

-----Original Message-----

From: Mary Barger <BARGER@wapa.gov>
To: bgold@flagmail.wr.usgs.gov <bgold@flagmail.wr.usgs.gov>
Cc: BURTON@wapa.gov <BURTON@wapa.gov>; CSPALMER@wapa.gov <CSPALMER@wapa.gov>
Date: Friday, September 17, 1999 3:47 PM
Subject: Western's comments on 2001 Budget

Barry,
Here are our comments. If you have questions, please call Clayton or me.
Mary

Attachment Converted: "\\Gcmrc\Mail\smankiller\EMAIL STUFF\Eudora\2001GCMR.doc"

Barry,

We are commenting on what we know about GCMRC's 2001 budget. We are interested in getting a detailed work plan so that we can make meaningful comments. In the meantime, we would like to make some comments on what we have so far.

Biological Resource Program

There is an issue about trout populations above Lee's Ferry. We may want to include monitoring above Lee's Ferry as part of the trout monitoring program.

We suggest that the native/non-native interaction study be increased in priority and be funded.

What funding is available for the proposal by SWCA?

The funds for unsolicited proposals, in-house research, and TWG requests should be combined for all programs and placed in an unallocated general area. We propose dropping in-house research dollars unless GCMRC can demonstrate a need for funds.

Cultural Resource Projects

Photographic Terrace Monitoring: this project should really be funded out of the Sediment budget. Although the original photographs were taken to evaluate damages to archaeological sites from terrace erosion, at this point, this project is unrelated to archaeology.

Monitoring Isolated Occurrences: this project is focused on relocating isolated occurrences, determining if they are buried sites, and then monitoring them since they are not covered under the Programmatic Agreement activities. Actually, this would be related to PA activities. First, if they are identified as sites, then site forms would need to be completed, which comes under NPS' purview to evaluate eligibility and effect. At that point, they are part of the PA. Also, the PA is currently conducting monitoring activities. There would clearly be overlap and concerns related to having comparable monitoring data. The 2000 Isolated Occurrence study has yet to begin, and Western recommends this project be cancelled. Locating isolated occurrences is very difficult, at best, and the SWCA synthesis report stated that the NPS surveys were not consistent in recording isolated occurrences, so the data is flawed. Certainly, there are more important research issues in the canyon than re-evaluating isolated occurrences.

Tribal Projects: TWG and GCMRC should evaluate tribal proposals during the budgeting process for both need and funding. Since there are no tribal proposals at this time, these dollars should be removed from the budget. This does not preclude the tribes from going after the unsolicited proposal dollars.

Data Dissemination and Access: this project is the evaluation of tribes' technological capabilities. Western doesn't think a project is necessary to make this determination. This project should be cancelled. Plus, this is not an archaeological issue, but an

Information Technology concern crossing all programs. It would be more appropriate to just call the tribes to make this determination.

PEP: this PEP is only for the cultural program at GCMRC and does not apply to the PA program. There are huge overlaps with the PA program, and it should be combined to assess research needs in the canyon, monitoring, who should be doing the monitoring, and all other archaeological research being conducted in the canyon. There is no merit in separating out the PEPs since they will be collecting similar data.

Tribal Participation Funding: The funding level for the PA and tribal participation needs to be resolved in the budget based on the findings of the PA meeting on Sept 20-21.

Information Technology

Systems Administration: We are unclear on the details of this expenditure and want further justification.

Remote Sensing: The GCMRC needs to make a specific proposal for its remote sensing initiative this year.

Logistics

NPS Permitting: We do not believe we should be paying the NPS to permit these trips and this should be dropped from the GCMRC budget. If NPS needs some reimbursement, it should be in the administrative part of the budget.

General Comments

Motor vs. Oar River trips: In the logistics budget, put in the dollars related to motor trips, and in addition, how those dollars would be different if you were restricted to oar trips.

Contingency Planning: GCMRC must provide some level of detail on contingency planning for an experimental flow. They can identify the types of equipment necessary and support personnel. The plan can identify where the equipment and personnel are available should in-house staff and equipment be unavailable. Also, all RFPs for contractors who could participate in the research could address that they could be called upon to conduct research on short time frames related to an experimental flow. We still need a "Science Plan" for an experimental flow so we can estimate a budget for it.

Format:

We would prefer you consider a format used for SOWs by the Upper Basin RIP, an example of which we will provide under separate cover. This would specifically address contract costs.

The current information provided to TWG is inadequate for a full evaluation of each project and is not set up in a way that makes it easy to cancel a project and move funds to

another. Each FY should show the past two years for projects, level of effort, and cost. We also need a 5-year budget which would have a discussion by program area in order to evaluate trends in research.

We are also interested in more details addressed for in-house costs as they relate to contracts. The current format doesn't allow for a review of each contract for level of in-house effort in support of those contracts, only for contract costs. One potential new format is below which would allow TWG to evaluate in-house costs for contracts.

PROGRAM (E.G. INFORMATION TECHNOLOGY)

Name of Contract	Program Staff* support (in total hours)	Clerical staff* support (in total hours)	Other staff* support (in total hours)	# river trips* *	Cost of river trips **	Is trip motor or oar?	Misc costs (attach list)	Contract cost	Travel costs for in-house staff

- * this should identify individual by position or name. This would help in identifying work load needs and FTE.
- ** This is part of the contract cost.

The above program/project format also needs to be shown for the two previous years.

From: Matt Kaplinski <matt.kaplinski@NAU.EDU>
To: bgold@flagmail.wr.usgs.gov <bgold@flagmail.wr.usgs.gov>
Cc: botero@flagmail.wr.usgs.gov <botero@flagmail.wr.usgs.gov>
Date: Friday, September 24, 1999 2:24 PM
Subject: Re: GCMRC FY2001 Work Plan Comments Due

Barry,

I tried to send the center these comments yesterday, but was thwarted. This time, I just pasted into this email message. I hope it works and these comments are not too late. Also, I wrote these after re-re-reading the NRC review and they may not specifically apply to the FY2001 work plan, but I included them anyway. In light of the NRC review, I hope these comments are viewed as constructive criticisms, not a TWG attempt to micromanage the center.

GCRG Comments on TWG FY2001 work plan:

GCRG applauds the efforts to promote integration between the programs. However, budget numbers are still compartmentalized within specific programs. How does the plan to integrate translate through programs? For example, geomorphic research is being conducted under the cultural program. Will reviews of this research/monitoring be carried out under the cultural or physical program? Will this research, if continued, be funded through the cultural program, but managed/ overseen by the physical program?

Good job with the PEP Seds. We look forward to future program reviews.

How is the center responding to the NRC comment that "The center should develop expertise and budgeting for modern techniques of nonmarket valuation of ecosystem services. The scope of economics inquiry in the strategic plan is out of balance with the level of research on other features in the GC ecosystem" ?

IT program:

The IT program needs to develop a clear statement of: 1) what data/GIS exists and is available now; 2) what is the procedure for acquiring the data; 3) what is the role of the IT program and researchers in developing this information in the future.

1) Most of what was presented at the sept. meetings dealt with the development of various components such as a database management system, and a GIS. What is the status of existing databases and GIS coverages? What is available to investigators, stakeholders, the public, right now? A GIS was developed by the GCES program and subsequently inherited by GCMRC (Werth, 1993; Kaplinski et al., 1994). Obviously, a GIS system within a monitoring and research program is constantly being "developed" and added to, but little emphasis has been placed on what already exists. I think the IT program needs to express what the GIS consists of, what is still in development, and what's taking so long. Basic data such as streamflow should be easily accessible through the IT program. A simple question like, "what was the flow on sept. 7, 1997" should be easily answered. Unfortunately, its not that easy.

9/24/99

2) Several research groups trying to acquire information have been stumped. Two groups we know of were not able to meet contractual deliverables, largely because information requested from the IT program was not delivered in a timely manner. Perhaps a clear outline of the process for obtaining information needs to be developed.

3) The role of the survey and GIS department is not clearly defined for individual researchers. The survey department needs to clearly define its role and level of support for individual researchers and do a better job of screening incoming proposals for the level of support needed. Also, can a monitoring/research project plan to develop GIS coverages with the GCMRC group, then have the GCMRC group produce the coverages? Or, is the GCMRC GIS group simply an archive of GIS coverages developed by outside contractors? A clear definition of the GCMRC's role in that development would be extremely helpful.

Thanks for the opportunity to comment on your work plan.

From: Norm Henderson <Norm_Henderson@nps.gov>
To: bgold@flagmail.wr.usgs.gov <bgold@flagmail.wr.usgs.gov>
Date: Thursday, September 16, 1999 5:51 PM
Subject: FY-2001 Integrated Science Plan

Barry -

Based on the information provided at the last TWG, I wanted to give you some specific comments on the subject science plan related to the IWQP and Lake Powell:

1. Lake Powell Conceptual Modeling - This is the history of the agreement by GCMRC to develop a conceptual model for Lake Powell is as follows:

- On 1/15/98 AMWG approves the '98 Report to Congress which includes a description of work to be accomplished in '98. That report specifies that a conceptual model for Lake Powell will be developed during '98 (see page 10).

- Also on 1/15/98, AMWG approves the FY-99 GCMRC workplan that includes a conceptual model for Lake Powell (see page 96).

- To my knowledge, no work was accomplished during either '98 or '99.

- 7/99, AMWG approves the Integrated Water Quality Program which includes only hydrodynamic modeling to be worked on tangentially with the BOR. It makes no mention whatsoever of the conceptual modeling obligations made previously. (I made repeated comments to the authors about this discrepancy.)

- 9/99, GCMRC presents the FY-2001 science plan with no mention of either the hydrodynamic or conceptual modeling obligations.

Based on the above chronology that includes some pretty solid committment by GCMRC to develop the conceptual model for Lake Powell, it seems appropriate to include such work in the FY-2001 program.

2. Lack of detail on research endeavors - None of the INs were specified in the proposed FY-2001 program. Implied, I guess, is that the current monitoring program will address them all. When bringing up this point before, I was told that the monitoring program was not designed to address specific INs directly and that those information needs would be addressed through specific research projects. I see no research proposed to address these specific information needs. Further, such lack of direction calls into question the need for \$300K (plus salaries) for a strictly basic monitoring program.

I suggest that GCMRC/IWQP specify a specific IN to be addressed in FY-2001. That way a study plan can be developed during 2000 for implementation the following year.

3. Analysis of biology data - This obvious need should be specified as a goal in the FY2001 plan. GCMRC has been collecting such data for a long time and no assessment has been made.

The above comments sort of document why I was a little taken back at the TWG

9/24/99

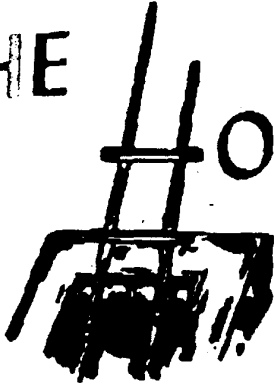
presentation on Lake Powell. You sort of implied that I hadn't brought these issues up before. But if you check my comments on the IWQP, you'll see that I have. I voted to approve the plan as written to get it out the door. Let's talk more...

nrh

9/24/99

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HOPI TRIBE

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Wayne Taylor, Jr.
CHAIRMAN

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17 September 1999

Dr. Barry Gold, Acting Chief
Grand Canyon Monitoring and Research Center
2255 North Gemini Drive, Room 341
Flagstaff, Arizona 86001

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ENV 3.00

RE: The Hopi Tribe's Comments on the Proposed FY2001 Integrated Science Plan

Dear Dr. Gold,

The Hopi Tribe has reviewed the Grand Canyon Monitoring and Research Center's (GCMRC) proposed FY2001 Integrated Science Plan and is pleased to offer the following comments to the GCMRC.

The Hopi Tribe is concerned with the continuing trend in the development of the science program for cultural resources to ignore the real need for integration with the Programmatic Agreement program. The Hopi Tribe recognizes that the issue of legal compliance with the Programmatic Agreement rests with the Bureau of Reclamation, and that the GCMRC's responsibility is in implementing a long term monitoring and research program that is specified in the Grand Canyon Protection Act. However, the category of resource concern is the same for both programs, and the information generated by each individual program is vital to the other. Moreover, the management objectives for cultural resources that were developed back in 1995 (before GCMRC) were designed to specifically incorporate the broad parameters of the Programmatic Agreement. To develop a cultural resource program that tends to divorce itself from the information needs and information generated by the Programmatic Agreement program is to disregard an entire category of vital data. For the past five years the Hopi Tribe has been advocating the integration of these two programs, however, no one appears to be listening. The proposed FY2001 cultural resources program clearly demonstrates that there is currently little if any integration between these two programs. The result of this lack of communication and consolidation is in the generation of proposed superfluous research activities at the expense of needed research. It is also very apparent that the GCMRC is developing its future research and monitoring activities for cultural resources program with little or no input from the participating Native American tribal stakeholders.

For example, the Hopi Tribe believes that the proposed photographic monitoring of terraces with cultural deposits in the Glen Canyon is currently unnecessary. It is our understanding that mitigative actions are being proposed for FY2000 for all archaeological and historic properties currently being adversely effected within the Glen Canyon reach. Therefore, by FY2001 all significant cultural

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Page 2 - 17 September 1999

Letter to Barry Gold, Acting Chief, GCMRC

RE: Hopi Tribe's Comments on the FY2001 Science Plan

resources within the Glen Canyon reach should have been addressed and the need for this monitoring activity diminutive. Moreover, it is not clear how this proposed monitoring activity will differ from the National Park Service's ongoing monitoring program. It is also questionable to support an activity where the sole intent is to photograph ongoing adverse impacts, if in fact it is already known that these impacts are occurring. It is the Hopi Tribe's recommendation to reprogram the slated \$35,000 for this project into more needed and relevant monitoring or research endeavors.

The Hopi Tribe also does not support the proposed monitoring of isolated occurrences for several reasons. First, the existing data on isolated occurrences generated by the National Park Service's inventory of the river corridor is unreliable, inconsistent, and not comparable. This point is well articulated in the draft synthesis report by SWCA under contract to GCMRC. Therefore, the data base on which this monitoring is proposed is deficient and until this data base is made more reliable the proposed monitoring activity would be useless. Secondly, relocating isolated occurrences is an extremely difficult task at best and then based on the level of descriptive information recorded for each isolated occurrence determining if this is the same isolated occurrence is even more problematic. The focus of the FY2000 research project on isolated occurrences is to determine if these isolated occurrences are the first vestiges of an archaeological site or the last. This basic assumption is flawed. The majority of isolated occurrences, depending on their classification, most likely reflect the general prehistoric and historic utilization of the Grand Canyon landscape, not habitation or repeated activity locations. The probability of any specific isolated occurrence representing a buried archaeological site is very slim. Furthermore, the ability to determine if an isolated occurrence is the last vestige of an archaeological site is even more problematic. Rather than limiting this to the presence or loss of archaeological sites, a suggested reduced scope of this research activity would be to look at types of isolated occurrences and working with the participating Native American tribes determine if there are types of isolated occurrences (e.g., rock cairns, rock piles, enigmatic rock features) that tribes would like to investigate to determine if they represent shrines, clan markers, or offering places. The Hopi Tribe recommends that this project as currently envisioned be deleted from the FY2001 science plan and that this funding could be better served by answering more vital information needs (i.e., developing historic context studies, historic properties typology synthesis, etc.).

The Hopi Tribe does not support the Dissemination and Access to GCMRC Cultural Data project. There is \$35,000 slated for this project of which one aspect is to assess the technological capabilities of the participating tribes. The Hopi Tribe does not see a need to support a contractor to research the technological needs of each tribe when the GCMRC could easily pick up the phone and ask the tribes what their current technological capabilities are. If the GCMRC were in a habit of communicating more with the tribes they might already know the answer to this question!

Additionally, the Hopi Tribe does not see the utility of training tribal personnel on access and use to GCMRC data and modeling information if the tribes do not possess the technological capability to access or use this information. The development of proposed GCMRC activities that incorporate the tribal stakeholders would be better designed if the GCMRC communicated with the tribes during the

Page 3 - 17 September 1999

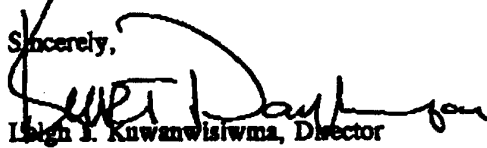
Letter to Barry Gold, Acting Chief, GCMRC

RE: Hopi Tribe's Comments on the FY2001 Science Plan

initial stages of planning. Currently, the interaction of the participating tribes with the GCMRC tends to be reactionary rather than proactive and the Hopi Tribe would like to see the GCMRC turn this trend around in future planning efforts.

The Hopi Tribe appreciates the opportunity to comment on the GCMRC's FY2001 science plan. Should you have any comments or concerns regarding this letter please contact me at 520/734-3751 or Kurt Dongooske at 520/734-3761.

Sincerely,


Leigh I. Kuwanwiswma, Director
Cultural Preservation Office
The Hopi Tribe

xc: Technical Work Group

ARMS

FACSIMILE COVER PAC

To : GCMRC Barry Gold
Sent : 9/22/99 at 2:46:34 PM
Subject : Comments on proposed FY 2001 science plan

From : Randall Peterson
Pages : 4 (including Cover)

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Grand Canyon Monitoring
and Research Center

SEP 22 1999

Received
Flagstaff, AZ

To: Barry Gold
Acting Chief, Grand Canyon Monitoring and Research Center, Flagstaff

From: Randall Peterson
Manager, Adaptive Management and Environmental Resources Division

Subject: Comments on the Proposed FY 2001 Integrated Science Plan

Thank you for the opportunity to comment on GCMRC's proposed FY 2001 budget. Your presentation at the last Technical Work Group meeting was helpful in understanding your monitoring and research efforts in 2001, and the Center's efforts at an integrated approach to the program continue to improve the Center's program. The designation of how each proposal addresses particular management objectives and information needs are also appreciated. With respect to specific program areas, I offer the following comments:

Physical Resources

I continue to believe that the development of both conceptual and specific sediment process computer models are key to improving our understanding of physical processes in the canyon. These are wise investments and are very likely to repay the initial costs by reducing the number of experimental flows, i.e. specific hypotheses could be modeled to screen various alternative experimental flow patterns. The mere development of such models forces us to address complex physical processes and resolve difficult interactions with other resources. The proposed continuation of Steve Weile's work and refinement of the conceptual model are especially critical to this work.

As an prerequisite to this model development, an analysis of the the need for additional digital elevation data should be performed. This data is not necessarily required for the entire canyon, but at least some key reaches identified with all resources in mind should be selected in order to answer prime integrated resource questions, particularly with respect to sediment aggradation and habitat formation during high flow events and the effects of such disturbances on biologic resources. Jack Schmidt's presentation at the recent SEDS PEP review made a compelling case for the use of longer reaches to better understand linkages rather than narrowly scoped site specific processes.

The recent PEP review was very helpful in understanding the current state of scientific understanding. Overall, I strongly support the proposed research activities identified in the proposed budget.

Biologic Resources

The biologic resource program is currently facing significant demands in the next few years as the result of the proposed temperature control device and low steady summer flow test specified in the Fish and Wildlife Service's Biological Opinion. In addition, recent concern surrounding the biologic baseline (native and non-native species) calls attention to the need for greater understanding of key processes in order to make informed management decisions. I am concerned that your FY 2001 proposed budget does not place sufficient emphasis on addressing

the baseline issue and on resolving some of the native/non-native controversy present in the current conceptual model. Perhaps some explanation of what work in these areas would remain after FY 2001 would help evaluate the validity of this concern.

Cultural Resources

The cultural program could be strengthened with closer integration with both Programmatic Agreement activities and other GCMRC program areas. This comment seems justified by comparing the scientific "strength" of the proposed contracts with the contracts in other program areas. There are pressing needs for additional funds for monitoring and treatment of cultural sites throughout the canyon, yet the proposed cultural resource program contracts addresses such issues as dissemination and access to cultural data, photographic monitoring of sites in the Glen Canyon reach, and isolated occurrences. It is likely that stronger proposals could be generated through closer consultation with the Programmatic Agreement group. While there may be some disagreement about GCMRC contracting for mitigation work in the canyon, the Grand Canyon Protection Act and accompanying report language is clear that Congress intended a broad suite of actions, including mitigative actions, to improve the values for which the park and recreation areas were created. I believe GCMRC has the statutory authority to fund such activities.

Specific ideas for contracts to accomplish this broad suite could include:

- (1) development of statistical criteria for site-class evaluation and treatment of affected cultural sites,
- (2) development of a tribal values study to integrate tribal spiritual values in canyon management and scientific research,
- (3) research into effectiveness improvement and implementing criteria for the important Zuni check dam construction to counter gully erosion,
- (4) a more thorough integration and evaluation of the National Park Service cultural site data base,
- (5) development of a program for long-term treatment of cultural sites impacted by dam operations,
- (6) a combined effort with physical resources in modeling pre-dam sediment deposition processes at sites above current dam release levels to better understand historic gully processes,
- (7) a literature survey of current knowledge of canyon cultural sites to prioritize future treatment actions, and
- (8) an analysis of the effect of proposed canyon wilderness designation on tribal, scientific, and recreational activities.

Information Technology

This program area seems primarily directed to GCMRC support and to the recent remote sensing proposal. While the remote sensing effort has the potential for increased program efficiency and reduced costs, there may be other technology areas that should be given greater emphasis or a higher priority. The electronic cataloging and integration of existing reports and data, the web publishing of such data, digital elevation mapping of specific reaches, and the upgrading of tribal technology are areas where the information technology program could provide greater value to the science effort. However, the rigorous analysis of cost efficiency of surveying and logistics programs are particularly appreciated.

Thanks again for this comment opportunity, /s/ Randall Peterson

cc: TWG members



THE STATE OF ARIZONA

GAME & FISH DEPARTMENT

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September 22, 1999

Dr. Barry Gold
 Grand Canyon Monitoring and Research Center
 2255 N Gemini Dr., Rm. 341
 Flagstaff, AZ 86001

Re: Comments on FY2001 Annual Plan Presentation

Dear Dr. Gold,

I have reviewed the September 8, 1999 presentation and handouts on the Grand Canyon Monitoring and Research Center's FY2001 Integrated Science Plan and offer the following comments.

Protocols Evaluation Program (PEP)

Appropriately, this is a major part of the Center's activities for the coming years, and should be reflected in the next version of the Strategic Plan. The Physical Program has a clearly defined and scheduled PEP. However, the Biology Program PEP needs the same level of detail in order to evaluate activities that are planned for FY2001 and out years. To ensure integration between resources I think it is important to conduct some of the PEP reviews concurrently, especially with regard to the aquatic food base and the fishery monitoring. I realize that some components of the monitoring program are farther along than others, but urge that the PEP for the recreational trout-fishery monitoring program and the aquatic food base monitoring program be evaluated together, since we have demonstrated such tight linkages between the two (McKinney and Persons 1999; McKinney et al. 1999). Your figure "Integrated Long-Term Science Program" illustrates those linkages; hopefully the integration will be part of the PEP for biological resources.

Conceptual Modeling

I'm glad to see this work continuing. I think it has been very valuable, at least for resources that we can provide data for.

Grand Canyon Monitoring
 and Research Center

SEP 27 1999

Received
 Flagstaff, AZ

Dr. Barry Gold
September 22, 1999

2

Water and Sediment Resources

MOs & INs:

Dam Operations: Measure and report GCD flow releases relative to Record-of-Decision.

Obtaining Dam Operations data is still somewhat difficult. Bill Vernieu has been helpful in the past supplying SCADA data from the Dam. Data from the Lee's Ferry gage is readily available through the USGS web site, but obtaining actual Dam release data is still somewhat difficult. Western has indicated that they will address this issue, and I wondered what GCMRC's strategy was towards reporting GCD flow releases. Can you clarify how this will be accomplished in the FY2001 Plan?

Streamflow and Sediment Transport Monitoring Linkages

I suggest you include a linkage between tributary flows and fish monitoring (recruitment), especially re: Paria and Little Colorado Rivers where gage data are available. Investigations into relationships between tributary flow and recruitment of native fishes are currently underway; perhaps the linkage could be made with the Streamflow program. Both the Paria and the LCR gages are problematic and appear to go off-line a times, frequently during high flow events. Is it a priority to address fixing or moving those gages?

Biological Resources Current Knowledge

I had hoped we knew more about fish and other biological resources. I realize that it's hard to put on one page, didn't see this for other resources. I think a discussion of current knowledge and how the Plan for FY2001 relates to that knowledge would be good, especially if it helps justify or explain why certain work tasks were given priority over others.

Terrestrial Ecosystem: Management Objectives and Targeted Information Needs for FY2001

Protect, restore and enhance native and special status species.

- Define and specify ecology of native faunal component (IN 11.1).
- Determine species population characteristics to detect departures from natural range (IN 11.2).
- Identify and characterize riparian wildlife habitat types along the river corridor (IN11.4).

Dr. Barry Gold
September 22, 1999

3

I assumed that these were prioritized from our April 1998 exercise with the last set of MO's and IN's, but after looking at the April 30, 1998 "Information Needs Prioritization April 23, 1998" document, they do not appear to be prioritized the same way. I understand that the priorities may change, and not all may be addressed each year. Would it be useful to justify why certain work tasks will be conducted in a given year? Are terrestrial ecosystem components included in the Biology Program PEP?

Aquatic foodbase monitoring

Is this scheduled for PEP in FY2001?

Fisheries monitoring

Does "long-term monitoring trout fishery" mean that this activity will have completed the PEP by FY2001?

"Continued downstream monitoring of fish - condition, abundance, composition, distribution, productivity"

Inasmuch as there is not a 'long-term' monitoring program in place for fish other than trout, I question the "continued" part of this task. Need to clarify that this is still "transition" monitoring until a valid long-term design is in place, following the Protocol Evaluation Program.

Terrestrial and Fisheries Research

The full scope of some of these activities may not be clear until the Biology PEP, specifically "Evaluate spawning substrates in Glen Canyon Reach". Depending on the PEP, this could be a large-scale project or a very small project depending on the level of resolution needed in the data.

Terrestrial and Fisheries Research - Section 8 Funds

Objectives: To evaluate effects of operations (TCD, SASF) on resources

Activities

- Baseline data collection for seasonally adjusted steady flows to augment current monitoring programs
- Baseline data collection/research for TCD prior to operation

I assume some of these activities will become clearer following the TCD workshop. Conducting a PEP on the current monitoring program prior to initiation of additional data collection would be wise in my estimation. Do we know that the current monitoring protocols are inadequate to collect baseline data to address SASF and TCD questions?

Dr. Barry Gold
September 22, 1999

4

FY 2001 Management Objectives and Information Needs- Recreational Resources

- Provide recreation experiences consistent with other resource objectives (MO1)
- Determine criteria for the recreational experience (IN 1.1)
- Define methods to insure quality experiences (IN1.3)
- Determine angler satisfaction, use and harvest (IN 1.4)

I assume we will have results from Dr. Stewart's studies to address some of these questions. IN 1.4 has been monitored by Arizona Game & Fish Department in the past, and I think it is a strong candidate for PEP, but it will require some work to get the data ready for power analysis and other evaluations.

Information Technology Program

Flow chart:

The flow chart indicates Surveying and Remote Sensing data will be "fed" into the Monitoring and Research Program. The chart does not indicate how other data will be handled. For example, we have extensive databases on fish (rainbow trout monitoring) that I assume will be turned over to the Center at some point. Where does data like that fit into the picture?

What is the timeframe for developing and populating the Oracle databases? I assume this is ongoing activity that will happen every year that new data comes in. We have sent data to GCES before and had it disappear into a black hole (otherwise known as a network server). I'm confident that won't happen again!

Library

I was glad to see the Library coming along nicely in the Bank Building! Do you expect it to be ready for online access by FY2001?

Logistics Program

Electrofishing: (FYI) We have worked with your staff to train AGFD personnel to operate the electrofishing boat in the Lees Ferry reach, and have not relied upon the Center for those services this year. Boat maintenance is still a problem.

Budget

Presentation is being addressed, assume that recommendations from the AMWG will be incorporated.

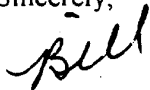
Dr. Barry Gold
September 22, 1999
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References Cited:

McKinney, T. and W.R. Persons. 1999. Rainbow trout and lower trophic levels in the Lee's Ferry tailwater below Glen Canyon Dam, Arizona: A Review. Final Report to U.S. Bureau of Reclamation, Grand Canyon Monitoring and Research Center, Flagstaff, Arizona. Arizona Game and Fish Department, Phoenix, AZ. Cooperative Agreement No. 1425-98-FC-40-22690. 53 pp.

McKinney, T., D.W. Speas, R. S. Rogers, and W.R. Persons. 1999. Rainbow trout in the Lee's Ferry recreational fishery below Glen Canyon Dam, Arizona, following establishment of minimum flow requirements. Final Report to U.S. Bureau of Reclamation, Grand Canyon Monitoring and Research Center, Flagstaff, Arizona. Arizona Game and Fish Department, Phoenix, AZ. Cooperative Agreement No. 1425-98-FC-40-22690. 109 pp.

Sincerely,



Bill Persons
Research Program Supervisor

:bp

The Sun is the symbol of life, without nothing is possible - plants don't grow - there will be no life - nothing. The Sun represents the dawn of the Hualapai people. Through hard work, determination, education, everything is possible and we assured bigger and brighter days ahead.

The connecting of the Hair makes them one person; for happiness or contentment cannot be achieved without each other.

The Canyons are represented by the purples in the middle ground, where the people were created. These canyons are Sacred, and should be so treated at all times.

The Reservation is pictured to represent the land that is ours, treat it well.



The Tracks in the middle represent the cows and other animals which were here before.

The Green around the symbol are pine trees representing our name Hualapai - PEOPLE OF THE TALL PINES.

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**HUALAPAI NATION
OFFICE OF THE CHAIRMAN**

Earl Havatone
Chairman

P.O. Box 179 • Peach Springs, Arizona 86434 • (520) 769-2216

Edgar B. Walen
Vice Chairman

September 22, 1999

Dr. Barry Gold, Acting Chief
Grand Canyon Monitoring and Research Center
2255 N. Gemini Dr., Room 341
Flagstaff, AZ 86001

Dear Barry,

This letter is to provide comments on the FY2001 work plan and budget. The Hualapai Tribe continues to have concerns over the lack of funding for tribal participation in the Adaptive Management Program (AMP). Unlike federal and state agencies, we do not receive funds from federal and state legislatures to allow us to participate in the AMP. Our previous participation has placed a significant hardship on our tribal administration, and our future participation is tenuous at best unless adequate funding is provided by GCMRC, BOR or elsewhere.

With regard to on-the-ground activities, the Hualapai Tribe provided input into the development of management objectives both within the Glen Canyon Dam Environmental Impact Statement and during the process guided by the GCMRC. The Hualapai Tribe cannot understand why there is no funding to implement the objectives. For example, one management objective is to maintain riparian vegetation in a state of multiple successional stages dominated by native species. Why are we not eradicating tamarisk and planting willows? Another example is that we have an objective to minimize interactions between native and non-native fishes. Why are we not removing carp, catfish and stripers from the river? In addition, recent RFP's are not based on the management objectives. To date, we have not used the management objectives in any manner, nor have we adaptively managed resources in Grand Canyon.

Grand Canyon Monitoring
and Research Center

SEP 27 1999

Received
Flagstaff, AZ

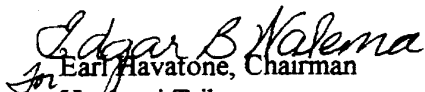
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In all, the Hualapai Tribe, as a major landowner of Grand Canyon and the Colorado River, feels that the AMP is not working to improve conditions in Grand Canyon in an effective and efficient manner. Too many dollars are spent on the AMP bureaucracy and too little is spent on-the-ground. We feel that the Hualapai Tribe's Department of Natural Resources could much more effectively operate the Adaptive Management Program and would welcome the opportunity.

Please contact myself or Mr. Clay Bravo in the Hualapai Department of Natural Resources (520-769-2255) to further discuss these issues.

Sincerely,
HUALAPAI TRIBAL COUNCIL


Earl Havatone, Chairman
Hualapai Tribe

cc: Mark Schafer
Assistant Secretary's Office, U.S. Department of the Interior

Charles Calhoun, Regional Director
U. S. Bureau of Reclamation