


TIER-1 APPLICATION TO THE NEW MEXICO INTERSTATE STREAM COMMISSION
FOR NEW MEXICO UNIT OR WATER UTILIZATION ALTERNATIVE
UNDER THE ARIZONA WATER SETTLEMENTS ACT

APPLICANT INFORMATION (PRINT OR

DATE: 4/30/2011

<p>1. Legal Name: Gila National Forest</p>	<p>2. Organization: United States Forest Service</p>										
<p>3. Address (street, city, county, state, and zip code): 3005 E. Camino del Bosque Silver City, NM 88061</p>	<p>4. Name, email, and phone number of contract person: Rhonda S Helzner rhelzner@fs.fed.us (575) 388-8220</p>										
<p>5. TYPE OF APPLICATION (check one): <input type="checkbox"/> Final <input checked="" type="checkbox"/> Preliminary for review <input type="checkbox"/> Revised</p>	<p>6. TYPE OF APPLICANT (CHECK BOX): <input type="checkbox"/> local governments or municipalities <input type="checkbox"/> soil and water conservation districts, irrigation districts or commissions, acequias, or other political subdivision of the State of New Mexico <input type="checkbox"/> institutions of higher education or a consortium of such institutions <input type="checkbox"/> non-profit organizations or associations <input type="checkbox"/> private individual/s <input checked="" type="checkbox"/> federal agency (ies) <input type="checkbox"/> Other (specify)</p>										
<p>7. BRIEF PROJECT DESCRIPTION: San Francisco River Diversion /Ditch Structural Improvements</p>											
<p>8. AREAS AFFECTED (describe by county, municipality, township, etc. as applicable): Catron and Grant Counties</p>											
<p>9. TOTAL FUNDING REQUESTED (in \$1,000): (See attachment 14A)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">2012: \$10</td> <td style="width: 20%;">2013: \$40</td> <td style="width: 20%;">2014: \$100</td> <td style="width: 20%;">2015: \$100</td> <td style="width: 20%;">2016: \$100</td> </tr> <tr> <td>2017: \$100</td> <td>2018: unk</td> <td>2019:</td> <td>2020:</td> <td>2021:</td> </tr> </table>		2012: \$10	2013: \$40	2014: \$100	2015: \$100	2016: \$100	2017: \$100	2018: unk	2019:	2020:	2021:
2012: \$10	2013: \$40	2014: \$100	2015: \$100	2016: \$100							
2017: \$100	2018: unk	2019:	2020:	2021:							
<p>10a. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED REQUIREMENTS AND ASSURANCES IF THE PROPOSAL IS ACCEPTED.</p>											
<p>10b. TYPED OR PRINTED NAME OF AUTHORIZED REPRESENTATIVE: <i>Patrick McKee - for Forest Supervisor</i></p>	<p>11. TITLE: <i>Forest Supervisor</i></p>										
<p>12. PHONE NUMBER: <i>575-388-8201</i></p>											
<p>13. SIGNATURE: </p>	<p>DATE: <i>5/2/11</i></p>										

**TIER-1 APPLICATION TO THE NEW MEXICO INTERSTATE STREAM COMMISSION
FOR NEW MEXICO UNIT OR WATER UTILIZATION ALTERNATIVE
UNDER THE ARIZONA WATER SETTLEMENTS ACT**

APPLICANT INFORMATION (PRINT OR

DATE: 4/30/2011

<p>1. Legal Name: Gila National Forest</p>	<p>2. Organization: United States Forest Service</p>										
<p>3. Address (street, city, county, state, and zip code): 3005 E. Camino del Bosque Silver City, NM 88061</p>	<p>4. Name, email, and phone number of contract person: Rhonda S Helzner rhelzner@fs.fed.us (575) 388-8220</p>										
<p>5. TYPE OF APPLICATION (check one): <input type="checkbox"/> Final <input checked="" type="checkbox"/> Preliminary for review <input type="checkbox"/> Revised</p>	<p>6. TYPE OF APPLICANT (CHECK BOX): <input type="checkbox"/> local governments or municipalities <input type="checkbox"/> soil and water conservation districts, irrigation districts or commissions, acequias, or other political subdivision of the State of New Mexico <input type="checkbox"/> institutions of higher education or a consortium of such institutions <input type="checkbox"/> non-profit organizations or associations <input type="checkbox"/> private individual/s <input checked="" type="checkbox"/> federal agency (ies) <input type="checkbox"/> Other (specify)</p>										
<p>7. BRIEF PROJECT DESCRIPTION: San Francisco River Diversion /Ditch Structural Improvements</p>											
<p>8. AREAS AFFECTED (describe by county, municipality, township, etc. as applicable): Catron and Grant Counties</p>											
<p>9. TOTAL FUNDING REQUESTED (in \$1,000): (See attachment 14A)</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20%;">2012: \$10</td> <td style="width: 20%;">2013: \$40</td> <td style="width: 20%;">2014: \$100</td> <td style="width: 20%;">2015: \$100</td> <td style="width: 20%;">2016: \$100</td> </tr> <tr> <td>2017: \$100</td> <td>2018: unk</td> <td>2019:</td> <td>2020:</td> <td>2021:</td> </tr> </table>		2012: \$10	2013: \$40	2014: \$100	2015: \$100	2016: \$100	2017: \$100	2018: unk	2019:	2020:	2021:
2012: \$10	2013: \$40	2014: \$100	2015: \$100	2016: \$100							
2017: \$100	2018: unk	2019:	2020:	2021:							
<p>10a. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED REQUIREMENTS AND ASSURANCES IF THE PROPOSAL IS ACCEPTED.</p>											
<p>10b. TYPED OR PRINTED NAME OF AUTHORIZED REPRESENTATIVE:</p>	<p>11. TITLE:</p>										
<p>12. PHONE NUMBER:</p>											
<p>13. SIGNATURE:</p>	<p>DATE:</p>										

14. Evaluation criteria. Comprehensive responses to criteria A through D should be supported where possible by the best available science and scientific data, studies, models, and, where applicable, cite state, regional, or other water plans. Where such data and information is not available, applications should include best estimates and describe how such information would be obtained. Applications that do not include the requested information will not satisfy Tier-1

A. State whether the proposal is for the “New Mexico Unit,” a “water utilization alternative,” or both.

This proposal is for a water utilization alternative. See attachment 14A.

B. Describe how the proposal will meet a “water supply demand” in the Southwest New Mexico Water Planning Region, comprised of Catron, Grant, Hidalgo and Luna Counties.

By improving the points of diversion, this project would improve water supply by providing more efficient means of transporting water to its intended point of use, as well as reducing losses to evaporation and seepage.

Diversion improvement would provide for the minimization and/or elimination of current negative impacts created every time the river floods and heavy equipment is required to reinstall an earthen dam.

This project would provide benefits to the irrigator, the State, and the U.S. public by improving: supply and transport efficiencies, thus reducing water losses; water quality (affects irrigation efficiency) by eliminating repeated installation of earthen berms; fish habitat by maintenance of the substrate and elimination of a barrier, reduction in negative impacts to stream health and channel configuration, reduced expenses to the irrigator, etc.

C. Describe how the proposal considers the Gila environment and describe how any negative impacts might be mitigated.

This project would provide benefits to the irrigator, the State, and the U.S. public by improving supply and irrigation efficiencies, thus reducing water losses; water quality (affects irrigation efficiency) by eliminating repeated installation of earthen berms; fish habitat by maintenance of the substrate and elimination of a barrier, reduction in negative impacts to stream health and channel configuration.

The NEPA analysis to be conducted before approval of any construction would identify the potential for harm to listed species.

D. Describe how the proposal considers the historic uses of and future demands for water in the Southwest New Mexico Water Planning Region and the traditions, cultures and customs affecting those uses.

This project will satisfy community needs by improving the water delivery system to irrigated fields, and is in accordance with historic uses of the water, irrigation traditions and customs. The project will provide environmental benefits to the Gila – San Francisco basin. The project also helps in meeting current and anticipated future demands for water.

This project is expected to provide an increase in both water quality and quantity to users in the Gila and San Francisco drainages. It will augment existing supplies by reducing the seepage from diversions and canals, resulting in more efficient application to the land.

This project would provide benefits to the irrigator, the State, and the U.S. public by improving supply and irrigation efficiencies, thus reducing water losses; water quality (affects irrigation efficiency) by eliminating repeated installation of earthen berms; fish habitat by maintenance of the substrate and elimination of a barrier, reduction in negative impacts to stream health and channel configuration.

Exhibit A. Interstate Stream Commission Gila Policy Statement, September 2004, and 2004 Arizona Water Settlements Act, Section 212 (i)

INTERSTATE STREAM COMMISSION GILA POLICY STATEMENT, SEPTEMBER 2004:

The Interstate Stream Commission recognizes the unique and valuable ecology of the Gila Basin. In considering any proposal for water utilization under Section 212 of the Arizona Water Settlements Act, the Commission will apply the best available science to fully assess and mitigate the ecological impacts on Southwest New Mexico, the Gila River, its tributaries and associated riparian corridors, while also considering the historic uses of and future demands for water in the Basin and the traditions, cultures and customs affecting those uses.

2004 ARIZONA WATER SETTLEMENTS ACT, SECTION 212 (i)

(i) NEW MEXICO UNIT FUND- The Secretary shall deposit the amounts made available under paragraph (2)(D)(i) of section 403(f) of the Colorado River Basin Project Act (43 U.S.C. 1543(f)) (as amended by section 107(a)) into the New Mexico Unit Fund, a State of New Mexico Fund established and administered by the New Mexico Interstate Stream Commission. Withdrawals from the New Mexico Unit Fund shall be for the purpose of paying costs of the New Mexico Unit or other water utilization alternatives to meet water supply demands in the Southwest Water Planning Region of New Mexico, as determined by the New Mexico Interstate Stream Commission in consultation with the Southwest New Mexico Water Study Group or its successor, including costs associated with planning and environmental compliance activities and environmental mitigation and restoration.

FORM 14A

USE THIS FORM TO COMPLETE ANSWERS TO CRITERIA 1 THROUGH 4. NUMBER EACH ADDITIONAL RESPONSE WITH THE CORRESPONDING CRITERIA NUMBER AND SUB-CRITERIA. USE AS MANY PAGES AS NEEDED.

Technical Viability:

These portions of the Gila National Forest are within the Southwest Planning Region; all San Francisco River/tributaries are within the Southwest Planning Region. Project would be located on National Forest System (NFS) lands within containing perennial or intermittent reaches of the San Francisco River and its major tributaries where current earthen dams/diversions exist. This project would be located in Catron County.

Planning, design, and implementation to replace earthen diversions on NFS lands and replace with alternative structures that are more self-maintaining and water-conserving (reduce absorption/leakage by diversion) are included in the proposal. In addition, where feasible and desired by both Forest Service and water right holder, open irrigation ditches could be replaced with pipe to prevent evaporation and seepage losses.

Earthen dams currently must be repaired/replaced following large flow events by means of heavy equipment within the channel. This deterioration and channel disruption increase turbidity, disturb the substrate and fish habitat, alter natural channel configuration and often negatively impact adjacent riparian habitat. By providing a more efficient, natural design to divert water into irrigation ditches, these negative impacts can be greatly reduced and/or eliminated.

The project would not affect any party's water rights, but rather would provide for improved distribution of current water systems and improvement natural resource management downstream.

There are several designs for diversion improvements available, as well as new designs that could be engineered and implemented. Each site would be evaluated for possible solutions and treated accordingly. Other entities, such as U.S.D.A. Natural Resources Conservation Service (NRCS), may also be involved. One proponent has approached the Forest Service and NRCS for assistance and has been pursuing technical/cost information. Optimum designs would emphasize

opportunities for compatibility with high flows and natural systems to minimize both structure maintenance and environmental impacts.

This project proposal is within the provisions of AWSA and would need to be subject to all other legal requirements such as NEPA, Endangered Species Act and Clean Water Act, including permit requirements and conditions

Attachment to 14A:

This proposal is for a water utilization alternative. It is a mitigation measure, with the objective of conserving water and increasing water quality, as described below:

- (1) Improve water use efficiency by removing/replacing existing earthen berms in the channel or reducing losses in unlined or open conveyances. Earthen diversions require frequent maintenance following high flows.**
- (2) Improve water quality. Deterioration of earthen berms by high flows and subsequent heavy equipment instream maintenance activities lower water quality.**
- (3) Benefits to water right holders such as irrigation companies and water users, recreation and other downstream users reliant on clean water, and people of the United States through improved management of water quantity and quality on NFS lands and associated environmental services.**

Attachment to 9: (Total Funding Requested):

Project Costs:

Planning and engineering costs are estimated between \$10,000 - \$20,000 per installation. Construction costs of up to \$100,000 per diversion and ditch replacement/piping are reasonable estimates, based on recent fish barrier construction costs on the Forest.

Diversion improvements would require an upfront cost of design and implementation and then are expected to require minimal maintenance following flood flows. These are site specific projects, and costs are expected to be comparable to similar projects elsewhere.

NEPA analysis and compliance costs are estimated at \$50,000.

There may be an opportunity to utilize AWSA funds to obtain other cost-share dollars or partners.