FY13/14 specifics

Jack Schmidt
GCMRC

A. Sandbars and sediment storage dynamics ... ($1.45 million) [$1.40 million]
A.1. Sandbar and camping beach monitoring ($258,000) [$262,000]
A.2. Sediment storage monitoring ($588,000) [$588,000]
A.3. Investigating eddy sandbar variability ... ($101,000) [$104,000]
A.4. Quantifying the correlation between bed and transport grain size ($148,000) [$150,000]
A.5. Geochemical signatures of pre-dam sediment ($51,000) [$51,000]
A.6. Control network and survey support ($132,000) [$56,000]

B. Stream flow, water quality, and sediment transport ... ($1.33 million) [$1.35 million]
C. Water quality monitoring of Lake Powell and Glen Canyon Dam releases ($0.25 million) [$0.25 million]

D. Mainstem humpback chub aggregation studies ($0.36 million) [$0.37 million]

D.1. Aggregation sampling ($197,000) [$200,000]
D.2. Natal origins of humpback chub ($166,000) [$167,000]
E. Humpback chub early life history near the Little Colorado River ($0.47 million) [$0.48 million]

E.1. July Little Colorado River marking ($126,000) [$129,000]
E.2. Describing food web structure and the potential for food limitation within the Little Colorado River ($253,000) [$257,000]
E.3. Population modeling ($88,000) [$90,000]

F. Monitoring of native and nonnative fishes in the mainstem Colorado River and the lower Little Colorado River ($2.29 million) [$2.32 million]

F.1. Systemwide electrofishing ($214,000) [$217,000]
F.2. Glen Canyon monitoring ($261,000) [$264,000]
F.3. Mainstem monitoring of native and nonnative fishes near the Little Colorado River; juvenile chub monitoring ($457,000) [$464,000]
F.4. Little Colorado River monitoring ($805,000) [$811,000]
F.5. Stock assessment and structured mark recapture model of humpback chub abundance ($20,000) [$20,000]
F.6. Detection of rainbow trout movement from Glen Canyon into Marble Canyon ($271,000) [$276,000]
F.7. Food base monitoring ($266,000) [$272,000]
G. Interactions between native fish and nonnative trout
($0.27 \text{ million}) \ [\$0.28 \text{ million}]

G.1. Laboratory studies ($91,000) [\$93,000]
G.2. Efficacy and ecological impacts of brown trout removal ($178,000) [\$182,000]

H. Understanding the factors limiting the growth of rainbow trout in Glen and Marble Canyons
($0.60 \text{ million}) \ [\$0.61 \text{ million}]

H.1. Laboratory feeding studies ($37,000) [\$38,000]
H.2. Understanding the links among dam operations, environmental conditions, and the food base ($228,000) [\$244,000]
H.3. Developing a bioenergetics model for large rainbow trout ($135,000) [\$138,000]
H.4. Learning from other Tailwaters – a synthesis ($143,000) [\$147,000]
H.5. Contingency planning for HFEs and subsequent rainbow trout population management ($43,000) [\$45,000]
I. Riparian vegetation studies ($0.37 million) [$0.38 million]

I.1. Monitor vegetation and channel response using response guilds and landscape scale vegetation change analysis ($368,000) [$377,000]

J. Monitoring Cultural Resources at a Small Scale and Defining the Large-Scale Geomorphic Context of the Processes Affecting Cultural Resources ($534,000) [$540,000]

J.1. Cultural site monitoring in Glen Canyon ($159,000) [$162,000]

J.2. Monitoring of Select Cultural Sites in Grand Canyon ($189,000) [$191,000]

J.3. Defining the Extent and Relative Importance of Gully Formation and Annealing Processes in the Colorado River Ecosystem ($186,000) [$187,000]
Independent Reviews ($27,000) ($28,000)
Science Advisors ($172,000) ($165,000)
GCMRC economist and research support $221,000 ($199,000)

USGS administration costs $1,570,000 ($1,606,000)
does not include indirect costs on projects

FY 13: $10,447,000 ($10,441,000)

- A. Sandbars and sediment storage ...
- B. Streamflow, water quality, sediment
- C. Lake Powell
- D. Mainstream humpback chub aggregations
- E. Humpback chub early life history
- F. Monitoring native and nonnative fishes
- G. Interactions between trout and native fish
- H. Factors limiting growth of Rainbow Trout
- I. Riparian vegetation monitoring
- J. Cultural resources monitoring and research
- Economist and support
- Independent review
- USGS administration
- quadrennial oversight
FY13: general budget categories

- GCMRC salaries
- USGS burden
- logistics trip costs
- GIS/RS/electronics support
- cooperators (USGS)
- cooperators (non-USGS)
- GCDAMP funding
- other BoR funding
- GCMRC FY12 carryover ($0.93 mil)
- USGS burden
- BoR carryover funding ($9.52 mil)

Sources of funding for FY13

- GCMRC FY12 carryover ($0.93 mil)
- GCDAMP funding
- other BoR funding
- BoR carryover funding ($9.52 mil)
FY14 -- $10,518,400

GCDAMP funding (8.91 mil)

- GCMRC FY12 carryover ($0.61 mil)
- BoR carryover funding ($0.57 mil)
- Other BoR funding ($0.42 mil)
- Other funding

FY14 $10,518,400

GCMRC FY12 carryover ($0.61 mil)
BoR carryover funding ($0.57 mil)
Other BoR funding ($0.42 mil)
Other funding

A. Sandbars and sediment storage...
B. Streamflow, water quality, sediment
C. Lake Powell
D. Maintenance hanmpack chub aggregations
E. Water quality, channelized flow
F. Monitoring native and nonnative fish
G. Intersection between fire and native fish
H. Riverine and riparian vegetation monitoring
I. Dryland vegetation monitoring and research
J. Asynchronous vegetation monitoring and research
K. Economic and support
L. Independent review
M. USGS administration
N. Quarterly oversight