

**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: July 14, 2011

| | | | | |
|---|--|--|-------------------------|---------|
| 1. Legal Name: Allyson Siwik | 2. Organization: Gila Conservation Coalition | | | |
| 3. Address (street, city, county, state, and zip code): 305A North Cooper St. Silver City, NM 88061 | 4. Name, email, and phone number of contract person: Allyson Siwik info@gilaconservation.org 575.538.8078 | | | |
| 5. TYPE OF APPLICATION (check one): <input checked="" type="checkbox"/> Final <input type="checkbox"/> Preliminary for review <input type="checkbox"/> Revised | 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 checked="" type="checkbox"/> non-profit organizations or associations <input type="checkbox"/> private individual/s <input type="checkbox"/> federal agency (ies) <input type="checkbox"/> Other (specify) | | | |
| 7. BRIEF PROJECT DESCRIPTION: Redesign/construction of Gila diversions using Rosgen-style cross vane diversions to improve efficiency of diversion and maintain instream flows in the Gila River. Project funding would be administered by ISC's acequia program and provided to the GBIC or Grant SWCD--an arrangement similar to what was already contemplated by ISC in Miller Engineering contract# 7273/Work Order GR-09-01 – cancelled due to funding issues. | | | | |
| 8. AREAS AFFECTED (describe by county, municipality, township, etc. as applicable): Cliff-Gila Valley, Grant County Project could be extended to Gila Valley in Hidalgo County and San Francisco River in Catron County. | | | | |
| 9. TOTAL FUNDING REQUESTED (in \$1,000): | | | | |
| 2012: \$150,000 | 2013: \$1.0M | 2014: \$1.0M | 2015: 0 | 2016: 0 |
| 2017: 0 | 2018: 0 | 2019: 0 | 2020: 0 | 2021: 0 |
| 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. | | | | |
| 10b. TYPED OR PRINTED NAME OF AUTHORIZED REPRESENTATIVE Allyson Siwik | 11. TITLE: Executive Director | 12. PHONE NUMBER: 575.538.8078 | | |
| 13. SIGNATURE:  | | | DATE: 7/13/11 | |

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 standards and, therefore, will not be eligible for Tier-2 consideration. Use Form 14a if needed.

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

This project is for a **WATER UTILIZATION ALTERNATIVE** that proposes to design, engineer, and construct Rosgen-style rock vane diversion structures on all the existing ditches in the Gila Valley. This would address several problems, including continual maintenance of the Gila Valley diversion dams, inaccessibility of water during higher flows on the Gila River and annual drying of the river which affects native fauna and flora. A Rosgen-style rock vane diversion would provide a more stable diversion point than the existing push-up earthen dams and would allow access to irrigation water much earlier in the year and at other high flow periods. A properly designed diversion would also withstand floods, divert water at any flow level, return sediment to the river in a more natural and functional manner and allow for persistence and passage of native fish.

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.

This project would meet a water supply demand by allowing irrigators in the Gila Valley to access water earlier in the spring when the existing push-up diversion dams are traditionally washed out. This would provide a more stable and predictable flow of water for agricultural purposes. It would also provide water for native flora and fauna (including some that are on the Endangered Species List) during the driest parts of the year when the entire flow of the river is diverted in order to get water into the irrigation ditches.

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

One of the primary advantages to this kind of diversion is that it is designed specifically to retain base flow in the river sufficient to meet the needs of native species while providing a more stable water supply for irrigation. This design would also eliminate the need for regular disturbance of the flood plain which now takes place every time the push-up diversion dams require rebuilding or maintenance. A fish passage would also be built in to the design to address native fish movement up and down stream. Often times this style of diversion is designed in concert with a more comprehensive riparian/watershed restoration plan which can enhance long-term water availability, species viability and riparian/watershed health. It would be prudent to consider this kind of comprehensive restoration plan as it would not only address agricultural and native species needs but could also address additional issues in the Gila Valley, such as flood risks to private land owners and risk to the Highway 211 bridge which crosses the Gila River.

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.

Construction of this diversion will ensure that irrigators will be able to access the water that they hold the rights to in a more stable manner and for a longer portion of the year without risking impacts to native species and any attendant regulatory pressures potentially arising from future species protection. Native flora and fauna would receive the water needed to thrive during times when the Gila River has traditionally been dried up to maintain water flow to the irrigation ditches. The diversion points would be designed specifically to maintain a base flow during low flow periods and would allow for diversion of additional irrigation water if available.