

ORGANIZATIONS

- 1. Living Rivers, Colorado Riverkeeper**
- 2. Trout Unlimited**
- 3. Uintah Mountain Club**
- 4. Water Consult Engineering and Planning Consultants**
- 5. Utah Waters**
- 6. Western Resource Advocates and The Nature Conservancy**

LIVING RIVERS

COLORADO RIVERKEEPER®

November 15, 2004

Mr. Peter Crookston
Bureau of Reclamation
Provo Area Office
302 East 1860 South
Provo, Utah 84606

RE: Comments on Draft Environmental Impact Statement on operations at
Flaming Gorge Dam

Dear Mr. Crookston,

Living Rivers and Colorado Riverkeeper submit the following comments on the Draft Environmental Impact Statement (DEIS) for the re-operation of Flaming Gorge Dam to benefit endangered fish, as released on September 7, 2004.

While the four-year effort to produce this document has proved useful in generating a better understanding of the challenges facing the recovery of endangered fish below Flaming Gorge Dam, the analysis is not yet sufficient to support the proposed action. The water supply and hydrograph assumptions do not correlate with present trends. The role of endangered fish recovery relative to other operational objectives has yet to be properly clarified. The proposed action fails to address the pitfalls in the structure and mandate associated with the proposed Adaptive Management Program as experienced with Reclamation's recovery efforts for endangered fish at Grand Canyon. The DEIS did not properly review the merits of recovery efforts through a dam decommissioning alternative. Lastly, as noted in our scoping comments of July, 2000, Colorado River endangered fish recovery should be tiered to a programmatic EIS that evaluates recovery needs and barriers throughout the historic range of these endangered fish species. We hope these matters will be properly addressed prior to completion of the Final EIS (FEIS).

1. Water availability

- 1a The DEIS failed to sufficiently address how long-term water availability will impact fish recovery in the lower Green River, and as a result did not sufficiently demonstrate whether the proposed recovery efforts can be successful in this limited stretch of river.

PO Box 466 • Moab, UT 84532 • (435) 259-1063 • Fax (435) 259-7612
www.livingrivers.org

- 1b Flow scenarios did not take into consideration the prospect of how climate change will affect river flows. The present drought has demonstrated that flows may be significantly lower than forecasted as precipitation patterns for the Green River watershed may be changing. The Department of Energy has forecasted how western rivers as a whole may experience a 30 percent reduction in flows over the next 50 years due to climate change.

2. Action Alternative is not consistent with the natural hydrograph

The DEIS acknowledges the recommendation to manage the recovery of endangered fish species on a dam-controlled river by mimicking the historic natural hydrograph and thermograph, as much as possible. We believe that the flow recommendations of the DEIS departs from this prescribed treatment. We believe the spring peak flow of the Action Alternative is much reduced and therefore diminishes the success in achieving the goal to recover endangered fish. We also believe that the Action Alternative's base flow, from the summer to winter season, is higher than the historic hydrograph and too does not reflect compliance with the biological data.

- 1c Furthermore, instead of timing releases from Flaming Gorge Dam with the natural flow of the Green River, the flow recommendation of the Action Alternative is timed to meet the natural hydrograph of the Yampa River, a tributary of the Green River downstream of the dam. We believe this too diminishes the recovery of endangered fish in the Green River, especially in Reach One (Flaming Gorge Dam to the confluence with the Yampa River).
- 1d We believe the DEIS overlooked the benefits associated with the Run of the River Alternative, as suggested by the National Park Service. We encourage Reclamation to scrutinize further the possibilities of implementing such an action plan. We believe strongly that matching the historic attributes of the river is what will eventually provide a greater measure of success in the recovery of endangered fish species, until which time the dam can and will be successfully decommissioned, as is inevitable.

3. Clarify the priority of satisfying the Endangered Species Act

- 1e The DEIS sometimes refers to the recovery of endangered fish as distinct from the authorized purposes of Flaming Gorge Dam (Sec.1.1). At other times the DEIS implies that the authorized purpose of Flaming Gorge Dam does include the improvement of critical habitat for fish and wildlife. The FEIS must make clear that fish recovery is paramount as the Bureau of Reclamation must comply with the Endangered Species Act first and foremost, then allow for other dam operational benefits to be pursued accordingly.

4. Adaptive Management Program protocols

The DEIS indicates that the Action Alternative includes the implementation of an Adaptive Management Program concerning the future operations at Flaming

Gorge Dam. This program will consist of the Flaming Gorge Working Group and a Technical Working Group. The purpose of the Flaming Gorge Working Group is to provide a check and balance system for the purposes that authorized Flaming Gorge Dam, including the recovery of endangered fish. The purpose of the Technical Working Group is to provide scientific expertise for the program.

Such a program has been underway for nearly ten years at Glen Canyon Dam, but the results have been disastrous. One more species has gone extinct, the Razorback Sucker, and the Humpback Chub has declined to nearly irreversible numbers. This has occurred for the lack of: a) a clear mandate for independent, peer-reviewed science that is removed from politics, b) to guide the decision making process by placing fish recovery at a priority below power generation, c) not ensuring there are sufficient funds to operate the program.

1f Reclamation must identify how the Flaming Gorge Dam Adaptive Management Program will avoid the pitfalls that have plagued the program at Grand Canyon.

1g Reclamation must also outline how this program will address uncertainties associated with the operations at Flaming Gorge Dam, and how future supplemental National Environmental Policy Act compliance will be required.

We believe that such uncertainties could include, but not limited to: progressive global warming, extended and prolonged drought, extreme flood events, higher sediment transport, increased human consumption, modifying selective withdrawal (temperature control), and the control and removal of exotic fish.

This should also include a call by the Lower Basin to deliver the minimal annual requirement of 8.23 million acre-feet at the Compact Point (Lee's Ferry, Arizona). As well as dam operations that further compromise the ecosystem values that authorized the creation of Dinosaur National Monument, Ouray National Wildlife Refuge, and Canyonlands National Park.

1h We also believe that another management decision of the immediate future should include a fish passage at the Tusher Wash Diversion Dam near Green River, Utah. This would include a device that prevents mortality of endangered fish from entrapment in the irrigation and hydropower projects associated with this diversion dam.

Therefore, we do expect that the working groups and the general public will have comprehensive access to all information that pertains to the operations of the Green River and Flaming Gorge Dam. This should be accomplished through the web pages of the Bureau of Reclamation and through a regular newsletter that is mailed to all interested parties.

For the agencies, scientists and the general public to be well informed, it is imperative that all program information is made available promptly and that this information is disseminated liberally and is not discretionary. It is also

imperative that adequate time be allowed for the public to process this information in a timely manner so as to maximize public outreach opportunities in the NEPA decision making process.

5. The Decommissioning Alternative

- 1i The DEIS dismissed the decommissioning alternative without sufficient justification or analysis, other than to say, “[decommissioning] does not meet the purpose and need for the proposed action.” The principle objective in fish recovery programs is to restore natural processes, which include seasonal flows, temperature, sediment, nutrients and migration.

Decommissioning Flaming Gorge Dam can best meet these objectives and thus should be thoroughly evaluated. While the dam makes some contributions to water storage, power generation and recreation, these contributions are not significant regionally, and are replaceable, whereas the endangered fish are not.

The DEIS also did not fully evaluate the potential for dam failure, and the impacts this may have on endangered fish recovery, as well as other downstream impacts to Dinosaur National Monument and Canyonlands National Park.

6. Basin-wide concerns

- 1j Reclamation continues to address fish recovery in the Colorado River watershed in a piecemeal fashion without consideration of the natural species’ range, or macro-social and environmental changes that may be affecting the watershed. It’s critical for Reclamation to develop a programmatic EIS involving all the recovery needs of endangered fish species in the watershed and the best approaches to resolve them.

We believe the overarching problems that must be thoroughly studied in such a system wide, programmatic approach would include, but not limited to:

- Diminished water supply and water quality
- Increased water demand
- Over allocation of water rights
- Quantifying the water rights of the First Nations
- Impacts to national wildlife refuges, parks and monuments (including the international biosphere at the Colorado River delta)
- Removal of exotic species
- Sedimentation in the reservoirs
- Dam safety
- Modernizing the Law of the River
- Alternative energy production and conservation
- Water storage and conservation alternatives

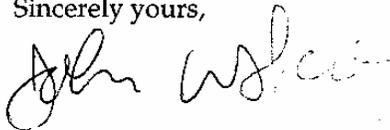
We believe such a study would show conclusively that the Colorado River system would benefit by having some of its infrastructure removed and that alternative storage strategies, such as the artificial recharge in depleted aquifers, can provide:

- Increased habitat for endangered species
- Restore the natural attributes of the river and its tributaries
- Reduce water loss from evaporation
- Reduce salinity
- Provide protection from extended drought
- Eliminate the consequences of high dam failure
- Prompt a sediment management plan

7. Closing statement

Thank you for this opportunity to comment on the DEIS for Flaming Gorge Dam. We encourage the Bureau of Reclamation to proceed in producing a Final Environmental Impact Statement and we look forward to the subsequent Record of Decision. Please feel free to contact us at any time should you require any additional information or assistance from us.

Sincerely yours,



John Weisheit
Living Rivers, conservation director
Colorado Riverkeeper

1. LIVING RIVERS, COLORADO RIVERKEEPER

1a

Reclamation has used the best available source of information for estimating “long-term water availability” in Reaches 1, 2, and 3 of the Green River as described in the EIS. The Flaming Gorge Model indicated that the 2000 Flow and Temperature Recommendations could be met, given the increasing depletions schedules and the assumption that future hydrology is similar to the historic hydrology used in the Flaming Gorge Model.

1b

Reclamation did not attempt to project specific climate changes into the future as these projections are considered speculative and difficult to quantify from a hydrologic standpoint. If climate change does occur, it will impact the inflow statistics and the hydrological year classification that will be used for making decisions about how to operate in a given year.

1c

Comment noted.

1d

The scope of this EIS is to assess operation regimes for Flaming Gorge that achieved the 2000 Flow and Temperature Recommendations, while continuing and maintaining the authorized purposes of Flaming Gorge Dam. It was determined through modeling that a run of the river approach to operating the dam would not achieve the peak flows and durations specified in the 2000 Flow and Temperature Recommendations. Specifically the recommended durations were not achieved. For this reason, the Modified Run of the River Alternative was not analyzed further.

1e

Implementation of RPAs is Reclamation’s responsibility as part of Section 7(a)(2) of the ESA consultation process with the U.S. Fish and Wildlife Service, but it should be noted that ESA compliance, like compliance with other statutes and regulations, is part of the Federal regulatory construct under which Reclamation operates Flaming Gorge Dam. Reclamation is committed to upholding its responsibilities under the ESA, as well as meeting authorized project purposes.

1f

Reclamation does not agree with this assessment of the Glen Canyon Dam Adaptive Management Program. The razorback sucker has always been rare in Grand Canyon and has not been declared extinct. The Grand Canyon humpback chub population, although experiencing recent decline, has not declined to nearly irreversible numbers. Rather, this population is still the most robust of all humpback chub populations in the Colorado River Basin. The Glen Canyon program has successfully applied adaptive management concepts to develop a better understanding of the relationship between dam operations and resource responses since its inception in 1997. Major experiments utilizing Glen Canyon Dam as an instrument to manipulate hydrology have been successfully completed through the recommendations of program stakeholders to the Secretary of the Interior.

1g

Please see section 4.20 of the EIS regarding the adaptive management process for Flaming Gorge Dam. Future NEPA compliance will be undertaken whenever there is a major Federal action with the potential to affect the human environment, in accordance with 40 CFR 1500-1508.

1h

A decision as to the necessity and feasibility of a fish passage at Tusher Wash Diversion is a responsibility of the Recovery Program and is outside the scope of the Flaming Gorge EIS.

1i

Section 2.2.2.2 of the EIS states why decommissioning Flaming Gorge Dam does not meet the purpose and need for which the EIS was prepared.

1j

A Federal action requiring a programmatic EIS has not been defined.



November 15, 2004

By Fax and Email

Peter Crookston
Flaming Gorge EIS Manager
PRO-774
Bureau of Reclamation
Provo Area Office
302 East 1860 South
Provo, UT 84606-7317

Re: Operation of Flaming Gorge Dam Draft Environmental Impact Statement

The Utah Water Project of Trout Unlimited would like to comment on the August 2004 Operation of Flaming Gorge Dam Draft Environmental Impact Statement (the "Flaming Gorge Draft EIS" or the "Draft EIS").

Trout Unlimited is the largest non-profit organization dedicated to preserving and restoring North America's trout and salmon fisheries and their watersheds. As the Green River below Flaming Gorge Dam is a world-class trout fishery, Trout Unlimited and its members have a strong interest in the way the dam is operated. Though Trout Unlimited focuses its conservation efforts on cold water fisheries, it supports the Bureau of Reclamation's (the "Bureau's") efforts to assist in the recovery of native warm water species identified in the Flaming Gorge Draft EIS to the extent those efforts do not impair the cold water fishery below Flaming Gorge Dam.

Trout Unlimited supports the flow restrictions and temperature recommendations in the Draft EIS.

In general, Trout Unlimited commends the Bureau on the Flaming Gorge Draft EIS. The Draft EIS addresses in detail the potential impacts on the trout fishery of the Action and No Action Alternatives. In particular, Trout Unlimited commends the Bureau for incorporating into its economic analysis two restrictions on the rate of water released from the dam: (1) the up- and down-ramp rate limit of 800 cfs per hour and (2) the single daily peak "hump" restriction. See Draft EIS at 149. These time-honored restrictions have been important in establishing and maintaining the quality of the trout fishery below the dam.



Similarly, Trout Unlimited supports the Action Alternative recommendation that releases not exceed 55°F during dry and moderately dry years and 59°F in moderate to wet years. As the Draft EIS recognizes, these temperature regimes should be followed to protect trout habitat down to the Utah/Colorado State Line. See Draft EIS at 164.

Although we generally support the flow restrictions and temperature recommendations in the Draft EIS, we would like to raise three concerns:

(1) The Draft EIS mischaracterizes the nature of the up- and down-ramp rate limit and single daily peak “hump” restriction.

- 2a The newly added second full paragraph on page 149 of the Draft EIS appears to minimize the importance of the release restrictions described above by asserting that there are no “formalized restrictions,” and that these informal restrictions have been in place only since 1993. In fact, these restrictions were the result of lengthy investigations and negotiations by the Flaming Gorge Dam Working Group and have been followed, except for emergencies, since well before 1993.

- 2b Our concern is that, by suggesting that the flow restrictions are recent and purely voluntary, the Draft EIS (perhaps inadvertently) lays the groundwork for arguments that power generation can or should be pursued at the expense of other uses generally and fishing in particular. We believe it would be inappropriate to elevate power generation at the expense of fishing and other uses, particularly in that the authorizing legislation (both the CRSP Act of 1956 and the Colorado River Basin Project Act of 1968) describes power generation as “an incident” to the primary listed purposes, which include “providing for basic public outdoor recreation facilities” and “improving conditions for fish and wildlife.” See Draft EIS at 3-4.

(2) The Draft EIS fails to address the timing of daily up- and down-ramp rates and the potential impact of such rates on the cold water fishery below Flaming Gorge Dam.

- 2c Although we support the flow restrictions contained in the Draft EIS, we are concerned that the Draft EIS does not address the timing of those flows and the potential impacts that timing can have on the coldwater fishery below the dam. For example, if peak flows occur in the middle of the day (as has happened in the past with test flows), it can have a significant impact on the quality of the fishing as well as the overall quality of the experience (significant fluctuations in flows make fishing unpredictable; high flows also stir up a lot of sediment and organic



2d matter). Moreover, significant flow increases during the day compromise the safety of fishermen who wade the river.

2e Because people travel from all over the United States and even other countries to fish the Green River below the dam, any operational change that impairs the quality of the fishing experience has a negative economic impact as well. Anglers who have a bad experience are unlikely to return.

We believe that the Final EIS should address these issues, and, more importantly, that significant increases or decreases in ramp rates should occur during non-fishing hours.

(3) The Draft EIS fails to address adequately local economic impacts of changes to the tailwater fishery.

2f We are also concerned that the Draft EIS may underestimate the effects of operational changes on the local economy. In particular, the Draft EIS uses a three county model to estimate economic impacts. Doing so may obscure serious impacts to the economy of Dutch John, Utah, and Daggett County, Utah, where the vast majority of economic activity associated with Flaming Gorge occurs.

2g For example, the Bureau estimates that under the Action Alternative, employment in the "Amusement and Recreation Services" industry may fall 8.3 percent in wet years (*see* Table 4-26) and 6.6 percent in dry years (*see* Table 4-27). These losses may appear insignificant when spread over three counties and mitigated by gains in other areas, but could be devastating to the community of Dutch John, where the vast majority of residents are employed by the recreation industry or associated with it. The same is true for Daggett County generally, which lacks the economic and employment diversity of Uintah and Sweetwater Counties.

Again, we applaud the Bureau's efforts to put together a comprehensive and balanced Draft EIS and appreciate the opportunity to comment on the proposed action. If you have questions or would like to discuss these comments further, please contact us at (801) 747-0747.

Sincerely,


Timothy Hawkes
Western Water Project
Trout Unlimited

2. TROUT UNLIMITED

2a

Section 4.4.1 accurately describes the limitations of ramp rates.

2b

The EIS states Reclamation's intent to balance the needs of all resources when making operational decisions under both the Action and No Action Alternatives. We appreciate your concern that power generation might have benefited at the expense of fishing and other uses. However, the analysis of the cumulative effects on hydropower generation shows that power has not been elevated above other authorized purposes and that, in fact, there have been losses to hydropower over the last 20 years. Please see section 1.4.2 for more information. The proposed action will not have a negative effect on the sport fishery, as shown in chapter 4 in the EIS.

2c

Within-day fluctuations are outside the scope of the EIS. It is noted that the changes in flows, as part of the operation of the powerplant, are designed to help meet the demand for electricity as usage of electricity increases during the day and decreases at night. Meeting peak demands is currently tempered, however, by the need to meet environmental concerns. This operational detail would be the same under either the Action or No Action Alternative.

2d

Reclamation agrees that the safety of fishermen and others along the Green River is very important. Currently, through efforts of the Flaming Gorge Working Group, the agreed upon ramping rate is established at 800 cfs per hour. This ramping rate has been the agreed upon standard since the Flaming Gorge Working Group meeting of April 11,

1994. There is prominent signage along the river warning fishermen of the potential for sudden fluctuations. A warning horn at the dam is also sounded before increase dam releases begin. Daytime fluctuations have been a part of operations since the dam was completed 40 years ago, and so it is common knowledge among those who have visited the river in the past. Nevertheless, Reclamation continues as part of its management of Flaming Gorge Dam to pursue all reasonable means of providing notification to the public of river fluctuations and other public safety concerns. Please see response to Daggett County 1g.

2e

The EIS acknowledges the possibility of both positive and negative effects under differing conditions if the Action Alternative is implemented. It should be noted that the nature and timing of ramp rates, and other daily operational details, would remain substantially the same under either the Action or No Action Alternative. The trout fishery was established 40 years ago within the context and limitations of dam operations; and over time, certain operational changes have benefited the trout fishery.

2f

The EIS acknowledges that the Action Alternative could create adverse impacts for certain Green River recreation activities and businesses (e.g., commercial operators), particularly under wet and dry conditions as compared to the No Action Alternative. The lack of appropriate county specific expenditure data precluded the development of impacts solely for Daggett County. In anticipation of this, a survey was conducted during the summer of 2001 to specifically identify economic impacts to commercial river guide operators. The results of the survey were presented in a separate subsection under

socioeconomics. Attempts have been made, and will continue to be made, to display the adverse impacts to commercial operators prior to the final decision. Finally, recall the analysis was looking at both river and reservoir recreation. While we cannot describe potential impacts by county due to lack of data, from an overall perspective, expenditure gains on the reservoir appeared to outweigh losses on the river. Therefore, it is possible that under the Action Alternative certain recreation oriented businesses (e.g., lodging, restaurants, gas stations) will be adversely impacted by reductions in Green River recreation visitation, but many of these same businesses (with the exception of river guides) could also benefit from the additional reservoir recreation visitation and expenditures.

2g

The EIS shows that Green River commercial operators could experience adverse impacts, particularly under wet and dry conditions. While we cannot definitively describe impacts to Daggett County given the lack of county specific expenditure data, we acknowledge your point and included more discussion in section 4.12 in the EIS. While these impacts could indeed create problems if concentrated in Dutch John (not an unreasonable assumption), we would like to point out that wet and dry conditions were each estimated to occur about 10 percent of the time.

From: "Tom and/or Ann" <taelder@easilink.com>
To: <fgeis@uc.usbr.gov>
Date: Sun, Nov 14, 2004 6:41 PM
Subject: Flaming Gorge Draft EIS

To Whom It May Concern:

November 14, 2004

3a

We, as the elected representatives of the Uintah Mountain Club (a local grassroots conservation organization centered in Vernal, Utah), would like to express our strong support for the Action Alternative as described in the "Operation of Flaming Gorge Dam DEIS".

As we understand the document, in most years, (about 9 out of 10), the high flows will not differ much from the current flows we experience. These other 9 years, the Green will not be very different from what we experience now. What will be the benefit of that 10th wet year? Species that have evolved in the pre-dam environment, will experience better conditions. Wildlife generally will benefit (and all those people who enjoy a healthy river ecosystem).

We believe the 4 endangered fish are currently declining, and that this action will help their recovery. But the fish are only "flagship species" for all of the species present in the river corridor. Such occasional high water conditions are also when boxelders and cottonwoods establish on high enough ground to be relatively safe for a long, reproductive life-span. Cottonwood and boxelder gallery floodplain forests are a vanishing habitat type in Utah and throughout the West, and one that is important to deer, beaver, migrating birds, bald eagles, and (not least importantly) humans. Beaches and sediment bars are also built up as the fine sediments that have sifted down into the main channel, are mobilized and re-deposited on the banks.

The exotic plant big whitetop disperses in such high-water events, and this is a legitimate concern. But not an overarching concern, since the weed is already established up and down the river corridor, and we're not even sure how much new habitat they would be able to colonize, that they aren't already present on. Additionally, whitetop does not compete well with alfalfa so it is primarily a problem with grazing land. There are effective aggressive grazing operations to deal with white top infestations (heavy early grazing by sheep).

The economics of recreation on the river is an important point. People come to Vernal to float the stretches of river that will be impacted by the Action Alternative. On any given day during boating season, hundreds of paying customers, tourists eager to experience the Old West, are scattered up and down the 400 mile stretch of Green River, that stretches from Flaming Gorge dam to the confluence with the Colorado River in Canyonlands National Park. The beaches, cottonwood groves, and wildlife that the Action Alternative will encourage, are part of the allure of the Green River Canyons.

The most serious charge concerns increasing the risk of West Nile virus. In short, we don't think the main issue that determines how an entire, 400 mile-long river is managed should be mosquito control. We do agree that WNV is a serious concern, but should this concern dictate how the entire Green River ecosystem is managed?

Our point is, mosquito management is only one consideration when deciding how to manage a river, but it takes its place alongside water delivery, wildlife management, and a host of other considerations.

Thank you for the opportunity to comment.

Uintah Mountain Club Board of Directors

Tom Elder

Lorna Condon

Chad Hamblin

Mickey Allen

3. UTAH MOUNTAIN CLUB

3a

Thank you for your comments.

From: "Water Consult" <h2orus@WaterConsult.com>
To: <fgeis@uc.usbr.gov>
Date: Mon, Nov 15, 2004 4:13 PM
Subject: Comments on Draft Flaming Gorge Environmental Impact Statement

Water Consult Engineering and Planning Consultants
Water Consult Engineering and Planning Consultants

535 N. Garfield Avenue, Loveland, Colorado 80537
E:mail: h2orus@waterconsult.com

Phone: 970-667-8690 FAX: 970-667-8692

November 15, 2004

Mr. Peter Crookston
Flaming Gorge Environmental Impact Statement Manager
Bureau of Reclamation
Provo Area Office
302 E. 1860 South
Provo UT 84606-7317

SUBJECT: Comments on Draft Flaming Gorge Environmental Impact Statement

Dear Mr. Crookston:

On behalf of the Upper Basin Water Users participating in the Upper Colorado River Endangered Fish Recovery Program, I wish to offer the following comments on the draft Flaming Gorge EIS:

- 4a**
1. The draft EIS emphasizes meeting the flow recommendations (Muth, et al, September 2000). The flow recommendations represent the best available information as of September 2000. The EIS overly emphasizes meeting the flow recommendations, rather than implementing an adaptive management process, which was strongly recommended in the flow recommendations:

4b "Although it is beyond the scope of this report to provide a detailed description of research and monitoring needs, we suggest that the collection of additional data on endangered fishes and their habitats focus on the evaluation and possible modification of our recommendations by following an adaptive management process . . ." (p.5-39)

4c 2. New information has been developed and was not available at the time the *flow recommendations* were completed. This includes the report by Valdez and Nelson (April 2004) regarding management of flooded bottomlands in the Green River. This report points out the importance of depression of bottomlands, rather than terrace bottomlands. A recent draft report by Hayes, et al (2004) shows that as many depression bottomlands can be flooded at 13,000 cfs as can be flooded at 18,000 cfs. Had this information been available in 2000, it is likely the flow recommendations would not be written as they are.

4d 3. The final EIS and the record of decision both need to recognize these recent reports and findings, and emphasize the need for consideration of this information in an adaptive management process that is implemented as part of implementation of the flow recommendations. Furthermore, the final EIS and record of decision also need to include a specific time period for review of the effectiveness of the flow recommendations in achieving goals, in consideration of the information and the results of a trial modification of the flow recommendations during the adaptive management process over the next few years.

4e The flow recommendations developed by the Recovery Program for the last several years represent a "first cut". These recommendations need to be tested for their effectiveness, modified based on the information gained, and revised as new information becomes available. The Recovery Program has adopted this approach, which needs to be included in the EIS and in the record of decision.

If you have any questions regarding these comments, please contact me at your convenience.

Sincerely,

Tom Pitts

Upper Basin Water Users Representative,

Recovery Implementation Program for

Endangered Fish Species in the Upper Colorado

River Basin

(1802-30-03-03)

4. WATER CONSULT ENGINEERING AND PLANNING CONSULTANTS

4a and 4b

The proposed action is to implement the 2000 Flow and Temperature Recommendations, therefore their emphasis in the document is appropriate. The use of adaptive management to implement the proposed action is described in section 4.20 of the EIS.

4c

The new information referenced in the comments is discussed in section 4.19.5 of the EIS. See also response to the National Park Service 3b-3e.

4d

Comment noted.

4e

Comment noted.

Utah Waters

*Improving communication and expertise
on water issues among Utah outdoor groups.....
United advocacy in reforming water law and policy
for the protection of wildlife and sustainable ecosystems*

November 15, 2004

Mr. Peter Crookston
Flaming Gorge Environmental Impact Statement Manager
Bureau of Reclamation, Provo Area Office
302 East 1860 South
Provo, UT. 84606-7317

SENT VIA FAX

Dear Mr. Crookston,

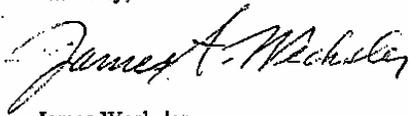
Utah Waters is conservation group dedicated to protecting the state of Utah's natural water resources through public advocacy and education. In accordance with that mission, we are pleased to provide the following brief comments on the draft EIS on the "Operation of Flaming Gorge Dam." Generally speaking, we think the draft offers a great deal of useful information and quality analysis; however, we have several major criticisms, which are the focus of our comments.

- 5a** Our first objection relates to the lack of alternatives presented in the draft EIS. Although NEPA regulations clearly state that an EIS must analyze all "reasonable" alternatives, your draft evaluates only the Proposed Action and the No Action alternative. We note that in Section 2.2 you have made an attempt to explain this dramatic departure from standard NEPA practice; however, we find the explanation unconvincing. Furthermore, since the No Action Alternative, which is to continue current practice, has already been shown to be inadequate to meet the needs addressed by the DEIS, there is only one plan, and no alternatives, offered for public consideration. We are aware that other conservation groups have already suggested alternatives that should be analyzed in the document, including an alternative that maintains steady flows during daylight hours in support of a quality fishery and for the safety of the fishermen. At a minimum this alternative should be evaluated, and arguably others as well. Not only would this make the draft EIS more useful as guide for policymakers and the public, it would also help to insulate the EIS against potential legal challenges. As you know, the adequacy of alternatives is one of the more common issues in the arena of NEPA litigation.
- 5b** A second objection we have is that the document does not contain "significance criteria". Again, this appears to be a departure from standard NEPA practice which undermines the strength of the analysis. Given that a NEPA document must define "significant impacts to the human environment", it appears impossible to draw meaningful conclusions unless 'significance' is first defined. We are aware that 'significance criteria' can be among the most subjective and controversial aspects of a NEPA document, but we don't think that relieves the authors of an EIS of the burden of making an honest attempt at offering such criteria. It is our opinion that they should be provided and integrated into the analysis in the usual manner.

We appreciate your attention to our concerns and look forward to additional dialogue on this important undertaking.

Comment Letter of Flaming Gorge Draft EIS, November 15, 2004

Sincerely,

A handwritten signature in cursive script that reads "James A. Wechsler".

James Wechsler
Assistant Coordinator, Utah Waters
2480 E. Fisher Lane
Salt Lake City, UT 84109
801-583-2090

5. UTAH WATERS

5a

Reclamation acknowledges that a full range of reasonable alternatives is desirable. However, despite considerable effort to develop additional alternatives that meet the purpose and need of the EIS, additional viable action alternatives could not be identified. Analyzing the No Action Alternative in the EIS is required by CEQ and NEPA regulations. Please see section 2.2 of the EIS. The EIS uses the best available information as called for by the CEQ regulations implementing NEPA.

5b

The criteria for determining significance are integrated into each resource analysis and discussion, and Reclamation believes that the methodologies and conclusions are sufficiently clear. The resource analysis is based on the issues and indicators described in section 1.8.3 of the EIS.

From: "Bart Miller" <bmill@westernresources.org>
To: <fgeis@uc.usbr.gov>
Date: Mon, Nov 15, 2004 5:27 PM
Subject: Comments on Flaming Gorge Draft EIS

To Peter Crookston:

Please accept the attached comments in the Draft EIS for re-operation of Flaming Gorge.

They were generated by Western Resource Advocates and The Nature Conservancy and also endorsed by the following organizations:

- * American Rivers,
- * Colorado Environmental Coalition,
- * San Juan Citizens' Alliance, and
- * Sierra Club's Colorado River Task Force.

I have also placed a hard copy of these comments in today's mail.

Please feel free to call with any questions.

Bart Miller
Water Program Director
Western Resource Advocates
Advancing Solutions for the Western Environment
2260 Baseline Road, Suite 200
Boulder, CO 80302
P: 303-444-1188 x.219
F: 303-786-8054
bmill@westernresources.org
www.westernresourceadvocates.org

This electronic message transmission contains information which may be confidential or privileged. The information is intended to be for the use of the individual or entity named above. If you are not the intended recipient, be aware that any disclosure, copying, distribution or use of the contents of this information is prohibited.

**COMMENTS OF
WESTERN RESOURCE ADVOCATES, THE NATURE CONSERVANCY, along
with AMERICAN RIVERS, COLORADO ENVIRONMENTAL COALITION,
SAN JUAN CITIZENS' ALLIANCE, and SIERRA CLUB (COLORADO RIVER
TASK FORCE)
ON
OPERATION OF FLAMING GORGE DAM
DRAFT ENVIRONMENTAL IMPACT STATEMENT
NOVEMBER 15, 2004**

I. INTRODUCTION

We appreciate the opportunity to comment on the Draft Environmental Impact Statement (DEIS) for the re-operation of the Flaming Gorge Dam and Reservoir (Flaming Gorge) to benefit endangered fish in the Green and Colorado Rivers. The following comments were generated by The Nature Conservancy and Western Resource Advocates and their long-time representatives to the Upper Colorado River Recovery Program. Both of these organizations have been committed for many years to working collaboratively on the operation of Flaming Gorge and the recovery of endangered fish species through the Recovery Implementation Program for the Upper Colorado River Basin. These comments are also endorsed by each of the organizations noted above.

In general, we support the fundamental finding of the DEIS and its technical appendix, i.e., that of the two options presented, the Action Alternative is far better able to assist in the long-term recovery of endangered fish in the Green and Colorado rivers. We are encouraged that the DEIS concludes that implementing the U.S. Fish and Wildlife Service flow recommendations (i.e., the Action Alternative) can be achieved while at the same time meeting the other authorized purposes of Flaming Gorge. Going forward, the most critical issues will be how to quickly and effectively implement the Action Alternative to achieve the best potential result for the endangered fish.

6a The DEIS sometimes implies, however, that meeting the temperature and flow recommendations through the Action Alternative is separate and distinct from other authorized purposes of Flaming Gorge. See, e.g., at pp. S-2, S-23 (sec. S.13.3); DEIS at pp. 1, 31 (sec. 2.5.3). Properly framed, however, and as correctly noted elsewhere in the DEIS, the authorized purposes of Flaming Gorge Dam and Reservoir and other applicable federal law expressly include improving and enhancing conditions for fish and wildlife. S-3; DEIS at 3-4 (sec. 1.4.1.1).¹ As a result, there is no conflict in authorization between implementing the flow recommendation and meeting the other project purposes

¹ See CRSPA, 43 U.S.C. § 620g (Secretary is to maintain CRSP projects to “mitigate the losses of, and improve conditions for, the propagation of fish and wildlife”); Colorado River Basin Project Act, 43 U.S.C. § 1501 (amending CRSP purposes to include “improving conditions for fish and wildlife”); Federal Water Project Recreation Act, 16 U.S.C. § 4601-12 (requiring Bureau to give full consideration to ways to enhance fish and wildlife); Fish and Wildlife Coordination Act, 16 U.S.C. § 661 (where legislative history makes clear that wildlife conservation shall receive “equal consideration” with other water project features, see S. Rep. No. 1981, 85th Cong., 2d Sess. 5 (1958)).

of Flaming Gorge Dam and Reservoir. The final EIS (FEIS) should specifically and consistently note that meeting flows for endangered fish is among the project purposes of Flaming Gorge.

- 6b Moreover, since meeting the flow recommendations is not a subordinate purpose and there is agency discretion, the needs of listed species should not be “balanced” against other purposes. Tennessee Valley Authority v. Hill, 437 U.S. 153, 185 (1978) (endangered species legislation reveals a conscious decision by Congress to give endangered species priority over the “primary missions” of federal agencies); Carson-Truckee Water Conservancy District v. Clark, 741 F.2d 257, 262 (9th Cir. 1984) (the Endangered Species Act directs the Secretary to give priority to endangered fish until such time as they no longer in need of protection). The FEIS should, therefore, clarify that Flaming Gorge operations needed to meet the flow recommendations are not balanced against discretionary operations, including hydropower production. Certainly, the impact on hydropower production should be minimized, but hydropower production cannot override operations for the purpose of meeting the flow recommendations.
- 6c Although we generally support the Action Alternative, we have some continuing concerns, first expressed in our original scoping comments on September 5, 2000 (see Attachment 1 to these comments), that are primarily related to the revision of the flow recommendations. We suggest these concerns (Section II, below) be re-considered in the context of adaptive management to revise the flow recommendations, similarly to any revision to address floodplain inundation, as committed in Section 4.19.5 of the DEIS. We are also concerned about how the implementation of the current flow recommendation will be adaptively managed (Section III, below). Finally, we offer comments about the extent to which the implementation of the current flow recommendations might offset new depletions in the Green River Basin (Section IV, below) and about a few remaining modeling issues (Section V, below). We appreciate your close consideration of all of these comments and look forward to seeing them addressed in the FEIS.

II. REVISION OF FLOW RECOMMENDATIONS

A. Base Flows

- 6d As we pointed out in our scoping comments, a comparison of pre- and post-dam average flows for the August through February base flow months showed that the recommended maximum base flows mimic post- rather than pre-dam magnitudes for the average hydrologic conditions, and that the recommended minimums for the moderately wet and wet categories depart much more significantly from pre-dam magnitudes than in the other hydrologic categories. Consequently the base flows in the DEIS for the Action Alternative are much higher than natural magnitudes for the drier average years, and for the moderately wet and wet years.

Some of these departures from natural base flow magnitudes appeared to have been driven by the selection of the hydrologic categories and not the biological data. The

Action Alternative does de-couple the selection of hydrologic categories from the run-off period, but these categories are adjusted to account for closer time hydrologic conditions indicated by the prior month, only when necessary to meet the May 1 draw down target, again without regard to any biological or natural flow indicators.

We also pointed out that there are significant differences in natural base flow magnitude between the summer/fall and winter months. One reason that the recommended base flows then diverge from natural magnitudes is simply because the base flow period is not broken into two sub-periods. Although the base flow period is now broken up into two sub-periods for the Action Alternative, this segregation only distinguishes greater or less variation of the recommended flows around significantly elevated mean flow magnitudes ($\pm 40\%$ of target flows for the summer fall months and $\pm 25\%$ for the winter months). Such variability around unnaturally elevated base flow magnitudes departs significantly from natural flow patterns, and may only allow for greater flexibility in other project operations.

6e We remain concerned that the range and categories for the magnitude of the base flow recommendation are driven by the draw down target or simply allow for greater operational flexibility around a greatly elevated mean flow magnitude during the summer/fall and winter months. We believe two basic concepts should be considered and tested: 1) that base flow period be broken in two sub-periods for flow magnitudes, and 2) that the maximum base flows for each currently recommended hydrologic category be scaled down towards the pre-dam magnitudes so that they are elevated by only 400 cfs in comparison to pre-dam average flows. The incorporation of these two basic concepts would much better mimic natural base flow magnitudes, but would still vary those magnitudes in accordance with hydrologic categories, and would still improve the river habitat as indicated by the biological data.²

B. Peak Flows

In the case of peak flows, we continue to believe that natural flow patterns could be better simulated by tracking the duration and timing of peak inflows to Flaming Gorge reservoir rather than keying off Yampa peak flow patterns, per the flow recommendations. We recognize that this operational alternative might reduce the maximum amplitude of peak flows in Reach 2, but we hypothesize that the natural combination of an earlier peak on the Yampa with a later one on the Green would more naturally extend the duration of peak flows in this reach. In our scoping comments we noted the National Park Service (NPS) found that Flaming Gorge would re-fill and natural inflow patterns could be closely mimicked if storage was limited to 10% of the unregulated daily inflows during

² See Pucherelli, *et al.* (1990), Rakowski and Schmidt (1999), Tyus and Haines (1991), and Bell *et al.* (1998). Rakowski and Schmidt did find that backwater habitat was maximized at 5,000 cfs in 1993, and at 4,200 cfs in 1994, but that the flow that maximized the habitat in 1993 produced no habitat in 1994. They did not present these flows as within an "optimum" range, however, and these flows are also outside of the recommended range of 900-3000 cfs. This report and Bell *et al.* establish that flows that optimize backwater habitat vary from year to year and that a single recommended base flow across a range of hydrologic conditions is inappropriate. A more naturally scaled range of base flows is consistent with this finding.

the run-off period from April 1 – July 31 while releases from storage during the rest of the year were limited to 22% of the daily inflows.

- 6f The DEIS failed to examine whether this basic concept might meet the flow recommendations. Instead the DEIS presents a “Modified Run of the River Alternative” under which a greater percentage of unregulated daily inflows (13%) is stored from March to July, while releases during the base flow period are only constrained by the broad ranges and rigid categories for base flow magnitudes that are quite divergent from natural patterns, as noted above. Although the DEIS dismisses this alternative because it did not achieve all of the peak flow recommendations, DEIS App. at 84, it comes close in most instances. See Table 1, DEIS App. at 71. There is only one big exception and that is meeting a peak of at least 18,600 cfs for two weeks or more. *Id.*
- 6g A more consistent run-of-run river concept that also incorporates more natural base flow patterns should be re-considered in the adaptive management process, especially if the peak flow recommendations are otherwise revised. Alternatively, a key element of this concept, such as timing peak flow releases based on Green River inflow patterns but not attempting to mimic their magnitude, should be examined in seeking to improve the peak flow recommendations.

III. IMPLEMENTATION OF CURRENT FLOW RECOMMENDATIONS

A. Elevated Late Summer Base Flows

- The DEIS reports that the average flows for the base flow months of August and September are about 200-300 cfs higher for the Action Alternative than for the No Action Alternative based on the 1992 Biological Opinion. DEIS at 135, Figure 4-6. A fundamental concern of that opinion was that the abundance and growth of young pikeminnow were negatively correlated with high, cooler late summer and fall flows. See 1992 Opinion at 15. We are concerned that the elevation of base flow magnitudes for these two months well above the maximum recommended by the 1992 Opinion could be a step backward and that urge that this expected result of the Action Alternative be carefully monitored and rigorously evaluated. The plan for tracking compliance with the recommended flow temperature regimes during this critical summer and fall base flow period should also be clearly laid out in the FEIS.
- 6h
- 6i

B. Real-Time Operations and Monitoring

We are concerned that the Flaming Gorge Model assumes some knowledge (e.g. the timing of the Yampa peak and quantity of future Green River inflows) that may allow target flows to be met in the modeling environment, and which will not be known in the real-time operational environment. It will be important to monitor the compliance with the flow recommendations in the real-time environment, which we recognize will differ from the computer-generated modeling.

- 6j We suggest that the flow recommendations for any hydrologic condition be posted on the web page for the Flaming Gorge Work Group and compared against the daily hydrology and temperatures from the gages for all three reaches. Where a flow recommendation has duration or frequency parameters, compliance with those parameters should be reported on this web page, along with the methodology for determining compliance with frequency parameters over an extending period of time. Deviations from the releases scheduled in the 24 Month Study should be reported on the web page as soon as they are requested. A summary of how the flow and temperature recommendations have been met to date should then be a standing agenda item for each meeting of the Flaming Gorge Work Group.

- The DEIS indicates that Reclamation will first consult with a Technical Work Group of biologists and hydrologists in developing operational plans to meet the flow recommendations, and would then gather information and input from the broader Flaming Gorge Work Group to refine the plan. DEIS at 31 (sec. 2.5.3). This process should provide for the written statements of the hypotheses that will be considered in the refinement of any operational plan and that will guide the collection of information or data monitoring. Reclamation should keep an administrative record of the meetings of both work groups, which should be posted on the same web page.
- 6k

C. Purpose of Technical Working Group

- 6l The DEIS makes the false distinction between the implementation of the flow recommendations and the authorized purposes for Flaming Gorge in describing the purpose of the Technical Working Group. DEIS at 31 (sec. 2.5.3). The purpose of this work group cannot be to balance the implementation of the flow recommendations with the other authorized purposes for Flaming Gorge. The DEIS already discloses how the flow recommendations will be met while minimizing the impact on discretionary operations, and this work group will be bound by the scope of the FEIS. The very important function of this work group is to offer biologic and hydrologic expertise to Reclamation on how the flow recommendations can be met from year to year without re-balancing other discretionary operations. Any re-balancing of other authorized purposes must be done by Reclamation outside the Technical Working Group and is likely to require supplemental compliance and further disclosure and analysis under NEPA and the ESA.

IV. DEPLETION COVERAGE

- 6m The DEIS seems to assume that implementation of the flow recommendations will offset all new depletions in the Green River Basin.³ The basis for this assumption, however, is

³ The DEIS makes several assertions about water depletions whose context and implications are unclear:

- “The 2000 Flow and Temperature Recommendations (Flow Recommendations) as implemented under the Action Alternative would offset the impacts of water depletions [of] these other projects” (page 6). These other projects are listed as the Upalco, Jensen, Uinta, Strawberry Aqueduct and Collection System, all units of the Central Utah Project; all other projects on the Duchesne Rive Basin; the Narrows Project on the Price River; and the Price-San Rafael Salinity Control Project.

conflicting, poorly disclosed, and never fully analyzed. See, e.g., Attachment 2 to these comments. Because this assumption is so speculative and not ever fully analyzed, the DEIS is unable to conclude that the Flow Recommendations will be met by the operation of Flaming Gorge under the Action Alternative if substantial new depletions do occur in the Green River Basin. DEIS at 241.

6n We believe the issue is much more clear-cut. Unless specific, new water depletion projects that are reasonably likely to occur can be identified, unless such new projects are also likely to offset the downward trend in existing depletions, and unless such depletions are fully and consistently incorporated into the hydrologic modeling, the FEIS should straightforwardly assume only current depletions. If significant new depletions do become reasonably foreseeable, they can be addressed as part of the adaptive management approach to Flaming Gorge operations or in separate biological opinions for specific projects or groups of projects.

V. REMAINING MODELING ISSUES

In a conference call with Reclamation staff on November 5, 2004, we had almost all of our questions about the Flaming Gorge Model answered. We wish to thank Reclamation for their efforts to clarify many of the questions we raised. However, a few modeling questions remain.

A. Letter of Review Issues

6o The authors of “Review of the Green River Model Developed for Flaming Gorge,” DEIS App. at 61-67, make several suggestions for reducing bypass flows by operating Flaming Gorge model differently from the run set described in the DEIS. They find that the mass balance rule used in the model results in a higher frequency of bypass flows than needed to meet the flow targets. They also suggest that extending the peak period in certain years and increasing the allowable down-ramping rate would reduce bypasses. We understand from our November 5th conference call that Reclamation has not made any of the suggested changes to the model, but we think that in the FEIS it should at least offer its reaction to these proposed changes. In such a response Reclamation could include its view on whether any of the suggestions imply a level of foresight that real time operators will not have. We also believe it is critical that these changes should be adopted only if it is proven they will have, at worst, a neutral effect on the native fish.

-
- “Historic and reasonably foreseeable future” depletions for all three reaches of the Green River to which the Flow Recommendations apply are listed in Table 4-31 (page 233).
 - “The Flaming Gorge Model assumed that water development in the Upper Green River and Yampa River Basin would continue at the rate projected by the Upper Colorado Basin Commission” (page 241).

B. Hourly Ramping Rates

In the “Power System Analysis Technical Appendix,” DEIS App. at 115-202), the application of the “single hump per day” rule appears to mitigate some of the impacts of hourly fluctuations in hydropower releases. Although this rule has not been formalized, relaxing it will entail supplemental NEPA and ESA analysis.

6p With the application of the single hump per day rule, however, it is not clear whether the
hourly ramping rate of 800 cfs per hour assumed for the hydropower analysis is
consistent with the recommended daily, down ramping rates that are less, e.g., 500 cfs per
6q day for the average hydrologic category. Nor it is clear whether the other daily limits
from the flow recommendations --- the change in daily flows at Jensen may not exceed
3%, may not exceed 25% of the monthly mean during the summer and fall, and may not
6r exceed 40% during the winter, were incorporated into the hydropower analysis. See
Table 3.2, DEIS App. at 118. Finally, it is not clear whether the biological impacts of
the hourly fluctuations have been adequately addressed. As indicated by Figures 8-3
through 8-7 of the hydropower analysis, see DEIS App. at 187-92, and even after being
dampened by the recommendation that the flow stage not exceed 0.1 meter per day, the
6s fluctuation in flows at Jensen still range from about 250 to 800 cfs per day. The FEIS
should directly address the biological implications of these hourly fluctuations.

VI. CONCLUSION

We again express our appreciation for the tremendous amount of effort that has been expended in generating the DEIS and for the opportunity to submit these comments. Please feel free to contact representatives of The Nature Conservancy or Western Resource Advocates with further questions.

ATTACHMENT 1: SCOPING COMMENTS SUBMITTED IN 2000.

Via Email (kschwartz@uc.usbr.gov), Hard Color Copy to Follow

September 5, 2000

Mr. Kerry Schwartz
Environmental Protection Specialist
U.S. Bureau of Reclamation
Provo Area Office, 302 East 1860 South
Provo, Utah 84606-7317

Re: Comments on the Scoping of Operational Alternatives to Meet the Endangered Fish Flow Recommendations Below Flaming Gorge Dam

Dear Mr. Schwartz:

These comments by Environmental Defense offer several straightforward illustrations of one basic principle: given the broad range of the flow recommendations in the January 2000 draft report (draft flow report) and the substantial scientific uncertainty about many of their features, operational alternatives that both meet the flow recommendations and better mimic natural flow pattern should be preferred.

Base flows. Figure 1 compares the pre- and post-dam average flows for the August-February base flow period (based on Table 3.8 of the draft flow report) with the recommended minimum and maximum base flows for each hydrologic category in Reach 2. This figure shows that the recommended maximum base flows mimic post- rather than pre-dam magnitudes for the average hydrologic conditions, and that the recommended minimums for the moderately wet and wet categories depart much more significantly from pre-dam magnitudes than in the other hydrologic categories. Figures 2A-2G compare the unregulated daily flows for Reach 2 with the recommended minimum and maximum base flows for the operational alternative illustrated in the draft flow report (flow report alternative), which includes three different operational scenarios for the average hydrologic category. These figures show that the base flows in the flow report alternative are much higher than natural magnitudes for the drier average years (1991 and 1964), and for the moderately wet (1980) and wet (1983) years, than for the dry (1992), moderately dry (1981) and wettest average (1974) years. The most significant departures from the natural pattern are in the average and wet hydrologic categories.

Some of these departures from natural base flow magnitudes appear to be driven by the selection of the hydrologic categories and not the biological data. A comparison of Figures 3 and 4 (based on Table 3.8 of the draft flow report) also suggests that there are important differences in natural base flow amplitudes between the summer and winter months of the base flow period. These differences create greater departures in the

recommended base flows simply because the base flow period to which the recommendations apply is not broken into two sub-periods.

There are at least four operational alternatives for meeting the recommended range of base flows (900-3000 cfs) that better mimic natural patterns than the flow report alternative:

A. The maximum base flows for each currently recommended hydrologic category could be scaled down towards the pre-dam magnitudes as shown in Figure 5. This scaling simply makes the operational concession that the maximum base flows for each hydrologic category can be elevated by 400 cfs in comparison to pre-dam average flows. This operational alternative better mimics natural base flow magnitudes, but still varies those magnitudes in accordance with hydrologic categories, and still improves the habitat as indicated by the biological data.⁴ The operational concession of elevating pre-dam base flow magnitudes by 400 cfs is no less arbitrary than simply partitioning the 900-3000 cfs recommended range of base flows in accordance with the flow exceedance percentages for each hydrologic category.

B. The 30-70% flow exceedance width of the recommended average hydrologic category is much wider than the others and its exceptional width elevates the maximum (2400 cfs) and depresses the minimum (1500 cfs) base flows recommended for this category. It is no less arbitrary and entirely within the recommended range of base flows to partition the hydrologic categories equally, as shown in Figure 6. More natural magnitudes for the drier average years could be achieved simply by breaking the recommended average hydrologic category in two (30-50% and 50-70%), as was done for the Aspinal flow recommendations.

C. More natural base flow magnitudes could also be achieved by simply splitting the base flow period into summer and winter sub-periods as an operational alternative, and assigning more naturally scaled magnitudes to the generally lower winter period as compared with the recommended range of base flows in Figures 7 and 8.

D. Within any recommended base flow hydrologic category, the actual base flow could be based on the magnitude of unregulated inflows to Flaming Gorge. When inflows were low, the low end of the recommended hydrologic category would be the operational alternative, while operations at the high end of the hydrologic category would be triggered by high inflows. Such an operational alternative better mimics natural magnitudes than the flow report alternative in 1991, 1964, 1980, and 1983, as shown in Figures 2A-2G.

⁴ See Pucherelli, *et. al.* (1990), Rakowski and Schmidt (1999), Tyus and Haines (1991), and Bell *et. al.* (1998). Rakowski and Schmidt did find that backwater habitat was maximized at 5,000 cfs in 1993, and at 4,200 cfs in 1994, but that the flow that maximized the habitat in 1993 produced no habitat in 1994. They did not present these flows as within an "optimum" range, however, and these flows are also outside of the recommended range of 900-3000 cfs. This report and Bell *et. al.* establish that flows that optimize backwater habitat vary from year to year and that a single recommended base flow across a range of hydrologic conditions is inappropriate. The more naturally scaled range of base flows is consistent with this finding.

One feature of all base flow alternatives that should be specified operationally is how the hydrologic categories will be adjusted if the run-off volumes do not turn out as predicted. The hydrologic categories for base flow recommendations should be determined based on actual run-off volumes, and adjusted in response to actual base flow volumes mid-way through the base flow period.

Peak Flow Duration and Timing. Natural peak flow duration and timing could be better mimicked within the peak flow recommendations by tracking the duration and timing of peak inflows to Flaming Gorge reservoir instead of keying off of Yampa peak flow patterns. This operational alternative may reduce the maximum amplitude of peak flows in Reach 2, but this potential trade-off could still provide a net benefit to the endangered fishes.

Inflow Driven Alternative. The greatest extent to which natural flow patterns can be mimicked, while still operating to store water and fill Flaming Gorge Reservoir over time, should be considered as an operational alternative that also can meet the flow recommendations especially when the base flow recommendations are more naturally scaled or partitioned. The U.S. National Park Service (NPS) examined a number of operational scenarios that were based on a simple set of percentages for storing inflows and making releases and that would result in the filling of the reservoir at least once over the 1963-1996 period of record, assuming the same system loss that occurred over that period. The NPS found that natural flow patterns could best be mimicked, while still operating to fill the reservoir, if storage was limited to 10% of the unregulated daily inflows to Flaming Gorge during the run-off period from April 1 – July 31 while releases from storage during the rest of the year were limited to 22% of the daily inflows.

In Figures 2A-2G and 9A-9G, this operational alternative is compared with the flow report alternative and unregulated flows in Reaches 1 and 2. The reduction in the departure from natural patterns is most dramatic in Reach 1, but this reduction translates directly to Reach 2, because the major flows into this reach from the Yampa River are almost completely unregulated. This inflow driven alternative could be further constrained to fill the reservoir more frequently, on a different pattern, or to produce more hydropower or other benefits, but could be considered as the minimally constrained operational alternative and used to *illustrate the impacts of further operational constraints that limit the restoration of more natural flow patterns.*

Respectfully,

Dan Luecke, Director
Rocky Mountain Office for Environmental Defense

Attachments: Figures 1 to 9

[Attachments OMITTED from November 15, 2004, comments but available upon request]

ATTACHMENT 2: DEPLETION ASSUMPTIONS

The programmatic biological opinion for the Duchesne River Basin supercedes the earlier referenced biological opinions for the Central Utah Project and directly addressed depletions within that basin, not on the Green River. The hydrologic modeling for the Action Alternative for operating Flaming Gorge appears only to consider new depletions above Flaming Gorge, and possibly the Yampa River, but not on other tributaries. The DEIS therefore provides no disclosure or analysis of the offset of future depletions on the White, Duchesne, Price, or San Rafael rivers.

The DEIS also does not provide any disclosure or specific analysis that the Action Alternative for operating Flaming Gorge will offset the set of depletions listed in Table 3-1, DEIS at 233, because these depletions do not appear to be incorporated into the hydrologic modeling analysis. Moreover, some of the assumptions about depletions in that table are questionable:

- One reason for rejecting the Modified Run of River Alternative, was that it did not meet the Flow Recommendation if current depletions above Flaming Gorge were assumed to be about 450,000 acre feet. Table 3-1, however, indicates that current depletions above Flaming Gorge are only about 372,331 acre feet.
- The Modified Run of River Alternative was also rejected because depletions were assumed to increase in the future beyond 450,000 acre feet. The depletion schedule from the Upper Colorado River Basin Commission shows an increase in depletions in Wyoming of 263,000 acre feet, all which would occur above Flaming Gorge except for a small percentage on the Little Snake. Table 3-1, however, indicates that reasonably foreseeable future depletions above Flaming Gorge are only 42,100 acre feet. (The footnoting for Table 3-1 suggests that this latter depletion figure is taken from the 1992 biological opinion for the operation of Flaming Gorge, but that figure is nowhere to found in that opinion or its depletion appendix.)
- Table 3-1 implies that 53,562 acre feet of new depletions are reasonably foreseeable on the Yampa River Basin, including the Little Snake River subbasin in both Colorado and Wyoming. That figure is the amount of new depletions that the U.S. Fish and Wildlife is proposing to find will not jeopardize endangered fish without any certainty of a positive endangered fish population response. But there is hardly any basis for assuming that 53,562 acre feet of new depletions is reasonably foreseeable to occur in the Yampa River Basin any time soon.
- Table 3-1 asserts that the total current depletions for Reach 3 and everything upstream is 1,583,960 acre feet, based on the depletion schedule from the 1992 biological opinion for the operation of Flaming Gorge. The estimate of such depletions for the year 2000 from the Consumptive Uses and Losses Report by the U.S. Bureau of Reclamation, however, is substantially less at 1,275,900 acre feet, suggesting a decrease in total depletions for the Green River Basin. That report indicates a downward trend in total depletions since the year 1995.

The assumption for the hydrologic modeling in the DEIS that future depletions for the Upper Green River Basin and the Yampa Basin will increase at the rate projected by the Upper Colorado River Basin Commission is even more questionable. As noted above, the increase assumed for Wyoming is 263,000 acre feet. The increase for all of Colorado is assumed to be 393,000 acre feet, for Utah the increase is assumed to be 369,000 acre feet, and for the entire Upper Colorado River Basin, it assumed to be 1,194,000 million acre feet.

The DEIS fails to disclose anything about how these exceedingly expansive state-by-state assumptions made by the Upper Colorado Basin Commission are broken down into specific projects depleting any of the three reaches of the Green River within the scope the hydrologic modeling or how these very substantial future depletions are distributed within any year or over all the years in the period of record for that modeling. This lack of disclosure and the recent downtrend in depletions reported by the U.S. Bureau of Reclamation compound the speculative nature of this assumption about future depletions in the Green River Basin.

6. WESTERN RESOURCE ADVOCATES AND THE NATURE CONSERVANCY

6a

The proposed action is not intended to be portrayed as an authorized purpose. Rather, the proposed action is implementation of the 2000 Flow and Temperature Recommendations while maintaining the authorized purposes of the Flaming Gorge Unit of the CRSP. Implementation of the 2000 Flow and Temperature Recommendations to the extent possible is part of Reclamation's responsibility to comply with the Endangered Species Act. It is an action which originated with the Reasonable and Prudent Alternative of the jeopardy 1992 Biological Opinion.

6b

Reclamation recognizes its responsibility to comply with all applicable Federal laws and regulations, including the Endangered Species Act. The proposed action is consistent with that responsibility.

6c

These scoping comments were considered in preparing the draft EIS.

6d

The primary purpose and need of this EIS process is to assess operation regimes for Flaming Gorge Dam that achieve the 2000 Flow and Temperature Recommendations while continuing and maintaining the authorized purposes of Flaming Gorge Dam. Revision of the flow recommendations is not a part of the proposed action. Reclamation recognizes that the base flow ranges recommended in the 2000 Flow and Temperature Recommendations are higher than pre-dam levels.

6e

Comment noted.

6f

The "Modified Run of the River Alternative" that was modeled did achieve many of the flow objectives of the 2000 Flow and Temperature Recommendations; however, it did not achieve all of the flow objectives. It did not meet the purpose and need for this EIS.

6g

Comment noted.

6h

Seasonal base flows are described as "mean base flows," implying that some flexibility is afforded in determining what the base flow will be from year to year during August and September. Additionally, those mean base flows may vary up to +/- 40%, making the differences between the No Action and Action Alternatives for the August and September periods minimal. Uncertainties associated with operating Flaming Gorge Dam under the Action Alternative would be monitored and addressed through an adaptive management process as explained in section 4.20 of the EIS. Therefore, adjustments to seasonal flows can be made overtime within the limits set by the 2000 Flow and Temperature Recommendations and based on sound accumulated information. Based on information gathered since the 1992 Biological Opinion, slightly higher flows during the August and September period may actually be necessary to maintain large, deep, and stable backwater habitats for young-of-the-year and age-1 pikeminnow.

6i, 6j, and 6K

Comment noted. Reclamation intends to maintain an administrative record that will be available to the public. Reclamation is considering use of a web page and other means to keep the public informed on implementation of the proposed action.

6l

Section 2.5.3 of the EIS has been revised to clarify.

6m

Section 1.4.3 of the EIS, referenced by the commenter, is not an assumption but a statement, in the context of compliance with the Endangered Species Act, that the U.S. Fish and Wildlife Service determined the re-operation of Flaming Gorge Dam to be a Reasonable and Prudent Alternative for a number of jeopardy biological opinions.

The Flaming Gorge Model included the best available data regarding future depletions in Wyoming, Colorado and Utah as provided by the Upper Colorado River Commission (memo dated December 23, 1999). The results of the Flaming Gorge Model indicated that the 2000 Flow and Temperature Recommendations for Reaches 1 and 2 could be met with the projected increases in future depletions. However, there is some uncertainty regarding Reach 3.

6n

Section 4.19.1 referenced by the commenter states that the hydrology model (Flaming Gorge Model) used in the EIS assumes that water development in the Upper Green and Yampa River Basins will continue at the rate projected by the Upper Colorado River Commission. The inclusion of reasonably foreseeable conditions in the analysis of the potential effects of the proposed action is essential to the analysis in compliance with NEPA. In the context of hydrology uncertainties, which is the topic of discussion in section 4.19.1, it is appropriate to disclose that future water development could reasonably be expected to affect how, or whether, the 2000 Flow and Temperature Recommendations are met.

6o

Reclamation believes that this issue is adequately addressed in section 2.4 of the EIS.

6p

The ramp rates that apply to the Action and No Action Alternatives are based on average daily flows and apply to seasonal operations between the spring, baseflow, and transitional periods (see section 2.5.3 in the EIS). That is, a ramp rate of 500 cfs actually means that the daily average release should not change by more than 500 cfs from one day to the next. In the hydropower analysis, hourly ramping rates of 800 cfs are used to evaluate power system flexibility within the daily flow change restriction of 500 cfs. Hourly ramping rates limited changes of flows through the powerplant within the daily flow constraints.

6q

The other potential daily flow changes (3%, 25%, and 40% in tables 2.6, 2.7, 2.8, and 2.9 of the EIS) that are a consideration in operations of the releases from the reservoir within the Action Alternative were not included in the modeling (Flaming Gorge Model). Since the hydrology team did not consider these potential operational changes, the hydropower team also did not consider these potential changes.

6r and 6s

Text was added to section 4.7.3.1.1.2 in the EIS to clarify. The extent of the aquatic food base in Reach 2 should increase as minimum discharge increases and daily fluctuations decrease under the Action Alternative. Higher base flows and decreased daily flow fluctuations in average and wetter years should lessen the extent of dewatering (exposure) and increase the extent of habitat available for food base organisms.

The attachment to this letter, scoping comments submitted in 2000, was considered during the preparation of the draft EIS.

BUSINESSES

- 1. Eagle Outdoors Sports**
- 2. Franson Noble Engineering**
- 3. Green River Outfitters**
- 4. Green River Outfitter and Guides Association (GROGA)**
- 5. Old Moe Guide Service**
- 6. Thunder Ranch, LLC.**
- 7. Burnell Slaugh Ranch**
- 8. Trout Bum 2**
- 9. Trout Creek Flies**
- 10. Western Rivers Flyfisher**

EAGLE OUTDOORS SPORTS

1507 S. HAIGHT CREEK, KAYESVILLE, UT. 84037

Mr. Peter Crookston
Flaming Gorge Environmental Impact Statement Manager
PRO 774 Bureau of Reclamation
Provo Area Office
302 East, 1860 South
Provo, UT. 84606-7317

November 15, 2004

Dear Mr. Crookston: We would like to submit our comments on the Draft *Operation of Flaming Dam Draft Environmental Impact Statement* and its *Technical Appendices*.

As a member of GROGA we fully support the comments submitted by them concerning this DEIS.

As a business, Eagle Outdoor Sports has been a Green River guide and outfitter service full time since 1987 and hold a U. S. Forest Service/BLM permit to provide fishing guided, fishing walk wading, scenic float rafting trips. Our customers include guided fishermen, boy scout groups and church groups. We provide many multi-day overnight excursions that include camping on the river. Our business is totally dependent on the recreational dollars generated on the Green River.

Comment 1.

We are very disappointed in the treatment of the economical impacts of this EIS as they pertain to us. A more localized analysis is appropriate in light that the largest economical impacts center around Reach 1 of the Green River and the Flaming Gorge Reservoir. To do an analysis over a 3 county area does not show the real impacts of the recommendations contained within this EIS. We would like to see this EIS fully address the impacts to our businesses. We feel that it has not.

- 1a Question 1. Is it not possible to prepare an adequate economic analysis surrounding the EIS recommendations as they pertain to our businesses?

Comment 2.

- While the GROGA letter states many of our concerns, we must reinforce the points that the ramping up process, flows exceeding 4600 cfs and daily fluctuating flow operations impact our businesses negatively by reducing the quality of the recreational experience for fishermen and other river users that use our services and buy our products. In addition we have safety concerns for fishermen and other water based recreations while these flows are being performed.
- 1b
1c

Comment 3.

- Furthermore, we support GROGA's position that power generation takes a lower priority when compared to the other "authorized purposes" of the Flaming Gorge dam. Operational considerations should be given to recreation and fishing in particular by reducing the impacts of daily fluctuations and their effects on these activities. Daily fluctuations performed during fishing daylight hours are an erosion of local economics one day after another with their daily negative
- 1d
1e

impacts.

1f Comment 4.

We support the recommendations for a 55 degree F release temperature during the dry and moderately dry years, maintaining adequate river temperatures for trout at the Colorado/Utah state line.

Comment 5.

- 1g We strongly support BOR recommendations of flow fluctuations limitations with the following exception. Power generation in the form of fluctuating flows should not be at the expense of other authorized purposes, "and for the generation of hydroelectric power, as an incident of the foregoing purposes" (Vol. 1, pg 3 and 4, 1.4.1.1).

Comment 6.

- 1h We strongly support the 800 cfs ascending and descending ramp rates. We would support a formalization agreement for these ramp rates.

Comment 7.

- 1i We fully support the maintaining of the minimal flow agreement between UDWR and Reclamation for the maintenance of river flow supporting the tailwater trout fishery and furthermore request the formalization of this agreement as stated in Vol. 1, pg 5, second full (italicized) paragraph.

Comment 8.

- 1j Except in emergencies, flows should not exceed the capacity of the power plant of 4600 cfs, bypass flows should only occur as a last resort, and the frequency of such events should be kept at an absolute minimum.

Comment 9.

- 1k We share GROGA's opinion that in general we found this DEIS complicated to review based on its overlapping of the treatment of subjects. So many references that seemed to contradict previous statements were made clearer only after rereading them in the context of their specialized subject. It required a lot of time spent in the effort to discover this EIS's overall direction. In light of our comments, you know that we were disappointed with the overall economic analysis. We would be happy to answer any questions you have on our comments or assist in any manner possible. We can be reached at 801-721-2677. Once again thanks for this opportunity.

Rex Mumford
Doug Smith
Dennis Breer
Eagle Outdoor Sports
1507 S. Haight Creek
Kayesville, UT. 84023

1. EAGLE OUTDOORS SPORTS

1a

To estimate regional economic impacts associated with changes in river and reservoir recreation, information was collected from surveys of recreators as to their expenditures. The expenditure information gathered via the recreator survey did not allow for county specific analyses. Based on pretests, it was determined that the survey was already complex (given the need to address visitation, valuation, and expenditure information by alternative), and any attempts to gather more detailed data by county would have significantly added to survey complexity, possibly jeopardizing survey usefulness. Attempts to allocate expenditures by county would be highly speculative. As a result, the decision was made to use the three-county model utilizing both river and reservoir expenditures and to supplement that analysis with specific commercial river guide operator survey information.

Even if we had enough detail to estimate economic impacts for Daggett County alone, the aggregated nature of the regional model would preclude estimation of impacts for individual businesses. This is because the lowest level of detail provided by the model reflects the economic sector which typically combines information across a range of somewhat similar businesses. Reclamation believes that the economic analysis in the EIS is sound and provides sufficient information to assess potential impacts.

1b

Flows above 4,600 cfs and daily fluctuations have been a normal part of dam operations for over 40 years and would continue under either the Action or No Action Alternative.

1c

Reclamation agrees that the safety of fishermen and others along the Green River is very important. There is prominent signage along the river warning fishermen of the potential for sudden fluctuations. A warning horn at the dam is also sounded before increase dam releases begin. Daytime fluctuations have been a part of operations since the dam was completed 40 years ago, and so the fluctuations are common knowledge among those who have visited the river in the past. Nevertheless, Reclamation continues as part of its management of Flaming Gorge Dam to pursue all reasonable means of providing notification to the public of river fluctuations and other public safety concerns. See response to Daggett County 1g

1d and 1g

The EIS states Reclamation's intent to balance the needs of all resources when making operational decisions under both the Action and No Action Alternatives. We appreciate your concern that power generation might have benefited at the expense of fishing and other uses. However, the analysis of the cumulative effects on hydropower generation shows that power has not been elevated above other authorized purposes and that, in fact, there have been losses to hydropower over the last 20 years. Please see section 1.4.2 for more information. The proposed action will not have a negative effect on the sport fishery, as shown in chapter 4 in the EIS.

1e

The EIS acknowledges the possibility of both positive and negative effects under differing conditions if the Action Alternative is implemented. It should be noted that the nature and timing of ramp rates, and other daily operational details, would remain substantially the same under either the Action or No Action

Alternative. The trout fishery was established 40 years ago within the context and limitations of dam operations; and over time, certain operational changes have benefited the trout fishery.

1f
Comment noted.

1h and 1i
Comment noted.

1j
Under either alternative, flows above powerplant capacity would be expected as a normal part of dam operations.

1k
Comment noted.



October 28, 2004

Mr. Peter Crookston
Flaming Gorge EIS Manager
PRO-774
Bureau of Reclamation
Provo Area Office
302 East 1860 South
Provo, Utah 84606-7317

Dear Mr. Crookston,

The purpose of this letter is to comment on the *Operation of Flaming Gorge Dam Draft Environmental Impact Statement*.

When the Ultimate Phase of the Central Utah Project was dissolved, the U.S. Bureau of Reclamation was left with a 430,910-acre-foot storage filing in the Flaming Gorge Reservoir. The Utah Division of Water Resources was given control over the water right in order to preserve the 1956 priority date. They have since segregated the water right to conservancy districts, irrigation companies, and individuals for beneficial use. Please refer to the enclosed table.

Some of the entities who were allocated a portion of the Flaming Gorge water right are our clients. As they have planned to implement their Flaming Gorge water rights, they have inquired as to how the flow recommendations for the endangered fish would affect their projects. We have, therefore, been anxious to review the Flaming Gorge DEIS with respect to this issue.

To our disappointment, Section 1.8 of the Flaming Gorge DEIS, quoted below, dismisses the water rights issue without much explanation.

1.8 Scope of Analysis for This Environmental Impact Statement

1.8.4 Issues Raised During Scoping Which Are Not Analyzed in Further Detail in This EIS

During the scoping process for this EIS, concerns were expressed regarding how the Proposed Action might affect water rights. A review of the hydrology modeling of both alternatives confirms that neither operational alternative would affect water rights within the context of the authorized purposes of Flaming Gorge Dam.

- 2a To me this seems like a token statement to appease existing downstream users that their rights will be protected. However, the water rights with which we are concerned have not yet been put to beneficial use and are not Green River rights, but are actually part of a Flaming Gorge storage right.



- In addition, Section 1.8 mentions hydrology modeling and that the modeling showed that water rights would not be affected. The hydrology modeling appendix, however, did not explain how existing or future rights were taken into consideration. Were the Flaming Gorge rights considered in the model? If so, how?
- 2b

The only other section in the DEIS from which we could imply anything about future water development was Section 4.16 as quoted below.

4.16 Scope of Analysis for This Environmental Impact Statement

4.16.1 Water Resources and Hydrology

4.16.1.1 Water Consumption

The 2000 Flow and Temperature Recommendations for Reaches 1, 2, and 3 are based on the needs of the endangered fish, and they do not account for any future change in water consumption. As consumption increases over time, it may become more difficult to achieve the 2000 Flow and Temperature Recommendations through the re-operation of Flaming Gorge Dam. Because of increasing water consumption in the tributaries of the Green River below Flaming Gorge Dam, it is anticipated that releases from Flaming Gorge Dam will have to be greater in the future than what would be required now to achieve the 2000 Flow and Temperature Recommendations under similar hydrologic conditions. Increasing release requirements would reduce the ability of Flaming Gorge Dam to store water during wet periods. During dry periods, drawdown conditions would become more severe as a result of increased release requirements to meet downstream flow recommendations.

With increased water consumption in the basin, flows in Reaches 2 and 3 during the base flow period might achieve the 2000 Flow and Temperature Recommendations at lower levels than would occur at current water consumption levels. Increased pressure on reservoir storage could cause Reclamation to target lower flows within the range of acceptable flows for Reaches 2 and 3 to reduce the impact to reservoir storage. During the transition period, releases potentially could be lower in the future than they would be now as a result of increasing water consumption.

Water consumption above Flaming Gorge Reservoir is also expected to increase, and this could reduce the inflows to Flaming Gorge Reservoir. With less water flowing into Flaming Gorge Reservoir, pressure on water storage could increase in the future.

- 2c From Section 4.16.1.1, we infer that the Flaming Gorge water rights allocated to the conservancy districts and irrigation companies can be developed without consideration for the endangered fish and the 2000 Flow Recommendations. We also infer that in the future, as water is developed out of the Green River, meeting the flow recommendations will become increasingly more difficult and may even be unfeasible.

- 2d We feel that this water rights issue should not be dismissed in the DEIS with one token statement. If water rights truly will not be affected, there should be a section explaining the reasoning behind that conclusion. Included in that section should be reference to the *Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin (RIPRAP)*, whose main objective is to ensure recovery of listed species while providing for new

water development. This is accomplished through a one-time per acre-foot depletion charge for each water project.

We appreciate this opportunity to comment on the DEIS and look forward to the final document.

Sincerely,

A handwritten signature in black ink that reads "Jay W. Franson". The signature is written in a cursive style with a large, stylized initial "J".

Jay W. Franson, P.E.

President

SUMMARY OF FLAMING GORGE WATER RIGHT APPLICATIONS						
No.	Assignee	Intended Use	Place of Use	Board Award AF		Balance AF Depletion
				Diversion	Depletion	
						158,890
1	Uintah WCD	Agricultural	19 mi south of Vernal	8,400	4,745	154,145
2	Eastside High Ditch Irr Co	Agricultural	5 mi north of Green River	2,900	1,769	152,376
3	Dead Horse Point Water Co	Municipal	Dead Horse Pt State Park	50	26	152,350
4	Trust Lands	Municipal	Resort at Buifrog Marina	600	313	152,037
5	Western Water Assoc	Industrial	40 mi NE of Moab	120	12	152,025
6	Sheffer, Brent D	Agricultural	3 mi SW of Jensen	120	68	151,957
7	K Ranch Water Co	Agricultural	5 mi east of Jensen	2,400	1,356	150,601
8	Green River City	Municipal	Green River City	2,000	899	149,702
9	Wilson Arch Water & Sewer Co	Municipal	25 mi south of Moab	100	56	149,646
10	Red Cut Water Co	Agricultural	1 mi east of Escalante	2,000	1,160	148,486
11	Cannonville Town	Municipal	Cannonville Town	724	326	148,160
14	Henrieville Town	Municipal	Henrieville Town	930	419	147,741
15	Kane County W C D	Municipal	Kanab vicinity	6,000	4,000	143,741
17	Tropic Town	Municipal	City of Tropic	1,100	616	143,125
18	Boulder Farmstead Water Co	Municipal	Boulder Town	300	132	142,993
23	Garfield County School District	Municipal	Escalante	50	29	142,964
24	Washington County W C D	Municipal	St George vicinity	69,000	69,000	73,964
29	Escalante City	Municipal	20 mi. north of Escalante	550	391	73,573
31	Grand County W C D	Municipal	SE of Moab in Spanish Valley	652	339	73,234
35	Duchesne County W C D	Municipal	Central & Eastern Duchesne Co.	3,200	2,300	70,934
39	Daggett County	Municipal	12 mi SE of Dutch John	200	68	70,866
1A	Uintah W C D	Sup. Agricultural	20 mi. SW of Vernal	8,400	5,370	65,496
21	Pine Creek Irr Co	Sup. Agricultural	2 mi. north of Escalante	240	158	65,338
22	Gardner, Leo J	Sup. Agricultural	2 mi. SE of Boulder	560	325	65,013
32	WW Water Co	Sup. Agricultural	43 mi. NE of Moab	3,655	2,230	62,783
35	Duchesne County W C D	Sup. Agricultural	Central & Eastern Duchesne Co.	44,400	28,860	33,923
1A	Uintah W C D	Agricultural	20 mi. SW of Vernal	35,000	14,630	19,293
2A	Eastside High Ditch Irr Co	Agricultural	5 mi. north of Green River	4,900	2,989	16,304
25	Nelden C Nielsen Enterprises	Agricultural	20 mi. SW of Vernal	1,280	820	15,484
26	Clark, Glen & Esther	Agricultural	4 mi. north of Green River	100	61	15,423
27	Goff, James S	Agricultural	14 mi. SE of Vernal	440	280	15,143
37	Gunnison Butte Mutual Irr Co	Agricultural	Green River vicinity	24,825	15,143	0
36	Trust Lands	Agricultural	Emery & Grand Counties	0	0	0
12	Larson, Stanley L	Agricultural	SE of Jensen	0	0	0
13	Minchey Construction, Inc.	Municipal	1 mi. north of Escalante	0	0	0
19	Fryer, Colin	Agricultural	14 mi. east of Moab	0	0	0
20	Rio Colorado at Dewey Wtr Co Inc	Municipal	40 mi. NE of Moab	0	0	0
30	Sand Mountain Mutual Water Co	Agricultural	6 mi. south of Hurricane	0	0	0
33	Green River Supplemental WUA	Agricultural	Green River Corridor	0	0	0
34	Manila Town	Municipal	Manila Town	0	0	0
38	Reynolds, Adrian K	Municipal	12 mi. SE of Dutch John	0	0	0
40	Green River Canal Co	Agricultural	Green River City	0	0	0
41	Daggett County W&S District	Municipal	4 mi. east of Manila	0	0	0

2. FRANSON NOBLE ENGINEERING

2a

In accordance with the CEQ regulations implementing NEPA (40 CFR 1500.1), the EIS is intended to fully disclose significant information while remaining as concise as possible. Since there are no effects to water rights under either the Action or No Action Alternatives, the disclosure of this fact in section 1.8.4 of the EIS is sufficient and appropriate treatment of the issue. Clarification has been added to this section. The statement of purpose and need in section 1.1 provides for the continuation of authorized purposes, including development of water resources.

The United States segregated the undeveloped portion of Water Right No. 41-2963 (A30414) and assigned it to the Utah Board of Water Resources on March 12, 1996. This segregated Water Right No. 41-3479 (A30414b) is commonly referred to as the “Flaming Gorge Right” and is being reserved for future water development.

Both the segregation application that created Water Right No. 41-3479, and the assignment documents that gave it to the Department of Water Resources, subordinate Water Right No. 41-3479 to Water Right No. 41-2963. These documents clearly show Water Right No. 41-3479 is not entitled to storage in Flaming Gorge Reservoir and is entitled to divert water only as it is being released under Flaming Gorge Dam operations.

2b

Water rights were not a consideration in the Flaming Gorge Model. That is to say that none of the rules that govern the Flaming Gorge Model under either the Action or No Action Alternative are activated based on water rights. There was a minimum release restriction of 800 cfs that was enforced throughout the model run. The results of the Flaming Gorge Model indicated that the 800 cfs minimum release could be maintained through foreseeable drought conditions while maintaining adequate storage in the reservoir to service downstream diversion requirements.

2c

This EIS does not relieve agencies or individuals of the obligation to comply with the Endangered Species Act for future actions. Available information on future water development was factored into the Flaming Gorge Hydrology Model. Section 4.19.1 articulates uncertainties associated with meeting the 2000 Flow and Temperature Recommendations in the future.

2d

Clarification has been added to section 1.8.4 of the EIS. See sections 1.4.4 and 4.16.4.1.1 of the EIS regarding the dual role of the Recovery Program in recovering the endangered species while allowing water development to continue. Please see response to Franson Noble 2a above.

GREEN RIVER OUTFITTERS

P.O. BOX 200, DUTCH JOHN, UTAH 84023

Mr. Peter Crookston
Flaming Gorge Environmental Impact Statement Manager
PRO 774 Bureau of Reclamation
Provo Area Office
302 East, 1860 South
Provo, UT. 84606-7317

November 15, 2004

Dear Mr. Crookston: We would like to submit our comments on the Draft *Operation of Flaming Dam Draft Environmental Impact Statement* and its *Technical Appendices*.

As a member of GROGA we fully support the comments submitted by them concerning this DEIS.

As a business, Green River Outfitters has been a Green River guide and outfitter service full time since 1987 and hold a U. S. Forest Service/BLM permit to provide fishing guided, fishing walk wading, scenic float trips. We share a 7000 square foot facility with Trout Creek Flies that provides us with a base of operations for these recreational services. Our customers include guided fishermen and scenic rafters. We are totally dependent on the recreational dollars generated on the Green River and Flaming Gorge Reservoir. We operate 12 months of the year although we have a seasonal business that is most active from April through October annually. We employ 8 plus river fishing guides full time. We are employers, full time residents, property owners and taxpayers.

We live in Daggett County and the town of Dutch John. Like us, this County, town and region is extremely dependent on the recreational dollars. With the exception of government workers, we are the only industry in Dutch John. Within Daggett County there are 12 outfitters, 80 guides, 4 lodges, restaurants, 2 snack bars, 4 convenience stores, 3 gas stations, 3 raft rental services and their associated employees just on the east side of the reservoir alone. On the west near Manila and north around the reservoir there are many more businesses that too depend on recreational visitor dollars. Our county has less than 800 full time residents and is only 682 square miles in size.

Comment 1.

3a

We are very disappointed in the treatment of the economical impacts of this EIS as they pertain to us. A more localized analysis is appropriate in light that the largest economical impacts center around Reach 1 of the Green River and the Flaming Gorge Reservoir. To do an analysis over a 3

county area does not show the real impacts of the recommendations contained within this EIS. We would like to see this EIS fully address the impacts to our businesses. We feel that it has not.

- 3b Question 1. Is it not possible to prepare an adequate economic analysis surrounding the EIS recommendations as they pertain to our businesses?

Comment 2.

- 3c While the GROGA letter states many of our concerns, we must reinforce the points that the ramping up process, flows exceeding 4600 cfs and daily fluctuating flow operations impact our businesses negatively by reducing the quality of the recreational experience for fishermen and other river users that use our services and buy our products. In addition we have safety concerns for fishermen and other water based recreations while these flows are being performed.

Comment 3.

- 3e Furthermore, we support GROGA's position that power generation takes a lower priority when compared to the other "authorized purposes" of the Flaming Gorge dam. Operational considerations should be given to recreation and fishing in particular by reducing the impacts of daily fluctuations and their effects on these activities. Daily fluctuations performed during fishing daylight hours are an erosion of local economics one day after another with their daily negative impacts.

Comment 4.

- 3g We support the recommendations for a 55 degree F release temperature during the dry and moderately dry years, maintaining adequate river temperatures for trout at the Colorado/Utah state line.

Comment 5.

- 3h We strongly support BAR recommendations of flow fluctuations limitations with the following exception. Power generation in the form of fluctuating flows should not be at the expense of other authorized purposes, "and for the generation of hydroelectric power, as an incident of the foregoing purposes" (Vol. 1, pg 3 and 4, 1.4.1.1).

Comment 6.

- 3i We strongly support the 800 cfs ascending and descending ramp rates. We would support a formalization agreement for these ramp rates.

Comment 7.

- 3j We fully support the maintaining of the minimal flow agreement between UDWR and Reclamation for the maintenance of river flow supporting the tailwater trout fishery and furthermore request the formalization of this agreement as stated in Vol. 1, pg 5, second full (italicized) paragraph.

Comment 8.

- 3k Except in emergencies, flows should not exceed the capacity of the power plant of 4600 cfs, bypass flows should only occur as a last resort, and the frequency of such events should be kept at an absolute minimum.

Comment 9.

31

We share GROGA's opinion that in general we found this DEIS complicated to review based on its overlapping of the treatment of subjects. So many references that seemed to contradict previous statements were made clearer only after rereading them in the context of their specialized subject. It required a lot of time spent in the effort to discover this EIS's overall direction. In light of our comments, you know that we were disappointed with the overall economic analysis. We would be happy to answer any questions you have on our comments or assist in any manner possible. We can be reached at 435-885-3338. Once again thanks for this opportunity.

Emmett Heath- Manager
Green River Outfitters
P.O. Box 200
Dutch John, UT. 84023

3. GREEN RIVER OUTFITTERS

3a

To estimate regional economic impacts associated with changes in river and reservoir recreation, information was collected from surveys of recreators as to their expenditures. The expenditure information gathered via the recreator survey did not allow for county specific analyses. Based on pretests, it was determined that the survey was already complex (given the need to address visitation, valuation, and expenditure information by alternative), and any attempts to gather more detailed data by county would have significantly added to survey complexity, possibly jeopardizing survey usefulness. Attempts to allocate expenditures by county would be highly speculative. As a result, the decision was made to use the three-county model utilizing both river and reservoir expenditures and to supplement that analysis with specific commercial river guide operator survey information.

3b

Even if Reclamation had enough detail to estimate economic impacts for Daggett County alone, the aggregated nature of the regional model would preclude estimation of impacts for individual businesses. This is because the lowest level of detail provided by the model reflects the economic sector which typically combines information across a range of somewhat similar businesses. Reclamation believes that the economic analysis in the EIS is sound and provides sufficient information to assess potential impacts.

3c and 3f

The EIS acknowledges the possibility of both positive and negative effects under differing conditions if the Action Alternative is implemented. It should be noted that the nature and timing of ramp

rates, and other daily operational details, would remain substantially the same under either the Action or No Action Alternative. The trout fishery was established 40 years ago within the context and limitations of dam operations; and over time, certain operational changes have benefited the trout fishery.

3d

Please see section 4.11.5 of the EIS for the discussion of safety as it relates to recreation activity in the Green River. See also response to Daggett County 1g.

3e and 3h

The EIS states Reclamation's intent to balance the needs of all resources when making operational decisions under both the Action and No Action Alternatives. We appreciate your concern that power generation might have benefited at the expense of fishing and other uses. However, the analysis of the cumulative effects on hydropower generation shows that power has not been elevated above other authorized purposes and that, in fact, there have been losses to hydropower over the last 20 years. Please see section 1.4.2 for more information. The proposed action will not have a negative effect on the sport fishery, as shown in chapter 4 in the EIS.

3g, 3i, and 3j

Comment noted.

3k

Under either alternative, flows above powerplant capacity would be expected as a normal part of dam operations.

3l

Comment noted.

GREEN RIVER OUTFITTER AND GUIDES ASSOCIATION GROGA

Mr. Peter Crookston
Flaming Gorge Environmental Impact Statement Manager
PRO 774 Bureau of Reclamation
Provo Area Office
302 East, 1860 South
Provo, UT. 84606-7317

November 15, 2004

Dear Mr. Crookston: We would like to submit our comments on the Draft *Operation of Flaming Dam Draft Environmental Impact Statement* and its *Technical Appendices*.

INTRODUCTION

The Green River Outfitter and Guides Association (GROGA) consists of ten guided fishing and two scenic rafting outfitters operating under Ashley National Forest Service permits on the Green River (Reach 1) below the Flaming Gorge (FG) dam. Many of the outfitters have been providing services to visitors of the Green River for nearly twenty years, others longer. We are a huge “stakeholder” in how the FG dam is operated. Our interests are twofold:

1. The protection of and wherever possible, enhancement of the Flaming Gorge tailwater trout fishery.
2. The economic survival of our businesses. With dedication and perseverance we have spent many years and dollars in the building of our businesses. Our industry provides great recreational experiences to our visitors while making value contributions to our areas economies and employment opportunities. Our needs are simply to protect our investments and secure our ability to survive.

COMMENT 1.

- 4a Thank you for the opportunity to comment on the *Operation of Flaming Dam Draft Environmental Impact Statement* and its *Technical Appendices*. We have been a part of the Flaming Gorge Work Group (FGWG) since its inception after the release of *The Final Biological Opinion on the Operation of Flaming Gorge Dam* (1992 FBO) in November 1992. GROGA has taken an active role as representatives of its members and trout issues within that work group. We know how difficult the management issues surrounding the operation of Flaming Gorge Dam by the Bureau of Reclamation (BOR) has been, we were there. The BOR is to be complimented on its efforts to be inclusive to all the interests that have evolved around the operation of the FG dam. From that effort, we believe there has developed a greater understanding and a sharing of the issues by all the participants. We feel the FGWG has been extremely effective and we encourage the BOR to follow the same formula wherever possible.

COMMENT 2.

In our comments, we will refer to “Operation of Flaming Dam Draft Environmental Impact Statement” as Vol. 1 and “Operation of Flaming Dam Draft Environmental Impact Statement Technical Appendices” as Vol. 2 to simplify discussions, i.e. (Vol. 1 pg_, paragraph/line).

COMMENT 3.

A promise was made to us by the BOR that when the EIS for the Flaming Gorge dam came out, it would address all impacts of the Action Alternatives recommendations (including economic) on all who are effected by their impacts, to include fishing outfitters. Having spent a great deal of time reviewing this document, we see many examples of keeping that promise while recognizing some serious shortfalls. We would like very much to make a positive contribution to the EIS in our comments whether they are positive or negative. While we don’t believe for our part that any of the shortfalls were intentional, past experiences make us vigilant wherever there are a lot of groups competing around the operation or management of any resource. We have been a solid partner in the FGWG, *considerate of all the parties with interests revolving around the operation of FG dam*. We support many of the flow and water temperature recommendations for the recovery of T&E fishes (see below). We believe that some of these recommendations may provide biological benefits to the tailwater trout fishery.

COMMENT 4.

We support the recommendations for a 55 degree F release temperature during the dry and moderately dry years, maintaining adequate river temperatures for trout at the Colorado/Utah state line.

COMMENT 5.

- 4b** We strongly support BOR recommendations of flow fluctuations limitations with the following exception. Power generation in the form of fluctuating flows should not be at the expense of other authorized purposes, “and for the generation of hydroelectric power, as an incident of the foregoing purposes” (Vol. 1, pg 3 and 4, 1.4.1.1).

COMMENT 6.

- 4c** We strongly support the 800 cfs ascending and descending ramp rates. We would support a formalization agreement for these ramp rates.

COMMENT 7.

We fully support the maintaining of the minimal flow agreement between UDWR and Reclamation for the maintenance of river flow supporting the tailwater trout fishery and furthermore request the formalization of this agreement as stated in Vol. 1, pg 5, second full (italicized) paragraph.

COMMENT 8.

- 4d** Except in emergencies, flows should not exceed the capacity of the power plant of 4600 cfs, bypass flows should only occur as a last resort, and the frequency of such events should be kept at an absolute minimum.

COMMENT 9.

- 4e Select sections of the current document somewhat minimizes the agreements and recommendations of the FGWG, as evidenced by the addition of the second full paragraph in Vol. 1, page 149 on this DEIS. This paragraph incorrectly implies that the ramp rates and single-hump operations are not strictly followed. In reality, these recommendations were the result of intensive investigations and discussions by the diverse interests of the work group, and reflect historical operation except in the times of an emergency. While minimizing these operational constraints may benefit the incident authorized purpose of power generation, the authorized purposes and associated resources would be negatively impacted by further liberalization of these release parameters. Inaccurate portrayal such as this should be avoided.

COMMENT 10.

- 4f It is important for us to report that, following the release of the 1992 FBO, a five year study of flow recommendations from the preliminary research provided by the Upper Colorado Endangered Fish Recovery Program (RP) were performed. (After twelve years we haven't seen the end of the 5 year study). These were advertised as "test flows" designed to further refine flows for the T&E fishes recovery program. "Test flows" do not require going through the NEPA process, therefore, Recovery Program proponents gave no considerations to impacts of such actions on recreation and sport fishing. Nor has there been any economical considerations given to local businesses since the 1992 FBO was started, up to the release of this DEIS. Only biological issues concerning trout survival were considered. As complaints from the public, fishing guides and impacted businesses were expressed about the dirty water and flows that impacted their fishing, their complaints were ignored. The negative economic (losses) resulting from these flows to the "fishing outfitter community" came in the form of canceled or a depression of guided fishing trips and other businesses losses came as related expenditures of lodging, food, services and retail. These are not just perceived impacts, but real. GROGA Chart 2 demonstrates this point with guided boat number declines on 5/9/99 as flows reach upward, look at 5/25 and 5/27/99 where the values are zero as flows go above 4600 cfs and the remaining suppression of boat numbers until the flows start to recede 6/25/99 and after. This chart shows an extreme wet hydrological year, but it is perfect in showing (by the magnification of) the impacts during flows changes that occur even during the smallest of flow changes. These various forms of "test" flows were most often performed in the heart of our (identified as "guided boat fishing" in the EIS) busiest time of year (April, May, June). They rarely come with little advance notice, commonly as little as 24 hours, then delays or changes are made that are hard to adjust to (see COMMENT 17. EXAMPLE). (This has not changed despite applaudable efforts by BOR to provide information). We have experience with the FGWG and can relate to the unpredictability of mother nature in planning flow releases. However, the fishing public and our guided fishing guests seldom understand finding poor river conditions effecting their fishing productivity, especially when man made. The Recovery Programs objective (Vol. 1, pg 70, first full paragraph) of "gaining public support for all these activities through an information and education program" has fallen extremely short of its goals in the sport fishing community. But then, maybe there is a reason for that in light of its stated agenda (Vol. 1, pg 70, first full paragraph). These "test flows" lasted longer than the 5 year study. We have been experiencing the refinements of T&E flows for twelve years now, but the negative economic impacts on "guided boat fishing and shore fishing" until

this EIS have never been considered. So what we are looking for here is that this EIS addresses all the impacts to fishing and businesses that depend on the use of the Green River within Reach 1. Through your comments (Vol. 1, 4.19 Uncertainties (particularly under 4.20) it is very plain to us that, the Recovery Program will go on indefinitely with tests, emergencies and modifications to the recommendations for some time to come. Consequentially, so will the impacts to us and our businesses. This built in flexibility without further NEPA makes us nervous.

- 4g Question 1. What are the Recovery Program, its recommendations and programs liabilities in addressing the negative economic impacts of its actions as identified in this EIS ?
- 4h Question 2. If it is liable, how would it mitigate damages?

COMMENT 11.

We have heard that landowners near Jensen, Utah are financially compensated for the loss of use of their flooded fields.

- 4i Question 3. Is this true, if so how are the losses calculated?

COMMENT 12.

We are concerned that some elements within the Recovery Program would like to eliminate all competition for the Flaming Gorge resources. The FG tailwater trout fishery is an attractive target. In the promotion of T&E issues, we are hopeful that attempts were not and are not being made to negatively impact our businesses. But there seems to be little concern about it. Within the FGWG we have been able to address trout issues, but have been dismissed in any conversations of the economic impacts to our businesses. The mood was and is Recovery Program at any costs. Great, if you are not the one paying. We are very small in economical picture when compared to the money being spent on the Recovery Program. The number of governmental jobs that are solely dependent on this program and losses in power generation alone is worth multi-millions of dollars annually. At Glenn Canyon, Arizona, gateway to the Grand Canyon, there are millions of dollars in private contracts studying Recovery Program goals. Within the scientific community, Glen Canyon is known as an “economic goldmine” for anyone wishing to perform an experiment of some kind. Flaming Gorge, though slightly smaller in scale is no different. As of the date of this letter, despite Lake Powells historical storage depletion from the current drought, they are sending huge amounts of water through big releases to “build beaches” (a big “test flow”) within the Grand Canyon. The EIS (Vol. 1, pg 70, first full paragraph) speaks to the Recovery Programs goals and is very revealing to us. “In addition to identifying the flow needs of the endangered fish, the Recovery Program has directed effort at developing habitat, reducing nonnative species, reducing the impacts of sport fish and sport fishing, raising and stocking endangered species, and gaining public support for all these activities through an information and education program.” While we would like to interpret this as impacts of sport fish and sport fishing directly on the T&E fishes themselves, the wording could easily be interpreted differently by those whose ambitions would like to see the demise of the FG tailwater trout fishery. The Recovery Program “has directed effort” at “reducing the impacts of” who? Rainbow and Brown trout are nonnative species, trout are a sport fish, and river fishing guides and the fishing public are sport fishermen. We know that at Glenn Canyon (Colorado River) that eradication of rainbow trout has been performed in lower river sections. We have also heard that some spring flows there may be timed to scour the spawning redds of the rainbow trout to reduce spawning productivity. There are

groups there actively pursuing the removal of the Glenn Canyon tailwater trout fishery. We fully anticipate that there will be a similar program of non-native fish removal on Reach 2 and 3 of the Green River. So our concern is that, there are no formalized agreement protecting the FG tailwater trout fishery.

4j We know that T&E issues “trump” all the other “authorized purposes”(Vol. 1 pg 3 and 4, italicized text)of the FG dam, but it disappoints us that there is a potentially stated bias (DEIS Vol. 1, pg 70, first full paragraph) towards specific Green River inhabitant and users. Let us say that we are disappointed with language that creates uncertainties as to intent, leaves us to wonder how extensively this policy is being pursued, how it is being interpreted and how it is influencing the recommendations stated in this EIS. We know that this EIS is not a forum for debating the goals of the Recovery Program. However, since this EIS and its recommendations sprang from the implementation of the Recovery Programs goals, we respectfully request your answers to Questions 3 and 4 below.

4k Question 3. Are there any elements within the flow and temperature recommendations or in other portions of this EIS that would support or facilitate the removal or suppression of the Flaming Gorge tailwater trout fishery between the FG dam and the Utah/ Colorado state line? Please list those parts of this EIS that speak to: the progress has already been achieved in “reducing nonnative species; what future plans are being made to further achieve “reducing nonnative species”; what progress has already been achieved in “reducing the impacts of sport fish and sport fishing”; what future plans are being made to further achieve “reducing the impacts of sport fish and sport fishing.”

4l Question 4. Would you foresee that any such development would not have the need to undergo further NEPA processes?

COMMENT 13.

4m This EIS brings up wherever possible, the positive benefits to the tailwater trout fishery under the “action alternative.” however, there are only a few rare acknowledgments as to the negative economic impacts on Green River recreational activities which include: guided boat fishing, scenic floating, shore fishing, private boat fishing, boat based camping. Focusing in on the guide boat fishing, there is an attempt to not address the economic impacts. In fact the document says that “despite reasonable survey response rates” (Vol 2, App-325, last paragraph) by commercial operators, “the survey data did not provide enough information to estimate the impacts by alternative” and that “an estimation of the direct impacts to them shouldn’t be used because it is figured in the regional modeling report.” Yet you had enough info to state losses in several locations within the document (Vol. 1, pg 205, first paragraph, sentence starting with “While these losses”, next paragraph, sentence starting with “The largest gains”,pg 216, second column, second full paragraph and in particular the sentence starting with “These gains.....”. The regional modeling report spreads the impacts over a 3 county area (Daggett, Uintah, Sweetwater) (Vol. 1, pg 221, second paragraph) says that “The difficulty with the regional modeling results are that they are aggregated by economic sector and industry and do not provide detailed impacts for specific businesses” and that “it would have been useful to separately identify the impacts on both the river and reservoir.” we fully expected that this EIS would fully do just that. We were

promised that it would. Issues 11 and 18 (Vol. 1, pg 15 &16) says you are supposed to. Your acknowledgment of the “difficulties” mentioned above and that are “a small sector in the three county economy” (Vol. 1, pg 217, right column, first paragraph) is small consolation in a county (Daggett) and town (Dutch John) that is totally dependent on the recreational services dollars. There are 12 outfitters, 80 guides, 4 lodges, 2 restaurants, 2 snack bars, 4 convenience stores, 3 gas stations, 3 raft rental services and their associated employees in a county that has less than 800 full time residents. Four businesses are involved in more than one part of the economic impacts, having a fishing guide service, lodging, retail and more. Maybe there are small impacts in Sweetwater and Uintah counties, but it translates into big economic impacts on businesses and in employment here for Daggett County. Our complaint is that there are a number of places within the DEIS that these details are missing, that facts effecting Reach 1 commercial guiding operations are glossed over, minimized or omitted completely. The explanation (Vol. 2, App-325, last paragraph) seems to demonstrate this point. In a document that gives so much detail to flows, fish, power generation and a myriad of other complicated subjects, the authors just didn’t have enough data? And if you did, you couldn’t/wouldn’t use it (Vol 2, App-325, last paragraph)?

COMMENT 14. We would like to see a fuller economic analysis that addresses the full measure of these impacts.

COMMENT 15.

4n We are providing information that may assist you. The statement that “the survey data did not provide enough information to estimate the impacts by alternative” might be true, but there is plenty of such information out there for those interested in finding it. We simply went to the Forest Service and asked for daily boat launch totals by day, then took BOR Weekly Reports on FG flows (the weekly e-mail) and transposed the flow data over it to make a “Flows vs Guided Boat Numbers” chart for the years 1998, 1999, 2000 during the months of May and June. The 1998 chart is labeled GROGA Chart 1, 1999 GROGA Chart 2, 2000 GROGA Chart 3 and are included in this comment package for your reference. While 1998 and 2000 might be considered “average”(highest flows at 4600cfs) hydrological conditions, 1999 was definitely “wet”(high flow peaked at 10,600cfs). But you would need to see how you would classify them. The Forest Service could provide you with the data on any year you deemed “dry” fully completing the “average, wet, and dry” hydrological conditions. Forest Service figures show May/June totals for 1998 for guided boat numbers at 1348 total, 1999 at 1162, and the more moderate flow year of 2000 at 1618. These numbers show a suppression of guide boat numbers during the wet year of 1999. Since during all these years, the dam was operated under the “Action Alternative” recommendations, we would assume they would represent the “Action Alternative” By using these charts you can calculate the impacts of both alternatives on the numbers of guided boat fishing under each hydrological scenario.

4o Question 5. Will you take this information and use it to address the direct economic impacts to the recreational community under the “Action Alternative”?

Question 6. If not, why?

4p Question 7. In your addressing the positive effects of the Action Alternative in Vol 1, 4.16.9

Socioeconomic, how can you say that it will result in increases when “it is assumed that the majority of economic development (of Dutch John) will cater to tourist activities” when compared to your acknowledged losses to the recreational services sectors?

4q Question 8. Explain to us the difference between “tourist activities and recreational services”.

4r COMMENT 16.

Within the framework of our COMMENT 13, we felt that within the DEIS, we were treated as a small economic sector over a three county region. There was a lack of detail concerning our (and the reservoir guide operations) operational information. Information that was well represented for other groups. In Vol 1, 3.11 Recreation (pg 107 last paragraph) and the Recreational analysis (Vol. 2, App 222, second paragraph) has an extensive treatment addressing the rafting community operating in Dinosaur National Monument (DNM) Reach 2 and continues on with discussions talking about: that the number of private and outfitters permits are constrained; that commercial rafting operations are popular requiring early reservations; that due to the degree of planning and financial commitment that there was a strong incentive to take the trip regardless of river conditions; that there was also the fact that there were other rivers (Yampa) where trips could be diverted to should rafting the Green River in Reach 2 be undesirable.

The closest description of us and our activities comes on Vol 2. App.325, 3.3 Commercial Operator Surveys, paragraphs 1 and 2. Your recreation analysis “focuses upon the effects on recreation visitation and economic value within Reach1”, “where the majority of the potentially impacted water-based recreation occurs (Vol. 1, page 107, second to the last paragraph). Yet you have no discussions about commercial operations such as those that start in the referenced paragraph and page (108) directly following?

COMMENT 17.

An analysis could go on to read: that boat fishing operators within Reach 1 share many similarities to their commercial rafting counterparts operating in DNM. They hold a Forest Service (currently managed by Bureau of Land Management) (BLM) “special use permit” which limits the numbers of outfitters. Daily launches have established limits for all combined outfitters (therefore our total trips in certain river sections are limited)(unused allotments cannot be recovered and constitute a permanent loss), their guests too have to make long term commitments for guiding services, lodging and travel. They also have a few basic differences. Unlike their rafting counter parts who prefer lots of water, they don’t have guests that are likely to book high flow trips (above 4600 cfs), nor are they likely to keep our guests from moving to out of the region, losing them financially altogether to other destinations when they find river conditions other than what they had expected (see GROGA Chart 2). Remember that flow changes come often with little advance notice, commonly as little as 24 hours, then delays or changes are additionally made that complicate further adjustments to long term reservations.

EXAMPLE

Imagine traveling from NY or California (we even get clients from around the world) at great expense to arrive for a 2-4 day fishing trip (that you planned and reserved six months or more

before) the day the flows were raised. You arrive to find the river dirty and high even though two days before, when you checked in with your service provider, river conditions were good. The most common reaction is that they were lied to gain their business by the service provider. Given that, you have now lost a customer for life. See "Ramping Up" for a discussion as to why this is a bad time to visit the river for fishermen. Also see chart our on 1999 flows. And there are no alternative rivers to move our guests to when conditions reach an unusable level. They seldom stay long, seeking somehow to "save" their fishing vacations elsewhere. The future opportunities to re-attract that visitor to the river are small once he feels that conditions on the river are unpredictable or that he has been betrayed.

COMMENT 18.

The US Forest Service is a collaborating Agencies for this EIS. In the forest service position paper (Vol 2, pgs 5&6) they identify issues to be addressed in the EIS. The last paragraph page 5 and the first 4 paragraphs page 6 contain the parts we are most concerned with.

- 4s Question 9. How do you feel this EIS addresses these issues directly?

COMMENT 19.

In section 3.3 Commercial Operator Surveys (Vol. 2, App-325), you state that "of the 12 river commercial operators, 10 returned surveys. Then in several places within the analysis (one in Vol. 2, App-331, paragraph 6) the following paragraph appears. "Two of the four boat fishing operators indicated.....to \$35,000." There are 12 commercial boat fishing operators.

Question 10. What two of four?

Question 11. Where are the other ten or eight?

- 4t Question 12. Are your economic figures right? The figures are available from the Forest Service.

- 4u COMMENT 20.

We have to point out something. Table 13 (Vol. 2, App-329) came from the surveys, but something is warped here. Under Dry Conditions, Boat Fishing, the river is "Beyond Usable Range" below 1039 cfs. No matter what this chart says, to commercial boat fishing operators, the river is usable down to a 800 cfs level. We experience this flow the majority of our season, it provides enough water to float a boat down the river. Below 800 cfs would be another matter, it is the true threshold. We disagree with the analysis provided in Vol. 2, App-331, paragraph 5.

COMMENT 21.

We further find suspect that the 1999 IMPLAN data base is considered reflective of the No Action wet conditions (Vol 1, pg 215, last paragraph) when real time 1999 data was produced under the river flow conditions formulated from the Action Alternative wet conditions. And this is what the economic analysis was based on?

- 4v Question 13. Since 1992 to current, flows on the Green River have reflected the "action alternative" under all hydrological conditions. Unless we mis-understood the statement above, where did you get your baseline data that represented the "no action alternative"?

4w COMMENT 22. DEFINITIONS

To explain our position more fully requires understanding what anglers consider acceptable. The terms that we will use in this attempt may not have clarity to everyone reading this. So here are several definitions that we will use.

1. Fishable- defined as “conditions that are favorable to the pursuit of fishing” or “conditions that most anglers would expect to find (most anywhere that fishing occurs) that creates a positive fishing experience”.
2. Un-fishable- defined as “conditions that frustrate or discourage anglers from the pursuit of fishing”.
3. Fishing Productivity- defined as “the number of fish caught when compared with the effort expended to catch them”.
4. Catch Rates- average number of fish caught in a specific time frame.
5. Tailwater Fisheries- defined as “fisheries existing in the downstream reaches of a dam”.

COMMENT 23. TAILWATER TROUT FISHERIES

Anglers who visit “tailwater fisheries” have come to rely on their attributes for their fishing activities. There are many well known trout tailwater fisheries located in the Rocky Mountain region of the west. Notably: the South Platte below Cheeseman dam (CO.), the Frying Pan below Ruedi dam (CO.), the San Juan below Navejo dam (NM), the Big Horn River (MT). On the positive side tailwaters provide: controlled flows, moderated impacts of spring run-off, sustained in stream flows during droughts, improved water quality, and in the case of the Flaming Gorge Dam regulated water temperatures to benefit trout and invertebrates. On the negative side: released flows can be high, fluctuating, unpredictable, create water quality issues and angler safety concerns.

4x COMMENT 24. FLOW CHANGES

Angler visitation to the Green River tailwater fishery is most notable in April, May and June, with July and August decreasing, September rebounding somewhat before a steady decline in October. (Though the winter months see some angling activity it has not at this point seen substantial use levels). July and August have considerably less angler visitation because other western waters are opening up to anglers to fish. Having visited the Green River in the earlier months, they head to other destinations. Under the Action Alternative, the months of April, May, June and July (which are the main part of our fishing season) have the highest Reach 1 average monthly flows (Vol. 1, Figure 4-4). More specifically, using the “average flow” term is very misleading in what really occurs on the rivers flow releases for those months. The FG dams recent operation for T& E fishes has translated into low to moderate flows in the early half of May, then as the Yampa River rises, flows are increased at 800 cfs a day to 4600 cfs that lasts into early to mid June (depending on water availability). This results in the ramping up period, the 4600cfs flow release and the down ramping period occurring during a substantial portion of our prime season.

- 4y Question 14. Does not the term “average flow” dilute the real indicators of impacts in your analysis?

COMMENT 25. EFFECTS OF FLOW CHANGES

There are two major effects of changing flows on trout and anglers. The first is water quality, the second is stability of flows.

4z COMMENT 26a. WATER QUALITY and RAMPING UP

Increasing water flows, initially produces some floating debris such as pine needles, sticks, and moss in the river as it rises. In severe cases when the debris is substantial, it can accumulate, clogging up many of the larger backwater areas. This is especially true when going to an extremely high flow, after extended periods of low flows when trees, tree limbs and other trash is brought into the flooded river bed. In early spring, water quality can be additionally compromised by the dying feathering moss beds breaking apart with higher flows. While these are the worst possible effects to water quality by higher flows, conditions can improve after several days of flushing. Angling opportunities will certainly be effected during this period by compounding poor water quality with the displacement of the trout population due to higher flows. This brief interim period is the worst possible time for anglers on the river. Those anglers impacted (under some flow recommendations for days) will have to wait for the water quality to improve and trout to adjust to their new environment. They are not often willing to do so. GROGA Chart 2 demonstrates this point with boat number declines on 5/9/99 as flows reach upward, look at 5/25 and 5/27/99 where the values are zero as flows go above 4600 cfs and the remaining suppression of boat numbers until the flows start to recede 6/25/99 and after. The first several days of ramping up don't have profound effects to the rivers fishability except for water quality issues as stated above and during the surge. Above the 3000 cfs threshold is where the volume of water really increases velocity and rises above the normal river bed bringing additional trash and debris into the rivers flows and the effects on trout occur. Starting at a base flow of 800 cfs it takes five days to reach 4600 cfs. We incur our biggest financial losses in this ramp up period from canceled fishing trips due to poor water quality. The higher the flow goes (3000 cfs and above), the more days it takes to ramp up, the greater the economic impacts. See GROGA Chart 2 (1999 a wet scenario year) to see the depression of guided boat numbers as the water ascends and how the depression continues for days afterwards. It does takes several days before water quality improves and the fish settle down to return anglers to the ability to fish. We would rate a settled and stable 4600 cfs flow as fishable. After settling out from flow changes, we would rate 6600 cfs as difficult to fish, 8800 cfs as extremely difficult fishing except for experienced anglers, above 10,000 cfs is attempted only by the most determined anglers. Over the years, we have tried to put a positive spin on flows up to 4600 cfs. After the initial ramping up period, the trout do seem to settle down, many of them concentrate on the rivers edges in lower velocity water where they become more accessible to shore fishermen. Flows above 4600 cfs have proved difficult to promote even when there is the possibility of decent fishing productivity. As commercial fishing guides, our knowledge of the river helps short cut through some of the difficulties associated with fishing high flows. The complaint factor remains high among those anglers who have less skills or little patience for increased difficulty in accessing and catching fish. The greatest impacts to fishability comes on the up-ramp period, during fluctuating flows (see COMMENT 26b) and at flows exceeding 4600 cfs. Ramping down from higher flows have not caused us issues as long as they did not contain fluctuations within them.

COMMENT 26b. FLUCTUATIONS

The impacts of ramping up for higher flows should not be confused with daily fluctuating flows

because after the ramp up they are stabilized. Fluctuating flows, are flows that start at a base flow then ramp up and down within a single 24 hour period. See GROGA Chart 4. Though smaller, daily or hourly fluctuations, give trout a shorter time-frame to adjust and in the most severe cases, they could be affected for up to two hours. This occurs even from changes in flows that originate from a base flow as low as 800 cfs. Trout do not initially deal well with these short term up and down changes in flows, each change can result in their needing to leave preferred habitat because of changes in current velocities and the energy requirements needed to match them. Their response to these movements in flows requires time for them to adjust to this newly created environment. When done within the average fishing hours of 6 am to 9pm, fishing productivity decreases as catch rates decline while the fish make these adjustments. Additionally, increased energy expenditures does results in stress for trout and increases mortality of trout fry. This can be lethal for wintering trout whose energy reserves are at their lowest. Anglers often have to stop fishing until the trout re-orientate themselves. Descending flows will require time for the trout to once again, re-distribute themselves throughout the river as their environment is reduced, again. This is a second period of lost fishing productivity when these changes occur during the hours of the day containing fishing activity. Fluctuations are normally the results of power generation. Even though the operational restrictions of a single daily hump restriction are a part of this EIS, the impacts of these “daily fluctuation” operations are felt by anglers when they are performed and

4aa scheduled during the hours between 6 am and 9 pm. Power generation in the form of fluctuating flows should not be at the expense of other authorized purposes, “and for the generation of hydroelectric power, as an incident of the foregoing purposes” (Vol. 1, pg 3 and 4, 1.4.1.1). We believe it is inappropriate to elevate power generation at the expense of fishing and other uses. BAR must address the impacts of such operations on other authorized purposes and find a way to lessen or eliminate their effects. The 2004 operation after the reduction of the spring flows (early June 2004) was an example of how power generation was performed without consideration to other river users that have a priority over power generation. See GROGA Chart 4. The chart shows the up ramp and down ramp all occurring in the early afternoon to late afternoon hours with only a short period of time between them. Daily fluctuations performed during fishing daylight hours are an erosion of local economics one day after another with their daily negative impacts. With up ramping towards a higher flow we lose business until flows stabilize, with fluctuating flows we lose business every day with disgruntled anglers. We heard many complaints about this activity and its timing. We heard how the fishing “shut down” and how “they (visiting anglers) weren’t staying if it was to continue”, were the most common comments. Safety issues involving wading anglers were extremely common. Boaters who had their boats anchored even experienced boats being picked up by higher water flows and dislodged from anchor. The most common questions asked in local businesses revolves around: what are the flows? how safe is the river? is there enough (or too much) water? are they doing any releases during the day? The up ramping and down ramping constitutes two impacts in a single day to other river users. Considerations by BAR must be made when discussing such operations requests from Western Area Power Authority (WAPA) as to their “timing” and the “effects” of these operations on others. We would prefer never to see such operations during the anglers day of 6 am to 9 pm except in emergency conditions.

4bb COMMENT 26c. STABLE FLOWS:

Stable flows are what we favor under all scenarios. Stable river flows from 800 cfs to 4600 cfs are

fishable (except during ramping up periods). Water quality and stable flows are most important for fishing. After the initial raising of the river, water quality improves after a short period of flushing. Steady high flows provide trout an opportunity to adjust to their environment. It will mean that river levels might be less than an anglers ideal and beyond their concepts and experiences as acceptable river flows. We have made a real effort over the years to educate anglers not to make the mistake of other anglers by dismissing the river as unfishable. This has been a tough sale. Most anglers who fish many other places know that higher water volumes result in higher river water velocities, in most cases this is fatal to the fishability of such a river. They often base their views on experiences elsewhere. We feel with stable flows, the opportunities for exceptional trout fishing still exist. Higher flows most effect the wading angler in his ability to physically wade around in the river. But with the trout more concentrated from being pushed into the rivers slower edges and pools, they often become readily accessible from the shoreline. Boats add immeasurably to the versatility in accessing more fish in high water. The difficulty in floating is in an increased awareness of safety issues.

COMMENT 27.

All of the impacts of flows that impact outfitters, impact shore fishermen and private boat fishermen too!

COMMENT 28.

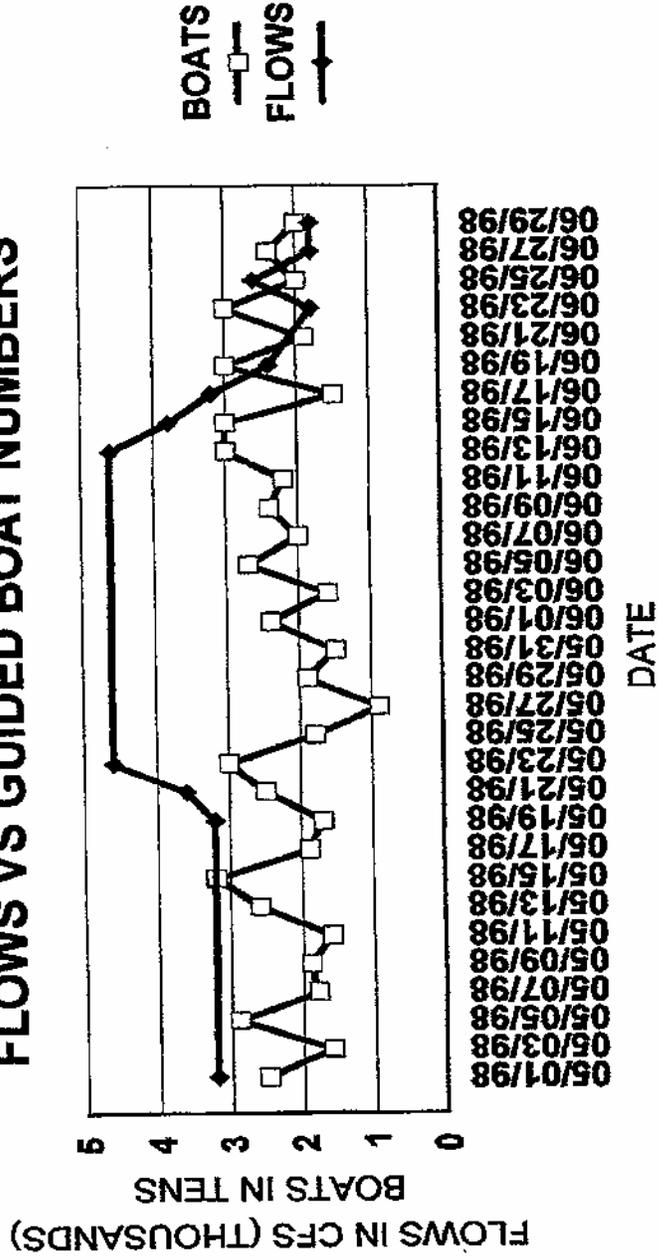
- 4cc In 4.13 Public Safety and Public Health (Vol. 1, pg 224) there are no references to the potential of drowning by fishermen or other river users such as rafters as flows change or fluctuate.

IN SUMMARY

- 4dd You are fortunate that we ran out of time to comment further. In general we found this DEIS complicated to review based on its overlapping of the treatment of subjects. So many references that seemed to contradict previous statements were made clearer only after rereading them in the context of their specialized subject. It required a lot of time spent in the effort to discover this EIS's overall direction. In light of our comments, you know that we were disappointed with the overall economic analysis, especially in the area of omissions. We would be happy to answer any questions you have on our comments or assist in any manner possible. We can be reached at 435-885-3355. Once again thanks for this opportunity. These comments sent to you by fax will be followed by a paper copy and a disk for your convenience.

Dennis Breer for GROGA
GROGA Representative Flaming Gorge Workgroup.
GROGA
P.O. Box 416
Dutch John, UT. 84023

**MAY/JUNE 1998
 FLOWS VS GUIDED BOAT NUMBERS**



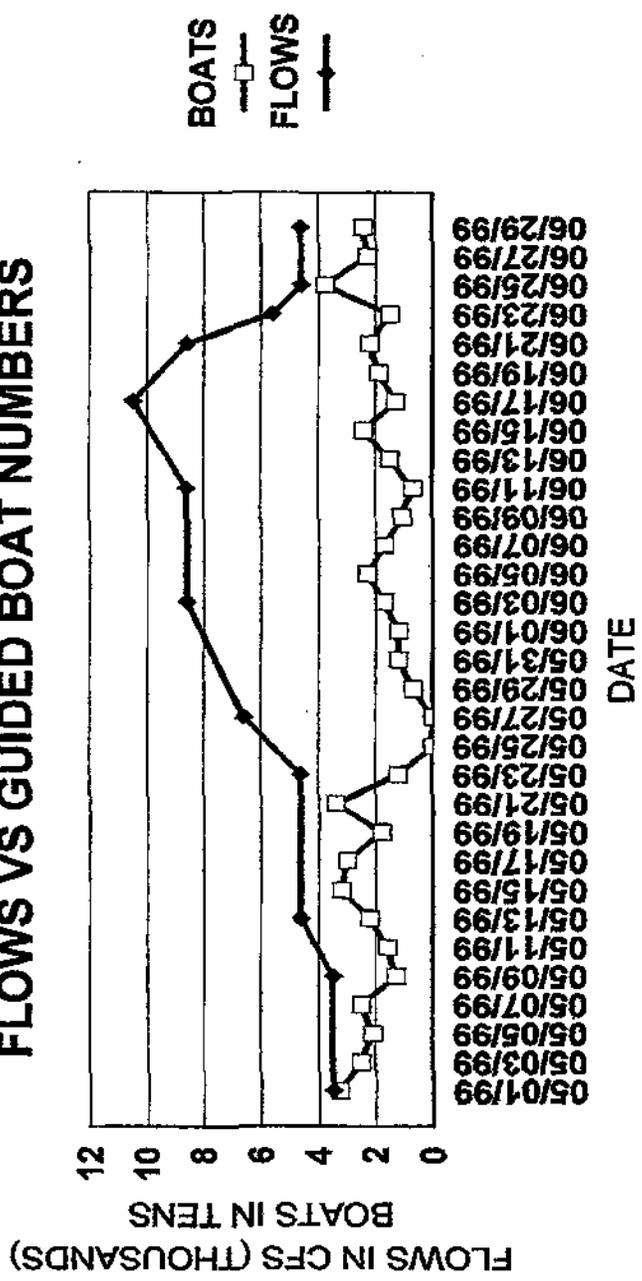
GROBA CHART 1

p. 2

435-885-3356

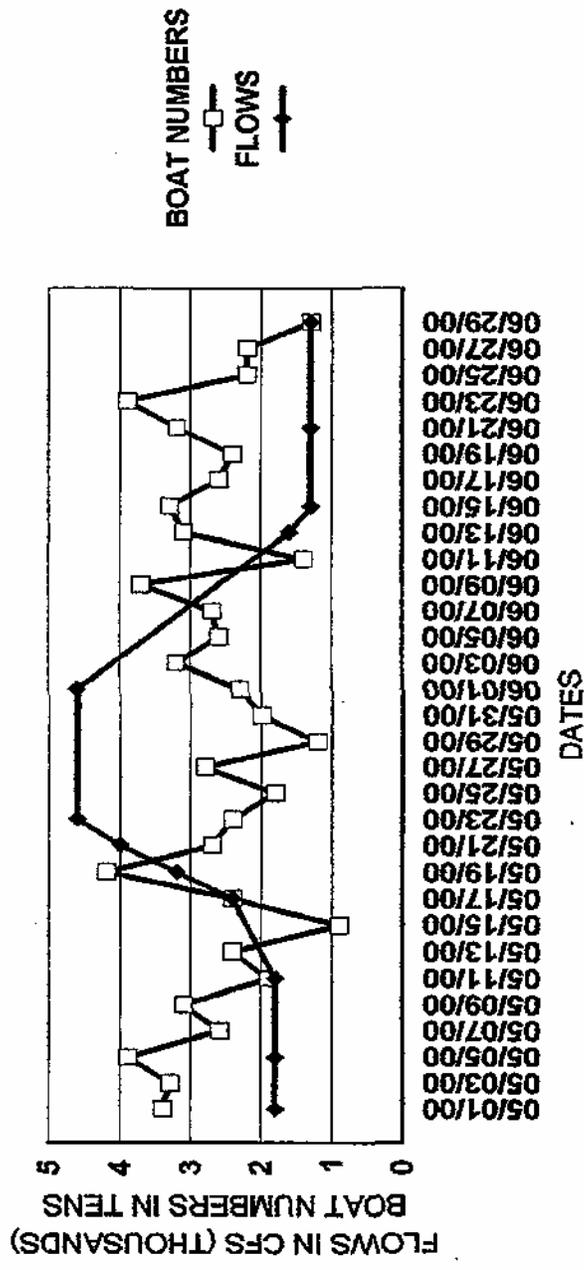
s. Breer

**MAY/JUNE 1999
 FLOWS VS GUIDED BOAT NUMBERS**



6206A CHART 2

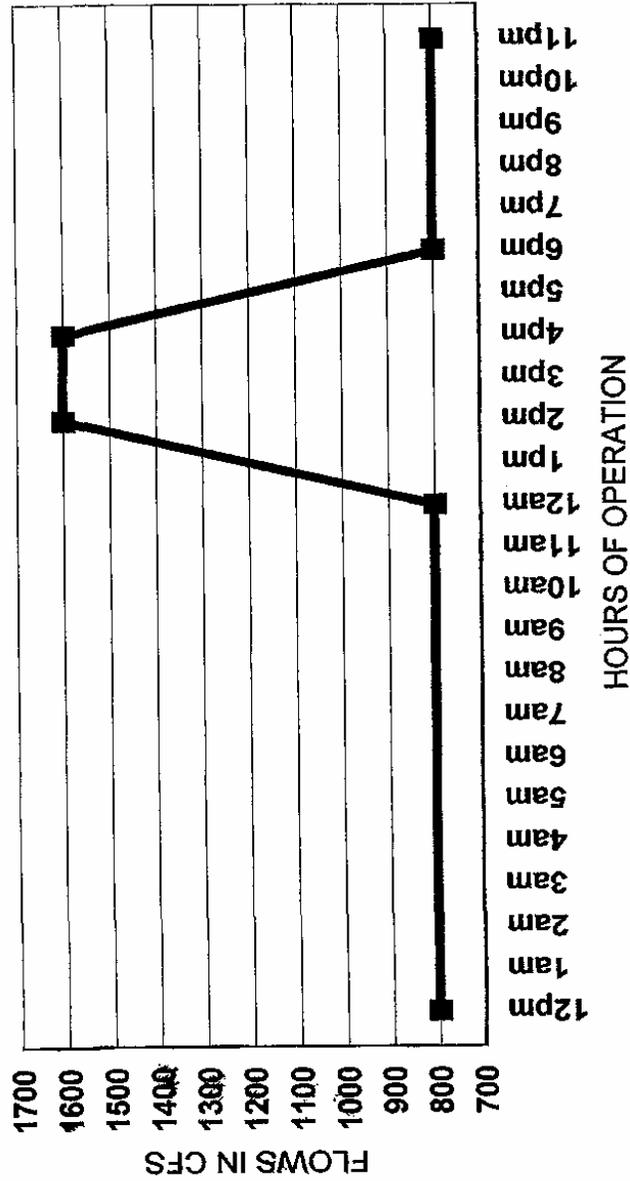
**MAY TO JUNE 2000
 FLOWS VS GUIDED BOAT NUMBERS**



GROGA CHART 3

435-885-3356 p. 4

2004 FLUCUATING FLOWS



FLOWS

p. 5

435-885-3356

s. Brear

4. GREEN RIVER OUTFITTERS AND GUIDES ASSOCIATION (GROGA)

4a Comments 1-4

Comments noted.

4b

The EIS states Reclamation's intent to balance the needs of all resources when making operational decisions under both the Action and No Action Alternatives. We appreciate your concern that power generation might have benefited at the expense of fishing and other uses. However, the analysis of the cumulative effects on hydropower generation shows that power has not been elevated above other authorized purposes and that, in fact, there have been losses to hydropower over the last 20 years. Please see section 1.4.2 for more information. The proposed action will not have a negative effect on the sport fishery, as shown in chapter 4 in the EIS.

4c Comments 6 and 7

Comments noted.

4d

Under either alternative, flows above powerplant capacity would be expected as a normal part of dam operations.

4e

Section 4.4.1 of the EIS accurately characterizes the historic operations.

4f

Reclamation is well aware of the recreation value created by the construction of Flaming Gorge Dam, including the trout fishery which did not previously exist. It must be remembered that fluctuations, depending on hydrologic year, will continue under either alternative.

4g

Reclamation, not the Recovery Program (of which Reclamation is a member), is the Federal agency responsible for the proposed action as analyzed in the EIS. The EIS shows that there are not significant socioeconomic differences between the No Action and Action Alternatives.

4h

As noted above, the Recovery Program is not responsible for implementation of the proposed action Reclamation has that responsibility. Based on the analyses in the EIS, there is the potential for both negative and positive effects to recreation and related businesses under the proposed action. Reclamation does not anticipate a need for mitigation. Under either the Action or No Action Alternatives, the opportunity to provide input to the Flaming Gorge Working Group regarding all resource concerns will continue.

4i

Reclamation does not offer compensation for flood plain inundations along the Green River. Reclamation is not responsible for damages to improvements or property in the flood plain. Any improvements have always been made by property owners at their own risk. Flood plain inundation has always occurred along the Green River, though less frequently since Flaming Gorge Dam was built. Nevertheless, though the frequency has declined since the dam has been in place, there has always remained the potential for significant flood plain inundation in wet years, and that potential will continue under either alternative.

4j

Text referred to by the commenter is already quoted from legislation. Please see section 1.4.3 in the EIS.

4k

Commentors are urged to read EIS sections 1.5, 3.7.2.3.4, 3.7.2.4.4, 3.7.2.5.4, 4.7.2.4, 4.7.3.2.5, 4.7.3.2.6, 4.7.4.2.5, 4.7.4.2.6, and 4.19.5. Control of nonnative fish is not within the scope of this EIS. At present, Recovery Program management of nonnative fish is primarily directed at cool and warmwater species such as channel catfish, smallmouth bass, and northern pike, at present most commonly found below the Utah/Colorado State line. Information regarding the Recovery Program's nonnative fish control program can be found at <<http://www.r6.fws.gov/crrip/rea.htm>> or by contacting the Recovery Program directly. The Flaming Gorge Working Group provides a forum whereby concerns for resources such as the tailwater trout fishery can be heard and forwarded as input for Reclamation to consider in planning dam operations. As stated in section 4.21, this working group will continue to be a valuable component of the adaptive management process following implementation of either the No Action or the Action Alternative.

4l

The need for NEPA compliance is analyzed each time there is a major Federal action with the potential to affect the human environment. Until such future actions are identified, it is impossible to speculate as to the NEPA compliance needs.

4m

Long-term negative effects to the tailwater trout fishery are not expected under the Action Alternative. Please see section 4.7.2.4 in the EIS and response 4o below.

4n

The data Reclamation used was more restrictive and able to show adverse impacts better than the attachments provided. See 4o below.

4o

Reclamation believes that the economic analysis in the EIS is sound and provides sufficient information to assess potential impacts. Given the inherent aggregation associated with regional economic impact models, and the expectation that commercial river guide operators might be adversely impacted, a survey was conducted during the summer of 2001 to specifically identify economic impacts to commercial operators. Since economic impacts to the commercial operators are included in the aggregated regional analysis from a revenue perspective (but not a profitability perspective), it would have been inappropriate to add survey results to the overall regional impacts. Nevertheless, the survey was conducted to provide additional detail on commercial operators. While the response rate to the survey was good, the respondents didn't answer all the questions, thereby precluding the estimation of economic impacts specifically for commercial operators.

While the commercial operator surveys proved less than fully successful, they did provide flow preference information which was reported in the EIS. In addition, estimates of changes in visitation for river recreation activities are reported in section 4.11, and recreational expenditures (including guides) are reported in the socioeconomic section (section 4.12). We acknowledge and have estimated adverse impacts to river recreation associated with the Action Alternative, especially under wet and dry conditions (20% of all years).

Attachments 1-3

Reclamation concurs with this analysis based on supporting data (attachments 1-3) from May/June 1998-2000 that commercial guide fishing trips decline as flows exceed 4,600 cfs. This is consistent with the recreation visitation analysis in the EIS. The interpolation analysis of

guide boat fishing visitation actually used a more restrictive high end threshold of 3,731 cfs as obtained from the survey of recreators conducted by the USDA Forest Service in the summer of 2001. For sake of conservatism (to identify adverse impacts), the EIS relies on the more restrictive high end flow threshold currently used in the EIS recreation visitation analysis.

4p

Based on average conditions, the recreation and socioeconomic analysis estimated an increase in recreation visitation and expenditures on both the river and reservoir. The EIS has been revised to clarify that this statement refers to average conditions, and that during wet and dry conditions, it is not possible to determine if the gain in reservoir expenditures would outweigh the loss in river expenditures from the perspective of Dutch John.

4q

Tourist activities” refer to the economic needs of the tourists or recreators (e.g., food, lodging, gas), whereas the “recreational services sectors” refer to the associated economic sectors (businesses) within the regional economic model.

4r and 4u

The intent of the geographic impact area subsection of the affected environment portion of the recreation section is to outline the focus of the impact analysis. The fairly detailed discussion of Dinosaur National Monument rafting activity was to explain why recreation impacts were not developed for this activity. Clarifying text was added to section 4.12.2.2 in the EIS.

4s

The USDA Forest Service participated heavily in developing the recreation and socioeconomic methodologies and analyses used in the EIS and emphasized the need to address recreation effects on

both the river and the reservoir. In addition, the USDA Forest Service conducted the data gathering surveys of both the recreators and commercial operators. The recreation visitation and expenditure information gathered via the recreator survey did not allow for county specific analyses. Based on pretests, it was determined that the survey was already complex (given the need to address visitation, valuation, and expenditure information by alternative), and any attempts to gather more detailed data by county would have significantly added to survey complexity possibly jeopardizing survey usefulness. Attempts to allocate expenditures by county would be highly speculative. Finally, the analysis was looking at both river and reservoir recreation where gains on the reservoir might outweigh losses on the river. As a result, the decision was made to use the three-county model utilizing both river and reservoir expenditures and to supplement that analysis with specific commercial operator survey information.

4t

While 10 river commercial operators responded to the survey, not all of them answered all the questions. Therefore, information reported on less than 10 data points is because of question nonresponse. The reported figures are based on those that answered the questions. Since many of the financial impact questions were not answered, Reclamation could not provide an overall estimate of financial impacts. This was clarified in the EIS.

4u

As suggested by this comment, the low end threshold for river boat fishing was reduced to 800 cfs, and the analysis/write-up was revised. The overall results of the analysis did not change significantly.

4v

From 1992 to the present, operation of Flaming Gorge Dam has mostly reflected the No Action Alternative, not the Action

Alternative. The No Action Alternative parameters of this operation were based on achieving the flow objectives of the 1992 Biological Opinion while also maintaining and continuing the authorized purposes of Flaming Gorge Dam. Please refer to chapter 2 of the EIS for a complete description of the alternatives.

4w Comments 22-23

Comment noted.

4x

Reclamation agrees with the comment. Under the No Action Alternative, the 3 months with the highest average flow in Reach 1 are April, May, and June. Under the Action Alternative, the months with the highest average flow in Reach 1 are May, June, and July.

4y

Reclamation performed analysis of resources based on the full distribution of flows that potentially could occur under the Action and No Action Alternative. This flow analysis can be found in the hydrologic modeling report in the Hydrologic Modeling Technical Appendices.

4z

Comment noted. This information is useful in planning dam operations under any alternative. Reclamation notes that the adverse conditions for fishing described here would occur under either the Action or No Action Alternative, particularly in wet years.

4aa

Please see response to 4b above.

4bb

Comment noted.

4cc

Please see section 4.11.5 of the EIS for the discussion of safety as it relates to recreation activity in the Green River. See also response to Daggett County 1g.

4dd

Comment noted.

Mr. Peter Crookston, Flaming Gorge Environmental Impact Statement Manager
PRO 774 Bureau of Reclamation
Provo Area Office
302 East 186- South
Provo, UT 84606-7317

Dear Mr. Crookston;

Old Moe Guide Service has been doing business below Flaming George Dam for 25 years. I am a local, born in Vernal, and raised on the Green River south of town near Horseshoe Bend. In the past 52 years I have seen many changes in the area and in the river, some good some not so good.

As a kid growing up on a farm on the Green before the dam, I remember spring runoff flows flooding some 100 to 150 acres of prime farm land. I also remember the mosquitoes that followed. I remember when the Fish and Wild Life Department were trying to eradicate the now endangered species.

5a I do not understand why that in these years of no water the Bureau would even consider implementing the Action Alternative flows. The Action Alternative flows would cause the loss of at least 52 jobs just in the guide service business when flows exceed approximately 4000cfs, please see the charts provided by GROGA - Green River Guides and Outfitters Association. The guide services generate approximately \$1.9 million just in moneys collected in guide service fees. This does not include what our clients spend on getting here, airplane tickets, rental cars, motels, fees, gas, fishing licenses, meals, fishing equipment purchased while here, and souvenirs.

5b Ramping up to these higher flows are of great concern due to the relocation factor of the fish and all the other aquatic life in the river, not to mention what it does to the fishing. The ramping schedule that occurred during the summer of 2004 is a good example - the double daily peak. One of these peaks, occurring midday, had a very negative effect on the fishing sending many fishermen, who spent a very substantial amount of money getting to and staying in our recreational area, home with a less than happy experience.

5c I am sure that the farmers and ranchers below Split Mountain are not happy about the Action Alternative Flows. We are also very concerned about the West Nile virus. The higher flows would create a vast amount of new breeding habitat from Jensen to the confluence with the Colorado River. This could also have a
5d very negative effect on white water recreation and other recreational activities throughout the area such as hiking and biking.

Thank you,

Terry & Gayle Collier
Old Moe Guide Service

5. OLD MOE GUIDE SERVICE

5a

Planned flows for each year would depend on the type of water year; high flows in the Green River below Flaming Gorge Dam would not be expected to occur in dry years. Please see chapter 2 for information on flow targets by hydrologic year.

The EIS states that the Action Alternative could create adverse impacts to Green River commercial river guide operators, particularly under wet and dry conditions as compared to the No Action Alternative.

5b

The EIS acknowledges the possibility of both positive and negative effects under differing conditions if the Action Alternative is implemented. It should be noted that the nature and timing of ramp rates, and other daily operational details, would remain substantially the same under either the Action or No Action Alternative. The trout fishery was established 40 years ago within the context and limitations of dam operations; and over time, certain operational changes have benefited the trout fishery.

5c

The EIS acknowledges (section 4.13.3) that the proposed action will increase mosquito habitat to the greatest extent in Reach 1, and to a lesser extent in Reach 2, which includes the town of Jensen as well as Uintah County. Based on our analysis, Reclamation believes that the increased risk of diseases such as West Nile virus, compared to other potential vectors for the disease, including irrigation and standing water on private property closer to population centers, is so small that it is insignificant. We do not anticipate a linkage between Reclamation's proposed action and an increased threat from West Nile virus or other mosquito-borne diseases.

5d

Comment noted.

THUNDER RANCH, LLC.

2900 South 12500 East
P.O. Box 160
Jensen, UT 84035
(435) 781-2662

December 8, 2004

Uintah County Commission
152 E 100 N
Vernal, UT 84078

To Whom It May Concern:

The proposed change in the operation of Flaming Gorge could cause significant damage to the Thunder Ranch, financial and otherwise. We are strongly opposed to the increased flows proposed in the Environmental Impact Statement.

- 6a We estimate that the potential damage to our property and equipment could easily reach \$155,000. Our analysis is attached.

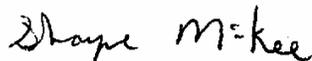
Thunder Ranch has 3 pumping stations located on the Green River. These pumps would incur significant damage if the dam is operated as suggested in the environmental impact statement.

- 6b As we read the EIS, at least 10% of the time water flow will more than triple in Reach 2 of the Green River, where our assets are located. Flow in an average year would more than double in the same reach.

Such drastic and unnecessary increases would cause damage to our equipment, and significant erosion of our property, which is located right on the river.

- 6c The EIS itself states on page S-5 that previous studies indicate that fish habitat conditions can be maintained at lower flows.

Sincerely,



Shayne McKee
Ranch Manager

NO ACTION (CURRENT OPERATION)						
Dry Year		Average Year			Wet Year	
Duration	Flow	Duration	Flow	Duration	Flow	
Spring Peak 1-2 Weeks	4000 cfs	2-5 Weeks	4600 cfs	5+ Weeks	4600 + Spillways	
Summer-Fall	1100-1800 cfs		1100-1800 cfs		1100-1800 cfs	
Sept15 - Nov	1100-2400 cfs		1100-2400 cfs		1100-2400 cfs	
Nov-May	800-3000 cfs		800-3000 cfs		800-3000 cfs	

ACTION (PROPOSED)						
Dry Year		Average Year			Wet Year	
Duration	Flow	Duration	Flow	Duration	Flow	
1-2 Weeks	8300 cfs	1-8 Weeks 2 Weeks one out of every three years	8300 cfs	4-9 Weeks	26,400 cfs	
			18600 cfs			
	900-1100 cfs		1500-2400 cfs		2800-3000 cfs	
	900-1100 cfs		1500-2400 cfs		2800-3000 cfs	
	900-1100 cfs		1500-2400 cfs		2800-3000 cfs	

Damage Potential to Equipment and Land:

Pump #1	50,000
Pump #2	30,000
Pump #3	50,000
Booster #4	5,000
Erosion	40,000
Total	<u>175,000</u>

6. THUNDER RANCH, LLC

6a

Reclamation is not responsible for damages to improvements or property in the flood plain. Any improvements have always been made by property owners at their own risk. Flood plain inundation has always occurred along the Green River, though less frequently since Flaming Gorge Dam was built. Nevertheless, though the frequency has declined since the dam has been in place, there has always remained the potential for significant flood plain inundation in wet years, and that potential will continue under either alternative. As part of its operation of Flaming Gorge Dam, Reclamation has in the past and will continue to provide public notification when flows are expected to increase, to enable property owners along the river to remove or secure equipment and livestock.

6b

These statements are incorrect. The flows that would occur in Reach 2 under the Action and No Action Alternatives are

very similar. In general, the spring flows in Reach 2 under the Action Alternative would be 10 to 20% higher in magnitude than the No Action Alternative about 40% of the time. The other 60% of the time, flows in Reach 2 would be nearly identical to the No Action Alternative during the spring.

6c

The reference to low flows was from an outdated interim agreement entered into by Reclamation and the U.S. Fish and Wildlife Service in 1985. Under the 1992 Biological Opinion, dam operations were found to jeopardize the continued existence of endangered fish in the Green River. More current information arising from a 5-year scientific investigation conducted under the 1992 Biological Opinion (2000 Flow and Temperature Recommendations) has since taken precedent in developing the flow and temperature recommendations.

be non-retrievable.

- 7i We have proven up on 6 ½ second feet of water and are in the process of proving up the remaining 3 ½ second feet. Our plans were to put it in a new \$25,000 pump and 4 new sprinkling systems @ \$8,000 to develop an additional field of 100 acres. The total loss for equipment not being able to follow through on this plan would be \$57,000. In 1985 we were offered \$3,500 per acre for our farm land, and the land is worth more on today's market. With the threatened increase of flows, we would not be able to develop this 100 acres as we have had in our plans which is a minimum of \$350,000 loss to us.

An additional 120 acres are being irrigated. There will be no irrigation possibility. Since there can be no pumps added, that leaves 180 acres that cannot be developed..

- 7j Dikes, worth \$10,000, have been in place for a number of years. An increased flow would destroy the dikes. Normal flow has been handled for years and dikes have been repaired as needed.
- 7k It is hard to put a dollar amount on the value of a mature tree, but there are numerous mature trees on our property.
- 7l In the late 50's promises were made to farmers by the Bureau of Reclamation that when the dam was built, flooding would be controlled. Many people bought their land based on these promises. The local promotion was to control the flooding.
- 7m We have not made these claims without having some knowledge of the damage high water can cause. The natural floods of 1983 took us 3 years to overcome and was a very costly to us. Please consider the damage increased flow would cause to both of us. This farm was intended to provide retirement income for my father, who still spends most of his time working on the property, and it is my sole income.
- 7n If the Bureau of Reclamation still plans to continue with the increased flows which would cause our land to flood, we are asking that we be offered flood rights.

Sincerely,



Burnell Slaugh

7. BURNELL SLAUGH RANCH

7a-7d, 7g, 7h, 7j, and 7n

Reclamation is not responsible for damages to improvements or property in the flood plain. Any improvements have always been made by property owners at their own risk. Flood plain inundation has always occurred along the Green River, though less frequently since Flaming Gorge Dam was built. Nevertheless, though the frequency has declined since the dam has been in place, there has always remained the potential for significant flood plain inundation in wet years, and that potential will continue under either alternative. As part of its operation of Flaming Gorge Dam, Reclamation has in the past and will continue to provide public notification when flows are expected to increase, to enable property owners along the river to remove or secure equipment and livestock.

7e

The EIS acknowledges (section 4.13.3) that the proposed action will increase mosquito habitat to the greatest extent in Reach 1, and to a lesser extent in Reach 2, which includes the town of Jensen as well as Uintah County. Based on our analysis, Reclamation believes that the increased risk of diseases such as West Nile virus, compared to other potential vectors for the disease, including irrigation and standing water on private property closer to population centers, is so small that it is insignificant. We do not anticipate a linkage between Reclamation's proposed action and an increased threat from West Nile virus or other mosquito-borne diseases.

7f

Please see response to 7a above. The Utah Division of Wildlife Resources has no record of issuing a permit for the referenced bass pond. Their policy is to not issue any permits for nonnative fish stocking on private land in the 100-year flood plain.

7i

The United States accepts no liability for flood damage to improvements made within the historic flood plain. Please see response to 7a above.

7k

Research on relationship of mature flood plain trees and flood flows suggest that mature trees likely live longer and have more robust life forms if subjected to flood flows. Please see section 3.7.2.6.1 of the EIS.

7l and 7m

The presence of the dam for over 40 years has indeed served to moderate flooding. However, this was never intended to mean that the flood plain would remain permanently dry. It means only that there is increased ability to moderate potentially catastrophic flows. Since the dam was built, there have been a number of wet years where high flows have occurred, such as 1983 as noted by the commenter. Whether or not the proposed action is implemented, high flows would be expected in the future. It must be remembered that a drought has been in place for 6 years, which has served to reduce flows on the river.

7n

Please see 7a above.

From: "K Kapaloski" <kkapaloski@hotmail.com>
To: <fgeis@uc.usbr.gov>
Date: Sun, Nov 14, 2004 9:04 PM
Subject: Environmental Impact Statement Comments and Questions

Mr. Peter Crookston,
Flaming Gorge EIS Manager
Bureau of Reclamation
Provo Area Office
302 East 1860 South
Provo, UT 84606

Dear Mr. Crookston,

I would like to offer the following comments and concerns regarding the August 2004 Operation of Flaming Gorge Dam Draft Environmental Impact statement.

I am the manager of Trout Bum 2 in Park City, Utah. We are a fly fishing store and outfitter operating as a permittee of Ashley National Forest on the Green River below Flaming Gorge Reservoir. A large portion of our store's guiding business and retail sales rely on the Green River trout fishery. As a result, the operation of the Flaming Gorge Dam directly effects our business operations. I am also a licensed fishing guide on the river myself and have been for over 12 years. In addition I own a home in Dutch John and my brother is the head guide for Western Rivers Flyfisher, another permittee on the river. All of these factors make the future operation of Flaming Gorge Dam a concern to me both economically and personally.

I support many of the issues addressed in the action alternative and I appreciate the diligence of the Bureau in conducting the statement. I appreciate the bureau addressing in detail the potential impacts on the trout fishery of the Action and No Action Alternatives. Specifically, in the economic analysis the limit of release of the dam to an up and down ramp rate limit of 800 cfs and the single daily peak, bump restriction. (refer to EIS page 149) These long standing restrictions are very essential in maintaining the world class trout fishery below the dam and should continue to be followed.

8a In addition, I support the recommendations regarding the temperature restrictions of no more than 59 degrees in moderate to wet years and 55 degrees in dry and moderately dry years.(Refer to EIS page 164). These temperature recommendations should be followed in order to maintain the blue ribbon world class trout fishery below the dam.

I would like to bring up a few concerns that I do have in regards to flow restrictions and temperature recommendations. These are concerns that I share with many fellow businesses in the area and fellow fishermen that enjoy the incredible recreational resources that the Green River below Flaming Gorge offers.

8b The EIS seems to marginalize the importance of the restrictions on the up and down ramp rate and single daily hump restriction. It seems as if the EIS concludes that the above mentioned restrictions have not been formalized and that the restrictions have only been in place since 1993. The reality is

that these restrictions were the result of lengthy investigations and negotiations of the Flaming Gorge Working Group and have been followed, except in extreme circumstances for some time before 1993.

8c This raises a concern that the flow restrictions are simply voluntary and unnecessary and opens the door to arguments that power generation should be pursued at the expense of fishing and other recreational pursuits. I believe that it would be a mistake to elevate power generation as a priority over other uses including but not limited to trout fishing. Past legislation has described power generation as an incident to the primary listed purposes of the dam including providing for basic outdoor recreation facilities and improving conditions for fish and wildlife. (Refer to EIS 3-4) I would pose the question to the Bureau: Should trout fishermen and others involved in outdoor recreational pursuits take a back seat to power generation and be subject to enjoying the resource at the mercy of power demand? Should past legislation and extensive discussion be ignored and pushed to the side in order to allow power generation to take priority?

8d Secondly I am concerned that the EIS fails to sufficiently address economic impacts of changes to the tailwater fishery. In using a model that includes three counties, the EIS fails to illustrate the true impacts to the economy of Dutch John and Daggett County where most of the economic impact occurs.

8e The EIS estimates under the Action Alternative a possible loss of employment in the Amusement and Recreation Services of 8.3 percent in wet years (table 4-26) and 6.6 percent in dry years (table 4-27). These are small losses when they are calculated across three counties but could be devastating to the community of Dutch John and Daggett County where the majority of residents are employed by this industry or associated with it. Has this serious economic impact on this area been fully researched and if so is it an acceptable impact?

In summary, I commend the well researched and thorough approach that the Bureau took in formulation and creating the EIS. I appreciate the opportunity to raise the concerns that I and many people effected by the operation of Flaming Gorge have put forth.

Sincerely,

Kory Kapaloski
Gen. Mgr
Trout Bum 2
4343 N. Hwy 224 #101
Park City, Ut. 84098
(435) 658-1166

CC: <troutbum2@qwest.net>, <kkapaloski@hotmaill.com>, <LKapaloski@pblutah.com>

8. TROUT BUM 2

8a

Comment noted.

8b

Section 4.4.1 of the EIS accurately characterizes the historic operations.

8c

The EIS states Reclamation's intent to balance the needs of all resources when making operational decisions under both the Action and No Action Alternatives. We appreciate your concern that power generation might have benefited at the expense of fishing and other uses. However, the analysis of the cumulative effects on hydropower generation shows that power has not been elevated above other authorized purposes and that, in fact, there have been losses to hydropower over the last 20 years. Please see section 1.4.2 for more information. The proposed action will not have a negative effect on the sport fishery, as shown in chapter 4 in the EIS.

8d

To estimate regional economic impacts associated with changes in river and reservoir recreation, information was collected from surveys of recreators as to their expenditures. The expenditure

information gathered via the recreator survey did not allow for county specific analyses. Based on pretests, it was determined that the survey was already complex (given the need to address visitation, valuation, and expenditure information by alternative), and any attempts to gather more detailed data by county would have significantly added to survey complexity, possibly jeopardizing survey usefulness. Attempts to allocate expenditures by county would be highly speculative. As a result, the decision was made to use the three-county model utilizing both river and reservoir expenditures and to supplement that analysis with specific commercial river guide operator survey information.

8e

The EIS acknowledges that Green River commercial operators could experience adverse impacts, particularly under wet and dry conditions. Reclamation cannot definitively describe impacts to Daggett County given the lack of appropriate county specific expenditure data. While these impacts could create problems if concentrated in Dutch John, Reclamation notes that wet and dry conditions were each estimated to occur about 10 percent of all years. We do acknowledge your point and included more discussion in section 4.12 in the EIS.

Trout Creek Flies

P.O. Box 247
Dutch John, Utah 84023

Email: info@fishgreenriver.com
www.fishgreenriver.com

(435) 885-3355
Fax: (435) 885-3356

Mr. Peter Crookston
Flaming Gorge Environmental Impact Statement Manager
PRO 774 Bureau of Reclamation
Provo Area Office
302 East, 1860 South
Provo, UT. 84606-7317

November 15, 2004

Dear Mr. Crookston: We would like to submit our comments on the Draft *Operation of Flaming Dam Draft Environmental Impact Statement* and its *Technical Appendices*.

As a member of GROGA we fully support the comments submitted by them concerning this DEIS.

As a business, Trout Creek Flies has been a Green River guide and outfitter service full time since 1987 and hold a U. S. Forest Service/BLM permit to provide fishing guided, fishing walk wading, scenic float trips and a vehicle shuttle service. We have a 7000 square foot facility that provides us with a base of operations for these recreational services. Within our facility we offer a retail fly shop, snack bar, raft rentals, motel rooms, convenience store and are a Phillips 66 gas distributor. Our customers include guided fishermen, the fishing public, rafters, hikers, boaters on the reservoir, people seeking lodging, travelers, local residents and out of area visitors. We are totally dependent on the recreational dollars generated on the Green River and Flaming Gorge Reservoir. We operate 12 months of the year although we have a seasonal business that is most active from April through October annually. We employ 20 plus river fishing guides and 25-30 other employees many who are full time. We are employers, full time residents, property owners and taxpayers.

We live in Daggett County and the town of Dutch John. Like us, this County, town and region is

extremely dependent on the recreational dollars. With the exception of government workers, we are the only industry in Dutch John. Within Daggett County there are 12 outfitters, 80 guides, 4 lodges, restaurants, 2 snack bars, 4 convenience stores, 3 gas stations, 3 raft rental services and their associated employees just on the east side of the reservoir alone. On the west near Manila and north around the reservoir there are many more businesses that too depend on recreational visitor dollars. Our county has less than 800 full time residents and is only 682 square miles in size.

Comment 1.

9a We are very disappointed in the treatment of the economical impacts of this EIS as they pertain to us. A more localized analysis is appropriate in light that the largest economical impacts center around Reach 1 of the Green River and the Flaming Gorge Reservoir. To do an analysis over a 3 county area does not show the real impacts of the recommendations contained within this EIS. We would like to see this EIS fully address the impacts to our businesses. We feel that it has not.

9b Question 1. Is it not possible to prepare an adequate economic analysis surrounding the EIS recommendations as they pertain to our businesses?

Comment 2.

9c While the GROGA letter states many of our concerns, we must reinforce the points that the ramping up process, flows exceeding 4600 cfs and daily fluctuating flow operations impact our businesses negatively by reducing the quality of the recreational experience for fishermen and other river users that use our services and buy our products. In addition we have safety concerns
9d for fishermen and other water based recreations while these flows are being performed.

Comment 3.

9e Furthermore, we support GROGA's position that power generation takes a lower priority when compared to the other "authorized purposes" of the Flaming Gorge dam. Operational considerations should be given to recreation and fishing in particular by reducing the impacts of daily fluctuations and their effects on these activities. Daily fluctuations performed during fishing
9f daylight hours are an erosion of local economics one day after another with their daily negative impacts.

Comment 4.

9g We support the recommendations for a 55 degree F release temperature during the dry and moderately dry years, maintaining adequate river temperatures for trout at the Colorado/Utah state line.

Comment 5.

We strongly support BAR recommendations of flow fluctuations limitations with the following exception. Power generation in the form of fluctuating flows should not be at the expense of other
9h authorized purposes, "and for the generation of hydroelectric power, as an incident of the foregoing purposes" (Vol. 1, pg 3 and 4, 1.4.1.1).

Comment 6.

- 9i We strongly support the 800 cfs ascending and descending ramp rates. We would support a formalization agreement for these ramp rates.

Comment 7.

- 9j We fully support the maintaining of the minimal flow agreement between UDWR and Reclamation for the maintenance of river flow supporting the tailwater trout fishery and furthermore request the formalization of this agreement as stated in Vol. 1, pg 5, second full (italicized) paragraph.

Comment 8.

- 9k Except in emergencies, flows should not exceed the capacity of the power plant of 4600 cfs, bypass flows should only occur as a last resort, and the frequency of such events should be kept at an absolute minimum.

Comment 9.

- 9l We share GROGA's opinion that in general we found this DEIS complicated to review based on its overlapping of the treatment of subjects. So many references that seemed to contradict previous statements were made clearer only after rereading them in the context of their specialized subject. It required a lot of time spent in the effort to discover this EIS's overall direction. In light of our comments, you know that we were disappointed with the overall economic analysis. We would be happy to answer any questions you have on our comments or assist in any manner possible. We can be reached at 435-885-3355. Once again thanks for this opportunity. These comments sent to you by fax will be followed by a hard paper copy for your convenience.

Dennis E. Breer- President
Trout Creek Flies, Inc.
P.O. Box 247
Dutch John, UT. 84023

9. TROUT CREEK FLIES

9a

To estimate regional economic impacts associated with changes in river and reservoir recreation, information was collected from surveys of recreators as to their expenditures. The expenditure information gathered via the recreator survey did not allow for county specific analyses. Based on pretests, it was determined that the survey was already complex (given the need to address visitation, valuation, and expenditure information by alternative), and any attempts to gather more detailed data by county would have significantly added to survey complexity, possibly jeopardizing survey usefulness. Attempts to allocate expenditures by county would be highly speculative. As a result, the decision was made to use the three-county model utilizing both river and reservoir expenditures and to supplement that analysis with specific commercial river guide operator survey information.

9b

Even if Reclamation had enough detail to estimate economic impacts for Daggett County alone, the aggregated nature of the regional model would preclude estimation of impacts for individual businesses. This is because the lowest level of detail provided by the model reflects the economic sector which typically combines information across a range of somewhat similar businesses. Reclamation believes that the economic analysis in the EIS is sound, and provides sufficient information to assess potential impacts.

9c

The EIS acknowledges the possibility of both positive and negative effects under differing conditions if the Action Alternative is implemented. It should be noted that the nature and timing of ramp rates, and other daily operational details,

would remain substantially the same under either the Action or No Action Alternative. The trout fishery was established 40 years ago within the context and limitations of dam operations; and over time, certain operational changes have benefited the trout fishery.

9d

Please see section 4.11.5 of the EIS for the discussion of safety as it relates to recreation activity in the Green River. See also response to Daggett County 1g.

9e and 9h

The EIS states Reclamation's intent to balance the needs of all resources when making operational decisions under both the Action and No Action Alternatives. We appreciate your concern that power generation might have benefited at the expense of fishing and other uses. However, the analysis of the cumulative effects on hydropower generation shows that power has not been elevated above other authorized purposes and that, in fact, there have been losses to hydropower over the last 20 years. Please see section 1.4.2 for more information. The proposed action will not have a negative effect on the sport fishery, as shown in chapter 4 in the EIS.

9f

The EIS acknowledges the possibility of both positive and negative effects under differing conditions if the Action Alternative is implemented. It should be noted that the nature and timing of ramp rates, and other daily operational details, would remain substantially the same under either the Action or No Action Alternative. The trout fishery was established 40 years ago within the context and limitations of dam operations; and over time, certain operational changes have benefited the trout fishery.

9g, 9i, and 9j

Comments noted.

9k

Under either alternative, flows above powerplant capacity would be expected as a normal part of dam operations.

9l

Comment noted.

From: Dennis Kubly
To: Crookston, Peter
Date: 11/16/04 12:13PM
Subject: Fwd: Inquiry to UC Region

Peter,

for your consideration of public comments.

dk

>>> Lisa Iams 11/16/2004 10:02:37 AM >>>
 Here is another inquiry regarding the test flows

>>> Steve Schmidt <nobody> 11/15/2004 6:48:46 PM >>>

 From Steve Schmidt () on Tuesday, November 16, 2004 at 01:48:20

message: RE: Operation of Flaming Gorge Dam Draft Environmental Impact Statement Executive Summary.

I have read this document several times and find the information within to be vague and incomplete in regards to schedules and impacts proposed by the 2000 Flow and Temperature Recommendations Executive Summary.

10a My concern is the Green River tailwater fishery from Flaming Gorge Dam to the Colorado Border. I am one of a handful of permitted outfitters on this resource and have been since 1986. In reading this document there is hardly a mention of the fishery or the potential and real bearing the 2000 Flow and Temperature Recommendations may have. If the proposed recommendations should significantly impact this fishery, the economic effect to Daggett County, businesses and those individual who rely on this resources for their livelihood could be devastating.

10b As I read the Executive Summary, much of what is being proposed under the right time frame and conditions would bear little consequence to the Green River fishery. However, irregular daily fluctuations over extended periods of time could inflict substantial environmental harm to this resource. In reading the Summary the time frame for possible increased flows under all 5 scenarios extends over a long period of time. Significant fluctuation outside of the rivers normal seasonal flow regime would greatly impact users and the economy of all businesses that rely on this fishery for their livelihood for years to come. In this document there is no mention of the impact to the fishery these recommended flows would have, nor is there any consideration given to this fishery under the proposed flow recommendations.

10c Regarding temperature, a broader overall range from the dam to the Colorado Border may improve the diversity of aquatic life in this section of the river thus enhancing many a users experience on this resource. However, on dry years, which we have experienced over the past 6, we have seen temperatures in the Browns Park portions of the river approach and exceed 70 degrees during the July to August time frame. If temperatures were increased over this time period under such conditions, as we have recently experienced, we could loose the lower sections of this fishery. Due to the most recent drought and increased temperatures in this portion of the Green, we have already seen a decline in the overall health of the lower Green River fishery. There is no indication in this report, that if and when possible steps would be taken to protect or possibly even enhance this resource in regards to temperature changes.

10d I support the Bureau's efforts in protecting these four endangered species. I recognize the value in such efforts and if recovery of these four endangered species should occur the better off we will all be. Yet there is nothing in the 2000 Flow and Temperature Recommendations that suggests that steps will be

10e

taken to protect or possibly enhance the economic viability of this resource when and if possible. There is virtually no regard given anywhere in the recommendation to the individuals and businesses whose lives depend on the health of the Green River fishery. Until such steps and considerations are taken, I find it difficult to support the proposed action.

Sincerely, Steve Schmidt
President, Western Rivers Flyfisher

emailaddress: schmidt@wrflyfisher.com

previous_page: <http://www.usbr.gov/uc/library/envdocs/eis/fqDEIS/index.html>

Submit: Send

REMOTE_HOST: 166.70.13.136

10. WESTERN RIVERS FLYFISHER

10a

Fishery discussions are contained in sections 3.7.2.3.4, 4.7.2.1, 4.7.2.4.1, 3.11, 3.12, 4.11, 4.12, and 4.21 of the EIS.

10b

The Action Alternative requires that the variation in elevation at the Jensen gauge stay within the 0.1-meter range per day. In dry conditions, the flow of water needs to be kept within a narrower range than under wet conditions. However, within these variations in flows, the change in depth, or elevation, of the water stays within the required 0.1-meter-per-day range. Even though the flows vary by up to 800 cfs per day depending on the minimum and maximum flows of the day, the change at the Jensen gauge remains within the 0.1-meter requirement.

Reclamation notes that flows above 4,600 cfs and daily fluctuations have been a normal part of dam operations for over 40 years, and would continue under either the Action or No Action Alternatives. The trout fishery was established 40 years ago within the context and limitations of dam operations; and over time, certain operational changes have benefited the trout fishery.

10c

See section 4.7.2.4.1.2. In dry and moderate years, 55 degrees Fahrenheit (°F) (13 degrees Centigrade [°C]) water would continue to be released from the

dam as it is currently, resulting in no more impacts to trout during summer months than are currently sustained.

10d

See section 4.7.2.4.1.2. The 2000 Flow and Temperature Recommendations were designed to benefit endangered fish. The Flaming Gorge Working Group provides a forum whereby concerns for other resources such as the tailwater trout fishery can be heard and forwarded as input for Reclamation to consider in planning dam operations. As stated in section 4.21, this working group will continue to be a valuable component of the adaptive management process following implementation of either the No Action or the Action Alternative. Issues such as temperature modification to protect the trout fishery can be raised through this process.

10e

The EIS discloses that there may be both adverse and beneficial effects to businesses under the Action Alternative. Under either the Action or No Action Alternative, Reclamation will continue to consider the needs of all resources when making operational decisions. Please refer to sections 3.7.2.3.4, 4.7.2.1, 4.7.2.4.1, 3.11, 3.12, 4.11, 4.12, and 4.21.