3.3.4 Core Monitoring Program Costs

A variety of sources have been used to estimate the annual costs of core monitoring activities if fully implemented, as shown in table 4. A number of the projects, particularly those that have completed the research and development and PEP review and recommendation steps, appear with detailed budgets in the GCMRC’s biennial FY2011-12 work plan and budget. The total annual cost for quality of water and sediment monitoring projects related to goals 7 and 8 are the best known of the 11 projects described in this plan. The other nine monitoring projects are associated with “ballpark” estimates because their associated R&D and PEP review phases are not yet completed.

The total gross cost for the core monitoring program, if fully implemented, is estimated at approximately $6,000,000 annually, representing about 60 percent of the total Glen Canyon Dam Adaptive Management Program annual budget (on the basis of the FY2010 total). Where possible, costs shown in table 4 have been derived from the monitoring project descriptions contained in the FY2010–11 annual work plan. In cases where the provisional monitoring projects are not yet underway and therefore not described in the annual work plan, best estimates of the project costs have been made by the various program managers who oversee development of the proposed monitoring.

The estimated gross costs for each project (Table 4) have been broken down into several categories, including the proportion of each project that will be directly supported by the GCMRC science and management staff, the logistics needs, the portion that is intended to be outsourced through contracts or cooperative agreements, other related expenses and estimated indirect costs for implementing the projects. Currently these are considered to be general estimates, but project costs derived from annual work plans (such as goals 7 and 8) are thought to be close to the projected longer term costs, assuming annual indexing for inflation. The logistics budgets are distributed across GCMRC monitoring projects based on a formula proportional to use of services. The formula takes into account contractor costs, trip size and length, and a percentage of operating expenses, salaries, and permitting costs.

The funding needs projections are based on the estimated cost to implement core monitoring to meet currently identified information needs (CMI) at a medium level of monitoring. The ultimate cost of individual core monitoring programs will be determined based on consideration of trade-offs between costs, precision and program needs. Further description of the review and approval process can be found in Appendix B, which describes the TWG process for reaching a final decision about what the program is willing to support in the long run for each core monitoring program.

However, reaching those decisions through a collaborative approach will be difficult and may require facilitation as the GCDAMP has had difficulty in reaching these types of decisions in the past.