand that Locations likely to change, but would like updated info when possible. Suggests we start a “live” document spreadsheet on google or a web driven spreadsheet that all agencies can access to see most up to date schedules (mostly concerned with GLCA). If we can't do that, then maybe use these calls to make sure the schedules are up to date and shared.
 - ii. Jeff: Could get Scott R. a schedule with dates and location of sampling in GLCA. Scott will try to do it with a live sheet and Jeff will try to ask his IT if he can do a live spreadsheet.
- b. Report out on slough modification discussion. – NPS still discussing but moving forward. Anyone else have updates?
 - i. Jeff: GLCA still in discussions. Looking at wetland delineations. Looking at different ways to do it. Still having weekly meetings (IDT calls).

V. New Business

- a. Jen Pelz from Grand Canyon Trust asking for data – thoughts? They would like data to create their own graphs/prepare background materials to educate people on smallmouth bass
 - i. Kim – talked to Tom Gushue about data being in a public online database so data visuals are available to public but the data would have to be published by GCRMRC for data release before sharing it (probably on a trip by trip basis).
 - ii. Dan Leavitt – Jess was data release to public identified in the SMB charter ? Jess doesn't remember the public being addressed in the charter, but only cooperators.
 - iii. Matt O'Neill - Strategic plan suggests NPS site for GCDAMP wiki page.
- b. SMB Panel Report released – NPS working on providing comments. GCRMRC providing comments?
 - i. Drew: GCRMRC was provided an earlier draft from Jack Schmidt for a review. Underwent review in house, almost finalized comments for first draft but prior

to being able to provide comments back to panel, it was published online. Likely would need directive from higher up to provide comment(s) on the final report. Ultimately, GCMRC never provided formal comments on the review. If you currently look at the website and the report, the phrase that GCMRC provided comments has been taken down on the website. Ryan M. thinks it may still say GCMRC provided comments – told Drew to verify that it actually got updated.

- c. Coordinated effort between NPS and GCMRC regarding sampling protocols for both GLCA and GRCA (email from Bill Stewart) – clarification
 - i. Kim and Drew chatted with Jeff and Kurt about SMB monitoring and removal this summer. Went over all the protocols and methods and sampling schedule etc. Potential to standardize the methods across the PBR and Lees Ferry effort (with some small exceptions) including standardizing datasheets. Backwater temperature loggers are important and are already installed. Preservation of SMB is important. Small fish can be used for otolith aging- to show hatch date in relation to potential SMB flows from GCD. All fish will have samples taken for genetics work (genetic samples need to be preserved in ethanol). Genetics can show parentage- how many nests, and if samples are taken from Lake Powell they could help tease out entrainment vs local reproduction below the dam. There is a need for systematic reporting of qualitative data, such as observations of SMB, including: nest sites or potential nesting activity, SMB that weren't able to get captured etc., potential sightings and/or catch from anglers. Maybe record on a separate sheet on nonnative database?

VI. Anything else?

- a. Let Melissa know if there is anything you'd like to see on next agenda.

Adjourn

GCMRC, Cooperator, and Tribal River Trips and Field Activities

VII. 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"
27-Jun	8-Jul	LCR Juvenile HBC monitoring (3 camps)
3-Jul	18-Jul	Grand Canyon Youth-"Partners in Science"
3-Jul	4-Jul	TRGD
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	Juvenile HBC Monitoring in Glen Canyon

Yackulic, C.B., Bair, L.S., Eppehimer, D.E., Salter, G.L., Butterfield, B.J., Caster, J.J., Deemer, B.R., Fairley, H., Grams, P.E., Kasprak, A., Palmquist, E.C., and Sankey, J.B., 2024, Modeling the impacts of Glen Canyon Dam operations on Colorado River resources [presentation], LTEMP SEIS meeting (virtual), January 31, 2024: Flagstaff, Ariz., US Geological Survey, Southwest Biological Science Center, Grand Canyon Monitoring and Research Center, <https://www.usgs.gov/centers/southwest-biological-science-center/science/modeling-impacts-glen-canyon-dam-operations>

GRCA Sampling Schedule 2024

Dates	Trip
April 9-10	PBR-BW
April 15-19	PBR-EF
May 7-8	PBR-BW
May 20-24	PBR-EF
June 4-5	PBR-BW
June 10-13	PBR-EF
June 19-30	HBC AGG/NN Surveillance Downstream
July 8-12	PBR-EF
July 23-24	PBR-BW
July 29- Aug 2	PBR-EF
Aug 13-14	PBR-BW
Aug 19-23	PBR-EF
Sept 9-12	PBR-EF
Sept 23-30	NN Surveillance SN/eDNA Downstream
Oct 7-10	PBR-EF
Oct 21-Nov 1	NN Surveillance EF Downstream
Nov 11-15	PBR-EF
Nov 25-29	PBR-EF

GLCA Sampling Schedule 2024. Dates and locations may change in response to monitoring results to focus on high density areas.

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 and Slough Block Net Installation
May 13	GLCA electrofishing
May 20	GLCA Netting
May 27	GLCA electrofishing
June 3	GLCA Netting
June 10	GLCA electrofishing
June 17	GLCA Netting
June 24	GLCA electrofishing
July 1	GLCA Netting

July 8	GLCA electrofishing
July 15	GLCA Netting
July 22	GLCA electrofishing
July 29	GLCA Netting
Aug 9-12	Potential chemical treatment of slough if needed
Aug 5	GLCA electrofishing
Aug 12	GLCA Netting
Aug 19	GLCA electrofishing
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