Notification: Diamond Fork River & Sixth Water Creek

September 26, 2016

Winter 2016-2017 Flows

During the summer of 2016, releases through the Strawberry Tunnel have been set at approximately 15 cubic feet per second (cfs) resulting in about 20 cfs at the Sixth Water USGS gauging station and approximately 40-60 cfs at Monks Hollow on Diamond Fork River. For the winter of 2016-2017, the Joint Lead Agencies (JLAs) will adjust the Strawberry Tunnel releases such that flows in upper Sixth Water Creek between Strawberry Tunnel outlet and Sixth Water Flow Control Structure would be approximately 25 cfs. With expected natural flow gains the resulting flows on lower Diamond Fork River near Monks Hollow would be approximately 35 cfs.

As with last winter, these releases will result in lower-than-typical flows on lower Diamond Fork and will allow for collection of a second year of macroinvertebrate and fisheries data with which to assess the relationship between winter streamflow levels and ecosystem health.

The change to the winter 2016-2017 flow release pattern is scheduled to occur on October 14, 2016. Additional details are provided in the table below:

	Average Winter 2015-2016 Flows	Average Summer 2016 Flows	Proposed A Interim Early Fall Flows	Approximate Early Fall 2016 Flows Short-Term Flow Test			Proposed Approximate Winter 2016- 2017 Flows
Diamond Fork (near Monk's Hollow)	40 cfs October- April	54 cfs May- present	28 cfs Sept.30- Oct.10	18 cfs Oct. 11	23 cfs Oct. 12	28 cfs Oct. 13	35 cfs Oct. 14-late April
Sixth Water (at Strawberry Tunnel)	30 cfs October- April	20 cfs May- present	18 cfs Sept.30- Oct.10	8 cfs Oct. 11	13 cfs Oct. 12	19 cfs Oct. 13	25 cfs Oct. 14- late April

Early Fall 2016 Flows

Beginning on October 11, the JLA's are proposing to conduct a short-term flow test to allow for collection of water quality and sediment transport data at flow release levels lower than this summer's releases. Specifically, for about an 18-hour period, releases through the Strawberry Tunnel would be reduced such that flows in upper Sixth Water Creek would drop to about 8 cfs, followed by a second 18-hour period when flows in upper Sixth Water Creek would be held at 13 cfs. Flows would then increase to about 19 cfs (the current flow level) for one day and then be set at the 25 cfs winter flow level. Flows on lower Diamond Fork River would be expected to temporarily drop to about 18 cfs at the start of the flow test, then increase to the anticipated winter flow level of about 35 cfs (see table above).

Note: this proposed schedule avoids the brown trout spawning season known to typically begin October 15; however, if fisheries sampling scheduled for the week of October 3 indicates that significant spawning activity has already begun, the time frame for this low flow test will be reconsidered in consultation with stakeholders.

This short-term low flow test is needed to gain a better understanding of how flow release levels affect selenium concentrations in Sixth Water Creek. When originally constructed in the early 1900's, Strawberry Tunnel intercepted groundwater that now constantly discharges to Sixth Water Creek at a rate of about 5 cfs. This groundwater discharge, known as "tunnel make", contains high concentrations of selenium, a naturally occurring element. Strawberry Reservoir water deliveries made through the Strawberry Tunnel typically dilute the naturally-occurring selenium to levels that do not exceed the water quality standard.

Background

The Central Utah Water Conservancy District (District), the Utah Reclamation Mitigation and Conservation Commission (Mitigation Commission), and the United States Department of the Interior, Central Utah Project Completion Act Office (CUCPA Office), as JLAs, have determined that the winter instream flows for Diamond Fork River can no longer be delivered from the Sixth Water Flow Control Structure. The JLAs have entered into an agreement with Utah State University (USU) to complete scientific studies over the course of several years on the Diamond Fork River and Sixth Water Creek systems to help identify the desired flow regimes.

A Categorical Exclusion Checklist was signed on October 1, 2015 to allow for flows to be experimentally altered from the legislated minimums during the three-year study period.

Questions regarding the studies or flow changes may be directed to Melissa Stamp at mstamp@usbr.gov or 801-524-3146. Additional information about this project can be found at diamondfork.cuwcd.com.