

Flaming Gorge Technical Working Group
May 3, 2013, 9:00am
Conference Call Record

Attending:

Fish and Wildlife Service: Kevin McAbee

UCRIP: Tom Chart, Jana Mohrman, Kevin Bestgen, Tildon Jones

Reclamation: Heather Hermansen, Dave Speas, Peter Crookston

Western: Jerry Wilhite

Agenda:

- Forecasts and hydrology in the Green and Yampa River Basins
- Larval sampling update and predictions
- Backwater survey results (Argonne/Western)
- Proposed spring flow operations discussion (FGTWG)

Overview:

The primary purpose of the call was to review May final forecasts and Green and Yampa River hydrology, receive an update floodplain management, larval sampling and an prediction of larval emergence. Heather Hermansen led the meeting.

Hydrology Discussion:

Heather Hermansen reviewed current forecast and snowpack conditions. The most probable May final forecast for unregulated inflow to Flaming Gorge during the April – July season is 480kaf (~87% exceedance or 49% of 30-year average), which is a decrease from the April midmonth forecast. This forecast corresponds to the lower end of Moderately Dry hydrologic classification. The Yampa River at Maybell and Little Snake at Lily forecast for April-July season is 778 kaf (~84% exceedance or 61% of 30-year average), increased into the moderately dry hydrologic classification. Runoff has started in both the Upper Green and Yampa River basins, although cooler temperatures are expected over the weekend and into next week. Spring weather conditions have a large impact on the magnitude of the Yampa River peak. If there continues to be a warming and then cooling trend similar to 2011, the magnitude of the peak will be lower with a longer duration. Alternatively, a period of hot temperatures would provide a quick runoff, high magnitude peak of short duration.

The Colorado Basin River Forecast Center (RFC) provided an update using their Ensemble Streamflow Prediction (ESP) model on April 29, 2013. The predicted Yampa River peak estimate is 8,610 cfs to occur between May 27 and June 17, with the likely peak occurring the week of June 3. Historic analog years for the Yampa River runoff are 1987, 1994 and 2001. Years 1987 and 2001 were chosen because their April-July volume is similar to the May forecasted volume. Year 1994 was chosen because it has the closest snow water equivalent to the current observation on the Yampa. Because of the continued colder temperatures, all analog year runoff patterns should be shifted later in the season.

Reclamation continues to recommend operating in the dry hydrologic classification for the spring season. Heather calculates seven days at powerplant capacity with a base flow of 820 cfs through the winter and into next spring. Real time information on observed Yampa River flows and larval presence will guide operational releases.

Larval Sampling and Prediction Discussion:

Kevin Bestgen indicated that the Middle Green River is colder than it has been in 20 years. Current sampling shows spawning on the White River. Based on existing conditions, larval emergence is expected in the latter half of May. The potential for low peak flows and cold water temperatures provides an environment not seen very often, so observations this year will be useful. Downstream the middle Green River also has cold water temperatures. While some spawning has occurred, it is anticipated that emergence is at least three weeks out after adding in incubation time prior to emergence.

Dave Speas speculated the possibility that because of spawning, there may be a possibility of larval emergence prior to the Yampa River peak and this year may be one where Flaming Gorge releases are timed both with larval emergence and the Yampa River peak.

Tildon Jones indicated that the Service would begin sampling on May 13th. Aaron has hits on the flat plate on the spawning bar. Spawning females have also been seen in Grey Canyon.

Floodplain Discussion:

Tildon Jones reported that Old Charlie Wash may be available this spring. New information has come to light and the Service hopes to get permits from the Utes in time to manage Old Charlie Wash this year. All indications are that the Utes will grant access and the Service will manage Old Charlie Wash to entrain larvae and pump water in the floodplain over the summer.

The current plan is to target Stewart Lake and Old Charlie Wash with the assumption of lower magnitude peaks for a longer duration. Again, real time information on observed Yampa River flows and larval presence will guide operational releases.

Next Meeting:

Two meetings were scheduled to provide discussions during potential larval emergence. The next meetings are scheduled for Friday, May 17, at 10:00 a.m. and Wednesday, May 22, at 1:30 p.m.