

**Colorado River Storage Project
Flaming Gorge Working Group
Meeting Minutes
April 15, 2009**

Participation

This meeting was held at Western Park, Vernal, Utah. Attendees are listed below.

Purpose of Meeting

The purpose of operation meetings (held in April, and August) is to inform the public and other interested parties of Reclamation's current and future operational plans and to gather information from the public regarding specific resources associated with Flaming Gorge Reservoir. In addition, the meetings are used to coordinate activities and exchange information among agencies, water users, and other interested parties concerning the Green River.

General

Ed Vidmar called the meeting to order at 10:00 a.m. with 32 present (see list of attendees below). Ed introduced himself and indicated that this year's Technical Working Group (FGTWG) 2009 spring, base flow, and temperature releases would be presented by Peter Crookston follow by the hydrograph analysis and forecast by Heather Patno. Proposals would be presented by Clayton Palmer with Western Area Power Administration (Western) and Larry Crist with the United States Fish and Wildlife Service (Service) followed by open discussion and questions. Before starting, all present introduced themselves and their affiliations.

Flaming Gorge Technical Working Group Proposal

Peter Crookston presented the FGTWG proposal for 2009. He provided some background on the Flaming Gorge EIS process and FGTWG establishment and also reviewed the 3 reaches of the Green River. He described the Action alternative of the EIS as the 2000 Flow and Temperature Recommendations published by the Recovery Program, and the 5 hydrologic classifications. Peter reviewed the Hydrologic Classification for the Green River and Yampa River Basins since the EIS Record of Decision (EIS ROD) was implemented in the spring of 2006. Since the EIS ROD was implemented the Green River Basin hydrology has always been much dryer than the Yampa River Basin. The same is true for this year. Since 2006 the Yampa River has provided the majority of the flows in Reach 2 of the river.

Peter then presented the FGTWG proposal for the different forecast scenarios. The hydrologic classification for the year is based on the unregulated inflow forecast for Flaming Gorge Reservoir. He indicated that the FGTWG proposal had to be in compliance of the EIS ROD prescription in order to be within ESA compliance. This year, so far the forecast falls within the average hydrologic classification of 810 KAF (thousand acre-feet), however, we are very close to the moderately dry classification. Under the average hydrologic classification the proposal is to achieve flows in Reach 1 in order to achieve at least 4,300 cfs or greater for a spring peak duration necessary to achieve an instantaneous one day peak of 18,600 cfs in Reach 2 and accommodate the Recovery Program research request of at least 15,000 cfs for a minimum of five consecutive days. Once the spring peak research flows and instantaneous peak objective

have been achieved in Reach 2, Reach 1 flows would be gradually reduced at a rate of 500 cfs/day to base flow levels.

If the Flaming Gorge unregulated inflow falls below 783 KAF the hydrologic classification would be (moderately dry). If the Yampa River Basin forecast remains above 1,248 KAF and Reach 2 flows exceed 14,000 cfs, it is proposed that the above proposal for the average hydrological classification be implemented. If the Yampa River Basin forecast falls below 1,248 KAF, it is proposed that flows in Reach 1 would be managed up to 4,300 cfs to achieve 8,300 cfs in Reach 2 for at least 7 days. Once the spring peak research request and instantaneous peak objectives have been achieved in Reach 2, Reach 1 flows would be gradually reduced at a rate of 350 cfs/day to base flow levels.

If the Flaming Gorge Reservoir forecast increases above 1,346 KAF the hydrologic classification would be (moderately wet). If the hydrologic classification is within moderately wet the proposal for the average hydrological classification would be implemented. In addition, flows in Reach 1 would be managed in order to achieve a one-day peak flow of 20,300 cfs in Reach 2 and 18,600 cfs for at least two weeks (these don't have to be consecutive). Reach 1 flows would be gradually reduced at a rate of 1,000 cfs/day to base flow levels. All the above peak flows would be achieved during the peak and post flows of the Yampa River.

Peter then described the base flow targets under the FG ROD. After the spring flow objectives in Reach 1 and Reach 2 have been achieved, flows would be gradually reduced to achieve base flow levels by no later than July 15, 2009. Base flows in Reaches 1 and 2 would be managed to fall within the prescribed base flow ranges described in the 2000 Flow and Temperature Recommendations depending on the hydrologic designation for 2009. At this time we are not sure what classification we will be this year. The FG ROD says that from August through November daily flows would be within plus or minus 40 percent of the mean base flow. From December through February daily flows would be within plus or minus 20 percent of the mean base flow. Also, mean daily flows would not exceed 3 percent variation between consecutive days and daily fluctuations at Flaming Gorge would produce no more than 0.1 meter stage change at Jensen, Utah.

The Temperature targets under the FG ROD would be managed to be at least 18 degrees Celsius for 2 to 5 weeks in Upper Lodore Canyon during the beginning of the base flow period. Water temperatures in the Green River would also be managed to be no more than 5 degrees Celsius colder than those of the Yampa River at the confluence of the Green and Yampa rivers for the summer of 2009 (June through August).

Hydrology Analysis and Forecast

Heather Patno began her presentation with a summary of what occurred in the past and where we are now and then the forecast. She started with a graph of the unregulated inflow for 2007 and 2008 with 33 percent of average and 66 percent of average, respectively. We are at a reservoir elevation low point right now at 6020 feet. Reclamation went into storage reserve last year with our releases so we are slightly low at this time. May is critical as far as inflow in the reservoir. We do not want reservoir elevation to exceed 6027 feet as we go into the spring runoff. The elevation level of 6027 feet is the upper level draw down limit for dam safety in case of unexpected flood events. This is the reservoir elevation that is targeted on May 1st. May 1st is

also the forecast for the official hydrologic classification to implement the flow recommendations we are working on today.

Snow levels for both the Green and Yampa River Basins are very similar this year compared to last year. The snow condition measured at Snotel sites is slightly low for the Green River basin. Yesterday the unregulated inflow for the Green River was at 97 percent of average. The Yampa River basin is above normal right now at 114 percent. It has been a good snow pack year for the Yampa River. Currently the Green River forecast falls in the Average category near the dry end. However, the Yampa River forecast falls in the Moderately Wet category. Combined forecast flow conditions for both river basins fall in the middle of the Average category.

Heather reviewed the snow pack, and forecast for moderately dry, average, and moderately wet scenarios. She explained that right now according the Green River April final forecast we are in the Average classification and there is a chance we could move down into the Moderately Dry classification and there is also a change we could move up into the Moderately Wet classification depending on what happens in the next few weeks.

Heather compared this year's hydrology to similar years in the past (1947, 1967, 1975, and 1997). Similar years to the most probable forecast are 1947 and 1975. If the 1947 year repeated itself, Flaming Gorge ramp up to powerplant capacity would begin on May 3, there would be eight days above 18,600 cfs in Reach 2, and the peak flow would be close to 21,500 cfs. If the 1975 year repeated itself, Flaming Gorge ramp up to powerplant capacity would begin on May 16, and there would be five days above 18,600 cfs in Reach 2, and the peak flow would be close to 20,700 cfs. A similar year to the minimum forecast is 1967. If flows this year were to mimic 1967, there would be a low spring peak and the Recovery Program research request would not be accommodated. A similar year to the maximum forecast is 1997. If flows this year were to mimic 1997, there would be very high spring flow of 18,500 cfs for 14 days in Reach 2. These historic years started with the same forecast as this year and have a wide range of results. She showed the range of flows on a graph that could happen this year based upon past years

Western Area Power Administration Base Flow Proposal

Clayton Palmer described their proposal in three parts (1) daily operations, (2) base flow request, and (3) the three agency trout studies. Clayton described their daily operations and gave background of Western's purpose, how they generate and contract power, and how the different reservoirs network together in the delivery of power. They are a non profit organization. They remain efficient to benefit the consumer. It is an efficient way to do business if Western can operate in a way to increase power production to meet increases in consumer peaks within a day. Consumers have peak use times during the day and Western is trying to meet that demand. The base flow requirements in the EIS ROD have flexibility around the mean daily average. After the requirements of the EIS ROD are met and ESA compliance is satisfied another authorized purpose of the dam is to generate power. We can go a long way to meet customer's demands and generate power within the flexibility in the EIS ROD.

Western would like the base flow to be at a minimum of 800 cfs immediately following the spring peak and remain low during the summer with a single peak in the summer during the day. Western would like higher fluctuating base flows during the winter when consumers demand is a double peak each day. Western would prefer to shape the water release to meet these demands

and to help deliver on contracts. Clayton showed graphs for winter operations (November, December, and January) with a double peak. It started with 800 cfs and increased to 1,400 cfs from 7 to 11 in the morning, down again to 800 cfs at noon and back up again to 1,800 cfs from 5 to 7 in the evening and down again to 800 cfs.

Western, Reclamation and UDWR have entered into studies to see what impacts these single and double peaks have on the trout below the dam. All three agencies have been contributing funds and are working together on these studies. They agreed to a five year study. On the 20th and 21st of this month they are sampling, measuring, weighing trout and looking at the overall health condition of each fish. They are placing pit tags on individuals and that is going a long way in determining the individual growth rates and condition of the trout.

Clayton Palmer provided his email and phone if anyone has questions: cspalmer@wapa.gov and 801-524-3522.

Lowell Martye from UDWR asked if Western is requesting two shapes, single summer peak and a double winter peak. Clayton replied that they are, while realizing it is subject to water availability and Reclamation monthly requirements, with a preference for the winter double peak.

Sue Nall with the USACE asked if this request by Western was a common request each year. Does this consumer demand need this kind of a double peak and single peak every year? Clayton said yes we make a proposal every year for this kind of a double peak in the winter and single peak in the summer. We change our proposal based on this meeting and as the forecast changes as we go into the summer months. It is all based on available water.

Roger Schneidervin with UDWR said we have been working on studies but as you know we run into funding problems all the time and that has hindered our progress. We prefer the peak in the summer rather than the winter. We believe the winter peaks are not natural and are very hard on wintering trout.

Clayton was asked to explain Western's relationship to marketing power. Clayton replied that while Reclamation operates the dam, Western takes the water on the high side of the transformer (as electricity) and markets it on a firm basis to its non-profit customers.

Gregg Tipton with GROGA asked if the double peak is to save money. Clayton replied that Western is a non profit organization so we are just trying to meet customer demand. We are under contract to provide power to our customers and that is our objective. Flaming Gorge is not the only dam in the system we use. We use other dams to meet the peaks as well but that has become a lot harder since Glen Canyon dam releases are less flexible due to environmental restrictions. The whole premise of this base flow request is a matter of service to our customers. UDWR said they are clearly most concerned with the winter double peak proposal by Western.

Charles Card with GROGA asked if the studies talked about earlier today were to study the double peaks impact to trout. The answer was no. Double peaks were not really studied in the

EIS because they were outside the scope of the EIS. There have really not been any direct studies on the impacts to trout from Flaming Gorge double peak releases.

U.S. Fish and Wildlife Service Base Flow Proposal

Larry Crist with the USFWS gave his proposal for base flow following the spring peak. The USFWS would like to see the targets met described by the FGTWG and then immediately go to a base flow release that is higher than the 800 cfs Western proposes. They are requesting higher base flows in the summer because preliminary results of research on the Green River, to disadvantage non-native smallmouth bass, indicate higher base flows are very hard on exotic smallmouth bass and do not harm the native endangered fish species that these flows are designed to help recover. We would like the base flow to be slightly higher in the summer and slightly lower in the winter. For example, if we fall into an average hydrologic classification this year and the EIS ROD asks for 1,500 to 2,400 cfs flows, we would request flows of 2,200 to 2,400 during the summer.

Ed said the requests by Western and the USFWS are clearly in opposition to each other this year and the final decision would be made by our regional director Larry Walkoviak. Ed added that Dave Speas is the main person to contact on the fish studies. Dave is up and involved on all the fish studies. Ed asked for all comments to be submitted by Friday, April 24th.

Melissa Trammell asked when you have conflicting requests for flows does that have an impact on the predicted monthly volume of water available. For example, last year Reclamation used storage water to accommodate Western's request. Heather responded that the decision is based on discretionary water that is available. This year there is much less water available to shape the release. She said that right now the May 1st 2010 target is 6027 feet elevation in the reservoir. Reclamation looks at the forecast inflow as an average and then shapes it in order to meet that target elevation of the reservoir. During the summer it can fluctuate as described in the EIS ROD plus or minus 40 percent and during the winter it can fluctuate plus or minus 25 percent of the mean daily average. All that goes into the equation but in the end we attempt to reach an elevation of 6027 feet by May 1st the following year. Right now, this early, we don't know what water is available or even if there will be any discretionary water available.

Clayton said that Western and the USFWS have a good history together and will try to reach a mutual agreement before Reclamations decision.

General Discussion

Jerry Taylor with Flaming Gorge Corporation stated that he was very concerned with the thought of using any storage water this year. When it is down to 6018 we have to move our facilities. A few years ago we had a lot of problems with the lower water levels. It is a big economic expense to move facilities and it disrupts our operations. We are on the edge this year economically and we can't see the reservoir go that low again.

Ed said we will have an August meeting to discuss where we are at in the hydrologic classification. We will discuss what happened in the spring release and where we are at on the base flows as we go into the winter, and we would expect to discuss Western's winter flow request for hydropower generation.

Sue with the USACE asked what the opinions of other agencies are on the impacts of spring peaks and base flows on other resources not mentioned. For example, what happens to wildlife, vegetation, sand bars, and riparian areas? She was directed to the EIS. It covers those areas well. It did not go into trout impacts heavily because they were outside the scope of the EIS. Heather said the EIS ROD provides a restriction that the daily fluctuation at Flaming Gorge Dam should produce no more than a 0.1 meter daily stage change at Jensen in Reach 2. It also provides that mean daily flow should not exceed 3 percent variation between consecutive days. Dave Speas said the EIS does not go very far in looking at fluctuating flows. Clayton said it did look at the Ute Ladies'-Tresses (Spiranthes) issue and much of that was in relation to fluctuating flow impacts to vegetation. A Triangle G Fishing Service representative said that in his extensive experience a changing shoreline has significant impacts on fish, vegetation, etc. Roger said their concern is that there have really not been any direct studies looking at fluctuating flows on trout. That is why we need to do the studies on double peaking. We need the data. Again it is not natural to double peak in the winter and those direct impacts need to be looked at. Dave said a lot of work has been done below Lake Powell but that work can not be directly applied the Flaming Gorge area.

Lowell, in mentioning the April 20-21 electrofishing, thanked Reclamation for their support and also thanked Reclamation and Dave Speas in particular for the shift of the selective withdrawal structure to get warmer water in the fall, this helps the trout. In general, it was observed that the trout guides prefer higher flows in summer and lower flows in winter. One GROGA guide said that in his 20 years experience, he (and others) think the fishery is in a state of decline in recent years, particularly fish size. He's observed this in the last 4-5 years, and especially in the last 2 years. This size decrease is also negatively affecting perception of our overall fishing quality. There may be many factors contributing to this decline. He appreciates that the three agencies are taking a look. In general GROGA likes high flows in spring but not in the winter.

GROGA said they favor the proposal by the USFWS. Dennis Breer often asked for high flushing flows to help the fishery and break up silt on Reach 1 and we still need those high flushing flows. Ed paid a tribute to Dennis saying he can only think of one meeting Dennis missed in the last 20 plus years. He was a great advocate for a healthy river and a healthy fishery. It has taken a lot of GROGA people here today to try and fill in for him. We miss not having him here with us.

Sue asked the USFWS if there were any downsides to higher base flows in the summer. Larry replied that there are no downsides for the fish, only for Western in that less power water would be available in the winter.

Ed thanked everyone for their comments. He said that if they didn't make comments today there is another opportunity for them to send comments on both the FGTWG proposal and base flow proposals by Friday, April 24th.

Next Meeting

The tentative date for the next Flaming Gorge Working Group meeting will be Wednesday, August 26th, 2009, at 11:00 a.m. at Western Park in Vernal.

Presentations

[FGTWG Flow Recommendations April 2009](#)

http://www.usbr.gov/uc/water/crsp/wg/fg/pdfs/FGTWGFlamingGorgeWorkGroup_Apr09.pdf

[Hydrology Presentation April 2009](#)

http://www.usbr.gov/uc/water/crsp/wg/fg/pdfs/FlamingGorgeWorkGroup_Apr09.pdf

[Western Proposal](#)

<http://www.usbr.gov/uc/water/crsp/wg/fg/pdfs/WesternProposal.pdf>

[Service Proposal](#)

http://www.usbr.gov/uc/water/crsp/wg/fg/pdfs/2009_USFWS_Request.pdf

Public Comments Received

[Utah Division of Wildlife Resources](#)

http://www.usbr.gov/uc/water/crsp/wg/fg/pdfs/2009_UDWR_Comments.pdf

[Eagle Outdoor](#)

http://www.usbr.gov/uc/water/crsp/wg/fg/pdfs/2009_EagleOutdoorComments.pdf

[GROGA](#)

http://www.usbr.gov/uc/water/crsp/wg/fg/pdfs/2009_FGResort_Comments.pdf

Previous Meeting Minutes

Flaming Gorge Working Group Meeting Minutes:

August 20, 2008

April 16, 2008

August 23, 2007

April 19, 2007

August 22, 2006

April 13, 2006

November 2, 2005

October 28, 2005

August 25, 2005

April 20, 2005

August 19, 2004

April 15, 2004

Attendees:

Peter Crookston	Reclamation	801-379-1152
Ed Vidmar	Reclamation	801-379-1182
Heather Patno	Reclamation	801-524-3883
Larry Crist	USFWS	801-975-3330
Kevin McAbee	USFWS	801-975-3330
Clayton Palmer	Western	801-524-3522
Sue Nall	USACE	970-985-1223
Lowell Marthe	UDWR	435-885-3164
Roger Schneidervin	UDWR	435-781-5314
Danelle Highfill	USFWS	435-781-5246
Melissa Trammell	NPS	801-741-1012 ext. 103
Jerry Taylor	Flaming Gorge Corporation	435-784-3483
Dave Speas	Reclamation	801-524-3863
Steve Hulet	Reclamation	435-885-3231
Terry Collier	GROGA	435-885-3342
Kevin Clark	Reclamation	435-885-3238
Kevin Clegg	GROGA	435-7904822
Bob Leake	Utah Water Rights	435-781-5330
Bill Reed	NWS/CBRFC	801-524-5130
Ryan Mosley	UDWR	435-885-3164
Burt Hawkes	Western	801-524-3344
Trina Hedrick	UDWR	435-781-5315
Wayne Prokopetz	Dinosaur NM	435-781-7721
Beverly Heffernan	Reclamation	801-379-1161
David Allison	Consultant Uintah County	435-722-7925
Cris Dippel	USFWS	970-365-3613
Charles Card	GROGA	801-725-5398
Kirk Robbins	Uintah MAD	435-789-4105
Chad Jaques	GROGA	435-901-4269
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