


**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**

<p>1. Legal Name: Allyson Siwik</p>	<p>2. Organization: Gila Conservation Coalition</p>										
<p>3. Address (street, city, county, state, and zip code):  305A North Cooper St. Silver City, NM 88061</p>	<p>4. Name, email, and phone number of contract person:  Allyson Siwik <a href="mailto:info@gilaconservation.org">info@gilaconservation.org</a> 575.538.8078</p>										
<p>5. TYPE OF APPLICATION (check one):  <input checked="" type="checkbox"/> Final           <input 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 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)</p>										
<p>7. BRIEF PROJECT DESCRIPTION: Wetland restoration on the Gila River in New Mexico for water storage and flood control.</p>											
<p>8. AREAS AFFECTED (describe by county, municipality, township, etc. as applicable):  Cliff-Gila Valley in Grant County  Project could be extended to Gila Valley in Hidalgo County and San Francisco River Valley in Catron County.</p>											
<p>9. TOTAL FUNDING REQUESTED (in \$1,000):</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">2012: \$150,000</td> <td style="width: 20%;">2013: \$1,500,000</td> <td style="width: 20%;">2014: \$1,500,000</td> <td style="width: 20%;">2015: \$500,000</td> <td style="width: 20%;">2016: \$500,000</td> </tr> <tr> <td>2017: 0</td> <td>2018: 0</td> <td>2019: 0</td> <td>2020: 0</td> <td>2021: 0</td> </tr> </table>		2012: \$150,000	2013: \$1,500,000	2014: \$1,500,000	2015: \$500,000	2016: \$500,000	2017: 0	2018: 0	2019: 0	2020: 0	2021: 0
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2017: 0	2018: 0	2019: 0	2020: 0	2021: 0							
<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 Allyson Siwik</p>	<p>11. TITLE: Executive Director</p>										
<p>12. PHONE NUMBER: 575.538.8078</p>											
<p>13. SIGNATURE: </p>	<p>DATE: 7/13/11</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 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 naturally create or build wetlands on land adjacent to the river corridor for water storage and flood mitigation.

This project proposes to use AWSA funding to acquire conservation easements in the floodplain or fee acquisition of land adjacent to the river when available from willing sellers. Naturally-created or built wetlands on land adjacent to the river corridor would reconnect the river to the floodplain and accommodate large flood flows. Where possible levees should be removed and cut banks laid back to encourage the river’s proper functioning condition, thereby improving groundwater infiltration, slowing flood velocity and reducing bank erosion.

**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 providing groundwater recharge and storage and increasing groundwater contribution to river base flows. The conversion of the floodplain to level pastureland has eliminated much of the surface-groundwater connectivity that occurs during flood events. Restoring wetlands and marshes along the Gila River will provide groundwater recharge and increase groundwater contributions to river base flows. Furthermore, increasing the floodplain connection through wetlands will also attenuate flood power, encourage nutrient cycling, and increase alluvial water storage thus providing a more reliable water supply, all of benefit to the private landowners and irrigators.

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

Attempts to restrict the river to its channel will continue to result in increased land loss and decrease the connectivity between surface and groundwater. The shear stress acting to erode a channel bank can only increase in incised channels. However, when rivers are allowed to overbank flood, the erosive forces against their banks decrease dramatically. Flood velocity also decreases notably when a river overbanks into its floodplain, further reducing the rate of bank erosion. This project would allow the river to overbank into its floodplain creating a more stable stream channel and allowing for recharge of groundwater that will contribute to the Gila’s base flows that can be significantly reduced during times of drought and by irrigation.

**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.**

Naturally created or built wetlands will provide increased groundwater storage and flood protection to irrigators along the Gila River. Areas vulnerable to land loss (e.g., FMI property upstream and adjacent Hwy 211 bridge) would be identified and assessed as potential candidate sites for wetlands restoration. By providing increased groundwater recharge and flood protection, this will benefit irrigators and the native flora and fauna that are adversely affected during times when the Gila River historically dries up.