

Notification:

Diamond Fork River & Sixth Water Creek

April 29, 2016

Summer 2016 Flows

During the winter of 2015/16, releases through the Strawberry Tunnel have been set at approximately 30 cfs resulting in about 35 cfs at the Sixth Water USGS gauging station, and approximately 45 cfs at Monks Hollow on Diamond Fork River. **For the summer of 2016, 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 20 cfs. With expected natural flow gains and pipeline surcharge inputs at Sixth Water Flow Control Structure and Monks Hollow Overflow (see map at diamondfork.cuwcd.com), the resulting flows on lower Diamond Fork River near Monks Hollow would be approximately 40-45 cfs.** These flows will allow for data collection under flow conditions lower than have been previously sampled. Types of data that will be collected include substrate, channel change, instream organic matter, primary production, stream metabolism, macroinvertebrate composition and drift, and fish species composition and density, diet, and age structure at seven sample sites along the Sixth Water and Diamond Fork system. Water temperature and dissolved oxygen data will be continuously collected at the sample sites. Temperature data on lower Diamond Fork will be reviewed monthly during the hot summer months to ensure that the proposed summer 2016 flows do not cause harmful water quality conditions. During the study period, the JLAs will continue to coordinate with the interested public and agencies. The change to the summer 2016 flow release pattern is scheduled to occur on Monday May 2, 2016.

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.

Title III, Section 303(c)(1) of CUCPA (Public Law 102-575) legislates minimum instream flows for Diamond Fork River and Sixth Water Creek, as per the following table:

	Winter Flows	Summer Flows
Diamond Fork (near Monk's Hollow)	60 cfs October-April	80 cfs May-September
Sixth Water (at Strawberry Tunnel)	25 cfs November-April	32 cfs May-October

The minimum instream flows for Sixth Water Creek are delivered through the Strawberry Tunnel. Since the completion of the Sixth Water Flow Control Structure, the Diamond Fork River minimum instream flows have been delivered through (supplemented though) the Sixth Water Flow Control Structure's sleeve valves.

The release of winter flows for Diamond Fork River through the Sixth Water Flow Control Structure has resulted in damage to the sleeve valves. The damage includes 'pitting' on the valve body and erosion of the valve seats. If left unchecked this would've caused the valves to fail. In fall of 2012, the District and CUPCA Office redesigned and repaired the sleeve valves in hopes that they would better handle the extreme range of flow deliveries at the Sixth Water Flow Control Structure. However, the newly redesigned and reconstructed sleeve valves have the same problems as mentioned. Therefore, the JLAs will no longer be able to deliver the Diamond Fork River winter minimum instream flows at the Sixth Water Flow Control Structure. The Sixth Water Creek and Diamond Fork River winter minimum flows will be made through the Strawberry Tunnel. This means that minimum instream flow targets for Diamond Fork would need to be satisfied from the outlet of the Strawberry Tunnel and all the way down Sixth Water Creek.

The JLAs are concerned that higher flow rates may cause adverse impacts to ecological conditions of Sixth Water Creek. The USU scientific studies will provide data to help evaluate these potential impacts and also assess whether or not the legislated minimum instream flows are the best flows to promote a healthy riparian and aquatic ecosystem. 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.