

COMMENTS AND RESPONSES

COMMENTS	RESPONSES TO COMMENTS
RECLAMATION ADMINISTRATION	
In FY04, Reclamation admin reduced by 15%. Not carried thru in FY05. (CREDA)	Reclamation admin costs were increased by anticipated CPI of 3%, except for PA costs. These were restored to FY 04 levels and then indexed to allow for more meetings as requested by PA members.
The FY04 reduction of 15% in Reclamation administration was restored in 05 and increased by CPI. Did the administrative costs actually go up? (B. Persons)	Reclamation admin costs were increased by anticipated CPI of 3%, except for PA costs. These were restored to FY 04 levels and then indexed to allow for more meetings in FY05 as requested by PA signatories.
AMWG Personnel Costs – what positions are represented by these costs? It appears to be 2-3 folks full time on this program. Is this accurate? (J. Cross/J. Balsom)	AMWG representative and alternate, program manager, compliance officer, and budget analyst (all part time) are included.
AMWG – is this actual based upon the last few years of travel? (J. Cross/J. Balsom)	Yes, this is the projected need based on the last few years. The amount also includes reimbursements for AMWG Ad Hoc committees.
BOR travel – is this actual? It seems odd that BOR staff travel is larger than the entire AMWG travel. (J. Cross/J. Balsom)	AMWG travel has been overspent and BOR travel underspent, so the two amounts have been switched.
Will the need for facilitation be as great in FY05 given that the strategic plan should be done? (J. Cross/J. Balsom)	Yes, it is expected to be. Facilitation costs were reduced 15% in FY 04 and left constant in FY 05. They were not indexed by the CPI.
TWG Personnel costs – what positions are represented in these costs? This appears to be 1+ individual full time. Is this accurate? (J. Cross/J. Balsom)	TWG representative and program manager, compliance officer, and budget analyst (all part time). These are projected costs. Other BOR personnel also may charge if they are required to be present at TWG meetings.
TWG travel – is this actual? (J. Cross/J. Balsom)	This is the anticipated TWG travel cost. Actual costs for FY 05 cannot presently be determined. This amount also includes expected costs for TWG Ad Hoc committees.
BOR travel – It seems odd that staff travel is greater than total TWG travel. (J. Cross/J. Balsom)	The difference between the two budgets is quite small. If TWG travel exceeds the amount identified, it can be paid for out of BOR travel.
Compliance Documents – what is being funded in this category? (J. Cross/J. Balsom)	Compliance with NEPA, ESA, NHPA, CWA and other relevant environmental laws for any experimental actions not already covered by existing compliance.
Contract Administration – what is being funded in this category? (J. Cross/J. Balsom)	Work done by contracts, acquisition, assistance, and financial personnel in BOR for procurement of goods or services administered by the agency on behalf of the AMP.

COMMENTS AND RESPONSES

PROGRAMATIC AGREEMENT CULTURAL RESOURCES	
<p>I have just one comment to add regarding the 05 proposed budget. I am encouraged that the Programmatic Agreement funding requests are now fully considered in the AMP budget table. However, I have concerns regarding the total amount being requested for 2005 and the underlying need for the work being proposed. If I understand the genesis of these, they were submitted without benefit of full discussion, prioritization and consensus from the PA group. The TWG has not been provided SOWs for the work being proposed and we not know how they fit in to compliance requirements or agency responsibilities. The TWG needs to understand better what the funding is being requested for, what is agency vs AMP responsibility, and what is required for 2005 vs what would be nice to do. Since the PA proposed budget is double the 2004 budget in a very tight budget year, I think it is important to better understand the underlying need for this work in place of other AMP priorities. (G. Burton)</p>	<p>PA signatories did not reach consensus on work needed in FY05. Reclamation's priorities for NHPA compliance are administration of the program and continued work on the treatment plan in Glen Canyon. The other projects can be deferred. Reclamation is also recommending shifting monitoring to GCMRC in recognition of GCMRC's responsibility for research and monitoring under GCPA on behalf of the AMP.</p>
<p><u>Whole Canyon Treatment Plan and Implementation</u> - The proposed budget contains a new placeholder - \$250,000 - for a whole canyon treatment plan. CREDA believes that it is premature to include this item in the FY '05 budget because the subset of sites that need "treatment" has not yet been defined and the PA group has not reached consensus on how to define where the effect of dam operations on archaeological sites begin and end. Before a whole canyon treatment plan can be developed (and therefore funded), CREDA believes that Reclamation must define (perhaps at some determined cfs level) the parameters of their Section 106 responsibilities. (CREDA)</p>	<p>Reclamation agrees and recommends deferring this project.</p>

COMMENTS AND RESPONSES

<p>NN/GLCA Treatment and Monitoring Plan Implementation: Is this a place holder or is it targeted at specific treatments? From our last meeting, it seemed that neither GLCA nor NN had specific recommendations that would go beyond the \$100K in FY04. Please confirm that GLCA acknowledges that monitoring will end with the application of treatment. This seems contrary to the Grand Canyon Protection Act and the Record of Decision. (J. Cross/J. Balsom)</p>	<p>The treatment plan will determine how adverse effects of dam operations will be avoided, minimized or mitigated in the Glen Canyon reach. This means that if any monitoring is needed for section 106 compliance it will be defined in the treatment plan; meanwhile, GCPA monitoring will be defined by GCMRC. This will probably occur in FY05 and subsequent years.</p>
<p>Whole Canyon Treatment Plan and Implementation: Please note that these dollars will begin treatment, but will not complete treatment. (J. Cross/J. Balsom)</p>	<p>Recognizing that adverse effects of dam operations have yet to be determined in the Grand Canyon, the "whole canyon treatment plan" should be deferred until the PA sigantories have consulted on eligibility and effect.</p>
<p>Zuni Conservation Program: The installation, monitoring and maintenance of check dams is an essential part of the preservation program. It could be combined with NPS funds if the additional funds were added to NPS budget. (J. Cross/J. Balsom)</p>	<p>The checkdams were installed and maintained under the interim monitoring and remedial action program of the NPS, funded by the transfer of power revenues to NPS. In previous years, NPS has not chosen to fund this preservation maintenance. Therefore, it is probably premature to add this as a line item to the budget until the long-term treatment plans are complete. It is presently unclear whether the check dams are a cost-effecive and appropriate preservation method for long-term stabilization.</p>

COMMENTS AND RESPONSES

<p><u>TCP GIS Documentation</u> – This project appears to be proposed based solely on a recent presentation made by the Pueblo of Zuni of how they are attempting to manage through a GIS program their traditional cultural property information and concerns about archaeological sites located within the Colorado River corridor. It is not clear whether the other four tribes are willing to accept or to participate in the development of a similar program for their respective tribes. CREDA also notes that the amount of funding (\$150,000) being considered results in \$30,000 per tribe, which may or may not be sufficient to establish a GIS program for traditional cultural properties, especially if a tribe needs to hire a technical consultant. CREDA suggests that this project may be premature to initiate for each tribe, rather, CREDA would like to see Reclamation consider reallocating a portion of this funding to one specific tribe for the purpose of fully developing its GIS program for traditional cultural properties and establish an associated</p>	<p>Agreed. Reclamation suggests funding this project as a pilot project for Zuni in FY05. If it proves useful, then other tribes might decide to adopt this approach in future years.</p>
<p>4 program/protocols for how that GIS documentation would be integrated</p> <p>TCP GIS – In the comments section, please note that this project will integrate TCP information into a GIS data base for use in assessing affects of AMP actions on National Register eligible Traditional Cultural Properties. (J. Cross/J. Balsom)</p>	<p>Ok.</p>
<p><u>Sociocultural/Evaluation and Plan for Cultural Monitoring</u> - The allocation of \$40,000 to address cultural resource core monitoring in FY '05 seems incongruent with the current plan of the GCMRC to develop a core monitoring plan by January '04 and finalized by April '04. Without a narrative description of what this project is going to entail it is impossible to evaluate its importance or necessity. At first blush it appears to be a redundant effort to accomplish a task that the GCMRC has already committed to accomplishing in FY '04. (CREDA)</p>	<p>Please refer to project summary description for information.</p>
<p>Independent Reviews: This item has increased by \$50,000. Please explain the proposed increase. (CREDA)</p>	<p>These funds are intended to be used to support review panels for new RFP's that are scheduled to be released in FY05 for ongoing experimental treatments, new fishery research and monitoring, as well as elements of core monitoring.</p>

COMMENTS AND RESPONSES

	<p>Technical Support/Website: We believe the proposed \$100,000 should be deferred as it is not critical for FY '05. (CREDA)</p>	<p>A critical component of GCMRC's mission is to provide data and info concerning the CRE to PI's, stakeholders and interested publics. The GCMRC website is the primary means of disseminating this information and it needs to be updated and improved.</p>
	<p>Humpback Chub Actions: This item assumes \$25,000 from the Lower Colorado River Multi-Species Conservation Program. It is our understanding, however, that the LCRMSCP has committed only \$10,000 per year, and may not even be implemented in FY '05. Suggest this assumption be reconsidered. (CREDA)</p>	<p>This issue needs to be discussed in greater detail at the upcoming November TWG meeting.</p>
	<p>NPS Initiatives: We question whether this funding should be included in the AMP budget. If these funds are not available to the AMP, but are used by the NPS for implementation of its policies, it may be inappropriate to show them under the AMP budget. Management agencies are continually implementing actions that affect canyon resources and funding of these actions is not included in the AMP budget. (CREDA)</p>	<p>This should be addressed by the TWG.</p>

COMMENTS AND RESPONSES

<p>OVERALL BUDGET</p>	
<p>Please show me previous years actual expenditures in the budget expenditures. Hopefully actual expenses are available for FY2003, and certainly they are available for FY2002. I find it helpful to look at how the budget is changing over time. We worked hard several years ago to recommend budget presentation protocols, and I suspect that those suggestions need to be reviewed. (B. Persons)</p>	<p>Excellent suggestion, Reclamation did not have the time to compile these data yet. GCMRC will be presenting previous year funding figures in their workplan.</p>
<p>It is hard to consider a budget without at least a short narrative to go with each line-item or project. In the past GCMRC has prepared a short paragraph describing both the ongoing and new projects to help explain the budget. I realize that a complete work-plan is likely premature for the FY05 period, but need at least a short description of the projects. (B. Persons)</p>	<p>Agreed. Work summaries are in preparation by both GCMRC and Reclamation.</p>
<p>I'm concerned about the amount of work that is being done in-house by GCMRC staff. I am sure that the quality of the work being done is outstanding, but the fact that GCMRC staff conducts the work detracts from other coordination and administrative activities. (B. Persons)</p>	<p>When the AMP establishes program objectives and recommends information needs, supplies or services required, Reclamation and GCMRC are fully committed to complying with the Competition in Contracting Act of 1984 and the Federal Acquisition Regulation. This means that at most work, including services historically sole-sourced to participants within the AMP, shall be subject to full and open competition. The agencies are committed to preparing performance work statements and developing program requirements, establishing schedules, estimating costs, and then submitting these to full and open competition to private commercial sources, as described under FAR Subpart 7.3 on Contractor versus Government Performance. It should be reiterated that USGS is the primary science provider for the Department of the Interior and GCMRC scientists will have a role in the conduct of monitoring and research in the AMP beyond contracting.</p>
<p>The GCMRC web page indicates a staff of more than 50 people. Is that accurate? What percentage of the science activities is being conducted through external, competitive bids and what percentage is being conducted in-house? Can you indicate by project which are in-house? (B. Persons)</p>	<p>This information is incorrect. The GCMRC currently has 26 FTE's. This is another reason why the web site needs to be updated.</p>

COMMENTS AND RESPONSES

	<p>I find it curious that within the aquatic biology section the in-house work realized budget increases while the work that is contracted out suffered cuts. Is it the proverbial fox guarding the henhouse? (B. Persons)</p>	<p>The GCMRC proposes to initiate R&D in FY 05-06 in an attempt to refine protocols for core-monitoring food base and answer the fundamental questions of: whether food base is limiting in the ecosystem and if there are, then what is the main source of the energy (autotrophic or allocthonous). While this research is undertaken by GCMRC scientists & key cooperators, the Center also intends to continue conventional monitoring of the food base in the Lees Ferry using more rigerous temporal but less rigerous spatial sampling design. Once the new protocols are defined for all reaches, then the Center proposes to outsource appropriate elements of long-term monitoring in the Lees Ferry reach and below.</p>
	<p>It is difficult to understand the budget as it is presented. Although the intent was to produce a comprehensive plan and budget for review, the budget alone begs more questions than answers. The budget presentation needs to include, at a minimum, the FY03 obligations in the various categories. Ideally, columns showing the last 3 – 5 years would be most helpful in viewing programs, both new and continuing. Please include past budget years in the spreadsheet. (J. Cross/J. Balsom)</p>	<p>Reclamation plans to provide the FY03 actuals, however, the fiscal year costs have not been fully accounted for yet. GCMRC will show previous year funding in their workplan.</p>
	<p>Base staff costs are not identified. In past years, staff were shown in the various programs by hours/dollars or percent of contribution to the project. A breakdown of GCMRC staff, equipment, logistical support, etc... relative to the various program areas would be helpful. Identification of projects to be completed in-house vs. contracted should also be presented. (J. Cross/J. Balsom)</p>	<p>This information will be provided in the final workplan. The project summaries identify in house costs and outsourced funds.</p>
	<p>Indication of which Management Objective a project is responding to would also be useful, along with information on whether the program is a continuation or new, expected completion date and status of reports. (Jeff Cross/Jan Balsom)</p>	<p>GCMRC agrees with these suggestions and has included the MO s and IN s in the project summaries</p>
	<p>The “CPI index” should be applied consistently by both GCMRC and BOR. Although we are pleased to see the index applied for FY05, we are concerned that it hasn’t been applied, at least not to the PA archaeological program, over the last 4 years. (J. Cross/J. Balsom)</p>	<p>The AMP voted several years ago to keep certain program costs flat, this included the PA costs and most of Reclamation's administration. Only certain GCMRC program costs were voted to be cost indexed.</p>

COMMENTS AND RESPONSES

<p>Is there a contingency plan for shifting dollars if appropriated dollars are not received to support Tribal consultation and river trips? Additionally, if the experimental flow does not occur, can these dollars be distributed to programs where funds are inadequate or to restore programs that have been cut. Priority needs to be established for wise use of these funds. (J. Cross/J. Balsom)</p>	<p>There is no contingency plan. A request for solicitor opinion about legal authorities for funding the tribes through appropriations has been forwarded to the Department. The agencies agree that priorities need to be established for funding.</p>
<p>It has also come to our attention that a major reorganization of the GCMRC make a presentation to the TWG in regards to this move, as it could possibly affect budget discussions. (M. Kaplinski)</p>	<p>Jeff Lovich will be making a presentation on the reorganization at the next TWG.</p>
<p>We are concerned that nearly 1/3 of the available funds for the program are being utilized by GCMRC for Administration/Technical Support. The intent of the program was to do research and monitoring and it appears that a large portion of the budget is going to administrative support and not the resources of concern along the Colorado River. (J. Cross/J. Balsom)</p>	<p>Facilitation of a complex adaptive management program requires a considerable amount of technical and administrative support.</p>
<p>In both FY04 and 05 columns, there are many programs listed with "0" in the line. For those projects that are zero in both years, is it necessary to include them if they are no longer valid? Additionally, an explanation of why something is being eliminated would be useful. In some areas, it appears that the project is being absorbed into something else. During the TWG meeting, Steve Gloss mentioned that in some cases, the budget shows the project as eliminated but it is really captured under another project. In all cases, this needs to be explained. (J. Cross/J. Balsom)</p>	<p>The draft plan no longer includes the projects that have been completed or zeroed out. Projects that have been combined are identified as such.</p>

COMMENTS AND RESPONSES

	<p>Overall, we believe the budget must reflect the primary objectives of the AMP and should be focused on programs and projects that result in tangible results and management recommendations. It is difficult to review this budget as presented without knowing how the various projects related to the overall goals of the program and how specific costs are accounted for. We look forward to seeing a revised budget in the near future. (J. Cross/J. Balsom)</p>	<p>BOR and GCMRC agree.</p>
	<p>EXPERIMENTAL MANAGEMENT ACTIONS</p>	
	<p>If the experiment doesn't occur, where will the funds be moved? How much of the program continues regardless of the experiment? (J. Cross/J. Balsom)</p>	<p>The funds will be presumably added back into the Experimental Flows fund, to be carried forward for future experimental treatment implementation.</p>
	<p>Mass Balance – Steve Gloss alluded to this project being subsumed under another project. A note to this effect would be useful in understanding the work accomplished and where it fits in the program. (J. Cross/J. Balsom)</p>	<p>The current proposal is to combine the suspended-sediment mass balance core monitoring into the Downstream Integrated Quality-of-Water program.</p>
	<p>As far as the FY2005 budget table goes, there are some rather disturbing items. For example, the sediment mass balance project has been completely eliminated?!?! The main focus of the ongoing experimental flow program is retention of tributary sediment inputs (see AMWG motion copied below). Under this funding scenario, there is no way that we can document whether we have enough new sand in order to trigger the experiment. We cannot understand how this aspect of the program can be cut. (M. Kaplinski)</p>	<p>The funding shortfall in FY05 has serious implications for conducting the sediment component of the experiment, if it is continued beyond FY04. As this decision has not yet been made by the DOI, it is premature to conclude that the loss of this project's experimental component is irreversible.</p>
	<p>Please explain the significant increase (from \$500,000 to \$750,000) in the FIST and what is being proposed for inclusion. (CREDA)</p>	<p>As FY05 is an "off" year for FIST field studies, additional funds are required under full implementation of the sediment experiment to cover three periods of data acquisition, rather than the two that are required in "on" years, such as FY04.</p>
	<p>FIST – exactly what projects are included in this? Moving from \$500k to \$750k is significant and an explanation of what is included, staffing, etc... would be most useful in reviewing the budget. (J. Cross/J. Balsom)</p>	<p>These elements are described in the GCMRC's Experimental Flow Science Plan, and will be described in more detail in the FY05 project summary info-sheets and Annual Plan.</p>

COMMENTS AND RESPONSES

<p>Primary Productivity/Carbon Flux – Is any of this captured in B1 (Monitoring Aquatic Foodbase)? It would seem so, given the comments. (J. Cross/J. Balsom)</p>	<p>The original science design for the GCMRC's recommended Experimental Flow Treatment Plan, called for return to normal ROD operations for Jan. through Mar. in years 3 & 4 of the 16-year experiment. If this recommendation is implemented in FY05-06, then the continuation of conventional food base monitoring in the Lees Ferry reach (as described in response to comment #33 above) would allow the comparison of the experimental fluctuations to the normal winter ROD operations. This is part of the "blocked" design incorporated into the Center's recommended experiment.</p>
<p>Are these (Modeling EHF Sandbar Response and Coarse Sediment and Conceptual Modeling) not captured in FIST? If not, can they be? (J. Cross/J. Balsom)</p>	<p>These elements of the experimental treatment were not intended to be implemented by the FIST project and could not be covered by that project under the currently proposed funding level.</p>
<p>Kanab Ambersnail – Could this not be done as part of A2 (Kanab Ambersnail Monitoring)? (J. Cross/J. Balsom)</p>	<p>We can discuss this possibility at the upcoming TWG meeting.</p>
<p>8 (Foodbase Impacts of EHF Flows), 9 (Monitoring of Rainbow Trout Adult), 10 (Distribution of Spawning Redds), 12 (Food Base Impacts of Fluctuating Flows) – How much of this can be captured in the various program lines in B (Terrestrial Ecosystem)? (J. Cross/J. Balsom)</p>	<p>Specific studies and their effects on the foodbase relative to GCD operations will be focused solely on the phytobenthic community where it is known to be directly linked to higher trophic levels. Owing to this new direction the phytobenthic assessment is best directed toward evaluating flow effects in the Lees Ferry section. Alternate studies assessing terrestrial contribution as allochthonous sources is currently unknown, and therefore, their relative importance to the aquatic foodbase remains in the realm of future research.</p>
<p>Also I do not want to see money cut from food base studies, particularly under Experimental Mgmt. actions, line 12 (Food Base Impacts of Fluctuating Flows), 14 (Rainbow Trout Diet Analysis) and 15 (Predation of Native Fishes (Humpback Chub)). (Mark Steffen)</p>	<p>The original experimental design over a 16 year period was to assess foraging response of rainbow and brown trout (hypothesized predators) to changes in environmental factors (flows, turbidity, and temperature) and biotic factors (changes in prey relative to changes in predator densities). Owing to the more recent budgetary cuts, the specific information regarding biotic and abiotic interactions relative to the foodbase are not possible. It is unfortunate but GCMRC will be unable to assess how certain management actions such as temperature control device and sediment augmentation might affect the predatory response of the non-native fish community.</p>

COMMENTS AND RESPONSES

<p>Experimental Flow/Mechanical Removal Biological Opinion Terms and Condition: The action agencies shall monitor the aquatic food base and other constituent elements of the humpback chub in a manner similar to past monitoring efforts, and report findings to this office annually. (Glen Knowles)</p>	<p>The GCMRC, in coordination with independent reviewers, has concluded that past food base efforts do not constitute a true long-term core monitoring effort primarily owing to the lack of demonstrated linkages between higher and lower trophic levels. Hence, the current proposal is to conduct the R&D required to establish answers to the linkage questions prior to continuing food base efforts below the Lees Ferry reach. However, with the present implementation of mechanical removal efforts we are locally (near LCR inflow area) assessing dietary use patterns of trout relative to food availability using new and conventional methods, as well as assessing drift.</p>
<p>Experimental Flow/Mechanical Removal Biological Opinion Terms and Conditions: All rainbow trout captured in hoopnets shall be checked for predation on humpback chub. (Glenn Knowles)</p>	<p>No change on this element of the mechanical removal effort is proposed under the FY05 budget.</p>
<p>Kanab Ambersnail taxonomy: This item should not be included in the AMP budget as it is a responsibility of the USF&W. (CREDA)</p>	<p>Comment noted.</p>
<p>Cultural Resources Monitoring and Mitigation -- The dollar figure from previous FY04 budgets should be shown. We believe the funds were actually reprogrammed to the FIST sponsored eolian transport studies. Please clarify. (J. Cross/J. Balsom)</p>	<p>This is correct. Per recommendations from stakeholders, FY04 funds were reprogrammed to support the eolian project which was underfunded in FY04</p>
<p>AQUATIC ECOSYSTEM ACTIVITIES</p>	
<p>Monitoring Aquatic Ecosystem Foodbase-- what is included in this line item? (J. Cross/J. Balsom)</p>	<p>Proposal for components of B1 include for FY05: 1) Continuation of past, conventional monitoring of food base in the Lees Ferry reach, 2) R&D aimed at assessing Carbon flux & importance as energy source for food base (sources and fate of inputs), and 3) R&D aimed at in-stream metabolism of primary production & community respiration.</p>
<p>INTEGRATED ACTIVITIES</p>	
<p>Over \$1 million is dedicated to fine grained sediment. A more detailed explanation of what is included in the program is needed. (J. Cross/J. Balsom)</p>	<p>This information can be partially found in the Experimental Flow Science Plan, and will be described in greater detail in the project info-sheets and Annual workplan.</p>
<p>It would seem that the Draut/Rubin eolian transport study should be in this section of the program rather than in the experimental section. (J. Cross/J. Balsom)</p>	<p>GCMRC agrees with this suggestion. The final workplan will include more detail about all the integrated sediment projects.</p>
<p>SOCIOCULTURAL & OTHER PROGRAM</p>	

COMMENTS AND RESPONSES

<p>5 (Cultural Synthesis & Data Report) and 6 (Cultural Affiliation Study). In previous versions of the FY04 budget, dollar figures were provided for these two line items. An explanation of where these dollars went would be useful. Did these funds also go to the eolian transport study? (J. Cross/J. Balsom)</p>	<p>This is correct. Per recommendations from stakeholders, FY04 funds were reprogrammed to support the eolian project which was underfunded in FY04</p>
<p>1st Year Geomorph Model, Process Study – Is this a continuation of the Pederson work? (J. Cross/J. Balsom)</p>	<p>Yes, in part. Also includes development of a predictive model for erosion susceptibility. See Annual work plan for additional details.</p>
<p>Evaluation & Plan for Cultural Monitoring -- A brief description of what this would include would be useful. We presume this will integrate the requirements of both the PA and GCPA needs? (J. Cross/J. Balsom)</p>	<p>A summary description of this project is included in the interim draft workplan</p>
<p>TECHNICAL SUPPORT SERVICES</p>	
<p>I would like to eliminate any funding for aerial flight photography, unless some money is spent to document any food base damage done by holding the flows at the steady 8,000 cfs. level. And then remedial flows need to be implemented to repair any damage to the food base done by the three days of steady 8,000 cfs. (Mark Steffen)</p>	<p>Overflight monitoring is potentially the most efficient means of collecting high-quality data systemwide for change detection, as well as conducting periodic inventories of resources. In 1997, an overflight strategy was proposed and implemented by the GCMRC - 8,000 constant would be used during hydrologic periods when weekend low flows normally reach 8,000, and 15,000 constant flows would be used when flows are driven by wetter hydrology that is not associated with weekend flows that approach 8,000. The current plan for GCMRC overflights is to conduct a springtime mission on a biennial schedule, a plan which will mean that constant flows will occur half as frequently for overflight monitoring.</p>

COMMENTS AND RESPONSES

HUMPBACK CHUB ACTIONS	
<p>Why is the NPS contributing \$167,000 to the AMWG budget, and then the AMWG gives the same amount of money back to NPS to kill trout in Bright Angel Creek? This implies AMWG approval and almost seems like money laundering. I would like it to be very clear what support AMWG is giving to NPS in killing trout in Bright Angel Creek. It is my understanding, since I was not around, that AMWG in 2002 gave their approval to NPS killing brown trout ONLY, with a weir ONLY, during 2002. I am told that Bruce Taubert was adamant in AMWG not approving NPS killing anything but brown trout, with the weir. I think we need to be clear in the 2005 budget, what fish killing the AMWG is approving and paying for in 2005. (Mark Steffen)</p>	<p>This issue should be discussed at the upcoming TWG meeting among the various stakeholders so that clear direction from that body can be given to the GCMRC.</p>
<p>A discussion of two individual factors that are not adequately addressed in the present plan and should receive attention follows...2. Importance of turbidity in HBC survival and recruitment. The plan does explicitly mention the turbidity issue, but does not propose experiments to test the hypothesis that recruitment may increase significantly if turbidity levels were enhanced in the mainstem. We are told that project 6 (TCD) would test the effects of increasing turbidity but it is not clear on what. Such an experiment could also be tied to the issue of allochthonous inputs, since historically high turbidity must have been associated with higher levels of suspended organic matter than are currently present in the river. I think its very important that we incorporate a sediment experiment into the program as soon as possible. I realize there is a budget shortfall, but this project has the potential to provide a great benefit to the chub and is not that expensive. We should do it. (Glen Knowles)</p>	<p>One element of the diet and predation study, that was part of the mechanical removal treatment, was to determine the seasonal effects of turbidity and the occurrence of high- versus low-turbidity on foraging behavior of non-native fish in the LCR inflow area. The sampling effort incorporated a temporal and spatial design to assess differences between upstream vs. downstream and between seasons of high vs. clear water clarity conditions.</p>