

MEMORANDUM

To: New Mexico Interstate Stream Commission
From: Craig Roepke, Gila Bureau Chief
Date: November 21, 2013
Re: Request for Commission Approval of Proposed Modifications to AWSA Proposals

At its January 16, 2013, the Commission voted to allow the 16 (now 15¹) AWSA proponents a one-time opportunity to amend their proposals. In a letter to the proponents dated January 18, 2013, the Director explained the constraints of the opportunity to amend, and indicated that, after March 8, 2013, any further modifications to the proposals would be made solely at the initiative of the ISC, based on recommendations by its staff and contractors.

The proposals being evaluated by the ISC in the context of the AWSA were, in almost all cases, crafted by stakeholders without significant technical or professional support. During the preliminary evaluations of those proposals, ISC staff and contractors have identified modifications that would improve or optimize the proposals. Optimizing means making the proposals as effective or as functional as possible. These optimizations result from additional information gathered during ongoing contractor and Reclamation studies, and from the preparation of Preliminary Engineering Reports (PERs). The proposals as originally submitted and the recommended modifications to the proposals are listed in Attachment A. For the Commission's convenience, staff has provided a list of all 15 proposals being evaluated, as Attachment B to this memorandum.

The above issues highlight the fact that ongoing studies will very likely reveal more beneficial modifications before assessments and evaluations are completed. Staff would like the Commission to allow staff to optimize the proposals as appropriate during the evaluation process. If the Commission approves this process, staff will report to the Commission on a regular basis regarding optimizations to specific proposals. The list will also be posted on the AWSA website on the last day of each month and modifications brought before the full Commission at the first Commission meeting subsequent.

Request No. 1: Staff requests Commission approval to optimize the AWSA proposals as indicated in Attachment A.

Request No. 2: Staff requests Commission authorization to optimize the 15 AWSA proposals as appropriate. Staff will report to the Commission regarding all optimization changes for the proposals. A list of optimizations will be provided to the Commission and posted on the AWSA website, on the last day of each month. At the Commission meeting following the distribution of such a list, the Commission will review the optimizations.

¹ On May 17, 2013, the Village of Bayard withdrew its AWSA proposal.

**ATTACHMENT A
OPTIMIZATION OF PROPOSALS**

This attachment contains the optimizations that staff and/or contractors recommend for certain proposals. The proposals are numbered to correspond with the numbering in Attachment B, “LIST OF PROPOSALS AND DESCRIPTION” immediately following.

PROPOSAL	PROPOSAL ELEMENT MODIFIED	RECOMMENDED OPTIMIZATION	REASON
1. Southwest New Mexico Regional Supply Proposal (Deming Surface Water Diversion)	1. Store AWSA water in Mogollon Creek 2. Store AWSA water in Mangas Creek	1. Consider Spar and Winn canyons instead of Mogollon Creek canyon 2. Consider other storage locations instead of Mangas Creek Canyon. 3. Consider means to efficiently combine the SWNM Regional Supply System with the GBIC and Hidalgo County Diversion and Storage proposals	1. Storage in Mogollon Creek poses conflicts with AWSA 2. Mangas Creek contains endangered species populations 3. Cost savings
2. Gila Basin Irrigation Commission (GBIC) Diversion and Storage Proposal	1. Store AWSA water in off river ponds (on-farm storage)	1. Remove on-farm storage option	1. No adequate acreage available
3. Hidalgo County Off-Stream Proposal	1. Storage in Schoolhouse Canyon	1. Consider other storage locations instead of Schoolhouse Canyon	1. Schoolhouse canyon has numerous geologic faults
8. San Francisco Watershed Restoration Proposal	1. Ditch improvements	1. Evaluate ditch improvements separate from watershed restoration elements	1. Evaluation of combined ditch and watershed projects cannot be equated with evaluations of discrete ditch projects
6. Deming Wastewater Re-Use Proposal	1. Install 16” diameter PVC trunk line.	1. Utilize 10” and 16” diameter trunk line	1. Cost savings
4. Grant County Water Commission (GCWC) Infrastructure and Reuse Proposal	1. Tanks : 2 @ 825,000 gal, 1 @ 250,000 gal, 1 @ 3 million gal 2. Pipeline material	1. 1 Tank @ 850,000 gal 2. Pipeline material PVC, 16” diameter	1. Additional tanks not needed 2. Permits improved water conveyance

	<p>HDPE and iron, 16" diameter</p> <p>3. Well-field with 4 wells</p> <p>4. 2 Booster stations</p>	<p>3. Well-field with two wells</p> <p>4. 1 Booster station</p>	<p>3. Two wells suffice to furnish proposed water supply and only two wells in application to OSE.</p> <p>4. Single booster station suffices</p>
<p>5. Grant County (GC) Recharge and Reservoir Proposal</p>	<p>1. Construct a dam and reservoir filled with effluent from the Bayard WWTP</p> <p>2. Refurbish spring boxes in Cameron, refurbish water tanks at Ft. Bayard, refurbish water lines at Ft. Bayard, water the ball field in Bayard, build pipeline from Bayard to Santa Clara, build pipeline from Bayard to Ft. Bayard, dump water to creek bed for infiltration</p>	<p>1. Fill the reservoir with AWSA water conveyed through the Southwest Regional Water Supply System</p> <p>2. Remove: refurbish spring boxes in Cameron, refurbish water tanks at Ft. Bayard, refurbish water lines at Ft. Bayard, water the ball field in Bayard, build pipeline from Bayard to Santa Clara, build pipeline from Bayard to Ft. Bayard, dump water to creek bed for infiltration</p>	<p>1. Bayard effluent not available</p> <p>2. No longer needed</p>

ATTACHMENT B
LIST OF PROPOSALS AND DESCRIPTION

Proposal	Description
1. Southwest New Mexico Regional Water Supply Proposal (Deming Surface Water Diversion)	AWSA water would be diverted from the Gila River, stored in off-stream storage in the Cliff-Gila Valley, released from storage for environmental needs and piped to communities in the Mimbres Basin. AWSA funding sought: \$190M. [The Gila Basin Irrigation Commission, and Hidalgo County have indicated a single diversion and storage system integrating their proposals with the Southwest Regional Water Supply System is preferable.]
2. Gila Basin Irrigation Commission (GBIC) Diversion and Storage Proposal	AWSA water would be diverted from the Gila River, stored in off-stream storage in the Cliff-Gila Valley, or in aquifers, released from storage for environmental and agricultural needs in the Cliff-Gila Valley. AWSA funding sought: \$10.233M (should be increased by 25% to reflect current costs, and some significant costs such as land acquisition, are not included)
3. Hidalgo County Off-Stream Proposal	AWSA water would be diverted from the Gila River, stored in off-stream storage in the Cliff-Gila Valley, or in aquifers, released from storage for environmental and agricultural needs in the Virden area. Construction of a small off-stream storage near Virden to capture AWSA water. AWSA funding sought: \$115M+ 200-300K annual cost + \$5-6M for environmental compliance
4. Grant County Water Commission (GCWC) Infrastructure and Re-Use Proposal	Effluent from Silver City's WWTP would be infiltrated to the aquifer and re-charge credits for that water, if so approved by the State Engineer, would be used to withdraw water from a well field near the Grant County airport, if so permitted by the State Engineer, then pumped to supply water to communities in the Mining district near Silver City and to Silver City. AWSA funding sought: \$30.123M capital (Grant County Water Commission would seek 50% from other sources) + \$733K annual costs
5. Grant County (GC) Recharge and Reservoir Proposal	Treated effluent from the Bayard WWTP would be pumped to a reservoir for recreation (swimming and fishing) near Ft. Bayard, and work done to refurbish spring boxes in Cameron creek, refurbish water tanks at Ft. Bayard, refurbish water lines at Ft. Bayard, water the ball field in Bayard, build pipeline from Bayard to Santa Clara, build pipeline from Bayard to Ft. Bayard, dump water to creek beds for infiltration. AWSA funding sought: \$10.7M
6. Deming Wastewater Re-Use Proposal	Treated effluent from the Deming WWTP would be piped to irrigate parks and ball fields in Deming. AWSA funding sought: \$4.484K
7. Bayard Effluent Re-Use	This proposal was withdrawn by the proposer.

8. San Francisco Watershed Restoration Proposal	Tree-thinning and restoration of forest areas damaged by recent wildfires (80,369 acres), improvement of ditch diversions and ditches, construction of small storage ponds. No use of AWSA water is proposed. AWSA funding sought: \$12.09M
9. New Mexico State University (NMSU) Watershed Restoration Proposal	A paired basin study of tree-thinning treatments. AWSA funding sought: \$2.170
10. New Mexico Forest Industries Association (NMFIA) Watershed Restoration Proposal	A paired basin study of tree-thinning treatments combined with some tree-thinning. AWSA funding sought: \$2.270M
11. Grant Soil and Water Conservation District (GSWCD) Watershed Restoration Proposal	Tree thinning (4,022 acres) and study of water savings. AWSA funding sought: \$1.275M
12. US Forest Service (USFS) Watershed Restoration Proposal	Tree thinning (105,000 acres) in the Bear Fire and Snow Lake areas of the National Forest. AWSA funding sought: \$3.63M + “20% of any other AWSA projects funded on US Forest service lands.”
13. Luna Ditch Improvements Proposal	Ditch linings and improvements in a ditch from a reservoir in Arizona to Luna Ditch, improvements to the Luna Ditch diversion, and improvements to laterals. AWSA funding sought: \$1.363M
14. Conservation of Water Through Reductions of Conveyance Loss in the Pleasanton East-side Ditch, Southern Catron County, New Mexico (Pleasanton Ditch Improvements Proposal)	Ditch lining. AWSA funding sought: \$900K (uncertain estimate)
15. Sunset/New Mexico New Model Ditch Pipeline Proposal	Ditch linings. AWSA funding sought: \$18.007M
16. Gila Conservation Coalition (GCC) Municipal Conservation Proposal (to Reduce Net Depletions to Groundwater)	Municipal Conservation Measures. AWSA Funding Sought: \$10.862M The Commission Has Allocated \$100,000 To Pilot Conservation Proposals In Deming and Silver City.