Ecological Flows in New Mexico – It Has Been Done
Adrian Oglesby

Photo © Mike Fugagli
## Federal Ecological Flows
### Biological Opinions

<table>
<thead>
<tr>
<th>River</th>
<th>Method</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pecos</td>
<td>Minimum Instream Flow</td>
<td>5 cfs at Acme gage</td>
</tr>
<tr>
<td>Rio Grande</td>
<td>Minimum Instream Flow + Adaptive Seasonal Minimums</td>
<td>100 cfs at Central Bridge, dry/average/wet years</td>
</tr>
<tr>
<td>San Juan</td>
<td>Habitat-Flow Relationship</td>
<td>Flow recommendations</td>
</tr>
<tr>
<td>Gila</td>
<td>Arizona Water Settlement Act</td>
<td>In play - Historic IFIM</td>
</tr>
<tr>
<td>River</td>
<td>Method</td>
<td>Implementation</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Red River</td>
<td>Wild &amp; Scenic</td>
<td>US-NM-Molycorp (IFIM)</td>
</tr>
<tr>
<td>Jemez East Fork</td>
<td>Wild &amp; Scenic</td>
<td>Abouselman Adjudication (negotiated settlement)</td>
</tr>
<tr>
<td>Rio Chama</td>
<td>Wild &amp; Scenic</td>
<td>Aragon Adjudication (settlement schedule)</td>
</tr>
</tbody>
</table>
Federal Ecological Flows
Federal Water Rights – Refuges

River | Refuge | Implementation
Pecos River | Bitter Lake NWR | Lewis Adjudication
| | (5 year monitoring of wetland ET & spring flow – Stipulated Order)
Rio Grande & Pecos River Biological Opinion flows stored in “Conservation Pools”

The Compact Commissions are permitting storage of water to support Biological Opinion requirements in Rio Grande & Pecos River reservoirs. Original authorizations of reservoirs should be expanded to clarify the ability of right holders to store water for ecological flows.
State Ecological Flows
State Water Rights

The New Mexico Interstate Stream Commission has applied for and received State Engineer surface water permits to augment the flows of the Pecos River for ESA and Compact compliance.

**Vaughan Pipeline:**
Groundwater irrigation rights transferred to instream flow, limited to transfer of Consumptive Use Right

**Seven River Wellfield:**
Surface and groundwater irrigation rights transfers to instream flow for Compact deliveries in progress

Bluntnose Shiner by Joseph Tomelleri
The New Mexico Interstate Stream Commission is authorized to acquire water for ESA & Compact compliance.

**Vaughan Pipeline:**

Groundwater irrigation rights purchased by New Mexico and then leased to Reclamation to meet Biological Opinion minimum instream flow target.

*Photo by James Van Dyke*

Rio Grande SWR effort is underway to offset new habitat surface water ET.
Water rights may be temporarily “retired” but protected from threat of abandonment or forfeiture if placed in a State Engineer approved Conservation Water Project.

**Pecos River CWP:**
- Sufficient groundwater irrigation rights purchased and retired by New Mexico to overcome 10,000 a/ft/yr compact delivery deficit.

  BLM has enrolled surface irrigation rights in Pecos CWP to maintain flows in the Black River.

**Mimbres CWP:**
- Forest Service for chub.

**Gila CWP:**
- Freeport for water right preservation.
Local Flows

Pecos Valley Artesian District:
Long-term water right retirement program to regain groundwater elevation.

Carlsbad Irrigation District:
Historically leased surface water to meet Compact delivery requirements.

Middle Rio Grande Conservancy District:
Cut gross diversions in response to environmental pressure.
The Nature Conservancy’s Living Rivers Program, protecting New Mexico’s freshwater ecosystems for nature, people and the future.