



United States Department of the Interior

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San Juan River Recovery Implementation Program
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Coordination Committee:

The intent of this memo is to outline and clarify the use of the San Juan River Basin Recovery Implementation Program's (Program) Hydrology Model in Endangered Species Act consultations.

BACKGROUND

The San Juan River Basin Recovery Implementation Program (Program) was established in 1991 and has two primary goals:

- To conserve populations of Colorado pikeminnow and razorback sucker in the Basin consistent with the recovery goals established under the Endangered Species Act.
- To proceed with water development in the Basin in compliance with federal and state laws, interstate compacts, Supreme Court decrees, and federal trust responsibilities to the Southern Ute Indian Tribe, Ute Mountain Ute Tribe, Jicarilla Apache Tribe, and the Navajo Nation.

The Program is also intended to provide the measures for compliance with the Endangered Species Act (16 U.S.C. 1531 et seq) (ESA) for water development and water management activities in the Basin that are developed during section 7 consultations.

The U.S. Fish and Wildlife Service (Service) participates in the San Juan Basin Recovery Implementation Program (Program). In order to facilitate the Program's compliance with the ESA, the Service assisted the Coordination Committee with the development of the "Principles for Conducting Endangered Species Act Section 7 Consultations on Water Development and Water Management Activities Affecting Endangered Fish Species in the San Juan River Basin" (June 2002) (Principles). The Principles were developed to be used as a guide to define how the Program's actions will be used to provide ESA compliance for impacts to listed fish species in

the Basin from water development and water management activities.

The Principles were adopted by the Program's Coordination Committee and have been reviewed by the Service and determined to be consistent with the Endangered Species Act and its implementing regulations (50 CFR Part 402). The Service, by memorandum transmittal to the Program in 2005, reiterated the intent to use the Principles in conduct of ESA compliance activities. Use of the hydrology model when evaluating proposed project impacts on meeting flow recommendations was specifically identified as part of the process.

The actions developed and implemented by the Program are intended to assist in the recovery of the species and provide the reasonable and prudent alternatives (RPA) that avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat from water development and water management activities in the Basin. Program actions are also intended to provide the reasonable and prudent measures (RPM) needed to minimize take of listed fish. Under the Principles, biological opinions for water development projects in the San Juan basin can rely on the Programs actions for RPAs, RPMs, and/or conservation measures. The Service recognizes that a major recovery component of the Program and a requirement of the Animas-La Plata Biological Opinion¹ is the requirement for Reclamation through the operation of Navajo Reservoir to provide flows for the recovery of the endangered fishes in the San Juan River. Flow recommendations necessary for the recovery of the two endangered fish were developed by the Program (San Juan Flow Recommendations (Holden 1999)) in 1999 and the Service recognizes these as the best available scientific information concerning flows for use in consultations. The Service also recognizes that the flow recommendations may change over time

THE ROLE OF THE SAN JUAN HYDROLOGY MODEL IN ESA CONSULTATIONS

The recommended flows are the flows that have been determined necessary for development and maintenance of spawning and nursery habitat and to maintain channel and habitat complexity. In addition to the habitat response, the flows also mimic a natural hydrograph understood to be important to the life cycle of the endangered Colorado pikeminnow and razorback sucker. Because of their importance to the recovery of these species, current and future section 7 consultations will consider the impact of any proposed project on the availability of water and timing of flows within the San Juan River Basin. Because the Service is required to use the best available science to make its determinations², the Service will use San Juan hydrology model run(s) conducted by the action agency or Reclamation. Evaluation by the Service of model runs will be used to determine the level of impact, if any, of the proposed action on Reclamation's

¹ In the Animas – La Plata Biological Opinion (2000) Conservation Measure number one, the Bureau of Reclamation (Reclamation) is committed to operate Navajo Reservoir to mimic the natural hydrology of the San Juan River to benefit endangered fishes and their Critical Habitat. Mimic of the natural hydrology will be achieved by following the San Juan River flow recommendations (Holden 1999). Conservation Measure number one relies on Reclamation as being the party responsible for maintaining the San Juan hydrology model and its data.

² The § 7 formal consultation process is designed to “ensure” that any agency action “is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined...to be critical...” 16 U.S.C. § 1536(a)(2). “In fulfilling the requirements of this paragraph each agency shall use the best scientific and commercial data available.” (*Id.*)

ability to meet the flow recommendations through the operation of Navajo Reservoir. However, the model runs will not be the sole criteria in determining the level of impact. The impact to the flow recommendations will be associated to biological impacts to the endangered fish and their Critical Habitat.

Consultations evaluate the effects of the proposed project on the listed species and their habitat. Without predetermining the results of a specific consultation, the Service wants to be clear that if model results show the flow recommendations cannot be achieved, the project may still be able to achieve compliance with the ESA. The Service will determine the magnitude of all of the proposed action's impacts, including how the proposed project affects the ability of Reclamation's operation of Navajo Reservoir to meet the flow recommendations and thereby meeting the listed fishes various life history needs/requirements. In interpreting the results generated by the San Juan Hydrology model, the Service will consider the assumptions used in the model, the limitations associated with the range of variability of the data used, and the level of accuracy and precision in the model results. In considering the assumptions used in the model, the Service and Reclamation, in consultation with the Program, will evaluate the schedule of depletions being used to ensure that they accurately reflect depletions as they are occurring in the Basin.

Finally, the Service will consider whether the probability of ensuring the survival and recovery and adverse modification of critical habitat are not compromised as a result of specific water depletion(s) or the cumulative effect of depletions.

If necessary, the Service will identify additional recovery actions to be undertaken by the Program that support the Program serving as the RPAs or RPMs for the proposed project. The Service will confer with the Coordination Committee regarding whether or not any recommended additional actions can be carried out by the Program.

The Service will consider all reasonable water and non-water solutions to avoid jeopardy to the species and adverse modification of critical habitat and to minimize take of the species if those conditions exist. The Service will continue to look for ways to balance the needs of the listed species with the needs of water users in the San Juan River Basin. We believe that achieving recovery and continued water development, the goals of the program, are achievable.

Finally, the Service is very appreciative of all the hard work by members of the San Juan River Basin Recovery Implementation Program. Without the Program and its accomplishments, the listed species would not be making progress.

If you have any questions regarding Endangered Species Act section 7 consultations relative to the San Juan River Basin, please call me David Campbell, Aquatic Ecosystems Branch Chief /San Juan Recovery Program Coordinator at (505) 761-4745.

cc: Supervisor, Fish and Wildlife Service, Ecological Services Field Office, Grand Junction, Colorado