

**Grand Canyon Monitoring and Research Center Publications
Fiscal Year 2010**

Goal	Goal Description	Project #	Status	Publication Date	Author/Editor	Agency	GCMRC Contact (Supervisor)	Work Plan Requirement	Report or Product Title	Publication Type	Citation / Link / Reference	Comments
1	Aquatic foodbase	BIO 1.R.1.10	Published	02/01/10	Behn/Kennedy	University of Wyoming	Andersen	Yes	Basal resources in backwaters of the Colorado River below Glen Canyon Dam—effects of discharge regimes & comparison with mainstem depositional environments	OFR	Behn, K.E., Kennedy, T.A., and Hall, R.O., Jr., 2010, Basal resources in backwaters of the Colorado River below Glen Canyon Dam; effects of discharge regimes and comparison with mainstem depositional environments: U.S. Geological Survey Open-File Report 2010-1078, 25 p. [http://pubs.usgs.gov/of/2010/1078/]	
1	Aquatic foodbase	EXP 7 FY2010		09/01/10	Yard and others	USGS	Andersen	Yes	Transport of organic matter during an experimental high flow	Journal		
1	Aquatic foodbase	BIO 1.R.1.10	Published	09/01/10	Cross and others (Kennedy)	Montana State University	Andersen	Yes	Invasion and production of New Zealand mudsnails in Glen Canyon	Journal, Biological Invasions	Cross, W.F., Rosi-Marshall, E.J., Behn, K.E., Kennedy, T.A., Hall, R.O., Fuller, A.E., and Baxter, C.V., 2010, Invasion and production of New Zealand mud snails in the Colorado River, Glen Canyon: Biological Invasions, doi: 10.1007/s10530-010-9694-y, p. unpagged, accessed on May 12, 2010, at http://www.springerlink.com/content/bv834031865h2077/fulltext.pdf.	
1	Aquatic foodbase	BIO 1.R.1.10		01/01/11	Wellard and others (Kennedy)	Loyola University of Chicago	Andersen	Yes	Invertebrate diets	Journal		
1	Aquatic foodbase	BIO 1.R.1.10		01/01/11	Hall, Kennedy, and others	University of Wyoming	Andersen	Yes	Photosynthesis in a regulated, turbid river	Journal		
1	Aquatic foodbase	BIO 1.R.1.10	In revision	01/01/11	Hall, Kennedy, Rosi-Marshall	University of Wyoming	Andersen	Yes	Air water gas exchange in the Colorado River	Journal		
1	Aquatic foodbase	BIO 1.R.1.10	1	06/01/11	Hall & others (Kennedy)	University of Wyoming	Andersen	Yes	Linking whole-ecosystem carbon cycling to food webs in a regulated river	SIR		
1	Aquatic foodbase	BIO 1.R.1.10		4/1/11	Kennedy and others	USGS	Andersen	Yes	Invertebrate drift in the Colorado River, Glen Canyon Summer 2010	Journal		
2	Native fish and habitat	BIO 2.M1.11	1	04/01/11	Andersen	USGS	Hamill	Yes	Status & trends of Grand Canyon population of humpback chub	Fact Sheet		OFR to be completed first
2	Native fish and habitat	BIO 2.M1.11	1	03/01/11	Persons & Andersen	USGS	Hamill	Yes	Status & trends of Grand Canyon population of humpback chub (ASMR 2010)	OFR		
2	Native fish and habitat	BIO 2.R1.10	Complete	01/01/11	Sponholtz	USF&WS	Andersen	Yes	Two (2) Trip Reports for Native Fish Monitoring in LCR	Informal Report		
2	Native fish and habitat	BIO 2.R1.10	1	11/01/10	Persons & others AZGFD & FWS	USGS	Andersen	Yes	Status & trends of the Little Colorado River Fish Community in Grand Canyon National Park	OFR		
2	Native fish and habitat	BIO 2.R1.10	1	01/01/11	Makinster	Arizona Game & Fish	Andersen	Yes	One (1) Trip Report for Native Fish Monitoring in the LCR	Informal Report		
2	Native fish and habitat	BIO 2.M4.10	Complete	?	Makinster	Arizona Game & Fish	Andersen	Yes	Mainstem Fish Monitoring Annual Report	Informal Report		
2	Native fish and habitat	BIO 2.R7.10	Complete	?	Vanhanverbek & Stone	FWS	Andersen	Yes	Annual Humpback Chub Stock Assessment	Informal Report		
2	Native fish and habitat	BIO 2.R7.10	Complete	?	Persons	USGS	Andersen	Yes	Humpback Chub Database on Website	Electronic Database		
2	Native fish and habitat	BIO 2.R7.10	Complete	?	Martell		Andersen	Yes	Assessment of Fish PEP recommendations related to Humpback Chub Monitoring	Informal Report		
2	Native fish and habitat	BIO 2.R13.10	Complete	12/15/10	Persons	USGS	Andersen	Yes	Annual Report on Remote Pit Tag Reading Operation	Informal Report		
2	Native fish and habitat	BIO 2.R15.10	In Prep	12/15/10	Pine	University of Florida	Andersen	Yes	Annual Report on Nearshore Ecology / Fall Steady Flow Study	Informal Report		
2	Native fish and habitat	BIO 2.R16.10	In Prep	12/15/10	Makinster	Arizona Game & Fish	Andersen	Yes	Annual Report on Mainstem Nonnative Fish Removal	Informal Report		
2	Native fish and habitat	BIO 2.R16.10	In Prep	12/15/10	Makinster	Arizona Game & Fish	Andersen	Yes	Annual Report on Mainstem Nonnative Fish Removal	Informal Report		
6	Riparian and spring communities	BIO 6.R3.10	Accepted with revision	06/01/10	Ralston and others	USGS	Andersen	Yes	Regulation leads to increases in riparian vegetation, but not direct allochthonous inputs	Journal		
6	Riparian and spring communities	BIO 6.R3.10	1	12/01/10	Ralston	USGS	Andersen	Yes	Richness & diversity patterns & trends in vegetation change	OFR		
6	Riparian and spring communities	BIO 6.M1.10	1	09/01/10	Ralston	USGS	Andersen	Yes	Vegetation monitoring recommendations & approaches	OFR		
6	Riparian and spring communities	BIO 6.R3.10	1	09/01/11	Ralston & others	USGS	Andersen	Yes	Vegetation cover changes over time	SIR		
7	Water Quality	PHY 7.M1.10-11	In Final Review	06/15/10	Topping, Rubin, Wright & Melis	USGS	Grams	Yes	Field evaluation of the error arising from inadequate time averaging in the standard use of depth-integrating suspended-sediment samplers	Prof. Paper		Editorial revisions needed
7	Water Quality	PHY 7.R3.11	Awaiting Publication		Voichick	USGS	McDougall-Reid	Yes	Comparison of turbidity to multi-frequency sideways-looking acoustic-Doppler data and suspended-sediment data in the Colorado River in Grand Canyon	Conf. Paper		
7	Water Quality	PHY 7.M1.10-11	Under Supervisor Review	02/11/10	Griffiths, Topping	USGS	Grams	Yes	Design and maintenance of a network for collecting high-resolution suspended-sediment data on the Colorado River in Marble and Grand Canyons, Arizona	Techniques & Methods		
7	Water Quality	PHY 7.R.1.10-11	1	02/01/11	Topping	USGS	Grams	Yes	Sampling methods	SIR		
7	Water Quality	PHY 7.R.2.10	Published	10/01/10	Wright, Topping, Rubin & Melis	USGS	Grams	Yes	An approach for modeling sediment budgets in supply-limited rivers	Journal	Wright, S. A., D. J. Topping, D. M. Rubin, and T. S. Melis (2010), An approach for modeling sediment budgets in supply-limited rivers, Water Resour. Res., 46, W10538, doi:10.1029/2009WR008600.	
7	Water Quality	BIO 7.R1.10	1		Vernieu	USGS	Andersen	Yes	Historical biological data for water in Lake Powell & from Glen Canyon Dam releases, UT-AZ, 1990-2009	OFR		
7	Water Quality	PHY 7.M1.10-11	1		Voichick	USGS	Topping	Yes	Turbidity of Co River	Data Series		
8	Sediment Storage (sandbars)	PHY 8.M2.10-11	Awaiting Publication		Sabol	USGS	McDougall-Reid	Yes	Field evaluation of sediment-concentration errors arising from non-isokinetic intake efficiency in depth-integrating suspended-sediment bag samplers	Conf. Paper		

**Grand Canyon Monitoring and Research Center Publications
Fiscal Year 2010**

Goal	Goal Description	Project #	Status	Publication Date	Author/Editor	Agency	GCMRC Contact (Supervisor)	Work Plan Requirement	Report or Product Title	Publication Type	Citation / Link / Reference	Comments
9	Recreational Experiences	REC 9.R1.	Published		Kaplinski & Others	USGS	Fairley	Yes	Colorado River campsite monitoring, 1998-2006, Grand Canyon National Park, Arizona.	SIR	Kaplinski, M., Hazel, J.E., Jr., and Parnell, R., 2010, Colorado River campsite monitoring, 1998-2006, Grand Canyon National Park, Arizona, in Melis, T.S., Hamill, J.F., Bennett, G.E., Coggins, L.G., Jr., Grams, P.E., Kennedy, T.A., Kubly, D.M., and Ralston, B.E., eds., Proceedings of the Colorado River Basin Science and Resource Management Symposium, November 18-20, 2008, Scottsdale, Arizona: U.S. Geological Survey Scientific Investigations Report 2010-5135, 275-284 p., accessed on July 15, 2010, at http://pubs.usgs.gov/sir/2010/5135/ .	
11	Cultural Resources	CUL 11.R1	Published	07/01/10	Draut & Others	USGS	Fairley	Yes	2009 Weather & Aeolian Sand-Transport Data from the Colorado River corridor, Grand Canyon, Arizona	OFR	Draut, A.E., Sondossi, H.A., Dealy, T.P., Hazel, J.E. Jr., Fairley, H.C., and Brown, C.R., in press, 2009 weather and aeolian sand-transport data from the Colorado River corridor, Grand Canyon, Arizona: U.S. Geological Survey Open-File Report 2010-XXXX.	
11	Cultural Resources	AMWG Request	In revision	06/01/10	Sondossi & Fairley	USGS	Hamill	Yes	Virtual shorelines- An Analysis of Potential for Glen Canyon dam Release to Inundate 242 Cultural Sites in Grand Canyon	OFR		
11	Cultural Resources	CUL 11.R1.	1	07/01/10	Collins & others	USGS	Fairley	Yes	Comprehensive LIDAR results	SIR		
11	Cultural Resources	CUL 11.R1.	1	04/01/11	Dealy & Fairley	USGS	Fairley	Yes	Technical manual weather stations	Techniques & Methods		
12	High-quality monitoring, research, and adaptive management program	EXP 7 FY2010	Awaiting Publication		Korman, Kaplinski & Melis	Ecometric Research, Inc., Vancouver, BC, Canada	Hamill	Yes	Effects of Fluctuating Flows and a Controlled Flood on Incubation Success and Early Survival Rates and Growth of Age-0 Rainbow Trout in a Large Regulated River	Journal		
12	High-quality monitoring, research, and adaptive management program	EXP 7 FY2010	Awaiting Publication		Korman, Kaplinski & Melis	Ecometric Research, Inc., Vancouver, BC, Canada	Hamill	Yes	Geomorphic Response of Sandbars on the Colorado River in Grand Canyon to the March 2008 High-Flow Experiment at Glen Canyon Dam	Journal		
12	High-quality monitoring, research, and adaptive management program	HFE 1C	Published	2/10/10	Hazel & Others	Northern Arizona University (NAU)	Grams	Yes	Sandbar response following the 2008 high-flow experiment on the Colorado River in Marble and Grand Canyons:	SIR	Hazel, J.E., Jr., Grams, P.E., Schmidt, J.C., and Kaplinski, M., 2010, Sandbar response following the 2008 high-flow experiment on the Colorado River in Marble and Grand Canyons: U.S. Geological Survey Scientific Investigations Report 2010-5015, 52 p., accessed on May 12, 2010, at http://pubs.usgs.gov/sir/2010/5015/ .	
12	High-quality monitoring, research, and adaptive management program	EXP 7 FY2010	1	03/01/11	Hazel & Grams	Northern Arizona University (NAU)	Melis	Yes	Sandbar time series	SIR		Priority (Control Network)
12	High-quality monitoring, research, and adaptive management program	EXP 7 FY2010	1	04/01/11	Grams & Kaplinski	USGS	Melis	Yes	Channel mapping	SIR		Priority (Control Network)
12	High-quality monitoring, research, and adaptive management program	EXP 7 FY2010			Draut & Others	USGS	Fairley	Yes	Aeolian reworking of sediment deposits from the March 2008 Grand Canyon high-flow experiment	Proceedings	Draut, A.E., Hazel, J.E. Jr., Fairley, H.C., and Brown, C.R., 2010, Aeolian reworking of sandbars from the March 2008 Glen Canyon Dam high flow experiment in Grand Canyon, in Melis, T.S., Hamill, J.F., Coggins, L.G., Jr., Grams, P.E., Kennedy, T.A., Kubly, D.M., and Ralston, B.E., eds., Proceedings of the Colorado River Basin Science and Resource Management Symposium, November 18-20, 2008, Scottsdale, Arizona: U.S. Geological Survey Scientific Investigations Report 2010-5135, p. 325-331.	
12	High-quality monitoring, research, and adaptive management program	EXP 7 FY2010	Published	05/17/10	Ralston	USGS	Andersen	Yes	Riparian vegetation response to the March 2008 short-duration, high-flow experiment—implications of timing and frequency of flood disturbance on nonnative plant establishment along the Colorado River below Glen Canyon Dam	OFR	Ralston, B.E., 2010, Riparian vegetation response to the March 2008 short-duration, high-flow experiment—implications of timing and frequency of flood disturbance on nonnative plant establishment along the Colorado River below Glen Canyon Dam: U.S. Geological Survey Open-File Report 2010-1022, 30 p.	
12	High-quality monitoring, research, and adaptive management program	EXP 7 FY2010	Published	06/25/10	Vernieu	USGS	Andersen	Yes	Effects of 2008 High-Flow Experiment on Water-Quality in Lake Powell & Glen Canyon Dam Releases, Utah-Arizona	OFR	Vernieu, W.S., 2010, Effects of the 2008 high-flow experiment on water quality in Lake Powell and Glen Canyon Dam releases, Utah-Arizona: U.S. Geological Survey Open-File Report 2010-1159, 25 p. [http://pubs.usgs.gov/of/2010/1159/] (*** Please note that this report has accompanying tables/data that can be downloaded from the Web address above)	
12	High-quality monitoring, research, and adaptive management program	EXP 7 FY2010	Published	04/20/10	Grams, Schmidt & Andersen	University of Wyoming, Laramie, WY 82071, USA	Hamill	Yes	2008 High-flow Experiment at Glen Canyon Dam—morphologic response of eddy-deposited sandbars and associated aquatic backwater habitats along the Colorado River in Grand Canyon National Park	OFR	Grams, P.E., Schmidt, J.C., and Andersen, M.E., 2010, 2008 high-flow experiment at Glen Canyon Dam—morphologic response of eddy-deposited sandbars and associated aquatic backwater habitats along the Colorado River in Grand Canyon National Park: U.S. Geological Survey Open-File Report 2010-1032, 73 p.	
12	High-quality monitoring, research, and adaptive management program	EXP 7 FY2010	Published	04/10/10	Rosi-Marshall & Others	Cary Institute for Ecosystem Studies, Millbrook NY	Andersen	Yes	Short-term effects of the 2008 high-flow experiment on macroinvertebrates in the Colorado River below Glen Canyon Dam, Arizona	OFR	Rosi-Marshall, E.J., Kennedy, T.A., Kincaid, D.W., Cross, W.F., Kelly, H.A.W., Behn, K.A., White, T., Hall, R.O., Jr., and Baxter, C.V., 2010, Short-term effects of the 2008 high-flow experiment on macroinvertebrates in the Colorado River below Glen Canyon Dam, Arizona: U.S. Geological Survey Open-File Report 2010-1031, 28 p.	
12	High-quality monitoring, research, and adaptive management program	EXP 7 FY2010	Published	04/20/10	Korman & Others	Ecometric Research, Inc., Vancouver, BC, Canada	Hamill	Yes	Effects of high-flow experiments from Glen Canyon Dam on abundance, growth, and survival rates of early life stages of rainbow trout in the Lees Ferry reach of the Colorado River	OFR	Korman, J., Kaplinski, M. and Melis, T.S., 2010, Effects of high-flow experiments from Glen Canyon Dam on abundance, growth, and survival rates of early life stages of rainbow trout in the Lees Ferry reach of the Colorado River: U.S. Geological Survey Open-File Report 2010-1034, 31 p.	

**Grand Canyon Monitoring and Research Center Publications
Fiscal Year 2010**

Goal	Goal Description	Project #	Status	Publication Date	Author/Editor	Agency	GCMRC Contact (Supervisor)	Work Plan Requirement	Report or Product Title	Publication Type	Citation / Link / Reference	Comments
12	High-quality monitoring, research, and adaptive management program	Plan 12.P3.10	Published	06/01/10	Protiva, Ralston, & others	Shepard-Wesnitzer, Inc.	Andersen	Yes	Mainstem discharge on YOY chub habitat near the LCR Effects of Glen Canyon Dam discharges on water velocity & temperatures at the confluence of the Little Colorado River & implications for habitat for young-of-the-year humpback chub (<i>Gila cypha</i>)	OFR	http://pubs.usgs.gov/of/2010/1137/	
12	High-quality monitoring, research, and adaptive management program	PLAN 12.P3.10	In revision	09/30/10	Ralston	USGS	Andersen	Yes	Summary Report of Responses of Key Resources to the 2000 Low Steady Summer Flow Experiment	OFR		Will require Lara's time in Fall 2010
12	High-quality monitoring, research, and adaptive management program	EXP 7 FY2010	In Peer Review		Cross & Others	Department of Zoology and Physiology, Montana State University	Melis	Yes	Ecosystem Ecology meets Adaptive Management: Food Web Response to a Controlled Flood on the Colorado River, Glen Canyon	Journal		
12	High-quality monitoring, research, and adaptive management program	EXP 7 FY2010	In Review	01/01/11	Schott, Hazel, & Fairley	Northern Arizona University (NAU)	Fairley	Yes	Gully Monitoring in Grand Canyon National Park, Arizona, 1996 to 2010 with Emphasis on the March 2008 High-Flow Experiment	OFR		
12	High-quality monitoring, research, and adaptive management program	EXP 7 FY2010	1	12/31/10	Schmidt, Valdez, & Melis	USGS	Hamill	Yes	Synthesis of 2008 high-flow experiment results	Circular		
12	High-quality monitoring, research, and adaptive management program	EXP 7 FY2010	1	12/31/10	Schmidt, Valdez, & Melis	USGS	Hamill	Yes	Synthesis of 2008 high-flow experiment results	Fact Sheet		
12	High-quality monitoring, research, and adaptive management program	DASA 12.D9.10	1	12/01/10	Davis/Gushue	USGS	Bennett	Yes	2002-2008 Overflights	Data Series		
12	High-quality monitoring, research, and adaptive management program	PLAN 12.P1.10-11	1	07/30/10	Vernieu	USGS	Andersen	Yes	Nearshore warming of Colorado River in Grand Canyon under steady discharge	OFR		
12	High-quality monitoring, research, and adaptive management program	SUP12.S3.10-11	1		Kohl	USGS	Grams	Yes	Development of spacial reference system	SIR		
12	High-quality monitoring, research, and adaptive management program	SUP12.S3.10-11	1		Kohl & Gushue	USGS	Grams	Yes	Remote sensing analysis & recommendations	OFR		
12	High-quality monitoring, research, and adaptive management program	EXP 7 FY2010	In Review		Wright and Kaplinski	USGS	Hamill	Yes	Hydro-morphodynamics of two large eddies and associated sandbars along the Colorado River during high flow	Journal		