

GCDAMP TRIENNIAL BUDGET PROCESS

Draft March 8, 2016

On May 6, 2010 the Adaptive Management Work Group (AMWG) approved a biennial budget and workplan process. This process proved to be very successful and supported by the Glen Canyon Dam Adaptive Management Program (GCDAMP) and was extended to a triennial process for the FY 2015-2017 budget and workplan per guidance from Anne Castle (May 7, 2014). The guidance also instructed the GCDAMP to revise the biennial budget and workplan process to a triennial process described here.

1.0 Description of the Triennial Budget Process

The goal is to reduce the effort expended on the budget process while improving the effectiveness of the Grand Canyon Monitoring and Research Center (GCMRC), Technical Work Group (TWG), and AMWG. The GCDAMP will develop a triennial workplan and budget (TWP) the first year of the process (Table 1). Then, in the second year the GCDAMP would implement the year-two budget and make relatively minor corrections primarily related to changes in CPI and needs at GCMRC and the Bureau of Reclamation (Reclamation). In the third year the GCDAMP would consider minor changes to the year three budget to allow for changes in projects or potential important new starts not envisioned during the development of the triennial budget.

The major components of the TWP would include:

- Three-year budget spreadsheets, work plans, and hydrographs,
- Modifications of the year-three budget based on specific criteria,
- Fiscal reporting, including expenditures for the previous fiscal year (mid-year and end-of-year reports),
- Project progress reports, including an annual reporting meeting in January, and
- Utilization of the Budget Ad Hoc Group (BAHG) to interface with Reclamation and GCMRC in developing a draft TWP, and to help the TWG develop budget recommendations for AMWG consideration.

2.0 Budget Process Components

The following describes the specific elements of the budget process and responsibilities.

2.1 Budget Principles

The TWP will:

- Employ the adaptive environmental assessment and management approach to resources management that was developed by Holling (1978) and Walters (1986), and articulated in the Adaptive Management Program Strategic Plan (AMPSP) to include participation from the BAHG, TWG, and AMWG;
- Be consistent with the GCMRC Strategic Science Plan (SSP), Monitoring and Research Plan (MRP), and Core Monitoring Plan (when completed);
- Use a collaborative science planning process as described in the SSP and MRP (Figure 1); and
- Address GCDAMP priority questions, information needs, and the associated strategic science questions (SSQs) and using them to provide the primary basis for designing the science program;

The TWP process will be most successful if the AMPSP, SSP, MRP, and Core Monitoring Plan are current and up to date. It is important that science planning and management planning occur currently as portrayed in Figure 1.

2.2 Priorities

All parties in the GCDAMP recognize the fact that not all funds needed and requested will always be made available. Prioritization of work is essential to the budgeting process. The Strategic Plan, including the Goals and Management Objectives and Desired Future Conditions, and especially the Information Needs (in sequence order) should serve as the basis for determining budget priorities. We anticipate that AMWG will review and update these periodically (e.g., every 5 years) to ensure they reflect new information and program priorities. Currently many of the documents have not been reviewed or updated for nearly a decade. At its basic level the budget should put core monitoring and high priority information needs ahead of other activities. TWG will provide an initial general BWPH recommendation to AMWG at its spring meeting and AMWG will provide feedback to TWG on budget priorities and general direction which the BAHG, TWG, and GCMRC will use in their development of a final recommendation to AMWG.

2.3 Budget Ad Hoc Group (BAHG)

TWG consideration of the budget and work plan has been facilitated by the BAHG, a small ad hoc group which has worked with Reclamation and GCMRC for many years. TWG will continue to utilize the BAHG to review the budget and work plan and to resolve difficult technical issues. The BAHG will work with Reclamation and GCMRC throughout the budget process and provide a liaison with TWG members. The BAHG will help Reclamation and GCMRC develop and bring to the TWG budgets that are prepared for full TWG discussion and recommendation to AMWG. Thus, technical issues and resolutions of major issues will be resolved to the extent possible before full TWG review. The TWG will give initial budget prioritization to the BAHG at its annual January reporting meeting. The BAHG will consider this input and the initial budget proposed by Reclamation and GCMRC and provide an initial budget recommendation to TWG at its spring meeting (e.g., April). The BAHG will then work with Reclamation and GCMRC through the spring and early summer to provide a final TWP recommendation to the TWG at its summer meeting (e.g., June). In the second year of the TWP this process will be truncated to consider only necessary changes to the budget for year-two, and then more changes in year-three (Table 1).

2.4 January Reporting Meeting

TWG, in coordination with GCMRC and Reclamation, will hold an annual reporting meeting in January to review progress on funded monitoring and research projects for the previous year. GCMRC and Reclamation will provide an annual report for each funded activity in the work plan. TWG will use this time to review and evaluate the progress of projects and to give direction to the BAHG in the development of the initial budget.

2.5 Mid-year and End of Year Fiscal Reporting Including Carry Over

Reclamation and GCRMC will provide mid-year and end of fiscal year reporting of expenditures and carry over to TWG and AMWG.

2.6 Budget Spreadsheet and Work Plan

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Commented [SAC3]: Again, difficult to describe our priorities

Reclamation and GCMRC will coordinate to provide a budget spreadsheet for the BAHG to review in January based on either a new TWP or modifications to the second or third year of the TWP. The spreadsheet will include expected costs for each project based on the priority setting provided by AMWG and discussions with the BAHG. Reclamation and GCMRC will coordinate to provide a budget spreadsheet, work plan, and hydrograph to the BAHG in the spring of the first year of the TWP development. The TWP will be used by TWG to provide budget recommendations to AMWG. During the second and third year of the budget, a full work plan would not be developed, rather a memo from GCMRC and/or Reclamation, outlining changes to the work plan would be provided in addition to a modified budget spreadsheet.

2.7 Hydrograph Development

The hydrograph of releases from Glen Canyon Dam emerges from a 24-month modeling study accomplished by Reclamation. Modeling outputs reflect anticipated inflows and reservoir storage to project annual and monthly dam releases. Daily fluctuations are predicated on agreements in the 1996 Record of Decision and the 2008 FONSI on dam operations. The TWG will be provided with Reclamation's 24-month findings, recognizing that these projections change with each month, to advise them of the most probable future release scenarios. TWG will provide a recommendation for the annual hydrograph to AMWG at its June meeting.

2.9 Roles of GCDAMP Entities

- TWG Chair: The chair of the TWG will endeavor to provide appropriate time for full discussion of the budget on the TWG agenda, and encourage Reclamation and GCMRC to provide budget documents to the TWG sufficiently in advance of meetings to allow for full review prior to TWG meetings.
- GCMRC: Develop budget spreadsheets and work plans in a timely manner that is responsive to Program Direction (SSP/MRP), and to TWG and AMWG requests and comments on draft documents.
- Reclamation: Develop budget spreadsheets, work plans, and hydrographs for their portion of the budget that is responsive to TWG and AMWG requests and comments on draft documents.
- AMWG: Review the initial budget at its spring meeting and provide input to Reclamation, GCMRC and TWG on priorities and general budget direction and development. Review the final budget recommendation from TWG at its fall meeting and make a final budget recommendation to the Secretary of Interior (SOI).
- TWG: Review the initial budget spreadsheet and initial BAHG budget recommendations and formulate an initial budget recommendation to AMWG at its spring meeting. Review the draft final budget spreadsheet and work plan and make final budget recommendation at its summer meeting for AMWG review at its fall meeting.
- BAHG: Review the initial budget spreadsheet and draft final budget spreadsheet, work plan, and hydrograph with GCMRC and Reclamation, make modifications as necessary, and provide recommendations to TWG at its spring and summer meetings.
- Science Advisors: Participate in TWG and AMWG deliberations on the budget in coordination with the Executive Coordinator. Review the final TWP proposal submitted to the AMWG for review and provide written feedback to both GCMRC and the AMWG.
- Other Cooperators: Other agencies and cooperators that are conducting work relevant to the GCDAMP are invited to submit workplans for inclusion in the GCDAMP and report upon those workplans at the Annual Reporting Meeting.

2.9 Criteria for Review and Revisions of the Year-three Budget

In order for the TWP process to be successful in reducing the administrative burden on the GCMRC, Reclamation, and the GCDAMP it must have clear criteria for making changes to the year-three budget. The burden of an appropriate rationale for proposing a change falls upon the proposer to make a persuasive argument. The following criteria will be used by GCMRC, Reclamation, and TWG in making recommendations to AMWG on changes to the year-three budget:

- Scientific requirement or merit: New information gained during the implementation of monitoring and research projects may result in a need to alter methods, scope, or timelines in the work plan or substantially alter or eliminate a project. This is a science-based need based on the experience of implementing an already approved project. This does not represent a shifting priority, but a scientific learning process which results in needed modifications to carry out the goals.
- Administrative needs: Administrative or programmatic changes may occur within the time-frame of an approved budget. Examples include the mitigation of an impact as a result of ESA consultation or tribal consultation, a change in the “overhead” charges of a federal or state agency, a significant reduction of the balance of the Colorado River Basin Fund or a failure to secure NPS permits for work in the Grand Canyon. As soon as an administrative event occurs that affects the budget, GCMRC (or relevant agency – such as DOI) will notify the TWG.
- New initiatives: New initiatives or modifications to projects that may or may not be based on a scientific merit must be vetted through DOI. DOI will consider whether to direct GCMRC/BOR to work on these new initiatives or whether to consider them during the next full budget cycle. Given that the budget will likely be fully accounted for, direction on where to locate the funds within the current budget will be requested from DOI.

Table 1. Approximate timelines for the development and implementation of the triennial workplan (TWP). Dates shown are estimated targets. Dates are shown which implement the 2015-17 TWP for reference.

Month	Year-1 (2014) (development of triennial workplan & budget)	Year-2 (2015)
December (year prior)	GCMRC produces annual project reports document.	
January	Annual reporting meeting and information synthesis (2 days) followed by 1-day TWG meeting to review budget and provide initial guidance to GCMRC and BOR. TWG reviews progress in addressing Information Needs and research accomplishments.	Annual reporting meeting (1-2 days) followed by 1-day TWG meeting with a primary emphasis on reporting on results/findings/scientific advances on previous work plan.
February	GCMRC meets with tribes and DOI agencies. GCMRC follow-up with BAHG on priorities and areas of emphasis on TWP. GCMRC meets with cooperators to develop projects. AMWG meeting to discuss initial priorities. DOI and Federal family input.	
March	USGS and BOR will develop an initial TWP and budget spreadsheet based on DOI priorities and input from scientists, the TWG, and DOI/DOE family. Initial TWP presented to DOI and ASWS.	
April	GCMRC meets with tribes and DOI agencies. April TWG meeting to consider draft TWP. Unresolved issues or conflicting priorities will be resolved by DOI in consultation with the DOI Family. GCMRC begins development of second draft TWP.	
May	GCMRC and BOR provide a second draft TWP to the TWG Budget Ad Hoc Group (BAHG), Science Advisors, DOI agencies, and tribes for their review and comment. GCMRC meets with tribes, BAHG, to get input on TWP. GCMRC develops third draft of TWP.	
June	GCMRC and BOR finish third draft for review. TWG meets to provide input on the draft GCMRC and BOR TWP and provide a recommendation to the AMWG.	TWG recommends Fiscal Year 2 (2016) of triennial budget to AMWG.
July	GCMRC and BOR provide a final draft TWP to the AMWG for their review.	
August	AMWG meets to provide input on the GCMRC and BOR draft TWP and provide a recommendation to the SOI.	AMWG recommends Fiscal Year 2 (2016) of triennial budget to SOI.
September	Secretary of the Interior reviews the budget and work plan recommendation from AMWG.	
October 1	Fiscal Year 1 begins under the TWP guidance.	Fiscal Year 2 begins under the TWP guidance.
November 1	Consumer Price Index becomes available.	
Late	Science and management meeting with DOI and	

November	cooperators.	
December	Budget is finalized. USGS produces GCMRC annual project reports document for prior year work.	GCMRC produces annual project reports document.

Month	Year-3 (2016)	Year-4 (2017)
January	Annual reporting meeting and information synthesis (2 days) followed by 1-day TWG meeting to review initial results and findings of TWP. Potential TWP changes may be identified.	Starts again under year 1.
February		
March		
April	TWG/agencies/tribes meetings to consider mid-TWP adjustments to work plan at TWG meeting.	
May		
June	TWG considers and recommends mid-TWP adjustments and a recommendation for Fiscal Year 3 (2017) budget.	
July		
August	AMWG meets and considers mid-TWP adjustments recommended by TWG and recommends Fiscal Year 3 (2017) budget to the SOI.	
September		
October 1	Fiscal Year 3 begins under the TWP guidance.	
November 1	Consumer Price Index becomes available.	
Late November	Meet with DOI to outline new work plan; Science and management meeting with DOI and cooperators.	
December	USGS produces GCMRC annual project reports document for prior year work.	

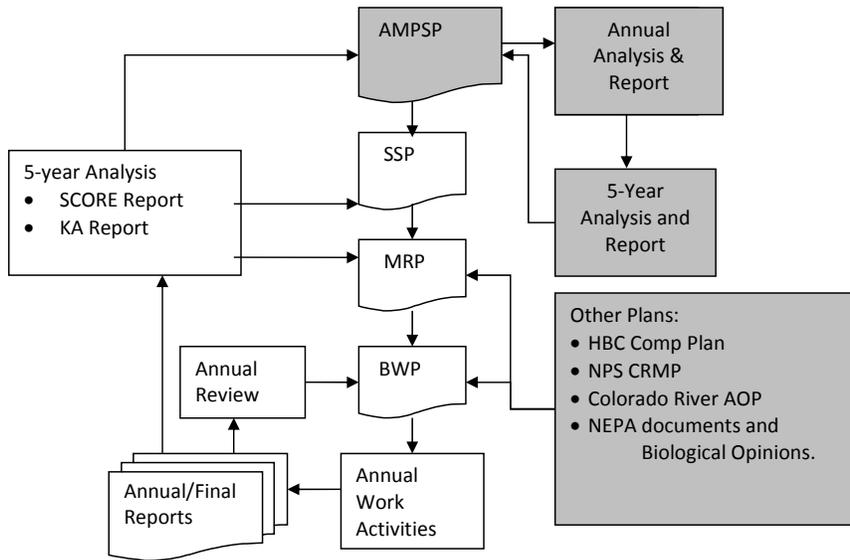


Figure 1. Collaborative science planning and implementation process from GCMRC's Strategic Science Plan. The Glen Canyon Dam Adaptive Management Program and the Department of the Interior have lead responsibility for the shaded boxes. The Grand Canyon Monitoring and Research Center has lead responsibility for the boxes that are not shaded.