

Flaming Gorge Technical Working Group
April 12, 2012, 3:30 p.m.
Meeting Record

Attending:

Service (USFWS) –Kevin McAbee

UCRIP – Tom Chart, Jana Mohrman, Kevin Bestgen

Reclamation (BOR) – Heather Hermansen, Malcolm Wilson, Dave Speas

Western (WAPA) – Clayton Palmer, Jerry Wilhite

Argonne National Lab – Kirk LaGory

Tom Chart with the Recovery Program gave an update on the status of the Stirrup Floodplain. Matt Breen with UDWR indicated that Stirrup has been pumped full and observed that it is holding water. It was ready to go a couple of weeks ago. If hydrology conditions improve, the hope is that during spring runoff it will connect as quickly as possible.

Dave Speas reiterated that Reclamation understands the LTSP takes priority this year and the secondary objective is research on the Stirrup Floodplain. Current hydrology indicates that connection flows to Stirrup Floodplain are unlikely. The Recovery Program agreed that the primary objective of the LTSP is timing of the larval trigger set out in Table 2 in the Study Plan (matrix).

Reclamation reviewed the draft FGTWG proposed flow and temperature recommendations for 2012 that incorporates the April forecast of the April-July volumes. Flaming Gorge forecasted unregulated inflows decreased to 83% of the 30-year average. The Flaming Gorge Flow Recommendation classification based on the historic period of record (1963-2011) is 69 percent exceedance, which places it in the average (below median) classification. Continued decreases in the forecast will likely place the Flaming Gorge classification in moderately dry.

Forecasted Yampa River Basin April-July flows are 54% of the 1980-2010 average. The median seasonal daily peak flow on Yampa River is 6,370 cfs with a 10% exceedance probability of a daily peak above 10,000 cfs. The Flow Recommendations classification based on the historic period of record (1922-2011) is 90 percent exceedance, which places it in the dry hydrologic condition. The current forecast is not promising for meeting the secondary objective of the Recovery Program research request to connect Stirrup Floodplain at 15,000 cfs for a minimum of 5 consecutive days. The dry Yampa River conditions lead Reclamation to advocate meeting the moderately dry or dry hydrologic classification targets this year.

Heather Hermansen summarized her analysis of three different ranges of operating criteria as compared against historic releases (2006-2012) that would meet both the timing and flow target levels in the Larval Trigger Study Plan (LTSP). Table 2 in the LTSP contains a matrix detailing the flow target levels. The three operating patterns are:

- Historic FG Releases Shifted to Occur during Larval Presence
- Longer Duration Releases, Limited to Power Plant Capacity, that Coincide with the Yampa River Peak and Occur during Larval Presence
- Higher Magnitude Releases, Limited to Full Bypass Capacity, Shifted to Occur during Larval Presence

Current conditions correlate with water year 2007. The timing of releases from Flaming Gorge Dam in historic dry years has generally coincided with the presence of larvae in the system. While the discussion paper conveyed beneficial information, there are a few items that need to be revised and Heather agreed to make those revisions.

Western questioned why Reclamation produced a historic analysis of FG operations rather than a prospective look at operations for 2012, as has been done in prior April FGTWG meetings. Reclamation's objective was to respond to requests by the FGTWG members and action items outlined in the LTSP to provide a historic analysis of different operating patterns that time FG releases to coincide with larval presence. Heather will provide some information on analog years and potential flow operations to the group.

Kevin McAbee indicated there is uncertainty this year with the moderately dry conditions. The Service is looking for current information on the best conditions for razorback sucker. Kevin Bestgen asserted that 1994 was a good production year with extended duration of access to Stewart Lake. A similar year would provide good information in the moderately dry cell of the matrix. Dry conditions tend to favor the Colorado pikeminnow during the base flow season rather than razorback sucker benefiting from spring peak flows.

Reclamation discussed the potential of bypass releases to augment Yampa River flows in order to achieve higher flows in Reach 2 during larval presence. The Service questioned the utility of shaping releases with bypass in order to achieve 14,000 cfs for one or two days at the expense of the base flows. The Recovery Program and the Service are inclined to look at duration rather than magnitude. Moderately dry and dry targets in Reach 2 are $\geq 8,300$ cfs with research and monitoring targeting the Stewart Lake floodplain. The Recovery Program, Service, Western and Reclamation unanimously agreed to follow the matrix outlined in the LTSP rather than shape releases to achieve higher targets in wetter hydrologic classifications.

Reclamation indicated that if bypass flows in conjunction with Yampa River flows did not meet the Reach 2 targets outlined in the matrix then Flaming Gorge Dam would be cut back. Reclamation and Western support utilizing bypass to augment flows under current conditions to meet the Reach 2 target of $\geq 8,300$ cfs for at least one week. Reclamation's willingness to use bypass flows this year will be discussed with landowners at the Working Group meeting in order to disclose the impacts of the LTSP.

Dave Speas will send out list of primary contacts for real-time coordination of larval presence during spring runoff. Reclamation acknowledges that communication during spring runoff is the practical matter. Bruce Haines will provide real-time information of

larval presence and will be able to characterize the number of fish captured. Kevin Bestgen's analysis of thermograph data indicates that in most years the first appearance of larvae in the system occurs during a continued warming trend with temperatures around 12 C.

The next meeting will be scheduled the second week of May.

Action Items:

Heather Hermansen will provide potential 2012 impacts looking at analog years.

Dave Speas will distribute the contact list for real-time coordination of larval presence.