

Glen Canyon Dam Adaptive Management Work Group
Agenda Item Information
August 12-13, 2009

Agenda Item

FY 2009 Mid-year Expenditures

Action Requested

√ Information item only; we will answer questions but no action is requested.

Presenters

Dennis Kubly, Chief, Adaptive Management Group, Upper Colorado Region, Bureau of Reclamation

John Hamill, Chief, Grand Canyon Monitoring and Research Center, U. S. Geological Survey

Previous Action Taken

√ By AMWG: At its August 2004 meeting, AMWG approved a budget process that included a semi-annual (mid-year and final) presentation of expenditures to date.

Relevant Science

√ N/A

Background Information

Attached please find the mid-year budget reports from the Bureau of Reclamation and the Grand Canyon Monitoring and Research Center, and GCMRC's Projected Carryover from FY09 to FY10.

Conclusions:

Bureau of Reclamation (see following spreadsheet for individual project lines)

- AMWG and TWG personnel cost and reimbursement expenditures were at 31% and 41% at mid-year. The lower percentage for AMWG reflects the lack of AMWG meetings in the fiscal year before April; e.g., see travel reimbursement.
- The \$500,000 allotted to experimental funds was transferred to GCMRC for 2008 high flow experiment report preparation.
- No funds were expended from the nonnative fish contingency fund in keeping with its purpose of meeting a future need for nonnative fish control.
- Underexpenditure in some budget lines is caused by the time needed to get contracts in place and invoices processed.
- No major problems are foreseen in the Reclamation budget for the remainder of the fiscal year.

GCMRC

- We have obligated or expended 80% of funds available for use in FY2009 (see TABLE 1).

FY 2009 Mid-year Expenditures Report, continued

- We project \$1.2 million will be carried over to FY2010 (see TABLE 2):
 - \$536k due to receipt of FY2010 funds in FY2009.
 - \$288k due to failure to obtain required permits from the National Park Service for the Cultural program.
 - \$160k due to unused contingency funds from May 2009 Overflight.
 - All carryover funds are being applied to the FY2010 budget.
- No other actions or concerns expected.

Glen Canyon Dam Adaptive Management Program

FY 2009 Mid-Year Expenses for the Bureau of Reclamation (October 1, 2008 - March 31, 2009)

						Updated:	7/16/09
AMWG	Description	Budgeted Amount	Burden	Obligation	Expenditure	% Used	Balance
2009- 2nd Quarter	Personnel Costs - Labor & Burden	\$176,747	\$15,555	\$176,747	\$65,545	37%	\$111,202
2009- 2nd Quarter	AMWG Member Travel Reimb	\$17,467		\$17,467	\$0	0%	\$17,467
2009- 2nd Quarter	AMWG Reclamation Travel Reimb.	\$14,178		\$14,178	\$4,096	29%	\$10,082
2009- 2nd Quarter	Facilitation Contract	\$26,959		\$26,959	\$8,682	32%	\$18,277
2009- 2nd Quarter	POAHG Expenses	\$55,536	\$3,567	\$55,536	\$17,271	31%	\$38,265
2009- 2nd Quarter	Other	\$7,969		\$7,969	\$2,872	36%	\$5,097
Subtotal		\$298,856	\$19,122	\$298,856	\$98,467	33%	\$200,389
TWG							
2009- 2nd Quarter	Personnel Costs - Labor	\$86,195	\$14,005	\$86,195	\$56,383	65%	\$29,812
2009- 2nd Quarter	TWG Member Travel Reimb.	\$23,952		\$23,952	\$4,570	19%	\$19,382
2009- 2nd Quarter	Reclamation Travel	\$17,658		\$17,658	\$3,020	17%	\$14,638
2009- 2nd Quarter	TWG Chair Reimbursement	\$24,625		\$24,625	\$0	0%	\$24,625
2009- 2nd Quarter	Other	\$2,277		\$2,277	\$0	0%	\$2,277
Subtotal		\$154,707	\$14,005	\$154,707	\$63,973	41%	\$90,734
OTHER							
2009- 2nd Quarter	Compliance Documents	\$50,000		\$50,000	\$5,700	11%	\$44,300
2009- 2nd Quarter	Admin Support NPS Permitting	\$118,852		\$118,852	\$10,314	9%	\$108,538
2009- 2nd Quarter	Contract Administration - Labor, Burden, Travel	\$39,953	\$7,305	\$39,953	\$30,208	76%	\$9,745
2009- 2nd Quarter	Experimental Carryover Funds	\$500,000		\$500,000	\$500,000	100%	\$0
2009- 2nd Quarter	Integrated Tribal Resource Monitoring	\$142,884		\$142,884	\$2,000	1%	\$140,884
2009- 2nd Quarter	Non-Native Fish Suppression Contingency Fund	\$48,483		\$48,483	\$0	0%	\$48,483
Subtotal		\$900,172	\$7,305	\$900,172	\$548,222	61%	\$351,950
PROGRAMMATIC AGREEMENT & CULTURAL RESOURCES							
2009- 2nd Quarter	Reclamation Administration and Travel	\$60,164	11,266	\$60,164	\$48,422	80%	\$11,742
2009- 2nd Quarter	GRCA Treatment Plan and Implementation	\$500,000		\$500,000	\$107,487	21%	\$392,513
Subtotal		\$560,164	\$11,266	\$560,164	\$155,909	28%	\$404,255
Reclamation Power Revenue Costs		\$1,913,899	\$51,697	\$1,913,899	\$866,570	45%	\$1,047,329
TRIBAL CONTRACTS (Appropriated Funds)							
2009- 2nd Quarter	Hopi Tribe	\$95,000		\$95,000	\$35,723	38%	\$59,277
2009- 2nd Quarter	Hualapai Tribe	\$95,000		\$95,000	\$19,747	21%	\$75,253
2009- 2nd Quarter	Navajo Nation	\$95,000		\$95,000	\$30,563	32%	\$64,437
2009- 2nd Quarter	Pueblo of Zuni	\$95,000		\$95,000	\$0	0%	\$95,000
2009- 2nd Quarter	Kaibab Band of Paiute Indians	\$95,000		\$95,000	\$41,254	43%	\$53,746
Sum		\$475,000	\$0	\$475,000	\$127,287	27%	\$347,713
Total		\$2,388,899	\$51,697	\$2,388,899	\$993,857	42%	\$1,395,042

TABLE 1

	A	D	Q	R	T	AD	AE	AF	AG	AH	AJ	AL
1	Grand Canyon Monitoring and Research Center											
2	Fiscal Year 2009 Adaptive Management Work Plan											
3	Actual Expenditures and Projected Carryover as of July 6, 2009											
4	Grand Canyon Monitoring and Research Center Project Descriptions	GCMRC Approved FY09 Budget - Gross (incl Burden)	GCMRC NET FUNDS AVAILABLE (excludes Burden)	TOTAL Burden Assessed FY09	Overall Burden Rate FY09	FY-T-D Commitments & Obligations in FY09	FY-T-D Expenditures in FY09	TOTAL COMMITMENTS, OBLIGATIONS & EXPENDITURES IN FY09	% NET USED to Date in FY09	Projected Additional NET Spending to End of FY09	Projected GROSS Carryover to FY10	COMMENTS
5												
6												
7	Goal 1 Food Base											
8	Aquatic Food Base (FY07--FY09)	503,481	454,621	48,860	10.75%	293,192	133,935	427,127	93.95%	27,494	20,000	
9	Impact of Flow - Aqu FoodBase	83,228	78,450	4,778	6.09%	78,450	-	78,450	100.00%	-	-	
10	Subtotal Goal 1	586,709	533,071	53,638	10.06%	371,642	133,935	505,577	94.84%	27,494	20,000	
11	Goal 2 Native Fishes											
12	LCR HBC Monitoring Lower 15km (HBC Population Est; Ongoing)	482,026	442,407	39,619	8.96%	345,758	78,488	424,246	95.89%	18,161	-	
13	LCR HBC Monitoring Lower 1,200m; Ongoing)	60,922	55,508	5,414	9.75%	40,000	14,573	54,573	98.32%	935	-	
14	HBC Monitoring Above Chute Falls; Ongoing)	134,110	120,230	13,880	11.54%	70,230	50,000	120,230	100.00%	-	-	
15	Monitoring Mainstem Fishes (includes Diamond Down; Ongoing)	469,232	424,439	44,793	10.55%	280,000	120,235	400,235	94.30%	24,204	-	
16	Nonnative Control Planning (FY07--FY10)	61,972	51,988	9,985	19.21%	-	44,317	44,317	85.25%	7,671	-	
17	Nonnative Control Pilot Testing (FY07--FY10)	109,006	98,045	10,961	11.18%	60,000	35,960	95,960	97.87%	2,084	-	
18	Stock Assessment of Native Fish in Grand Canyon (FY07-- Ongoing)	94,188	79,013	15,175	19.21%	-	48,980	48,980	61.99%	30,034	-	
19	Bioenergetics Modeling (FY07--FY10)	93,496	78,433	15,064	19.21%	-	49,304	49,304	62.86%	29,128	-	
20	Remote PIT Tag Reading (FY07--FY09)	149,219	137,204	12,015	8.76%	50,000	84,173	134,173	97.79%	3,031	-	
21	Nonnative Fish Contingency Plan	-	-	-	-	-	-	-	-	-	36,818	
22	Near Shore Ecology / Fall Steady Flows	11,831	9,925	1,906	19.20%	-	7,419	7,419	74.75%	2,506	-	
23	Mainstem Coldwater Fish Control - New Initiative	139,392	121,995	17,397	14.26%	46,000	61,938	107,938	88.48%	14,057	-	
24	Subtotal Goal 2	1,805,394	1,619,187	186,209	11.50%	891,988	595,389	1,487,377	91.86%	131,808	36,818	
25	Goal 3 Extirpated Species											
26	None Identified	-	-	-	-	-	-	-	-	-	-	
27	Subtotal Goal 3	-	-	-	-	-	-	-	#DIV/0!	-	-	
28	Goal 4 Rainbow Trout											
29	Status & Trends of Lees Ferry Trout (Ongoing)	117,084	109,152	7,932	7.27%	99,360	9,461	108,821	99.70%	332	-	
30	Subtotal Goal 4	117,084	109,152	7,932	7.27%	99,360	9,461	108,821	99.70%	332	-	
31	Goal 5 Kanab Ambersnail											
32	Monitor Kanab Ambersnail (FY95--FY10)	22,618	20,443	2,175	10.64%	13,355	3,862	17,217	84.22%	3,226	-	
33	Subtotal Goal 5	22,618	20,443	2,175	10.64%	13,355	3,862	17,217	84.22%	3,226	-	
34	Goal 6 Springs/Riparian											
35	Vegetation Mapping (FY07--FY10)	120,395	100,998	19,398	19.21%	-	51,140	51,140	50.63%	49,858	-	
36	Vegetation Transects (FY07--FY10)	78,989	68,455	10,535	15.39%	19,921	35,989	55,910	81.67%	12,545	41,777	
37	Vegetation Synthesis (FY07--FY10)	54,666	46,943	7,723	16.45%	9,860	25,238	35,098	74.77%	11,845	5,000	
38	Subtotal Goal 6	254,050	216,397	37,656	17.40%	29,781	112,367	142,148	65.69%	74,248	46,777	
39	Goal 7 Quality-of-Water											
40	Water Quality Monitoring Lake - Powell & Tailwaters (Budget presented below; FY07--FY09)	-	-	-	-	-	-	-	-	-	-	
41	Integrated Quality-of-Water Monitoring (Downstream of GCD; FY07--Ongoing)	974,740	872,657	102,083	11.70%	9,854	699,006	708,861	81.23%	163,796	-	
42	Modeling Support Linked with Integrated Quality-of-Water Monitoring (FY07--FY08)	298,923	285,270	13,654	4.79%	52,993	127,538	180,531	63.28%	104,740	-	
43	Subtotal Goal 7	1,273,663	1,157,927	115,737	10.00%	62,847	826,544	889,391	76.81%	268,536	-	

TABLE 1

	A	D	Q	R	T	AD	AE	AF	AG	AH	AJ	AL
4	Grand Canyon Monitoring and Research Center Project Descriptions	GCMRC Approved FY09 Budget - Gross (incl Burden)	GCMRC NET FUNDS AVAILABLE (excludes Burden)	TOTAL Burden Assessed FY09	Overall Burden Rate FY09	FY-T-D Commitments & Obligations in FY09	FY-T-D Expenditures in FY09	TOTAL COMMITMENTS, OBLIGATIONS & EXPENDITURES IN FY09	% NET USED to Date in FY09	Projected Additional NET Spending to End of FY09	Projected GROSS Carryover to FY10	COMMENTS
44	Goal 8 Sediment											
45	Integrated Longterm Monitoring of System Wide Changes in Sediment Storage	345,648	311,541	34,107	10.95%	197,006	108,173	305,179	97.96%	6,362	-	
46	Subtotal Goal 8	345,648	311,541	34,107	10.95%	197,006	108,173	305,179	97.96%	6,362	-	
47	Goal 9 Recreational Experience											
48	Sand Bar and Campable Area Monitoring (FY07--FY11)	54,438	51,313	3,125	6.09%	-	32,700	32,700	63.73%	18,613	-	
49	Compile Campsite Inventory and GIS Atlas (FY07--FY08)	38,762	32,516	6,245	19.21%	-	23,517	23,517	72.33%	8,999	-	
50	Compile and Analyze Existing Safety Data	36,992	34,826	2,166	6.22%	34,482	-	34,482	99.01%	344	-	
51	Subtotal Goal 9	130,192	118,655	11,536	9.72%	34,482	56,217	90,699	76.44%	27,955	-	
52	Goal 10 Hydropower											
53	Monitor Power Generation and Market Values under Current and Future Dam Operations (FY07--Ongoing)	19,360	16,241	3,119	19.20%	-	-	-	0.00%	16,241	-	
54	Subtotal Goal 10	19,360	16,241	3,119	19.20%	-	-	-	0.00%	16,241	-	
55	Goal 11 Cultural											
56	Research & Development toward Core Monitoring (FY07; Note 10)	339,257	311,226	28,031	9.01%	-	250,605	250,605	80.52%	60,621	287,904	
57	Subtotal Goal 11	339,257	311,226	28,031	9.01%	-	250,605	250,605	80.52%	60,621	287,904	
58	Goal 12 High Quality Monitoring, Research & Admin											
59	Preparation for Monitoring Data Acquisition (Remote Sensing; FY07--Ongoing)	572,472	530,740	41,732	7.86%	459,000	45,282	504,282	95.01%	26,458	160,928	
60	Grand Canyon Integrated Oracle Database Management System (FY07--Ongoing; Note 7)	182,350	158,472	23,878	15.07%	50,000	65,677	115,677	73.00%	42,795	-	
61	Library Operations (FY07--Ongoing)	55,633	46,670	8,963	19.21%	-	27,377	27,377	58.66%	19,293	-	
62	Legacy Analog Data Conversion (Analog to Digital - Reports & Imagery) (FY07--FY11)	129,227	108,957	20,270	18.60%	5,000	58,524	63,524	58.30%	45,433	-	
63	GIS Support for Integrated Analyses and Projects, GIS Lead (FY07--Ongoing; Note 7)	296,161	262,837	33,324	12.68%	130,809	74,229	205,037	78.01%	57,800	32,860	
64	Integrated Analysis and Modeling - FY09 Overflight (FY09--10) New Initiative	127,631	120,304	7,327	6.09%	120,304	-	120,304	100.00%	-	-	
65	Subtotal Goal 12 DASA Portion	1,363,474	1,227,980	135,494	11.03%	765,113	271,089	1,036,201	84.38%	191,779	193,788	
66	Logistics Base Costs (Other costs dispersed throughout projects; Ongoing)	228,444	191,638	36,806	19.21%	-	39,305	39,305	20.51%	152,333	-	
67	Survey Operations (Ongoing)	113,392	96,971	16,421	16.93%	16,800	42,973	59,773	61.64%	37,197	-	
68	Control Network (Ongoing)	158,177	136,543	21,634	15.84%	11,800	112,110	123,910	90.75%	12,633	-	
69	Subtotal Goal 12 Support Portion	500,013	425,152	74,861	17.61%	28,600	194,388	222,988	52.45%	202,163	-	
70	Enhancing the Conceptual Ecosystem Model to Identify Critical Ecosystem Interactions and Data Gap (Science Advisor's conduct work in FY07; Funding in Independent Reviews, ADM 12.A4.07; FY07--FY08; Note 1)	116,307	113,871	2,436	2.14%	50,000	15,184	65,184	57.24%	48,687	-	
71	Low Steady Summer Flows - Data and Research Compilation, Synopsis and Synthesis (Note 1)	27,365	22,956	4,409	19.21%	-	8,729	8,729		14,227	18,067	
72	Subtotal Goal 12 Planning Portion	143,672	136,827	6,845	5.00%	50,000	23,913	73,913	54.02%	62,914	18,067	

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	A	D	Q	R	T	AD	AE	AF	AG	AH	AJ	AL
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4												
73	Administrative Operations (Ongoing)	155,854	131,323	24,531	18.68%	10,528	76,781	87,309	66.48%	44,015	23,930	
74	GSA Vehicle Charges	50,000	41,944	8,056	19.21%	-	32,839	32,839	78.29%	9,105	-	
75	I-Vehicle Fuel & Maintenance	25,000	20,972	4,028	19.21%	-	10,126	10,126	48.28%	10,846	-	
76	Program Planning & Management (Ongoing)	1,098,744	921,719	177,025	19.21%	-	669,516	669,516	72.64%	252,203	-	
77	AMWG/TWIG Meeting Travel Funds (Ongoing)	18,933	15,883	3,050	19.20%	-	12,624	12,624	79.48%	3,259	-	
78	Independent Reviews (not including Science Advisors & Exec. Director)	59,208	49,807	9,401	18.87%	1,260	43,913	45,173	90.70%	4,634	8,663	
79	Executive Director of Science Advisors Review and Coordination; includes Science Advisors' Expenses (Ongoing)	267,289	224,225	43,065	19.21%	144,035	77,236	221,271	98.68%	2,954	-	
80	2008 Science Symposium (Intermittent)	24,956	20,935	4,021	19.21%	-	5,910	5,910	28.23%	15,025	-	
81	GCMRC Component of SBSC Sys Admin Support (FY05-Ongoing)	226,721	190,193	36,528	19.21%	83,206	63,500	146,706	77.14%	43,487	5,150	
82	Subtotal Goal 12 Administrative Portion	1,926,705	1,617,001	309,705	19.15%	239,029	992,444	1,231,473	76.16%	385,528	37,743	
83	Subtotal Goal 12	3,933,864	3,406,960	526,905	15.47%	1,082,741	1,481,834	2,564,575	75.27%	842,383	249,598	
84	GCMRC Power Revenue Subtotal Projected for FY2009	8,827,839	7,820,801	1,007,045	12.88%	2,783,203	3,578,387	6,361,590	81.34%	1,459,204	641,097	
85	Water Quality Monitoring - Lake Powell & Tailwaters (FY07-09) <Agreement #	300,256	251,851	48,376	19.21%	94,981	117,133	212,114	84.22%	39,737	-	
86	Subtotal	300,256	251,851	48,376	19.21%	94,981	117,133	212,114	84.22%	39,737	-	
87	Near Shore Ecology / Fall Steady Flows <Agreement # 08AA402808>	631,972	569,847	62,125	10.90%	360,776	160,177	520,953	91.42%	48,894	536,641	
88	Tribal River Trips <Agreement # 08AA402806>	70,383	59,043	11,340	19.21%	-	59,043	59,043	100.00%	-	-	
89	Environmental Research Agrmt (Temperature Control Device TCD) Task 1 : A Test Using Artificial Streams <Agreement # 06AA402575>	1,435	1,204	231	19.19%	-	-	-	0.00%	1,204	-	
90	Subtotal	703,790	630,094	73,696	11.70%	360,776	219,220	579,996	92.05%	50,098	536,641	
91												
92	Experimental Study 1.A - Sand Budgeting	93,799	81,124	12,675	15.62%	-	47,189	47,189	58.17%	33,935	-	
93	Experimental Study 1.B - Eddy - Sandbar Deposition Rates	76,092	74,837	1,255	1.68%	2,655	71,641	74,296	99.28%	541	-	
94	Experimental Study 1.C - Response of Sandbars & Select Cultural Sites	360,288	341,083	19,205	5.63%	234,487	21,789	256,276	75.14%	75,369	-	
95	Experimental Study 1.D - Biological & Physical Aspects of Backwater Habitats	201,119	175,342	25,777	14.70%	55,200	60,996	116,196	66.27%	59,146	-	
96	Experimental Study 2 - Riparian Vegetation Studies	30,471	25,680	4,791	18.66%	-	16,973	16,973	66.10%	8,707	-	
97	Experimental Study 3 - Aquatic Food Base Studies (Lower Trophic Levels)	43,319	36,508	6,811	18.66%	-	-	-	0.00%	36,508	-	
98	Experimental Study 4.A RBT Redds Study	108,852	98,854	9,998	10.11%	67,200	41,092	108,292	109.55%	-	-	
99	Experimental Study - 4.B RBT Movement Study	2,017	1,700	317	18.66%	-	-	-	0.00%	1,700	-	
100	Experimental Study - 5 - Lake Powell	4,924	4,150	774	18.66%	-	4,138	4,138	99.72%	12	-	
101	Experimental Study - 7 Synthesis of Knowledge	254,134	220,000	34,134	15.52%	55,000	-	55,000	25.00%	165,000	66,326	
102		1,175,015	1,059,278	115,737	10.93%	414,542	263,819	678,361	64.04%	380,918	66,326	
103												
104	Total	11,006,900	9,762,023	1,244,854	12.75%	3,653,501	4,178,559	7,832,060	80.23%	1,929,957	1,244,064	

TABLE 2
GCMRC Projected Carryover FY09 to FY10 Funds Review
as of July 06, 2009

GROSS Projected Carryover from FY09 to FY10	Purpose / Notes
20,000	Projected Carryover from FY09 Aquatic Food Base (BIO 1.R1.09) from lapsed position not filled in FY09
36,818	Projected Carryover from FY09 (Nonnative Fish Contingency Fund (BIO TBD) planned for possible use in BIO 2.R16.10
41,777	Projected Carryover from FY09 Vegetation Transects (BIO 6.R2.09) from unused cooperator budget
5,000	Projected Carryover from FY09 Vegetation Synthesis (BIO 6.R3.09) from unused cooperator budget
287,904	Projected Carryover from FY09 Research & Development toward Core Monitoring of Cultural Sites (CUL 11.R1.09) from unused logistics, suballocation & cooperator budget due to permitting restraints
160,928	Projected Carryover from FY09 Acquisition for Montirong Data Acquisition - Remote Sensing (DASA 12.D1.09) from contingency fund / shoals flight unused cooperator budget
32,860	Projected Carryover from FY09 GIS Support for Integrated Analyses and Projects (DASA 12.D5.09) from unused cooperator budget
18,067	Projected Carryover from FY09 Low Steady Summer Flows - LSSF (PLAN 12.P3.09) from unused cooperator budget
23,930	Projected Carryover from FY09 Administrative Opoerations (ADM 12.A1.09 (A)) from unused cooperator budget
8,663	Projected Carryover from FY09 Independent Reviews (ADM 12.A4.09) from unused suballocation budget
5,150	Projected Carryover from FY09 GCMRC Componenet of SBSC System Admin Support - Info Technologies (ADM 12.A5.09) from unused suballocation budget
641,097	Projected Carryover from FY09 for Annual Work Plan - Capped Power Revenues
536,641	Projected Carryover from FY09 Near Shore Ecology (BIO 2.R15.09) from FY10 funds transferred from Bureau of Reclamation in FY09
66,326	Projected Carryover from FY09 HFE Experiment 7 for additional Synthesis of Knowledge funding in FY10
602,967	Projected Carryover from FY09 for Other Funding Sources (non-Capped Revenues)
1,244,064	Total Projected Carryover from FY09 to FY10