



United States Department of the Interior  
U.S. GEOLOGICAL SURVEY  
SOUTHWEST BIOLOGICAL SCIENCE CENTER  
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## MEMORANDUM

**Date:** November 15, 2006  
**To:** Adaptive Management Work Group Members  
**From:** John Hamill, Chief, Grand Canyon Monitoring and Research Center  
**Subject:** Fiscal Year 2006 Budget Summary

Attached is the Fiscal Year 2006 Grand Canyon Monitoring and Research Center's (GCMRC) Budget Summary showing expenses and obligations as of September 30, 2006. Please note that we show a carryover balance of approximately \$235,000, or 3.14%, of the total budgeted amount of the GCMRC portion of the Glen Canyon Dam Adaptive Management Program's portion of the FY2006 under cap power revenues. This item will be discussed during the FY-06 Final Expenditures presentation at 11:15 on 5 December 2006. The GCMRC Program Managers and I intend to follow the standard operating procedures involving the Technical Work Group and the Budget Ad Hoc Group in determining appropriate uses for these funds including possibly, covering the anticipated CPI shortage, as well as other priority science activities. The Southwest Biological Science Center Administrative Officer, J.D. Kite and I look forward to meeting with you in December.

Attachment

**USGS GRAND CANYON MONITORING RESEARCH CENTER  
GLEN CANYON DAM ADAPTIVE MANAGEMENT PROGRAM  
FY 2006 BUDGET REPORT  
AS OF SEPTEMBER 30, 2006**

Rev. 11/15/2006  
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|    | A                                                       | B    | C                                                           | D                                        | E                                    | F                                      | G                     | H                                        | I                    | J                  | K                               | L                      |
|----|---------------------------------------------------------|------|-------------------------------------------------------------|------------------------------------------|--------------------------------------|----------------------------------------|-----------------------|------------------------------------------|----------------------|--------------------|---------------------------------|------------------------|
|    | GCMRC<br>Work Plan<br>ID                                | ID   | GCMRC Project Descriptions                                  | Reimbursable<br>Gross Project<br>Funding | USGS Gross<br>Contributed<br>Funding | Total Funding<br>BOR & USGS<br>(D + E) | Total Gross<br>Burden | Total Net Funds<br>Available<br>(F<br>G) | Total<br>Obligations | Total Expenditures | Total Oblig<br>& Exp<br>(J + I) | Carryover to<br>FY2007 |
| 1  |                                                         |      |                                                             |                                          |                                      |                                        |                       |                                          |                      |                    |                                 |                        |
| 2  | <b>Power Revenues Agreement #06-AA-40-2439</b>          |      |                                                             |                                          |                                      |                                        |                       |                                          |                      |                    |                                 |                        |
| 3  | <b>A Physical Sciences \$ Modeling</b>                  |      |                                                             |                                          |                                      |                                        |                       |                                          |                      |                    |                                 |                        |
| 4  | <b>A.2</b>                                              | CM   | Integrated Downstream Water Quality Monitoring              | 817,947                                  | 60,983                               | 878,930                                | 114,368               | 764,562                                  | 65,902               | 698,660            | 764,562                         | 0.00                   |
| 5  | <b>A.3</b>                                              | CM   | Fine-Sediment Storage - Monitoring                          | 271,625                                  | 2,004                                | 273,629                                | 16,281                | 257,348                                  | 229,397              | 27,951             | 257,348                         | 0.00                   |
| 6  |                                                         |      |                                                             | <b>1,089,572</b>                         | <b>62,987</b>                        | <b>1,152,559</b>                       | <b>130,649</b>        | <b>1,021,910</b>                         | <b>295,299</b>       | <b>726,611</b>     |                                 | <b>0</b>               |
| 7  | <b>A DASA</b>                                           |      |                                                             |                                          |                                      |                                        |                       |                                          |                      |                    |                                 |                        |
| 8  | <b>A.4</b>                                              | DASA | Air-Remote Sensing - Monitoring                             | 32,877                                   | 71,931                               | 104,808                                | 20,412                | 84,396                                   | -                    | 84,396             | 84,396                          | 0.00                   |
| 9  | <b>A.5a</b>                                             | DASA | Database Management System                                  | 157,105                                  | 16,239                               | 173,344                                | 34,416                | 138,928                                  | 10,471               | 128,457            | 138,928                         | 0.00                   |
| 10 | <b>A.5b</b>                                             | DASA | Library & Scanning Data Conversion Project                  | 168,005                                  | 18,767                               | 186,772                                | 18,734                | 168,038                                  | 111,497              | 56,541             | 168,038                         | 0.00                   |
| 11 | <b>A.6</b>                                              | DASA | GIS: GIS General Support for Integrated Analyses & Projects | 186,017                                  | 21,870                               | 207,887                                | 40,035                | 167,852                                  | 41,920               | 125,932            | 167,852                         | 0.00                   |
| 12 | <b>A.7</b>                                              | DASA | Channel Mapping                                             | 32,877                                   | 4,285                                | 37,162                                 | 4,577                 | 32,585                                   | 21,411               | 11,174             | 32,585                          | 0.00                   |
| 13 |                                                         |      |                                                             | <b>576,881</b>                           | <b>133,092</b>                       | <b>709,973</b>                         | <b>118,174</b>        | <b>591,799</b>                           | <b>185,299</b>       | <b>406,500</b>     | <b>591,799</b>                  | <b>0</b>               |
| 14 | <b>PHYSICAL SCIENCES, MODELING &amp; DASA SUBTOTAL:</b> |      |                                                             | <b>1,666,453</b>                         | <b>196,079</b>                       | <b>1,862,532</b>                       | <b>248,823</b>        | <b>1,613,709</b>                         | <b>480,598</b>       | <b>1,133,111</b>   | <b>591,799</b>                  | <b>0</b>               |
| 15 | <b>B Biosciences Program</b>                            |      |                                                             |                                          |                                      |                                        |                       |                                          |                      |                    |                                 |                        |
| 16 | <b>B.1</b>                                              | CM   | Kanab Ambersnail & SWWF - Monitoring                        | 88,832                                   | 3,106                                | 91,938                                 | 12,775                | 79,163                                   | 11,885               | 60,472             | 72,357                          | 6,806.00               |
| 17 | <b>B.2</b>                                              | CM   | Aquatic Food base - Monitoring                              | 403,898                                  | 19,274                               | 423,172                                | 49,502                | 373,670                                  | 69,625               | 159,293            | 228,918                         | 144,752.00             |
| 18 | <b>B.3</b>                                              | CM   | Status & Trends of DS Fish - Monitoring                     | 917,844                                  | 31,648                               | 949,492                                | 122,056               | 827,436                                  | 702,428              | 125,008            | 827,436                         | 0.00                   |
| 19 |                                                         |      | Lew Coggins Training & Salary                               | -                                        | 73,380                               | 73,380                                 | 12,855                | 60,525                                   | 6,402                | 54,123             | 60,525                          | 0.00                   |
| 20 | <b>B.4</b>                                              | CM   | Status & Trends LF Trout - Monitoring                       | 156,492                                  | 7,623                                | 164,115                                | 21,403                | 142,712                                  | 73,601               | 69,111             | 142,712                         | 0.00                   |
| 21 | <b>B.5</b>                                              | CM   | Habitat Map & Inventory - Monitoring                        | 16,632                                   | 2,168                                | 18,800                                 | 2,999                 | 15,801                                   |                      | 15,800             | 15,800                          | 1.00                   |
| 22 | <b>B.6</b>                                              | EXP  | Spawning Redds & Suppression Mechanisms                     | 157,732                                  | 3,615                                | 161,347                                | 17,133                | 144,214                                  | 81,344               | 62,870             | 144,214                         | 0.00                   |
| 23 | <b>B.7</b>                                              | EXP  | Mechanical Removal of Non-native Fish                       | 795,192                                  | 17,879                               | 813,071                                | 143,108               | 669,963                                  | 273,372              | 369,922            | 643,294                         | 26,669.00              |
| 24 | <b>B.8</b>                                              | HCA  | Translocation of Humpback Chub                              | 53,550                                   | 463                                  | 54,013                                 | 4,517                 | 49,496                                   | 12,519               | 36,977             | 49,496                          | 0.00                   |
| 25 | <b>B.9</b>                                              | HCA  | Warm Water Fish Monitoring Workshop (prev. Dam Ops Exp)     | 27,600                                   | 3,597                                | 31,197                                 | 3,148                 | 28,049                                   | 17,459               | 10,590             | 28,049                          | 0.00                   |
| 26 | <b>B.10</b>                                             | HCA  | Monitoring Parasites and Diseases                           | 23,400                                   | 444                                  | 23,844                                 | 5,194                 | 18,650                                   | 2,792                | 15,858             | 18,650                          | 0.00                   |
| 27 | <b>B.12</b>                                             | HCA  | Fish Monitoring below Diamond Creek                         | 81,000                                   | 2,281                                | 83,281                                 | 18,711                | 64,570                                   | 3,207                | 61,363             | 64,570                          | 0.00                   |
| 28 | <b>BIOSCIENCES PROGRAM SUBTOTAL:</b>                    |      |                                                             | <b>2,722,172</b>                         | <b>165,478</b>                       | <b>2,887,650</b>                       | <b>413,401</b>        | <b>2,474,249</b>                         | <b>1,254,634</b>     | <b>1,041,387</b>   | <b>2,296,021</b>                | <b>178,228</b>         |
| 29 | <b>C Sociocultural Program</b>                          |      |                                                             |                                          |                                      |                                        |                       |                                          |                      |                    |                                 |                        |
| 30 | <b>C.1</b>                                              | CM   | Integrated Archaeological Site Monitoring                   | 374,201                                  | 8,980                                | 383,181                                | 61,718                | 321,463                                  | 266,751              | 54,712             | 321,463                         | -                      |
| 31 | <b>C.2</b>                                              | CM   | Integrated Tribal Resources Monitoring                      | 29,250                                   | 3,812                                | 33,062                                 | 7,929                 | 25,133                                   | 21,696               | 3,437              | 25,133                          | -                      |
| 32 | <b>C.3</b>                                              | CM   | Integrated Campsite Monitoring Program                      | 86,287                                   | 2,775                                | 89,062                                 | 11,405                | 77,657                                   | 75,369               | 2,288              | 77,657                          | -                      |
| 33 | <b>SOCIOCULTURAL PROGRAM SUBTOTAL:</b>                  |      |                                                             | <b>489,738</b>                           | <b>15,567</b>                        | <b>505,305</b>                         | <b>81,052</b>         | <b>424,253</b>                           | <b>363,816</b>       | <b>60,437</b>      | <b>424,253</b>                  | <b>-</b>               |

USGS GRAND CANYON MONITORING RESEARCH CENTER  
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|    | A                                                                                     | B   | C                                                                                      | D                                        | E                                    | F                                      | G                     | H                                        | I                    | J                  | K                               | L                      |
|----|---------------------------------------------------------------------------------------|-----|----------------------------------------------------------------------------------------|------------------------------------------|--------------------------------------|----------------------------------------|-----------------------|------------------------------------------|----------------------|--------------------|---------------------------------|------------------------|
| 1  | GCMRC<br>Work Plan<br>ID                                                              | ID  | GCMRC Project Descriptions                                                             | Reimbursable<br>Gross Project<br>Funding | USGS Gross<br>Contributed<br>Funding | Total Funding<br>BOR & USGS<br>(D + E) | Total Gross<br>Burden | Total Net Funds<br>Available<br>(F<br>G) | Total<br>Obligations | Total Expenditures | Total Oblig<br>& Exp<br>(J + I) | Carryover to<br>FY2007 |
| 34 | <b>D Logistics Support</b>                                                            |     |                                                                                        | -                                        |                                      |                                        |                       |                                          |                      |                    |                                 |                        |
| 35 | <b>D.1</b>                                                                            | L&S | Logistics (Base salary costs)                                                          | 122,616                                  | 127,533                              | 250,149                                | 52,203                | 197,946                                  | 41,665               | 156,281            | 197,946                         | 0.00                   |
| 36 |                                                                                       |     | Logistics (For information only; dispersed throughout projects not included in totals) | -                                        | -                                    | 1,109,177                              | 263,998               | 845,179                                  | 11,460               | 833,719            | 845,179                         | 0.00                   |
| 37 | <b>D.2</b>                                                                            | L&S | Survey Operations                                                                      | 118,572                                  | 14,801                               | 133,373                                | 27,047                | 106,326                                  | 40,949               | 65,377             | 106,326                         | 0.00                   |
| 38 | <b>D.3</b>                                                                            | L&S | Control Network                                                                        | 138,270                                  | 13,459                               | 151,729                                | 34,201                | 117,528                                  | 40,000               | 77,528             | 117,528                         | 0.00                   |
| 39 |                                                                                       |     |                                                                                        | 379,458                                  | 155,793                              | 535,251                                | 113,451               | 421,800                                  | 81,665               | 299,186            | 421,800                         | -                      |
| 40 | <b>E Information and Outreach Program</b>                                             |     |                                                                                        | -                                        |                                      |                                        |                       |                                          |                      |                    |                                 |                        |
| 41 | <b>E.1</b>                                                                            | IPO | GCMRC Component of SBSC Sys Admin Support                                              | 354,510                                  | 45,548                               | 400,058                                | 90,452                | 309,606                                  | 51,350               | 258,256            | 309,606                         | 0.00                   |
| 42 |                                                                                       |     |                                                                                        | 354,510                                  | 45,548                               | 400,058                                | 90,452                | 309,606                                  | 51,350               | 258,256            | 309,606                         | -                      |
| 43 | <b>F Administration &amp; Management</b>                                              |     |                                                                                        | -                                        |                                      |                                        |                       |                                          |                      |                    |                                 |                        |
| 44 | <b>F.1</b>                                                                            | ADM | Administrative Operations                                                              | 772,545                                  | 197,695                              | 970,240                                | 226,341               | 743,899                                  | 6,000                | 737,899            | 743,899                         | 0.00                   |
| 45 | <b>F.2</b>                                                                            | ADM | Program Planning & Management                                                          | 566,444                                  | 73,168                               | 639,612                                | 153,437               | 486,175                                  |                      | 486,175            | 486,175                         | 0.00                   |
| 46 | <b>F.3</b>                                                                            | ADM | TWG/AMWG Participation                                                                 | 17,550                                   | 1,636                                | 19,186                                 | 4,643                 | 14,543                                   |                      | 14,543             | 14,543                          | 0.00                   |
| 47 | <b>F.4</b>                                                                            | ADM | Independent Reviews                                                                    | 380,250                                  | 48,903                               | 429,153                                | 102,343               | 326,810                                  | 145,526              | 181,284            | 326,810                         | 0.00                   |
| 48 | <b>F.5</b>                                                                            | TBD | GCMRC Additional Strategic Planning Support                                            | 29,250                                   | 3,161                                | 32,411                                 | 7,815                 | 24,596                                   |                      | 24,596             | 24,596                          | 0.00                   |
| 49 | <b>F.6</b>                                                                            | TBD | GCMRC Science Symposium                                                                | 29,250                                   | 3,161                                | 32,411                                 | 7,815                 | 24,596                                   |                      | 24,596             | 24,596                          | 0.00                   |
| 50 | <b>F.8</b>                                                                            | AMP | AMWG/TWG Requests                                                                      | 87,750                                   | 10,784                               | 98,534                                 | 18,126                | 80,408                                   |                      | 23,103             | 23,103                          | 57,305.00              |
| 51 |                                                                                       |     |                                                                                        | 1,883,039                                | 338,508                              | 2,221,547                              | 520,520               | 1,701,027                                | 151,526              | 1,492,196          | 1,643,722                       | 57,305                 |
| 52 | <b>LOGISTICS, INFO OFFICE &amp; ADMIN SUPPORT SUB TOTAL:</b>                          |     |                                                                                        | 2,617,007                                | 539,849                              | 3,156,856                              | 724,423               | 2,432,433                                | 284,541              | 2,049,638          | 2,375,128                       | 57,305                 |
| 53 |                                                                                       |     |                                                                                        | 7,495,370                                | 916,973                              | 8,412,343                              | 1,467,699             | 6,944,644                                | 2,383,589            | 4,284,573          | 5,687,201                       | 235,533                |
| 54 |                                                                                       |     |                                                                                        | -                                        |                                      |                                        |                       |                                          |                      |                    |                                 |                        |
| 55 | <b>IWQP Lake Powell Agreement #05-AA-40-2385</b>                                      |     |                                                                                        | -                                        |                                      |                                        |                       |                                          |                      |                    |                                 |                        |
| 56 | <b>A.1</b>                                                                            | CM  | Lake Powell Water Quality - Monitoring                                                 | 218,994                                  | 27,477                               | 246,471                                | 58,095                | 188,376                                  | -                    | 183,962            | 183,962                         | 4,414.00               |
| 57 |                                                                                       |     |                                                                                        | 218,994                                  | 27,477                               | 246,471                                |                       |                                          |                      |                    |                                 | 4,414                  |
| 58 | <b>Environmental Res &amp; Compliance - Temp Control Device - Agmt #02-AA-40-6750</b> |     |                                                                                        | -                                        |                                      |                                        |                       |                                          |                      |                    |                                 |                        |
| 59 | <b>B.11</b>                                                                           | HCA | Env Res * Compliance - TCD                                                             | 119,271                                  | 15,550                               | 134,821                                | 13,043                | 121,778                                  |                      | 57,400             | 57,400                          | 64,378.00              |
| 60 |                                                                                       |     |                                                                                        | 119,271                                  | 15,550                               | 134,821                                | 32,284                |                                          |                      |                    |                                 | 64,378                 |
| 61 | <b>Temp Control Device - Agmt #06-AA-40-2575</b>                                      |     |                                                                                        | -                                        |                                      |                                        |                       |                                          |                      |                    |                                 |                        |
| 62 | <b>B.11</b>                                                                           | HCA | TCD - Experimental Action                                                              | 170,000                                  | -                                    | 170,000                                | -                     | -                                        | -                    | -                  | -                               | 170,000.00             |
| 63 |                                                                                       |     |                                                                                        | 170,000                                  | -                                    | 170,000                                |                       |                                          |                      |                    |                                 | 170,000                |
| 64 |                                                                                       |     |                                                                                        |                                          |                                      |                                        |                       |                                          |                      |                    |                                 |                        |
| 65 | <b>USGS-GCMRC AVERAGE BURDEN RATE APPLIED = 17.46%</b>                                |     |                                                                                        |                                          |                                      |                                        |                       |                                          |                      |                    |                                 |                        |
| 66 | <b>GCMRC Portion of GCDAMP Funds Carryover Percentage: 3.14%</b>                      |     |                                                                                        |                                          |                                      |                                        |                       |                                          |                      |                    |                                 |                        |