3-YR BUDGET REPORT
GRAND CANYON ADAPTIVE MANAGEMENT PROGRAM

PROGRAM AREA	FY 1999 Actual	FY 2000 Budget	FY 2001 Proposed
GCMRC AMP - Beginning Budget:	5,894,000	6,229,000	6,434,000
GCMRC Program and Operating Costs			
A. Bureau Support Services	89,000	123,000	125,000
B. Operations, Personnel, Contract Services	1,777,000	1,875,000 (1)	1,941,000
C. Physical Resources Science	935,000	704,000 (2)	954,000
D Biological Resources Science	1,275,000	1,553,000 (3)	1,238,000
E. Socio-Cultural Resources Science	340,000	359,000 (4)	369,000
F. Information Technologies Program	459,000	382,000 (5)	312,000
G, Remote Monitoring Technology	0	400,000	400,000
H. Independent Review Panels	70,000	155,000	175,000
I. Unsolicited Proposals			120,000
J. AMWG/TWG Requests			60,000
K. In-House Research			20,000
L. Logistics	710,000	583,000 (6)	650,000
M. Survey Operation	59,000	18,000 (7)	18,000
N. Integrated Water Quality Program	267,000	77,000 (8)	52,000
Subtotal Obligations/Expenditures:	5,981,000		
Deobligated funds applied to FY-99 expenditures	-87,000		
TOTAL AMP FUNDING	5,894,000	6,229,000	6,434,000
GCMRC - O&M Funding - Integrated Water Quality Program	0	300,000	300,000

Note: A final review of the FY-2000 budget was performed to ensure current program objectives would be met.
A few modifications were made to improve clarity and provide for new objectives. Modifications are described below:

(1) *B. Operations (original funding $1,969,000)*
- *Salaries for IWQP were originally funded by AMP. O&M funding now covers 70% of the projected salary. The balance of $120,000 was transferred to the Biology Program.*
- *Travel funds in the amount of $28,000 were moved from Operations and distributed to each Program area.*

(2) *C. Physical (original funding $700,000)*
- *$4,000 moved from "Operations" into the Physical Program to provide for projected travel expense.*

(3) *D. Biological (original funding $1,500,000)*
- *$120,000 moved from "Operations" into the Biological Program.*
- *$8,000 moved from "Operations" into the Biological Program to provide for projected travel expense.*
- *$75,000 moved to "IWQP" for Integrated Water Quality contract cost.*

(4) *E. Socioeconomic Program (original funding $355,000)*
- *$4,000 moved from "Operations" into the Cultural Program to provide for projected travel expense.*

(5) *F. Information Technologies Program (ITP) (original funding $320,000)*
- *$70,000 for aerial photography was moved from Logistics to ITP where it is more appropriately categorized.*
- *$16,000 for Survey Operations was moved into a new category entitled Survey Operation (see M.)*
- *$8,000 moved from "Operations" into the Information Technology Program to provide for projected travel expense.*

(6) *L. Logistics (original funding $653,000)*
- *$70,000 for aerial photography was moved from Logistics to ITP where it is more appropriately categorized.*

(7) *M. Survey Operation (new category)*
- *New category developed to separate survey costs from ITP operations. $16,000 transferred from ITP to provide for general operations; $2,000 transferred from "Operations" to provide for projected travel expense.*

(8) *N. IWQP (new category)*
- *New category developed to separate IWQP expenses from the Biology Program. $75,000 transferred from Biology Program for IWQP project work to be supported out of AMP funds; $2K tranferred from "Operations" for projected travel.*

PROGRAM AREA	FY 1999 Actual	FY 2000 Budget	FY 2001 Proposed
A. Bureau Support*			
Contracts	41,000	66,000	70,000
Personnel	21,000	25,000	25,000
Computer	25,000	28,000	25,000
Property	2,000	4,000	5,000
Subtotal A:	89,000	123,000	125,000

* *Salary includes benefits and overhead*

B. Operations, Personnel, Contract Services			
Salaries*			
GCMRC Operations			
Chief (1-fte)	171,000	170,000	170,000
Secretary (1-fte)	32,000 (a)	44,000	44,000
Administrative Officer (1-fte)	58,000	63,000	64,000
Student Assistants - 2 (1 -fte)	34,000	34,000	34,000
Subtotal GCMRC Operations:	295,000	311,000	312,000
Physical Resources			
Physical Scientist (1-fte)	76,000	90,000	91,000
Student Assistant (.5-fte)	0 (b)	15,000 (b)	21,000
Subtotal Physical Resources:	76,000	105,000	112,000
Biological Resources			
Biological Sci, "Program Mgr" (1-fte)	74,000	76,000	76,000
Ecologist	75,000	44,000 (b)	71,000
General Biologist - Post Doc (Contract)	0 (b)	36,000 (b)	36,000
Biologist (Aqa) (1-fte)	3,000 (b)	69,000	69,000
Student Assistant (.5-fte)	22,000	21,000	21,000
Subtotal Biological Resources:	174,000	246,000	273,000
Cultural Resources			
Social Scientist, "Program Mgr" (1-fte)	93,000	99,000	99,000
Assistant (.5-fte) (+.25-fte Behan in FY-00)	0 (b)	25,000 (b)	21,000
Economist - Harpman	0	12,000	12,000
Subtotal Cultural Resources:	93,000	136,000	120,000
Information Technologies			
Res. Info. Analyst, "Program Mgr" (1-fte)	94,000	99,000	99,000
Computer Spec. (1-fte)	0 (b)	76,000	76,000
GIS Specialist (1-fte)	31,000 (b)	63,000	63,000
Technical Information Spec (1-fte)	0 (b)	39,000 (b)	58,000
Surveyors - 2 (2-fte)	163,000	151,000	151,000
Student Assistants - 4 (2-fte)	54,000 (b)	78,000	78,000
Subtotal Information Tech:	342,000	506,000	525,000
Logistics			
Logistics Coordinator (1-fte)	56,000	60,000	60,000
Supply Technician "Whse Mgr" (1-fte)	6,000 (a)	46,000	46,000
Subtotal Logistics	62,000	106,000	106,000
IWQP Program			
Hydrologist (2 FTE)	168,000	68,000 [c]	68,000
Subtotal Salary:	1,210,000	1,478,000	1,516,000

* *Salary includes benefits and overhead (CPA)*

(a) *Partial salary paid by Bureau Administrative accounts*

(b) *Position vacant part or all of fiscal year*

[c] *30% paid by AMP funding; balance paid by O&M funding*

PROGRAM AREA	FY 1999 Actual	FY 2000 Budget	FY 2001 Proposed
B. Operations, Personnel, Contract Services (Cont'd)			
Awards	4,000	10,000	10,000
Travel	32,000	38,000	35,000
Travel - TWG	10,000	12,000	12,000
Training	27,000 (d)	12,000	12,000
Contracts - USGS/BRD Sci Synthesis	50,000	0	0
Contracts - Ambersnail WS (Scoville)	14,000	0	0
Administrative & Network Support - USGS/FFC	45,000	60,000	64,000
Space (includes phones)	172,000	172,000	180,000
Office Supplies & Office Equip Maintenance	40,000	50,000	60,000
Vehicle Expense & Depreciation	30,000	28,000	32,000
Equipment Purchases	34,000	15,000	20,000
Building Mod. & Move Related Expenses	109,000 (e)		
Subtotal B:	**1,777,000**	**1,875,000**	**1,941,000**

(d) *Training includes $13k SES for Gold*

(e) *Relocation delayed to 11/99; Costs include systems furniture, building modifications, phones, and other move related expenses. Funds carried over to FY-00.*

C. Physical Resources Science			
Conceptual Modeling	50,000	40,300	
Fine-Grained Sediment Deposits	135,000		
Geomorphic Synthesis	119,000		
Extended Synthesis		76,400	
LCR Conceptual Model Dev / Verification	31,000		
		14,000	
Mainstem Sediment Transport & Streamflow	529,000	330,000	520,000
Protocol Evaluation for Physical Resources	29,000 (a)		
Protocols Evaluation Review, Field Testing, and Capital Investment		225,400	
Ungaged Tributaries	20,000		
Debris Fans & Rapids Change		10,000	
Channel Evolution			50,000
Geomorphic Framework of Mainstem			30,000
Main Channel & Shoreline Sand Storage			150,000
Predicting Sandbar Evolution			150,000
Reach Averaged Sand Transport			50,000
Travel		4,000	4,000
Other Operating Expenses	22,000	3,900	
Subtotal C.	935,000	704,000	954,000

(a) *$6k carried-over to cover PEP workshop costs paid in FY-00*

PROGRAM AREA	FY 1999 Actual	FY 2000 Budget	FY 2001 Proposed
D Biological Resources Science			
Contracts			
Aquatic Foodbase	178,000	194,000	190,000
Avifauna	81,000	81,000	90,000
Conceptual Modeling	9,000	70,000	
Endangered Fish Research Flows	74,000		
HBC, Second Population	62,000		
Kanab Ambersnail	44,000		10,000
Native Fish	520,000	470,000	470,000
Trout	133,000	130,000	130,000
Trout Symposium	25,000 (a)	25,000	
Wetland and Riparian Vegetation	80,000		90,000
Aquatic Foodbase Foodweb Dynamics		40,000	40,000
HBC, Population Genetics		90,000	50,000
Riparian Vegetation PEP		50,000	
Side-Scan Sonar Pilot		25,000	
Terrestrial Endangered Species PEP		10,000	
Terrestrial Trophic Linkages		30,000	30,000
Trout PEP		25,000	
Vegetation Synthesis		55,000	
Aquatic PEP			40,000
GCMRC In-house Studies		100,000	20,000
Benthic standing mass (GCMRC/NAU)	47,000		
TWG Work Requests		50,000	
Unsolicited Proposals		100,000	70,000
Pit-Tags and Other Expenses	22,000 (b)		
Travel		8,000	8,000
Subtotal D.	1,275,000	1,553,000	1,238,000

(a) *Postponed to FY-00. Funds carried-over.*

(b) *$15k carried over for FY-00 pit tag data work.*

E. Socio-Cultural Resources Science			
Cultural Resources			
Conceptual Modeling	30,000		
Conceptual Modeling Research Projects	12,000 (a)		
Data Protocol Map	10,000 (a)		
Flow Impact on Cultural Resources	78,000		
Geomorphic Hypothesis Testing	80,000		
Protocol Assessments	6,000	15,000	
Southern Paiute Consortium	30,500		
Hopi-Ethnobotanical	60,500		
Unsolicited Tribal Proposals	33,000 (a)		
Application of Flow/Deposition Model		25,000	
Application of Geomorphic Testing		35,000	
Investigation of Isolated Occurrences		25,000	
Monitoring Terrestrial Habitatats		125,000	75,000
Photographic Terrace Modeling		35,000	35,000
Tribal Technologies		35,000	
Unanticipated Info. Requests (TWG/AMWG)		5,000	
Evaluating Cultural Res. Monitoring & Mitigation			65,000
Historic Contexts			25,000
Modeling Sandbar Evolution			25,000

PROGRAM AREA	FY 1999 Actual	FY 2000 Budget	FY 2001 Proposed
E. Socio-Cultural Resources Science (Cont'd)			
PEP Activities / Implementation			35,000
Public Outreach Activities			35,000
Socioeconomic Resources			
Assessing 30-year Campsite Changes		25,000	
Evaluating Trout Anglers Satisfaction		5,000	
Campsite Monitoring Protocols		20,000	
Boater Adopt-a-Beach Program		5,000	5,000
Long-term Monitoring of Campsite Beaches			45,000
PEP - Angler Satisfaction			20,000
Travel		4,000	4,000
Subtotal E:	340,000	359,000	369,000

(a) *Work postponed to FY-00; funds carried-over.*

F. Information Technologies Program			
Aerial Photography	101,000 (a)	70,000	
Computer Support	131,000	108,000	120,000
Geographic Information Systems	20,000 (b)	12,000	12,000
Library Information	2,000	12,000	12,000
Database Management	174,000 [c]	160,000	160,000
Digital Photography - Labor Day Overflight	31,000		
Data Standards & Protocols		12,000	
Travel		8,000	8,000
Subtotal F:	459,000	382,000	312,000

(a) *$30k carried-over for FY-00 Aerial Photography*

(b) *$15k carried-over for FY-00 GIS work*

[c] *$160k carried-over for FY-00 Oracle Consulting*

G. Remote Monitoring Technology			
Remote Sensing Initiative	0	400,000	400,000

H. Independent Review Panels			
RFP Review	41,000 (a)	35,000	65,000
NRC Review	28,000		
Executive Secretary for SAB First Year		5,000	
SAB Review		100,000	80,000
Technical Report Review		15,000	25,000
Unsolicited & In-house Proposal Review			5,000
Travel & Overhead	1,000		
Subtotal H:	70,000	155,000	175,000

(a) *$40k carried-over for FY-00 RFP Review*

I. Unsolicited Proposals*			
General			70,000
Tribal			50,000
Subtotal I:			120,000

* *New category established in FY-01. Previously funded in the Biological and SocioCultural Programs.*

J. AMWG/TWG Requests*			60,000

* *New category established in FY-01. Previously funded in the Biological and SocioCultural Programs.*

PROGRAM AREA	FY 1999 Actual	FY 2000 Budget	FY 2001 Proposed
K. In-House Research*			20,000

* *New category established in FY-01. Previously funded in the Biological Program.*

L. Logistics			
River Logistics Cost	530,000	457,600	525,000
Warehouse Operations	8,000	5,000	5,000
Equipment Purchases	88,000 (a)	25,000	30,000
Helicopter Support	34,000	40,000	30,000
Emergency Evacuation		5,000	6,000
NPS Permitting	50,000	50,400	54,000
Subtotal J:	710,000	583,000	650,000

(a) *$55k carried-over for boats & motor replacements*

M Survey Operations			
General Expenses	59,000 (a)	16,000	16,000
Travel		2,000	2,000
Subtotal K:	59,000	18,000	18,000

(a) *$32k carried-over for FY-00 expenses*

N. Integrated Water Quality Program			
Conceptual Modeling	20,000 (a)		
Equipment Restoration, Maintenance, Repairs	73,000 (b)		
NPS IA - Lake Powell Technical Assistance	10,000		
Sample Processing & Supplies	158,000		
IWQP Downstream Water Quality Monitoring		75,000	50,000
Travel	6,000	2,000	2,000
Subtotal H:	267,000	77,000	52,000

(a) *$20k carried-over for FY-00 Conceptual Model*

(b) *$70k carried-over for for Uniflite restoration*

O&M Funding

Integrated Water Quality Program		
Salaries (70% of 2.5 fte)	145,000	145,000
Support from GC National Recreation Area	10,000	10,000
Sample Processing	85,000	85,000
Research	30,000	30,000
Logistics	20,000	20,000
Travel	8,000	8,000
Data Analysis & Report Preparation	2,000	2,000
Subtotal O&M Funding:	300,000	300,000