

Fiscal Year 2016
Draft Scope of Work to Conduct
San Juan River Environmental Flows Workshop #2

Background

The San Juan River Basin Recovery Implementation Program (Program) held a workshop on environmental flows in the San Juan River on 12-13 February 2015. The goal of this workshop was to discuss and agree on an End of Water Year Storage Target (EOWYST) elevation for Navajo Reservoir. The group determined a target elevation of 6,063 feet (with an option to drop the reservoir to 6,050 feet for biological flexibility) was most appropriate to minimize the risk of shortage sharing, eliminate moderate releases that do not appear to accomplish intended results, and increase the frequency of larger releases from Navajo Dam. Water in excess of the storage target is considered “available water” that can be used for spring peak releases, elevated base flows, summer spikes, or other management as determined appropriate by the Program. A second and possibly third workshop was anticipated to evaluate and revise the 1999 Flow Recommendations. This scope-of-work details the process to evaluate the fish and habitat responses to flow recommendations that would culminate in a second San Juan River Environmental Flows Workshop.

Relevant Long Range Plan Tasks

Task 2.2.1.1. Implement flows that provide suitable habitat for endangered fishes and other native fishes in the San Juan River.

Flow recommendations were developed in 1999 to provide sufficient water at times, quantities, and durations necessary to protect the endangered fishes and their designated critical habitat (Holden 1999). Reclamation has been operating Navajo Dam according to the Flow Recommendations since 1999. Reclamation implements the flow recommendations by making releases based on operations decision criteria developed in 2006 (Navajo Ops BO), hydrologic conditions, and operational constraints while maintaining the other authorized purposes of the Navajo Unit. Slight modifications to the 2006 operations decision criteria were made in 2015 primarily to adjust for prolonged dry hydrologic conditions in the San Juan River Basin.

Task 2.2.1.2. Develop and implement a process for revising flow recommendations.

The Service will coordinate and oversee development of any revisions to the Program’s flow recommendations (Program Document 2012). The process for revising flow recommendations will be based on monitoring data, the San Juan River Basin hydrologic model, updated climate change projections for stream flow, and scientific knowledge of flow-ecology relationships. The revised flow recommendations will be produced by the Program Office with technical guidance from the Biology Committee and outside experts. The revised flow recommendations will be reviewed and commented on by the Biology and Coordination Committees. Following review and any necessary revisions, the Program Office will submit the revised flow recommendations to the Service Regional Office and Reclamation for further review, revision, approval, and implementation.

Study Area

This project will encompass the San Juan River Basin downstream of Navajo Reservoir but analyses will be conducted on data that have already been collected.

Objectives

1. Evaluate the fish and habitat response to past flows.
2. Revise Flow Recommendations as appropriate.

Methods

A small team of Biology Committee (BC) members, San Juan River researchers, and Program Office staff will be convened to carryout pre-workshop tasks prior to the full workshop. Members of the team are yet to be identified but likely contributors would include: Ron Bliesner, Jason Davis, Scott Durst, Nathan Franssen, Dave Gori, Vince Lamarra, Mark McKinstry, Bill Miller, Steven Platania, and Tom Wesche.

Once members are identified, this sub-committee would meet over two days in Albuquerque to determine available data and assess how the information can be used. Specifically, during this meeting the sub-committee will: identify data, acknowledge limitations in the data, identify questions, review literature, agree on a process how to evaluate flow, and outline appropriate analyses to evaluate fish and habitat response to flow. Ideally, this meeting will be held in November or December 2015.

Analyses identified during the two day meeting in Albuquerque will be conducted in-house by sub-committee members over the course of one month. If necessary, a more detailed SOW to complete preliminary analyses and conduct the workshop will be developed.

The sub-committee will reconvene for a one day meeting in Albuquerque to share, discuss, and interpret results of analyses. Any additional analyses or alternative interpretations identified during this meeting will be investigated.

A two day workshop with the full BC, peer reviewers, and interested parties will be held in Albuquerque to share and discuss the findings of the sub-committee. Based on the evaluation of the fish and habitat response to flows and other relevant information, workshop participants will discuss possible revisions to the 1999 Flow Recommendations. Expected outcomes of Workshop #2 are: 1) the identification of revisions to the 1999 flow recommendations and, 2) the delegation of responsibility for making the revisions and finalizing the updated flow recommendations. The workshop will be moderated by an independent third party, likely Jim Brooks, and may include external experts to provide expertise and additional peer review. Ideally, the workshop will be held sometime from January-March 2016.

Products

The analyses conducted by the sub-committee will be summarized in a “whitepaper” and in presentation format during the workshop. The proceedings of the workshop will be summarized by an individual/entity not participating in the workshop.

Estimated FY-16 Budget

Anticipated costs for the two day workshop include expenses associated with preliminary analyses, workshop moderator, workshop note taker, and external expertise, if needed.

The total FY-16 budget for the workshop is estimated to be **\$50,000**.