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Abstract

Opportunity for Spill Management on the Dolores River in 2017: A Collaboration of 'Spill Science'

The Dolores River below McPhee Dam has been the focal point for native fish management since it was recognized that the Dolores represents a relatively intact assemblage of three large bodied, important native fish species: bluehead sucker, flannelmouth sucker, and the roundtail chub. Recognizing the importance of these species, and in general, a restricted water supply that affected aquatic habitat and viability for these fish, CPW and other partners have worked through years of collaborative stakeholder efforts -the Dolores River Instream Partnership ('DRIP'), the Dolores River Dialogue ('DRD'), the Lower Dolores River Working Group, and the 'A Way Forward' Process - to craft a process plan or process that will sustain these populations into the future by capturing opportunities for improving fish habitat or flow conditions when these opportunities exist. The Lower Dolores River '*Implementation, Monitoring, and Evaluation Plan for Native Fish*' (2014) was the result of many efforts by many partners. This Plan focuses on capturing opportunities for improvements when they occur, and in particular, monitoring and evaluating the benefits or uncertainties in a given year. The greatest opportunity to use flow management to improve native fish habitats occurs when there is excess water supply coming into McPhee Reservoir (excess to fill needs and out-of-basin diversions), which allows for a managed spill event during spring runoff into the Dolores River below the dam. Winter 2017 brought an ample water supply to the Dolores basin, and a spill of sufficient magnitude was projected to allow for flexibility in how the spill was operated. This talk describes the collaboration of scientific efforts that occurred in spring and summer of 2017 - including native fish monitoring, groundwater-fluvial interactions, riparian vegetation response, and geomorphic effects; the 'real world' issues associated with monitoring and evaluation of ecological factors affecting native fish; and some caveats about the findings from these efforts.