

Recommendation from the Budget Ad Hoc Group for the Fiscal Year 2022 Budget and Work Plan



Peggy Roefer, Acting BAHG Chair

June 16, 2021

Meeting on May 5, 2021

- Discussion of Section 2.7 of GCDAMP Triennial Budget and Work Plan Process – Three reasons for revisions
 - Scientific requirement or merit
 - Administrative needs
 - New initiatives
- Reclamation and GCMRC Budget Presentation
- Discussion of Items that Meet Criteria of Section 2.7
 - Overhead rate
 - 7.48 MAF release from Lake Powell
 - Others

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- Items that meet the criteria of Section 2.7
 - From AMWG
 - Project Element O.1 (2022)
 - Project Element O.2 (2022)
 - Project Element O.11 (2021, 2022)
 - Recommendation – Opportunities to leverage external resource and support from Program partners will be considered and explored by GCMRC and Reclamation
 - From TWG
 - Additional TRGD sites (2023)
 - JCM-West (2023)
 - From 7.48 MAF release presentation
 - Aquatic Vegetation Pilot in Lees Ferry (202?)
 - Reclamation request
 - Dissolved Oxygen Risk Assessment (2022)
- Did not reach consensus on a motion to TWG. BAHG wanted to rank projects and needed more information on projects and costs.

Activities before May 27, 2021 meeting

- GCMRC and Reclamation completed spreadsheet detailing projects to be funded and funding amount.
- GCMRC requested additional review of Bug Flows with Project O.11 review
- Project details and cost sent to BAHG and they prioritized the following projects based on the information they received
 - Project O.1 (2022)
 - Project O.2 (2022)
 - Project O.11 (2021, 2022) and Bug Flow Review (2021)
 - Additional TRGD site (2023)
 - JCM West (2023)
 - Aquatic Vegetation Removal Pilot in Lees Ferry (202?)
 - Reclamation Dissolved Oxygen Risk Assessment (2022) was yes or no
 - Opportunities to leverage external resources and support from Program partners will be considered and explored – Not ranked, a recommendation from AMWG

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Brief Discussion of Items to be Prioritized (Items in no particular order)

- Project O.1 (2022)
- Project O.2 (2022)
- Project O.11 (2021, 2022) and Bug Flow Review (2021)
- Additional TRGD site (2023)
- JCM West (2023)
- Aquatic Vegetation Removal Pilot in Lees Ferry (202?)
- Dissolved Oxygen Risk Assessment (2022) – Not to be prioritized, only item from Reclamation budget
- Opportunities to leverage external resource and support from Program partners will be considered and explored by GCMRC and Reclamation – Not prioritized, a recommendation from AMWG

Description of Projects to be Ranked and Cost

GCMRC Projects	Description of the Project	What Information do we Lose if the Project is not Funded	Cost	Source
Project O.1 (2022)	Food base response analysis of full samples (carry over or other)	Miss full analysis of data collected from the FLAHG flow - tradeoffs were made to accommodate more resources in first year work	\$50,000	(From project O doc)
Project O.2 (2022)	Bank erosion, bed sedimentation, channel change - second year includes analysis of all collected data; funding source open (carry over or other)	Miss full analysis of data collected from the FLAHG flow - tradeoffs were made to accommodate more resources in first year work	\$161,959	(From project O doc)
Project O.11 (2021, 2022) and Bug Flow Review (2021)	Decision analysis to inform timing of experimental spring flows and identify important uncertainties with respect to goals and multiple resources, building on previous decision analysis	Reduced chance to continue to improve decision analysis processes into AMP, as well as the design and prioritization of monitoring and research of future flows	\$61,359	(From project O doc)
Additional TRGD site (2023)	Maintain an additional Trout Reproduction and Growth Dynamics monitoring site	Lose ability to track brown trout population abundance and impacts of incentivized harvest and other management actions will be compromised.	\$67,000	TWP
JCM-West (2023)	Project G.6 - investigations into drivers of juvenile HBC survival (?)	We may not be able to develop a clear picture of drivers needed for management recommendations, such as why HBC survival is lower in Western Grand Canyon than in LCR. In eastern GC, the ability to estimate the relative importance of trout and temperature was not realized until we had 7 or 8 years of data.	\$250,000	TWP; with some external calcs by Kimberly using actual staffing projections
Aquatic Vegetation Removal Pilot in Lees Ferry (202?)	Not in TWP, needs compliance more than \$		needs compliance	An effort, not described in work plan, to reverse impending conversion to a brown trout fishery without directly taking tons of life.
Reclamation Projects				
Dissolved Oxygen Risk Assessment (2022)	Multi-part project to be completed by Reclamation Technical Services Center, including 1) State-of-practice literature review of low D.O. issues at Reclamation and other facilities around the US and world; 2) An assessment of current monitoring methodology and infrastructure at Lake Powell to monitor low D.O. events; 3) Risk analysis of low D.O. to resources downstream of GCD; 4) A review of potential tools to address low D.O. events at GCD.	GCDAMP will continue to rely on existing monitoring resources to forecast the potential for low D.O. events to occur, assess events in real time, and determine the magnitude of associated impacts to downstream resources should such an event occur.	\$50,000	Source of funding: Year 2 support is requested, subject to available end of year funding.
Other Considerations (Not to be ranked)				
Opportunities to leverage external resources and support from Program partners will be considered and explored				

Project Ranking Table by Stakeholder

total	78	87	74	59	38	70		
count	19	19	19	19	19	19		
average	4.1	4.6	3.9	3.1	2.0	3.7		
ranking	5	6	4	2	1	3		
Entity	Project O.1 Foodbase	Project O.2	Project O.11 and Bug Flow Review*	Additional TRGD Site	JCM-West	Aquatic Veg Removal	Reclamation Project	
Grand Canyon	5	6	1	3	2	4		
Utah Municipal Power Agency	5	6	6	1	3	4	yes	
Nevada	5	6	4	2	1	3	yes	
Grand Canyon Wildlands Council	5	1	4	6	2	3	yes	
Hualapai	2	1	3	6	5	4	yes	
WAPA	5	6	4	3	1	2		
Reclamation	3	5	6	1	2	4		
New Mexico	3	4	1	5	2	6	yes	
Glen Canyon	4	6	5	3	1	2	yes	
CREDA	6	6	6	3	1	2	yes	
Fly Fishers International/Trout Unlimited	3	5	2	1	4	6	yes	
Hopi	5	6	4	3	2	1		
AZGF	4	5	3	1	2	6	yes	
Arizona	5	6	4	2	1	3	yes	
Colorado	3	4	5	2	1	6		
Zuni	3	6	4	2	1	5		
California	3	6	4	5	1	2	yes	
Navajo Nation	5	1	6	4	3	2	yes	
Utah								
River Guides	4	1	2	6	3	5		
Wyoming								
USFWS								
BIA								
SPC								
American Rivers								
	Item should not be funded		*Additional proposal detail requested following Science Advisor review.					
	Bug flow Review only							

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Developed and Approved Budget Recommendation to TWG

The Budget Ad Hoc Group (BAHG) recommends that the Technical Work Group (TWG) recommend to the Adaptive Management Work Group (AMWG), the Triennial Work Plan and Budget FY2021-2023 as revised by the BAHG during their meeting on May 27, 2021. All proposed projects will be considered as appropriate sources of funding (e.g. TWP carryover funds from prior years or through annual review of the TWP or other Reclamation considerations) become available. Revisions include addition of a Dissolved Oxygen Risk Assessment to be completed by Reclamation in 2022. In addition, the proposed revisions include the following prioritized list of GCMRC projects, as described in the attached spreadsheets dated May 27, 2021:

1. JCM-West (2023)
2. Additional TRGD Site (2023)
3. Aquatic Vegetation Removal Pilot in Lees Ferry (202?) (Subject to additional proposal detail and completion of compliance requirements.)
4. Project O.11 and Bug Flow Review. (Additional proposal detail requested following Science Advisor review.)
5. Project O.1 (2022)
6. Project O.2 (2022)

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- Budget Prioritization Process Discussion
 - Look at compliance frequency. Is there flexibility in the frequency of monitoring?
 - Need to start with a criteria of how to prioritize. Ranking projects will be hard.
 - Develop a list of all activities that are required and a list of other activities and see if they meet the criteria that is being developed.
 - Consider using a “value of information approach” which should show the best ways to spend program funding
 - Begin planning for the pending effects of climate change and how these effects will impact this program, especially if the prediction is less water available in the Colorado River system.

For Consideration by the TWG

The Budget Ad Hoc Group (BAHG) recommends that the Technical Work Group (TWG) recommend to the Adaptive Management Work Group (AMWG), the Triennial Work Plan and Budget FY2021-2023 as revised by the BAHG during their meeting on May 27, 2021. All proposed projects will be considered as appropriate sources of funding (e.g. TWP carryover funds from prior years or through annual review of the TWP or other Reclamation considerations) become available. Revisions include addition of a Dissolved Oxygen Risk Assessment to be completed by Reclamation in 2022. In addition, the proposed revisions include the following prioritized list of GCMRC projects, as described in the attached spreadsheets dated May 27, 2021:

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