

Attachment 1:

Purpose and Need for Modification of Catron County's Tier Two Proposal

The Tier Two proposal, *San Francisco Watershed Restoration Proposal*, submitted to ISC in February, 29 2012, has been modified as described in this text and submitted by Catron County Commission to ISC for consideration. The modified proposal, like the original, is a water utilization alternative to meet water supply demands as provided by the Arizona Water Settlements Act of 2004 (AWSA), P.L. 108-251.

Catron County Commission has modified its original proposal due to the Whitewater Baldy Complex catastrophic wildfire in the watersheds identified in the first proposal, and adjacent watersheds, which are now exposed to destructive flooding. In addition, the Catron County Commission modified its proposal because of the emergency/disasters, declared by the Governor of New Mexico and by Catron County Commission last summer and, regarding the associated flood damage potential to the lower watershed irrigation systems. Both state of emergencies/disasters remain in effect today.

The major change to the original proposal is the addition of downstream irrigation projects that will protect and improve at-risk infrastructure exposed to destructive flooding, per the emergency/ disaster declarations; and, will enhance our original proposal in meeting AWSA evaluation criteria.

The purpose of the modified proposal is to sustain the current level of water use in the San Francisco River Watershed, and capture the increased water yield, resulting from the catastrophic wildfires, to meet current and future San Francisco River Watershed water right obligations, and improve ecosystem health in Catron County.

These large catastrophic wildfires altered the headwaters and the flow of water in both the main stem and tributaries of the San Francisco River. The objectives in the original proposal, to increase water yield for downstream use through removal of woody vegetation in the uplands, were accomplished at a much higher magnitude than desired. The purpose of the original proposal—to extend water supply and quality through improvement of watershed conditions over a significant portion of the San Francisco watershed, including improved herbaceous ground cover, watershed storage and capture functioning - is still a crucial goal in the modified project.

A necessary modification to the original proposal involves the upland watershed vegetation treatments that are directed towards long term watershed rehabilitation and focus on reforestation, salvage logging and wetland restoration. The restoration of herbaceous ground cover and other erosion control measures reduce sediment load and flood events and restore healthy ecosystems in the uplands. If these preventative measures are not implemented, many of the native wildlife species that have adapted to the past levels of flow in the San Francisco River will be impacted.

The original goal, to make additional usable water available to downstream users in Catron County, and below, will still be met by the modified proposal, but only if the effects of the increased flow and sediment yield can be mitigated at the lower parts of the watersheds. The modified project goal cannot be achieved without on-the-ground functional projects that capture and improve the quality of the expected

two to fourfold increase in water yield. Improvements to lowland at-risk water diversion infrastructures, and stream bank protection, offer, as a by-product a practical approach to mitigate this situation, and sustain downstream water uses.

The modified proposal addresses the lowlands of the watersheds, as well as the uplands, by mitigating at-risk irrigation projects on private land that are exposed to increased levels of stream flows, flood events, and sediment yields expected after the wildfires. In addition, these irrigation projects sustain the ability to meet water demands for agricultural uses (which paradoxically are at-risk due to the inability to capture and use poor quality flood and surface water) and improve ecosystem health. Of the projects in this proposal modification, the Catron County Commission believes that these mitigation measures provide the most expedient and feasible remedy for the adverse impacts from the burned areas.

The final change to the modified proposal is the unique opportunity to monitor and analyze the changes to the upland and lowland components of the watershed after the catastrophic wildfires. The information acquired would facilitate adaptive management by the Forest Service and provide downstream users with the information needed to use water more efficiently, which, in turn, would result in higher and more secure in-stream flows for all uses.

The upland restoration component and the lowland irrigation component work in conjunction to improve watershed health and increased water yield. There are many secondary benefits including: protecting wildlife habitat; reducing the risk to local citizens of flooding and degraded water quality; improving ground water recharge rates; reducing the potential for destruction of infrastructure such as highways and bridges; reducing the potential for destruction of private property such as homes, businesses, and farm fields; and, sustaining existing water rights. Both projects are in accordance with AWSA, page 53, environmental mitigation and restoration Sec 212 (i)) (<http://www.gpo.gov/fdsys/pkg/PLAW-108publ451/pdf/PLAW-108publ451.pdf> .

In many ways yet to be realized, these large catastrophic wildfire events will continue to affect all of the proposed AWSA projects in the Gila and San Francisco River Basins that are being considered by ISC at this time. Because adverse impacts are inevitable, pro-active efforts to mitigate them can reduce their severity and reap benefits to overall watershed and ecosystem health and sustain water uses. If preventative actions do not occur, the purpose of the AWSA will not be fully realized, and future flood waters will cause consequential damage before ending up in the San Carlos Reservoir in Arizona.