GCDAMP TRIENNIAL BUDGET AND WORK PLAN PROCESS

October 19, 2016 Passed by Consensus by the TWG

On May 6, 2010, the Adaptive Management Work Group (AMWG) approved a biennial budget, work plan, and hydrograph process to replace the annual process previously employed. This process proved to be successful and was supported by the Glen Canyon Dam Adaptive Management Program (GCDAMP). To further improve efficiency of the budgetary and planning efforts of the GCDAMP, the biennial process was extended to a triennial process for the FY 2015-2017 work plan as directed by the Secretary's Designee (Anne Castle) in a memo dated May 7, 2014. The memorandum also instructed the GCDAMP to revise the work planning guidance to reflect the development of three-year work plans. This approach was also reiterated by the Secretary's Designee (Jennifer Gimbel) in a July 8, 2016 memorandum to Scott VanderKooi and Katrina Grantz.

1.0 Triennial Work Plan Process

The goal of the triennial work plan (TWP) process is to develop a three-year budget and work plan that is responsive to the guiding principles and documents of the GCDAMP. It will be developed as a collaborative effort between the Grand Canyon Monitoring and Research Center (GCMRC), Bureau of Reclamation (Reclamation), Technical Work Group (TWG), and AMWG. The GCDAMP will develop a triennial work plan (TWP) the first year of the budgetary and planning cycle. Then, in the second and third years, the GCDAMP would implement the TWP making adjustments for CPI and budgetary needs at GCMRC and Reclamation. The GCDAMP would also consider potential changes to projects or new starts subject to guidelines in Section 2.7.

The major components of the TWP process include:

- The Budget Ad Hoc Group (BAHG) and TWG will work with Reclamation and GCMRC to develop a draft TWP according to the process described in Table 1;
- The TWG will develop a TWP recommendation for AMWG consideration and recommendation to the Secretary of Interior (SOI);
- The TWP will include budget spreadsheets, that identify funding source and work plans for each
 of the three years;
- The GCDAMP will recommend annual budgets to the SOI, based on the TWP, as required by federal budgetary policy;
- Modifications to the budget and work plan should adhere to the criteria described in Section 2.7;
- Annual fiscal reporting on expenditures and annual progress reports will be provided to the GCDAMP by GCMRC and Reclamation; and
- The GCDAMP will hold an annual reporting meeting in January (targeted month).

2.0 Budget Process Components

The following describes the specific elements of the TWP process and responsibilities of associated agencies and organizations.

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 guided by the GCDAMP Desired Future Conditions;
- Use a collaborative science planning process as described in the MRP (Figure 1);
- Address science needs contained within the GCDAMP science plans and adaptive management needs identified by the GCDAMP; and
- Comply with the "Law of the River" including, but not limited to the Long Range Operating Criteria, as currently implemented through the 2007 Interim Guidelines, and the GCPA.

2.2 Budget Ad Hoc Group (BAHG)

TWG consideration of the budgets 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 and provide input on the TWP and to resolve difficult technical issues. The BAHG will work with Reclamation and GCMRC throughout the budget process. 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.

2.3 Annual Reporting Meeting

TWG, in coordination with GCMRC and Reclamation, will hold an annual reporting meeting targeted to be 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 GCDAMP-funded project 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 or review of annual budget recommendations. This is an especially important meeting during the development of the TWP, because it will serve as a three-year knowledge assessment from the last work plan, and support the development of the projects for the new work plan and associated program priorities based on monitoring, research, and experiments.

2.4 Fiscal Reporting Including Carry Over

Reclamation and GCRMC will provide to TWG and AMWG, end of fiscal year reporting of expenditures (actual and budgeted) and carry over funds.

2.5 Budget Spreadsheet and Work Plan

Reclamation and GCMRC will develop a budget spreadsheet and work plan, which identifies funding sources, with review and input from the BAHG and the TWG, according to dates described in Table 1. The TWP will be used by the BAHG and TWG to provide budget recommendations to AMWG. During the second and third year of the budget, TWG would consider potential changes to the work plan, and recommend appropriate changes to AMWG to consider and recommend to the Secretary of Interior (SOI) during the annual budget recommendation.

2.6 Roles of GCDAMP Entities

- TWG Chair: The TWG Chair will endeavor to provide appropriate time for full discussion of the TWP on the TWG agenda, and encourage Reclamation and GCMRC to provide budget documents to the TWG in advance of meetings to allow for sufficient review prior to TWG meetings.
- GCMRC: Develop budget spreadsheets and work plans in a timely manner that is responsive to program direction and science plans, and to TWG and AMWG requests and comments on draft documents.
- Reclamation: Develop budget spreadsheets and work plans for its portion of the budget that is responsive to TWG and AMWG requests and comments on draft documents.
- BAHG: Review and provide input on the initial budget spreadsheet and draft final budget spreadsheet and work plan to GCMRC and Reclamation, including input from the CRAHG and other ad hoc groups. Provide recommendations to TWG at its spring and summer meetings. Review and make recommendations on annual budget and work plans to TWG.
- TWG: Review the initial budget spreadsheet and initial BAHG budget recommendations. 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 the TWG's summer meeting for AMWG review at its fall meeting. Review and make recommendations on annual budget and work plans to AMWG.
- AMWG: Review the initial budget at its spring meeting and provide input to Reclamation, GCMRC, and TWG on priorities for general budget direction and development. Review the final budget recommendation from TWG at its summer meeting and make a final budget recommendation to the SOI. Review and make recommendations on annual budget and work plans.
- 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 TWG for review and provide written feedback to the GCDAMP.
- Other Cooperators: Other agencies and cooperators that are conducting work relevant to the GCDAMP are invited to submit work plans for inclusion in the GCDAMP and report upon those work plans at the annual reporting meeting.

2.7 Criteria for Review and Revisions of the Budget and Work Plan

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 budget and work plan. Revisions of the year two budget are intended to be limited to unexpected changes due to a scientific requirement or merit, or administrative needs. Year three changes may be more substantive according to the guidelines below. The individual steps of the process, including roughly when meetings should occur and their objectives, are provided in Table 1. The burden of an appropriate rationale for proposing a change falls upon the proposer to make a persuasive argument to the TWG and AMWG. The following criteria will be used by GCMRC, Reclamation, and TWG in making recommendations to AMWG on changes to the budget and work plan:

• 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 need based on the experience of implementing an already approved project. This does not represent a shifting

- priority (e.g., policy change), but a scientific learning process which results in needed modifications to carry out the goals of the Program.
- Administrative needs: Administrative, policy, or programmatic changes may occur within the
 time-frame of an approved TWP. Examples might include the mitigation of an impact resulting
 from ESA, NHPA, or tribal consultation, a change in the "overhead" charges of a federal or state
 agency, a significant reduction of the balance of available funds, or a failure to secure permits..
 As soon as an administrative event occurs that affects the TWP, GCMRC (or relevant agency –
 such as DOI) will notify the TWG.
- New initiatives: New initiatives may be brought up for discussion by members during BAHG or TWG budget discussions (see Table 1) for consideration by Reclamation and GCMRC. These new initiatives may need to be considered by the GCDAMP Program Manager prior to requesting either GCMRC or Reclamation to develop a proposal for mid-work plan consideration. If DOI determines it is beyond the scope of a mid-work plan change, then the initiative could be considered during the development of the next work plan. Given that the budget will likely be fully accounted for, direction on funding source within the current budget will be required for discussion with the GCDAMP Program Manager. Revisions must comply with the Budget Principles (see Section 2.1).

Table 1. Approximate timelines for the development and implementation of the TWP. Dates shown are estimated targets. Dates are shown which implement the 2018-20 TWP for reference.

Month	Year-1 (2017) (development of TWP)	Year-2 (2018)
December (year prior)	GCMRC and Reclamation produces annual project reports document for GCDAMP review.	
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 Reclamation. 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 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	GCMRC and Reclamation will develop an initial TWP based on DOI priorities and input from scientists, the TWG, and DOI/DOE family. Initial TWP presented to DOI and Secretary's Designee.	
April	GCMRC meets with tribes and DOI agencies. April TWG meeting to consider draft TWP, including anticipated funding sources. Unresolved issues or conflicting priorities will be resolved by DOI in consultation with the DOI Family. GCMRC begins development of second draft TWP.	BAHG and TWG considers potential changes to the Fiscal Year 2 TWP based on criteria in section 2.7.
May	GCMRC and Reclamation provide a second draft TWP to the 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 Reclamation finish third draft for review. TWG meets to provide input on the draft GCMRC and Reclamation TWP and provide a recommendation to the AMWG.	TWG recommends Fiscal Year 2 (2019) budget of TWP to AMWG.
July	GCMRC and Reclamation provide a final draft TWP to the AMWG for their review.	
August	AMWG meets to provide input on the GCMRC and Reclamation draft TWP and provide a recommendation to the SOI.	AMWG recommends Fiscal Year 2 (2019) budget of TWP to SOI.
September	SOI 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 November	Science and management meeting with DOI and cooperators.	Science and management meeting with DOI and cooperators.
December	Budget is finalized. USGS produces GCMRC annual project reports document for prior year work.	GCMRC produces annual project reports document.

Table 1 (continued). Approximate timelines for the development and implementation of the TWP. Dates shown are estimated targets. Dates in parentheses are shown which implement the 2018-20 TWP cycle for reference.

Month	Year-3 (2019)	Year-4 (2020)
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.	Process starts again under year 1.
February	BAHG/agencies/tribes meetings to consider mid-work plan adjustments to TWP, February through March.	
March		
April	Consider mid-work plan adjustments at TWG meeting. BAHG and TWG considers potential changes to the Fiscal Year 3 TWP based on criteria in section 2.7.	
May		
June	TWG considers and recommends mid-work plan adjustments to TWP and a recommendation for Fiscal Year 3 (2017) budget.	
July		
August	AMWG meets and considers mid-work plan adjustments to TWP recommended by TWG and recommends Fiscal Year 3 (2020) budget to the SOI.	
September		
October 1	Fiscal Year 3 begins under the TWP guidance.	
November 1	Consumer Price Index becomes available.	
Late November	Science and management meeting with DOI and cooperators. New TWP development meeting within DOI.	
December	USGS produces GCMRC annual project reports document for prior year work.	