

**Flaming Gorge Technical Working Group**  
**March 6, 2013, 9:00am**  
**Conference Call Record**

**Attending:**

Fish and Wildlife Service: Kevin McAbee,  
UCRIP – Tom Chart, Jana Mohrman, Kevin Bestgen, Tildon Jones, Matt Breen  
Reclamation – Heather Hermansen, Dave Speas, Peter Crookston, Ed Vidmar  
Western – Jerry Wilhite  
Argonne National Labs – Kirk LaGory

**Agenda:**

- Current Hydrology in the Green and Yampa River Basins
- Recovery Program flow request
- Draft FGTWG Proposed Flow and Temperature Recommendations for 2013

**Overview:**

The primary purpose of the call was to discuss the details of implementing the Recovery Program's research request (LTSP) and managing floodplains for endangered fish during the spring and base flow period under current forecast conditions. Heather Hermansen led the meeting.

**Hydrology Discussion:**

Heather Hermansen reviewed current forecast and snowpack conditions. spring and summer/fall basin hydrology and Flaming Gorge reservoir operations information. The March forecast for unregulated inflow to Flaming Gorge during the April – July season is 550kaf (~84% exceedance) and is trending down. 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 740 kaf (~86% exceedance) with similar conditions as the Upper Green. Current forecasts, snowpack and hydrology closely resemble last year with even drier antecedent soil moisture conditions. Heather recommended operating in the dry hydrologic classification for the spring season. Heather mentioned that Reclamation has an operational policy not to use the spillway because of O&M concerns. Using the March final forecast, Heather calculates seven days at powerplant capacity with a base flow of 850 cfs, although she anticipates this will decrease if the forecast continues trending dry.

Heather presented to the group the need to discuss the use of bypass to meet Reach 2 targets this year in light of the dry hydrology. Jerry Wilhite (Western) suggested that because of the dry forecasts that operations return to matching the peak of the Yampa without bypassing rather than recreate last year's operation. This opened up the discussion of improved management strategies at the Stewart Lake and Old Charlie Wash floodplains, the targeted floodplains outlined in the LTSP to be targeted for research in dry years.

## **Floodplain Discussion:**

### Stewart Lake:

Matt Breen (UDWR) discussed last year's connection to the Stewart Lake floodplain. Stewart Lake would normally connect at 7,500 cfs at the inlet. The inlet channel was largely blocked due to several hundred meters of sedimentation that occurred during 2011. UDWR did excavate some sediment at the inlet and a minimal volume of water did get through the inlet channel to the floodplain. The bulk of the entrainment of larvae during the 2012 spring peak occurred through the outlet structure because of the sedimentation at the inlet channel. The floodplain successfully entrained larvae last year but drought conditions prevailed and the fish didn't survive.

UDWR discussed an improved management strategy for entrainment into and maintenance of larvae in Stewart Lake floodplain. The strategy would be to use the LTSP releases from Flaming Gorge to provide an initial fill of and entrain larvae into Stewart Lake and the pump additional water into the lake to maintain water levels. UDWR has a water agreement with Reclamation for 1,000 acre-feet of water from Red Fleet to be used for selenium management in Stewart Lake. This water would be available to maintain water in Stewart Lake and maintain survival over the summer. Dave Speas mentioned that Kerry Schwartz with Reclamation's Provo Area Office would like to communicate further with the Service regarding use of Red Fleet water. He suggested convening a Red Fleet working group to coordinate activities this summer.

Matt discussed UDWR's new management strategies to keep the floodplain filled with water as long as possible over the summer and reintroduce the razorback into the river. There is some concern that the outlet channel will have water pockets and ponds that may capture the fish during reintroduction and hinder survival.

Kevin McAbee (Service) agreed that there was successful entrainment and connection in a dry year last year from a water management standpoint. He advocated learning from last year's successful entrainment and implementing new strategies this year throughout the summer for fish survival. Matt Breen agreed that UDWR would like to repeat the study with modifications to ascertain potentially different results under dry conditions. The 1,000 acre-feet of water from Red Fleet should be adequate to maintain water elevations in Stewart Lake's 570 acres. Dave Speas asked if there were past records available on Red Fleet water and selenium management. Matt Breen was going to see if he could find any historic information.

Ed Vidmar (Reclamation) let everyone know that the 1,000 acre-feet of water is guaranteed. He mentioned that Red Fleet is 19 feet lower this year than last with a 60% of average forecast. Using water this year means there may be less water in 2014 for selenium treatment. However, drawdown for selenium treatment is seen as positive from a fisheries management perspective.

### Old Charlie Wash:

Tildon Jones (Service) discussed the Old Charlie Wash floodplain connection. Old Charlie connects at 5,000 cfs at the outlet, which is a single-breach downstream wetland connection. It has a control gate structure at the outlet that allows the floodplain to be dewatered before larval razorback sucker entrainment. This allows the Service to open the control gate during larval presence and connect to the river for 4-5 days during the peak, after which the gate is closed to maintain water in the floodplain. Last year they documented survival of larvae in Old Charlie for about a month and to a size bigger than seen before. The Service has the capability to pump water from the river into the floodplain to maintain survivability over the summer. This has been a learning process and the goal is to keep the razorback alive as long as possible.

Tildon discussed the Service's similar strategy for Old Charlie Wash where they plan to keep the floodplain filled over the summer and reintroduce the fish to the river as they reach YOY stages big enough to survive rather than over-winter the fish. The time frame for reintroduction is August or September. The working hypothesis is that as the larval fish transform to YOY and reach the juvenile stage there is a better chance for survival when they are reintroduced to the river.

### Base flow Discussion:

Jerry Wilhite mentioned that it looks drier this year than last. Last year's base flows were higher in the summer to assist Colorado pikeminnow. Base flows between 800-850 cfs are not good for the pikeminnow and there is uncertainty in razorback sucker survival, even with the improved management plans and strategies. Kevin McAbee agreed that the currently scheduled base flows are not good for pikeminnow, which need between 1,500-1,800 cfs in Reach 2. He acknowledged that flows this year can't be used for both razorback sucker and the pikeminnow.

Kevin Bestgen would like to see the LTSP implemented again this year with the supplemental water available. The research may invalidate the concept that there are various years for various species. Researchers did see fish showing up in the middle and lower Green River sections in 2012. Kirk LaGory questioned the origin of the 2012 fish and wondered if they were using the margin habitat in the lower Green. He agreed that holding the fish until they reached 2-3 inches in length and then reintroducing them to the river would help survival. Kevin Bestgen mentioned that the sampling is easier and research is more tractable in a dry year.

Kirk discussed the 2012 transection survey and habitat availability results. He mentioned that the range of 1,000 cfs to 1,400 or 1,500 cfs provides good habitat availability. Habitat in Reach 2 would remain the same without large peak releases this year. Kirk will present his findings at the next meeting. He suggested the group rely on habitat availability relationships to make a decision. The 2013 survey is done with the first round at Thunder Ranch. There are new relationships to look at in the next couple of weeks. It may be a moot point by the next meeting, but good to know.

### **Recommendation:**

The group recommends similar operations to last year while implementing improved management strategies and maintaining wetlands through the summer. Matt Breen will

email information on the Red Fleet water agreement and additional details on the use of the water and discuss it further at the next meeting.

**Next Steps:**

The next meeting was scheduled for Friday, April 6, at 9:00 a.m.