

Arizona Water Settlements Act
New Mexico Process Framework

September 1, 2009 Revision

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I. Introduction a. Background

i. Brief History

The Colorado River Basin Project Act of 1968 (CRBPA) authorized the Central Arizona Project. The Central Arizona Project (CAP) delivers water from the Colorado River near Lake Havasu across Arizona through Phoenix and Tucson. The project is a major resource with a total Colorado River allocation of 1.8 million acre-feet of water annually. Section 304(f) of the original CRBPA authorized an exchange of waters from the Gila River and its tributaries and underground water sources for CAP water in amounts that permit consumptive use of water in New Mexico of not to exceed an annual average in any period of ten consecutive years of 18,000 acre-feet over and above the consumptive uses provided for by article IV of the decree of the Supreme Court of the United States in *Arizona v. California*.

Section 212 (d) of the Arizona Water Settlements Act of 2004 (AWSA) modified Section 304(f) to allow the Secretary of Interior to contract with water users in the State of New Mexico, with the approval of its Interstate Stream Commission, or with the State of New Mexico, through its Interstate Stream Commission for water from the Gila River, its tributaries, and underground water sources in amounts that will permit consumptive use of water in New Mexico not to exceed an annual average in any period of 10 consecutive years of 14,000 acre-feet, including reservoir evaporation, over and above the consumptive uses provided for by article IV of the decree of the Supreme Court of the United States in *Arizona v. California*. Such increased consumptive uses shall continue only so long as delivery of Colorado River Water to downstream Gila River users in Arizona is being accomplished in accordance with the AWSA, in quantities sufficient to replace any diminution of their supply resulting from such diversion from the Gila River, its tributaries, and underground water sources. Full consideration will be given to any differences in the quality of the water involved.

Sections 107 and 212 of the AWSA provide between \$66 and \$128 million in non-reimbursable funds for New Mexico to develop water supply alternatives, including a New Mexico Unit of the CAP if desired to accomplish the exchange. Funds will be deposited into the New Mexico Unit Fund, a State of New Mexico Fund established and administered by the New Mexico Interstate Stream Commission. Beginning in 2012, \$66 million, indexed to reflect changes since 2004 in the construction cost indices, will be deposited into the New Mexico Unit Fund in 10 equal annual payments. Following notification by December 31, 2014 that the State of New Mexico intends to have the New Mexico Unit constructed or developed, a Record of Decision is to be issued in the Federal Register by the Secretary of Interior no later than the end of 2019 (unless extended by the Secretary for reasons outside the control of the State of New Mexico). Upon demonstrating that project construction cost limitations outlined in Section

212(j)(2) are met, an additional \$34 million, indexed to 2004 construction costs will be added to the New Mexico Unit Fund. If minimum earnings in the Lower Colorado Basin Development fund as outlined in Section 212(k) are met, an additional amount of not more than \$28 million indexed to 2004 construction costs shall be made available to the New Mexico Unit fund. Withdrawals from the fund will be to pay costs associated with a New Mexico Unit or other water utilization alternatives to meet water 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.

The Interstate Stream Commission initiated planning efforts shortly after the AWSA was passed in 2004. A memorandum of understanding creating the Gila-San Francisco Coordinating Committee was signed in 2006 by the State of New Mexico, the Interstate Stream Commission, the Southwest New Mexico Water Planning Group, and the Bureau of Reclamation and U.S. Fish and Wildlife Service to evaluate potential effects of water withdrawals on fish and wildlife resources based on flows allowed by the Consumptive Use and Forbearance Agreement (CUFA). A public process was initiated to begin the analysis.

In 2005 (verify), the Gila-San Francisco Collaborative Modeling Team was established to create a modeling framework to address water resource issues in the region. The Gila-San Francisco Decision Support tool was created with input from local stakeholders and provides a basin wide view of water supply and demand issues. A summary of the assumptions and details included in the model are attached as Appendix VI.

The Upper Gila River Science Forum was held on October 21, 2006. The Forum brought in experts on river ecosystem management to assist in determining specific scientific research needed to provide information for a comprehensive, ecosystem-based evaluation of future management decisions.

During the 2007 legislative session, Governor Richardson vetoed funds intended to support the process expressing concerns that the process lacked the balance he felt it needed, and asking that a process move forward considering a range of alternatives, and include consultation with other interested parties.

In October 2007, a series of workshops were initiated culminating in the creation of the Southwest New Mexico Stakeholder Group. This group formed to investigate ways to utilize benefits of the AWSA. Details of the group members, structure, and responsibilities are outlined in Section VII.

On May 28th, 2009, the Gila Planning Economic Forum was held. Experts presented an array of economic tools and techniques that could provide the Southwestern New Mexico Stakeholder's Group with additional decision making and management capabilities. In addition, the forum include presentations on projecting hydrologic effects

of climate change in southwestern New Mexico and an update of demographic and economic trends in the four Gila Basin Counties.

On June 3, 2009, the 2009 Gila Science Forum was held to aid in the determination of the effects of flow modification on the aquatic and riparian resources of the Gila River.

On June 17, 2009 (verify), four consultants provided information water area waer supplies at the Supply and Demand Forum. Recommendations on next steps were also provided for consideration.

- ii. The planning area for this effort is the Southwest New Mexico Planning Region comprised of Grant, Luna, Hidalgo, and Catron Counties.
- b. Purpose - The Stakeholder Group determined that the purpose of this planning process is to determine how to utilize the AWSA in a cost effective manner to balance historical and future demands against uncertain supply while protecting the environment.
- c. Scope of the New Mexico Special Study Framework

This framework provides for an assessment of water resources including current conditions in the Southwest planning region of New Mexico, and an evaluation of alternatives to use New Mexico's benefits, including water and/or funding, provided by the AWSA.

This special study focuses on an appraisal level assessment of needs and opportunities to identify alternatives for more detailed consideration. Existing data and information will be used to the fullest extent possible. Additional data may be generated to the extent needed to identify and recommend plan alternatives. As applied to this study "appraisal level" refers to an investigation to generate sufficient information to allow the selection of a preferred plan, including multiple alternatives that could be used singularly or in combination, or identification of plans requiring more detailed analysis.

Ecology, hydrology including characterization of current and anticipated surface and groundwater supplies and demand within the 4-county study area considering impacts of drought and climate change, demand management/conservation, demographics, economics and social effects of the alternatives must be sufficiently addressed to recommend a plan that would be unlikely to later encounter issues causing significant cost increases or impediments to implementation. Alternatives may also be eliminated from further consideration if determined to be economically, technologically, or environmentally impractical.

Alternatives developed as a result of this process and the no action alternative will be evaluated as to whether each addresses agreed upon criteria described in more detail below. However, the scope of this effort does not include a National Environmental Policy Act (NEPA) compliance document.

The Gila-San Francisco Decision Support Model is designed to evaluate alternative supply and demand management scenarios in an open and transparent venue as options are identified.

- d. Key issues identified by the Stakeholder Group to be addressed by the planning process are:
 - i. Establish an organizational structure and scope for decision-making that promotes trust.
 - ii. Conduct comprehensive baseline studies to identify current and future water supply and demand conditions and the consequences of each.
 - iii. Identify a broad and balanced range of water supply alternatives that close the gap between supply and demand and evaluate each with a common and agreed upon set of criteria.
 - iv. Define desired future conditions (and conditions that are to be avoided) in terms of assets, supply and demand.
 - v. Clarify the legal and regulatory framework and how it applies to water use in southwestern New Mexico.
 - vi. Coordinate AWSA planning efforts with other water planning authorities and initiatives.

- e. Opportunities –
 - i. To utilize funding and/or water authorized under the AWSA while assuring that current water users' rights are not adversely affected.
 - ii. To develop objective measures to use in assuring a dependable supply of water in the Gila and San Francisco Rivers and tributaries to meet the needs of various interests.
 - iii. To implement a plan that will meet current and future water needs within the 4-county region.

- f. Authority

The CRBPA of 1968 (P. L. 90-537) authorized the construction of the CAP and included an exchange of Gila and San Francisco River waters for New Mexico. The AWSA of 2004 (P.L. 108-451) revised the terms of the exchange, authorized funding and provided the authority to develop water supply alternatives including construction of a New Mexico Unit in the Southwest Planning Region of New Mexico if desired. Authority to conduct water resource investigations is also contained in the Reclamation Act of 1902, as amended. Funding for this planning framework may be provided through annual Energy and Water Appropriations, and additional resources available to the State of New Mexico and other stakeholders. This special study is expected to be completed no later than 2011 provided sufficient funds are available on an annual basis.

- g. Decisions Required by the Stakeholder Group Process

The Stakeholder Group will formalize a set of recommendations for utilization of the benefits of the AWSA and provide these recommendations to the Interstate Stream

Commission in sufficient time for the State of New Mexico to notify the Secretary of Interior whether or not they intend to pursue development of a New Mexico Unit. The ISC requested this process be completed prior to 2011.

h. Definitions (continue to add as needed)

<u>Acceptability</u>	The workability and viability of an alternative plan with respect to acceptance by State and local entities and the public and compatibility with existing laws, regulations, and public policies. This criterion is used to test as part of a fatal flaw analysis to screen options.
<u>Appraisal-level</u>	As applied to this study, “appraisal level” refers to an investigation to generate sufficient information to allow the selection of a preferred plan, including multiple alternatives that could be used singularly or in combination, or identification of plans requiring more detailed analysis.
<u>AWSA</u>	Arizona Water Settlement Act, P.L. 108-451
<u>CAP</u>	Central Arizona Project
<u>Completeness</u>	The extent to which a given alternative plan provides and accounts for all necessary investments or other actions to ensure realization of the planned effects. This may require relating the plan to other types of public or private plans if the other plans are crucial to realization of the contributions to the objective. This criterion is used to test as part of a fatal flaw analysis to screen options.
<u>CUFA</u>	Consumptive Use and Forbearance Agreement
<u>Effectiveness</u>	The extent to which an alternative plan achieves the specified opportunities and objectives. This criterion is used to test as part of a fatal flaw analysis to screen options.
<u>Efficiency</u>	The extent to which an alternative plan is a cost-effective means of realizing the specified opportunities and objectives, consistent with protecting the environment. This criterion is used to test as part of a fatal flaw analysis to screen options.
<u>Fatal Flaw</u>	Negative effects that cannot be offset by any degree of benefits from other factors
<u>M&I</u>	Municipal and Industrial
<u>NEPA</u>	National Environmental Policy Act
<u>NHPA</u>	National Historic Preservation Act
<u>Reclamation</u>	Bureau of Reclamation
<u>Special Study</u>	Special studies address a variety of activities that are required to make responsible resource management decisions, but are not intended to lead to Federal actions requiring subsequent or additional authorization by Congress. Special studies are usually undertaken with non-Federal entities to address specific problems or opportunities.

Etc.

II. Framework Approach & Conceptual Methodology

a. Identify Needs

- i. It is anticipated that water demand in the study area will increase over time. In addition, water supplies may change due to natural fluctuations in weather patterns and as a result of climate change. An analysis of water supply and demand issues in the region will identify areas of concern to be addressed, and other areas of uncertainty to plan for in the long term.
- ii. One possible result of no action is an increased likelihood of water shortage in the study area for any or all of the projected future demands.
- iii. Funding provided by the AWSA deposited in the NM Unit Fund shall be for paying costs of a NM Unit or other water utilization alternatives to meet water supply demands in the SW Water Planning Region of NM. The focus of plan formulation for both current and future conditions is meeting water supply demands in the region. If a NM Unit is selected, project purposes may include water for municipal and industrial, irrigation, fish and wildlife, environmental quality, recreation, flood control, other beneficial uses, and related incidental energy considerations.
- iv. The Gila-San Francisco Decision Support model efforts are designed to provide quantitative information on water needs in the basin for both past and future projections.
- v. An initial discussion of desired future conditions on March 19, 2008 tentatively identified 2050 as a planning horizon recognizing that the Stakeholder Group desires a condition that lasts. General themes identified as priorities for planning purposes include protecting the health of the river and ensuring its ecological integrity and diversity, conservation, economy, custom and culture, and property/water rights, particularly those lost as a result of Arizona v. California. These general themes were also reiterated as part of the April 12, 2008 Stakeholder Group discussion.

The Stakeholder Group held a Desired Future Conditions workshop on October 25, 2008. The public and all interested parties in the planning region were invited to attend and asked to describe what could be, or what should be when considering water supply issues in the region over the next 40-50 years. Written summaries were provided by those presenting their vision.

The Implementation Committee created a subcommittee to review and compile the public input and generate a list of the desired future conditions articulated.

At the Implementation Committee on March 2, 2009, the group held a brainstorming session to compile a list of problems identified by attendees. These were later compared to the desired future conditions and compiled into the same document by category. A draft list of desired future conditions was presented to the stakeholders at their April 4, 2009 meeting. The desired future conditions and problem statements were used to develop preliminary planning objectives and constraints at the June and July 2009 Implementation Committee meetings. Acceptance of this list was provided at the July 13, 2009 Implementation/Technical Committee meeting and the following Stakeholders Group meeting. Appendix VI contains a table showing the desired future

conditions, problem statements, objectives, and constraints identified by category.

- b. Planning Objectives (to define, categorize, prioritize and quantify)
 - i. To assure a dependable supply of water to meet the needs of the various interests in the region through 2050.
 - ii. The following objectives and constraints were developed by the stakeholders and committees.
 - 1. Water Supply
 - a. Objectives
 - i. Assess current and project future water supply and demand in each demand area through 2050 for a range of anticipated conditions.
 - ii. Provide alternatives to meet demands within each demand area through 2050.
 - iii. Communicate and utilize best management practices for water managers and users.
 - iv. Identify opportunities for decreases in net depletions and related preservation of water rights.
 - v. Identify opportunities for water-use efficiency improvements.
 - vi. Promote positive working partnerships among and between water providers and users.
 - vii. Utilize AWSA funding to support water supply availability by considering alternatives ranging from no additional development to an annual average exchange in any 10 consecutive year period of 14,000 AF as allowed under the AWSA and the CUFA.
 - 2. Water Quality
 - a. Objectives
 - i. Enhance water quality to increase available supply.
 - b. Constraints
 - i. Avoid degradation of water quality
 - 3. Ecosystem Health
 - a. Objectives
 - i. Develop/maintain streamflow regimes in natural waterways that maintain resource patterns found in the natural hydrograph to sustain, restore, and protect watershed, riparian, and riverine resources, and particularly native species.
 - ii. Develop policy and river management strategies (like in-stream flow) that recognize the perennial nature of the rivers.
 - b. Constraints
 - i. Perennial marsh/cienega/spring/seep, and 1st- 5th order streams persist in the Gila Watershed.
 - ii. Avoid damaging short- and long-term biological integrity of Gila and San Francisco rivers.

- iii. Minimize catastrophic wildfire.
- 4. Flood Protection
 - a. Objectives
 - i. Reduce flood damage along the Gila and San Francisco rivers.
- 5. Species Protection
 - a. Objectives
 - i. Manage habitats for well-distributed biodiversity and protection of threatened, endangered, and native species.
 - b. Constraints
 - i. Perennial marsh/cienega/spring/seep, and 1st-5th order stream habitats persist in the Gila watershed to sustain viable and resilient populations of resident Species of Greatest Conservation Need and Federal and State listed threatened and endangered species.
- 6. Recreation Opportunities
 - a. Objectives
 - i. Provide recreation activities
- 7. Water Rights
 - a. Objectives
 - i. Identify legal validity of “lost” rights and explore avenues to restore losses.
 - b. Constraints
 - i. Minimize potential risks to supply associated with diversions managed by Interior.
 - ii. Avoid export of water supplies to outside the 4-county area.
- 8. Economic Factors
 - a. Objectives
 - i. Develop cost effective alternatives.
 - b. Constraints
 - i. Avoid actions that would limit economic growth in the area.
- 9. Community Values
 - a. Objectives
 - i. Develop ecologically appropriate and sustainable alternatives.
 - ii. Create benefits for each county.
 - b. Constraints
 - i. Avoid actions that substantially alter local, rural character, customs, culture, and values.
 - ii. Preserve the ability of private property owners to implement best management practices to preserve ecological and environmental health.
- 10. Other
 - a. Objectives

- i. Promote positive working partnerships among and between all resource managers, public and private.
 - ii. Develop creative mechanisms to resolve existing conflicts related to land use and riparian management.
 - iii. Recommend a preferred set of water supply and demand management options to the Interstate Stream Commission for consideration when distributing the benefits of the AWSA.
 - iv. Recommended options should include conceptual design and preliminary cost/benefit estimates.
 - v. Identify data gaps that limit the extent that promising alternatives can be determined, and recommend additional data collection to be conducted to reduce these uncertainties.
- iii. The following strategies and others may be used to meet these objectives:
 - 1. Develop and implement water reuse strategies.
 - 2. Develop and implement water conservation strategies to meet projected demands under normal conditions through 2050.
 - 3. Develop and implement water conservation strategies to meet shortages due to drought or climate change through 2050.
 - 4. Improve forest management
 - 5. Storage of surface water
 - 6. Groundwater management
 - 7. Recharge opportunities
 - 8. Implementation of demand management strategies
 - 9. Wastewater Reuse
 - 10. Additional surface water diversions and groundwater sources
 - 11. Maintain riparian buffers
 - 12. Maintain ecological flows
 - 13. Improve range management
 - 14. Improve overall watershed management

III. Resources and Constraints

- a. Available resources:
 - i. Prior studies completed
 - ii. Funding to perform future studies to meet data gaps – What information is needed to determine possible alternatives?
 - iii. Consideration of water options available per the CUFA
 - iv. Funding provided within the AWSA
- b. Risks & Constraints limiting the process
 - i. Understanding groundwater activity within basins
 - ii. Impacts to surface and groundwater resources
 - iii. Impacts to ecology
 - iv. Diversion and delivery of water to meet demands over a large service area
 - v. Time to decide

- vi. Funding availability
- vii. Legal framework including conditions within the AWSA and CUFA to be met associated with various possible alternatives
- viii. Political framework
- ix. Equity issues
 - x. Present water management strategies
 - xi. Present land use strategies
- xii. Political boundaries (state, county, local governments)

IV. Technical Evaluation for Needs Assessment

The following is a list that represents many of the tasks that may be necessary to complete the water supply needs assessment and to meet the needs and objectives identified above. Note that all work carried out for this effort should make maximum use of existing studies and information, with new analyses or data collection undertaken only when a review of existing work reveals it to be incomplete or inadequate for use in this effort. Coordination should occur as needed with various agencies, previous consultants and other interested parties in the study for the purpose of obtaining additional information if available. (Implementation and Technical Committees, Collaborative Modeling Team)

- a. Current water sources
 - i. Surface water (including Gila, SF, Mimbres, & other tributaries into each)
 - 1. Historical data
 - ii. Ground water in the 4-county area
 - 1. Wells
 - a. Location
 - b. Size/production
 - 2. Aquifers
 - a. Identification
 - b. Boundaries
 - c. Capacities
 - d. Aquifer level trends
 - iii. Hydrologic connectivity
- b. Current water uses & location in the 4-county area
 - i. Surface Water
 - 1. Ag
 - 2. Municipal & Industrial
 - 3. Rural domestic use
 - 4. Mining
 - 5. Downstream obligations
 - ii. Groundwater
 - 1. Ag
 - 2. M&I
 - 3. Domestic
 - 4. Mining
 - iii. Effluent

- iv. Recharge
- c. Future Projected Water Sources – Changes anticipated from Item a. above.
 - i. Climate Change
 - ii. Other
- d. Future Projected Demands for 4-county area
 - i. Ag
 - ii. Municipal & Industrial
 - iii. Rural domestic use
 - iv. Environmental
 - v. Mining
 - vi. Downstream obligations
 - vii. Additional demands resulting from changes in climate
- e. Baseline biological and watershed conditions for the 4-county area
 - i. Physical characteristics of watershed
 - 1. Elevations, area(s), gradients, hydrology
 - 2. Geomorphology
 - 3. Geology, soils
 - 4. Vegetation types
 - 5. Water quality
 - ii. Biological
 - 1. Aquatic species
 - a. Federal and State threatened and endangered species, and Species of Greatest Conservation Need
 - b. Native species
 - c. Non-native species
 - d. Critical and sensitive habitat
 - e. Ecological flow requirements
 - 2. Terrestrial species
 - a. Federal and State listed threatened and endangered species and Species of Greatest Conservation Need
 - b. Native species
 - c. Non-native species
 - d. Critical and sensitive habitat
 - e. Ecological flow requirements
 - 3. Riparian ecosystems
 - a. Critical and designated areas
 - b. Ecological flow requirements
 - iii. Land Management
 - 1. Fire
 - 2. Grazing and farming
 - 3. Logging-thinning
 - iv. Cultural Resources
 - 1. Historical
 - 2. Pre-historic

- 3. Inventories/past studies
- v. Recreation
 - 1. Current uses
 - 2. Trends
- f. (ID way to document reports in these categories and summarize appropriate findings here.)

V. Alternatives and Preferred Plan Selection

- a. Identify Potential Options to Meet Needs and categorize (location, size, or function, or by structural, financial, educational, social, institutional, legal, political, commercial)– These are the building blocks for the recommended alternatives.
- b. Water Development Alternatives to take advantage of opportunities and satisfy objectives for the 4-county area
 - i. For each alternative proposal
 - 1. Conceptual description of Alternative
 - a. Infrastructure where applicable
 - b. Water use/water distribution
 - c. Location
 - d. Costs/benefits
 - 2. Social Issues
 - 3. Economic impacts
 - 4. Environmental/ecological issues
 - a. Aquatic
 - b. Terrestrial
 - c. Riparian
 - d. Integration of adaptive management
 - 5. Cultural resource issues
 - 6. Recreation issues
 - 7. Legal institutional constraints of concern specific to alternatives should also be noted.
- c. Establish and Apply Screening Criteria to each option to identify and eliminate all options with fatal flaws and document the decision to either carry forward or exclude alternatives from further consideration. Initial criteria include acceptability, completeness, effectiveness, and efficiency as defined above. Other criteria can be developed as necessary, but are to be applied evenly to all options. These could relate to issues like technical, social, economic, environmental, institutional, legal, acceptability to public, costs, risk and uncertainty, etc. Criteria should ensure that options from above
 - i. Can be supported by participants
 - ii. Can withstand scrutiny of adversaries
 - iii. Can respond to the needs and objectives defined
 - iv. Can be accomplished within defined resources and constraints
 - v. Ensure accuracy and reliability of options
- d. Develop Alternatives – Combine options remaining from the initial screening above into a full range of implementable, comprehensive alternatives to meet needs. (Full

- e. Develop Evaluation Criteria/Weighting as necessary and Evaluate Alternatives (What needs to be known to choose alternatives or what will drive the decision?)
- f. Address effects of each on resources (like water resources including fish and wildlife and recreation, endangered species, economics, social and cultural resources, and environmental justice. The Gila-San Francisco Decision Modeling tool provides a transparent and open environment for stakeholders, public, water professionals, and decision makers to explore their options both individually or in a group setting. The model can be configured with the various evaluation criteria that can then be applied equally and consistently across alternatives.
- g. Select and Recommend Alternatives to Move Forward

VI. Group Organization and Responsibilities

- a. Entities specifically charged with responsibilities under the AWSA
 - i. The State of New Mexico and the New Mexico Interstate Stream Commission
 - 1. Responsibilities under the Act include
 - a. Determining whether to build the New Mexico Unit and notifying the Secretary of Interior of that decision no later than December 31, 2014.
 - b. Overseeing the state requirements if a Unit is selected as identified in the Act.
 - c. Managing the New Mexico Unit Fund in accordance with the Act.
 - d. Other?
 - 2. Gila-San Francisco Water Commission as Successors of the Southwest New Mexico Planning Group
 - a. Responsibilities within the Act include consultation on water supply alternatives
 - 3. Reclamation
 - a. Responsibilities include
 - i. Disbursement of funds to NM from the Lower Colorado Basin Develop Fund
 - ii. Additional legal requirements if diversions under the CUFA selected
 - iii. Environmental Compliance
- b. Other entities are participating in the AWSA planning process through the Southwest New Mexico Stakeholder Group process. These entities shall strive to reach decisions based on consensus.

- i. The Southwest New Mexico Stakeholder Group
 1. Responsibilities include setting goals and direction for the planning program to be implemented by various committees. The Stakeholder Group will come up with goals, vision, and specific questions to be answered by the planning process.
 2. Membership is made up of any interested parties.
- ii. The Implementation Committee
 1. The Implementation Committee is responsible for implementing the planning process and will oversee AWSA planning related studies and analyses consistent with direction provided by the Stakeholder Group.
 2. Membership includes representatives from the New Mexico Governor's Office, New Mexico Interstate Stream Commission, New Mexico Game and Fish Department, U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service, two members from the Gila-San Francisco Water Commission, two members from the Gila Basin Irrigation Commission, and two members representing environmental interests.
 3. Identify funding needs and sources.
- iii. The Technical Committee
 1. The Technical Committee will provide technical leadership including synthesizing existing data and new data as it becomes available, identifying data gaps and key legal drivers, assisting in developing scopes of work for studies supporting AWSA planning, and getting qualified disciplinary teams to accomplish the work. This team's work is subject to periodic external peer review. The Implementation Committee will work with the Technical Team to prioritize studies and assist in contracting as necessary.
 2. Membership of the Technical Committee will be made up of a core technical team and will be expanded to include other members and disciplines as needed. Agencies comprising the core Technical Committee include the New Mexico Interstate Stream Commission, New Mexico Game and Fish Department, the Gila-San Francisco Water Commission, the Gila Basin Irrigation Commission, participating environmental non-governmental organizations, U.S. Fish and Wildlife Service, and the U.S. Bureau of Reclamation.
- iv. The Collaborative Modeling Team
 1. The Collaborative Modeling Team will continue to develop decision support tools to aid the AWSA planning process.
 2. Members represent various interested parties in the region.
- v. The Communications Committee
 1. The Communications Committee will support internal and external communications for the AWSA planning process.
 2. Members may include a paid communications coordinator, a web support person, someone from the facilitation team, and others as appropriate.

vi. Facilitation Team

1. The Facilitation Team will provide facilitation and logistics services to the Stakeholder Group, Implementation Committee, and Technical Committee. The Facilitation Team will assist other committees as needed.

vii. Other standing/interim committees will be developed as needed.

VII. Deliverable - Final Report supporting conclusions and recommendations. A draft and final report will be prepared documenting the planning process, the findings, conclusions and recommendations for future action. All technical disciplines will generate supporting documentation as appropriate to present the details of their individual analysis and evaluation.

VIII. Program Analysis

- a. Costs associated with specific tasks to be accomplished – to be identified. For example, costs associated with hiring an information contractor, or a consultant to provide information for an identified data gap, etc. (Implementation and Technical Committees, Collaborative Modeling Team and others as needed)
- b. Planning Process Schedule (see draft pdf file).

Appendix I - Specific technical studies requested to date.

Studies specifically requested for inclusion by individual stakeholders as of June 15, 2008 as part of this analysis. Recommend review by Technical and Implementation Committees to determine appropriate action within the study framework. Please note these are in no particular order.

Ecology

1. The effects of water diversions and withdrawal on the Gila and San Francisco Rivers pursuant to the CUFA on river ecology.
2. Characterize hydrogeomorphic conditions and develop 'Stage-Discharge-Habitat Relationships' for key ecological attributes.
3. Characterize and analyze aquatic habitat.
4. Characterize and analyze riparian habitat.
5. Evaluate the impacts of nonnative fishes on native fish assemblages.
6. Conduct avian surveys with particular focus on species of greatest conservation need.
7. Conduct herp surveys with particular focus on species of greatest conservation need.
8. Conduct ichthyofauna surveys with particular focus on species of greatest conservation need.
9. Conduct mammal surveys with particular focus on species of greatest conservation need.
10. Conduct terrestrial invertebrate surveys.
11. Conduct aquatic invertebrate and benthos surveys.
12. Evaluate the status and estimate extinction or extirpation risk of rare species.
13. Identify critical river reaches for detailed studies.
14. An ecological complement to the Sandia Water Model adequate to generally assess the ecological feasibility and effects of increased diversions from the Gila River.
15. Ecological impacts of water storage alternatives
16. Conduct predictive analysis of the potential effects of increasing aridity in the region on aquatic dependent fauna.

Hydrology (including surface and groundwater supplies considering impacts of drought and climate change)

1. The effects of watershed and riparian restoration on quality, timing and quantity of water delivery.
2. Effects on the hydrograph of creating "banked water," i.e., slowing surface flow to cause vadose and alluvium recharge.
3. The effects of cloud seeding or other precipitation enhancement technologies on water delivery, timing, and quality.
4. Characterize river channel flows and geomorphology under varying flow regimes.
5. A study of the Mangas Trench Aquifer west of the Continental Divide adequate to assess physical feasibility and financial costs of storing water pumped from the Gila River to supplement the Franks Well Field.
6. A study adequate to assess current groundwater levels in the area between the Franks Well Field and Woodward Well Field and the Tyrone mine site to ensure that a groundwater divide is currently effective in protecting the regional aquifer.

7. Mangus Trench and Mimbres Basin Aquifer study

Supply and Demand management/conservation

1. Update of current supply and demand, “water budget” and projected supply & demand.
2. Quantify current and projected land-use associated with the Gila and San Francisco rivers, and identify related ecological communities.
3. A study of the Mangas Trench Aquifer in the Mimbres Basin adequate to allow the replacement of the critical block management administrative system with a more efficient system that allows optimal exchange and use of water resources locally. (The critical block system creates artificial water shortages through administrative policy.)
4. A study adequate for the approval of return flow credits to local water utilities for water discharged to the aquifer in the Mimbres Basin.
5. A study that identifies opportunities and infrastructure needs for integrating water diversion and delivery systems to optimally serve Silver city, Santa Clara, Bayard, and Hurley from water sources in the Mimbres and Gila Basins.
6. A study including demographic forecasts to balance all ground and surface water supplies against all water demands in the 4-county area.

Economics

1. An economic complement to the Sandia Water Model adequate to generally assess the economic costs of increasing diversions from the Gila River that integrate the CUFA guidelines and appropriate ecological mitigations.

Water Rights

1. The effects of water diversions and withdrawal on the Gila and San Francisco Rivers pursuant to the CUFA on downstream senior water right holders and economies in AZ.
2. Determination of “lost water rights” from the New Mexico adjudications following the Arizona v. California U.S. Supreme Court decree.
3. A study of the Mangas Trench Aquifer and the Gila River that identifies water rights that are owned in blocks larger than 50 acre-feet (consumptive use) and that maps points of diversion and points of use for those rights, including delivery systems if the points of diversion and the points of use are different.

Legal

1. Compiled questions from previous Stakeholder Group sessions (see Carl’s notes)
2. Use of the Strategic Water Reserve to maintain beneficial use through in-stream flow.

Appendix II – Specific Questions Asked

Questions specifically requested for inclusion by stakeholders as of July 30, 2008 as part of this analysis. Recommend review by Technical and Implementation Committees to determine appropriate action within the study framework. Please note these are in no particular order.

1. Is vegetation growth on the rivers affecting surface and ground water flows?
2. Are upland vegetative conditions affecting surface and ground water flows?
3. Do we need diversion projects to go forward with studies?
4. Do agricultural water conservation practices actually save water?
5. If those practices do result in savings, what happens to the saved water?
6. If we do not use the 66 million dollars from the Arizona Water Settlements Act (AWSA) for a water supply need, is it non-reimbursable?
7. What effect will the 14,000 acre/feet of withdrawal pursuant to the CUFA have on the ecological function of the rivers?
8. Can we hold floodwater in arroyo impoundments for longer than 96 hours to increase ground water recharge?
9. Is the damage caused by flooding included in the economic impact cost/benefit analyses?
10. What can be done to reduce flooding under the provisions of the AWSA?
11. Can we put dams on the tributaries?
12. Are there any “dollars lost” studies for the Gila and San Francisco Rivers floods, i.e. how much money has been spent on flood damage over the years?

AWSA Funding

1. What restrictions, if any, are there on the first level of funding provided New Mexico under the Arizona Water Settlements Act? Are there any circumstances under which it would become reimbursable? Are there any circumstances under which the state would not be eligible to receive it at all?
2. What restrictions are there on the second level of funding? What are the legal parameters and limitations on what would constitute a “New Mexico project,” under the meaning of the Arizona Water Settlements Act? What are the size/scope/method/cost/other parameters a “project” must meet to trigger the second level of funding? Under what circumstances, if any, would the second level of funding become reimbursable?
3. Does the \$66M need to go through the NEPA process before it can be used for a project?
4. Disbursements from the Lower Colorado River Development Fund begin in 2012 in \$6.6M increments over 10 years. Does funding for environmental and other planning studies need to go through NEPA before it is expended?

5. Is AWSA funding indexed to future year dollars?
6. Which agency is in control of \$66M in AWSA funding once it is transferred to New Mexico? Who decides how \$66M gets spent?

AWSA Water

7. In the event New Mexico does not initiate a “New Mexico project” under the Arizona Water Settlements Act provision, thereby not initiating an exchange for Central Arizona Project Water, does New Mexico lose any future claim on the 14,000 acre-feet/year specified in the Arizona Water Settlements Act or the original Central Arizona Project legislation? Put more simply, is this a take it now or lose it forever proposition with regard to the 14,000 acre feet?
8. Who owns CAP water?
9. What are the terms and conditions of a contract for AWSA water? Who can contract? What are the appropriate exchange costs (acre-foot basis) over time?
10. What happens after a contract? Can CAP water be leased, exchanged or distributed to water users? By whom—NM CAP Entity?
11. Where can the AWSA water be used? Does it need to stay in southwestern New Mexico or can it be transferred outside of the region? Can places outside the Basin be the CAP entity?
12. What are the specific CUFA rules? How do the CUFA diversion parameters relate to flood flows?
13. What are the conditions under which New Mexico may divert groundwater rather than surface water under the AWSA/CUFA? What are the locations for groundwater diversion under the CUFA? How is it managed/enforced?

Institutional Authority/Management

14. Who manages the New Mexico Unit if one were to be built?
15. What is the role of the Bureau of Reclamation under the AWSA?
16. What are the roles and responsibilities of various agencies and services under the AWSA? How to ensure early consultation re: roles and regulations?
17. What is the State Engineer's authority in permitting the AWSA water?
18. How are shortages addressed?
19. Who communicates with the Bureau of Reclamation?

20. Could these water rights be administered differently? Prior appropriation?

Timing

21. What is the “expiration date” on the second level of funding if any?

22. What are the conditions under which the timeline for a Record of Decision can be extended beyond 2019?

Additional Questions from Stakeholder Group Meetings re: Planning Process:

1. Who are "water users"?

2. What are all the options?

3. What "tests" should be used?

4. How to identify all stakeholders?

5. What latitude is there for drawing the line?

6. How to incorporate a "no water" scenario?

7. How can inefficiencies in water administration be addressed?

8. Standing of applicant (section 7)?

9. How can effects on people in Gila Basin be addressed?

10. Is San Juan/Chama a useful model for Gila?

11. Could these water rights be administered differently? Prior appropriation?

12. Legal framework at federal and state level?

13. Gila-San Francisco Water Commission – what do you do to involve the public?

14. How can science be used? How will it be funded?

15. How can previous studies be used? And how much will they draw on studies? Should there be a preferred sequence of studies? How to decide on what to study?

16. How can the GSFWC be assisted? And what is its role in helping the state achieve its responsibility?

17. How much impact can conservation have on meeting water needs?

18. What are the impacts of depending on ground water?

19. Can agriculture and species preservation co-exist?
20. Cost associated with surface water diversion? Potential benefits?
21. Should we first determine the impacts on/of the CUFA?
22. What should we spend money on?
23. Global warming and water supply? Result in less surface and more ground water?
24. What studies are needed before we move to alternatives? Are done? Need to be done?
25. What is done to ensure trust in who conducts studies?
26. Will GCC participate and assist in funding studies for a collaborative process?
27. How can we increase flow? What is the connection between watersheds and flows?
28. Is the ISC open to alternatives?
29. What does it mean to participate in good faith?
30. Define need (water demands) first?
31. Planning horizon (in years)? 10? 20?
32. What is an inclusive stakeholders group?
33. How can BLM's (and other state and federal mandates) mandated management responsibility be recognized? And included in the process?
34. What is the carrying capacity of this region?
35. Who should be used as experts in applied science?

Appendix III – Specific Projects Proposed for Evaluation

Proposed projects specifically requested for inclusion by stakeholders as of July 30, 2008 as part of this analysis. Recommend review by Technical and Implementation Committees to determine appropriate action within the study framework. Please note these are in no particular order.

Project Name	Project Description
Promoting Conservation in the Upper Gila River Basin	Drawing attention to the preservation of the free-flow Gila.
Various Projects in Catron County	Tree removal, watershed restoration, making existing water rights whole, maintenance of tanks, assistance in installing pipelines in ditches and delivery systems.
Use of Money by the Arizona Settlement	To explore building a dam on the Gila River.
Pipeline Draw Recharge	Location: Woodward Well Field. The main component of this project is the removal and disposal of woody vegetation. The project also includes the removal of sediment from recharge structures, construction of additional erosion control structures, maintenance of recharge structures, and maintenance of watershed using prescribed fire.
White Water Well Field Recharge	Location: South of Grant County Airport
Mangus Creek Restoration	Location: Mangus Valley. The Project addresses water quality. Remediation of this valley will result in a greater perennial flow of Mangas Creek and flow of the Gila River during non-flood events.
Bear Creek Restoration	Location: West of Cliff, NM with head waters at Pinos Altos, NM. Emphasis is on water quality and upland watershed forest health. Components of the project include prescribed burns, erosion control structures, burn boss, and cultural clearances.
Duck Creek Restoration	Location: Buckhorn, NM. The project is primarily designed to address water quality. Remediation of this valley will result in greater perennial flow of Duck Creek and flow of the Gila River during non-flood events.
Duck Creek Recharge Feasibility Study	The purpose of this project is to locate an area suitable for underground storage of CAP water.
Various Projects in Grant County	Fund for supplies systems and delivery systems. Fund for stream and watershed restoration.
New Well Proposal	Drilling of two new production wells in replacement of four existing wells. (Bayard)
Potable Water Treatment Facility at New Well Site	To construct a reservoir and install treatment equipment for chlorination of water at well site. (Bayard)
Infrastructure Improvements	Replacement of aging water supply system to prevent loss of water. (Bayard)
Regional Effluent Reuse Project	Construction of a regional waste water treatment facility for use of irrigation of baseball fields and parks. Other

	uses may include mining and recreational facilities. (Bayard)
Water Projects Outside City Limits	Installation of a supply line from Bayard to Hanover to provide a reliable source of water to residents in Hanover.
Waterline Improvements	Looping the middle school water supply system with the supply lines across US Highway 180. (Bayard)
Various projects in the City of Deming	Agricultural conservation and Declaration of Water Basins for having data system on wells.
Various projects in Silver City	Additional wells, improvement of the Town's Water Delivery System, and additional storage capacity.
Installation of a pipeline in Virden Valley	This is to conserve water in the delivery system. The current system is through earthen ditches.
Gila Institute	The proposed Institute will serve as a pivot organization and center for research, monitoring, education and data management as well as a resource to all stakeholders in the Gila watershed.
Area-Wide Collaborations for Public Drinking Water System	To assist drinking water systems in creating area-wide collaborative solutions to meet current and future drinking water needs.
Various projects	Watershed restoration, repairing restoration and promoting aquifer recharge by treating tributaries.
Conservation Education in the Community	To use part of the funding for education of the community and children, on conservation education and to develop long term research investments.
Model Simulation Software	The model is used to simulate various water use projections, future water needs for population growth. In can be used for water management.

The projects above were proposed in April 2005 by the Southwest New Mexico Water Planning Group.

Appendix IV – Interstate Stream Commission’s Gila Policy Statement¹

Reflecting New Mexico State statutes, Congress directed in the 2004 Arizona Water Settlements Act that the New Mexico Interstate Stream Commission approve any expenditure of monies or contracts for water received by New Mexico in the settlement. Even before the Act was signed into law, the Commission adopted a policy to guide it through the planning and decision process:

"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."

Under State statute, the Governor is also responsible for ensuring the equitable distribution of interstate waters. This policy was adopted by the Commission and approved by the Office of the Governor, with the further directive that the planning and decision process be executed within a fully inclusive and transparent public involvement process.

This process will plan and decide how best to utilize the benefits received in the 2004 Arizona Water Settlements Act. To resolve the potential conflicts between protection of the Gila Basin ecology and present and future demands for water will be neither easy nor simple. The responsibility for the first critical step in this process, providing the citizens of New Mexico the information they need with respect to possible impacts on endangered species, lies with the Gila-San Francisco Coordinating Committee.

¹ <http://www.ose.state.nm.us/PDF/ISC/BasinsPrograms/GilaSanFrancisco/BriefingPacket-7-3-2006.pdf>

Appendix V – Governor Richardson’s June 2008 Policy Statement
on the Gila and San Francisco Rivers

It is imperative that the Gila and San Francisco Rivers be protected and preserved for future generations. To that end, I hereby reaffirm the direction that I provided in 2007 regarding planning on the Gila and San Francisco Rivers.

I want to reiterate and amplify on three specific aspects of my 2007 statement:

- First, it will be the policy of this administration that there be no planning or consideration of constructing any dam on these rivers, and I will do all I reasonably can to make that policy permanent.
- Second, the planning process will be open and inclusive.
- And third, the planning process must specifically include consideration of non-diversion alternatives to meet the current and future water demands of the region. I am skeptical that a new diversion will make economic and/or environmental sense, but the appropriate studies must be completed to support a decision about how to proceed.

The planning process must include inquiries on a range of topic areas already identified by the planning group, including:

- Needs assessment of regional water supply and demand
- Multi-stakeholder planning process including administration and public involvement
- Demand management/conservation
- Demographics
- Economics/Social
- Ecologic studies
- Hydrologic studies including characterization of surface and groundwater supplies within the four-county area considering drought and climate change

There must be a full suite of studies to assess the range of activities that might be undertaken under the 2004 Arizona Water Settlements Act to meet southwestern New Mexico’s water demands – both today and into the future. These studies must specifically include consideration of non-diversion alternatives for meeting the water demands of the region, including investigation of further groundwater development and water gains from improved watersheds and watershed management, but will not include consideration of a dam across either the Gila or San Francisco Rivers.

First and foremost, we must assure ourselves that any activities undertaken to reap the potential benefits of the 2004 Arizona Water Settlements Act will not result in any detriment or impairment to the natural ecological functionality of these two rivers. The state is committed to ensuring a secure water future for Southwestern New Mexico while protecting valuable natural resources like the Gila and San Francisco Rivers.

The Gila planning process along with similar projects that are underway – including river ecosystem restoration projects and designation of key New Mexico headwaters as Outstanding Natural Resource Waters – help to protect New Mexico’s rivers. A combination of these efforts will ensure that the Gila and San Francisco Rivers are protected into the future.

DRAFT

Appendix VI

INSERT SANDIA's 9/18/08 Memo to the Stakeholder Group

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Appendix VII

**Initial Planning Objectives and Constraints for Consideration
Based on identified problems and desired future conditions
September 1, 2009**

9/1/09 rev*	General Desired Future Condition Statements	Problems Identified at the March 2, 2009 Implementation and Technical Committee Meeting worded as reported in SCDP.	Preliminary Planning Objectives (What do you hope to accomplish and what needs would an action help meet?)	Preliminary Planning Constraints (What are sideboards and limits including environmental concerns?)
Water Supply				
	A balance exists between water supply and demand to meet future agricultural, municipal, domestic, commercial, industrial, and ecosystem demands while assuring a sustainable water supply to support economic growth, recreation, healthy and diverse physical and biological watersheds and ecosystems, healthy human populations, fire and road safety, and drought reserve needs.	Impact of domestic wells on the Gila, San Francisco, and Mimbres rivers.	Assess current and project future water supply and demand in each demand area through 2050 for a range of anticipated conditions. Provide alternatives to meet demands within each demand area through 2050. Communicate and utilize best management practices for water managers and users.	
	Residential, commercial, industrial and agriculture uses in the Silver City service area and the neighboring communities in the mining district have sufficient water supplies,	Too few sources of water and inadequate infrastructure to accommodate future growth.	Identify opportunities for <i>decreases in net depletions</i> and related preservation of water rights.	

9/1/09 rev*	General Desired Future Condition Statements	Problems Identified at the March 2, 2009 Implementation and Technical Committee Meeting worded as reported in SCDP.	Preliminary Planning Objectives (What do you hope to accomplish and what needs would an action help meet?)	Preliminary Planning Constraints (What are sideboards and limits including environmental concerns?)
	sufficient water rights, and sufficient water distribution systems, and all of these sufficiencies are supported by a sound scientific understanding of issues affecting local water management, by regulations that reward best practices, by effective working partnerships among water providers, and by adequate financing.		<p><i>Identify opportunities for water-use efficiency improvements.</i></p> <p>Promote positive working partnerships among and between water providers and users.</p> <p>Utilize AWSA funding to support water supply availability by considering alternatives ranging from no additional development to an annual average exchange in any 10 consecutive year period of 14,000 AF as allowed under the AWSA and the consumptive use and forbearance agreement.</p>	
		Irrigation system(s)		
		Need to recycle water.		
	Preserve the ability of NM to use the annual average exchange amount in any 10 consecutive year period of 14,000 AF of water available under the AWSA and the consumptive use and forbearance agreement.	Unknown future increase in water needs.		
Water Quality				

9/1/09 rev*	General Desired Future Condition Statements	Problems Identified at the March 2, 2009 Implementation and Technical Committee Meeting worded as reported in SCDP.	Preliminary Planning Objectives (What do you hope to accomplish and what needs would an action help meet?)	Preliminary Planning Constraints (What are sideboards and limits including environmental concerns?)
	Water quality is improved from current conditions.		Enhance water quality to increase available supply.	Avoid degradation of water quality.
	Water quality meets the needs described for “Water Supply” and “Ecosystem Health.”	Impact of septic tanks on the Gila, San Francisco, and Mimbres rivers.		
		Sediment imbalance in the river.		
Ecosystem Health				
	Watersheds are restored and protected by soil resource and natural streamflow regimes (including small and medium-level overbank events) such that human communities, healthy riparian systems with rich and diverse native plant, animal, and fish populations exist along rivers and natural waterways in the four- county area.	Maintaining a flow to sustain native-species populations and satisfy mandates agencies are responsible for enforcing.	Develop/maintain streamflow regimes in natural waterways that <i>maintain resource patterns found in the natural hydrograph</i> to sustain, restore, and protect watershed, riparian, and riverine resources, <i>and</i> particularly native species. Develop policy and river management strategies (like in-stream flow) that recognize the perennial nature of the rivers.	Perennial marsh/cienega/spring/seep, and 1 st -5 th order streams persist in the Gila Watershed. Avoid damaging short- and long-term biological integrity of Gila and San Francisco rivers.
	The Gila River is an unimpaired, free-flowing river with uncompromised in-stream flows and natural flow regimes.	Maintain an adequate flow to sustain endangered species and provide for multiple uses.		
	Tree densities and arrangement provide fire patterns that avoid catastrophic (or high-intensity) wildfires.	Need for watershed restoration.		Minimize catastrophic wildfire.

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		Lack of and decline in recovery of endangered species.		
		Slow recovery of riparian vegetation.		
		Protecting the ecology of the river(s).		
		Availability of adequate water to support endangered species.		
		River is getting drier and drier.		
		River runs dry during a drought.		
		Keep river from drying up.		
Flood Protection				
	Adequate flood protection for personal property and other purposes exists along the Gila and San Francisco rivers.	Flood plain is inadequate to mitigate floods.	Reduce flood damage along the Gila and San Francisco rivers.	
	Adequate erosion protection exists for lands adjacent to the Gila River.	Need for adequate flood control.		
Species Protection				
	Manage for well-distributed biodiversity and maintain or		Manage habitats for well-distributed biodiversity and	Perennial marsh/cienega/spring/seep, and 1 st through

9/1/09 rev*	General Desired Future Condition Statements	Problems Identified at the March 2, 2009 Implementation and Technical Committee Meeting worded as reported in SCDP.	Preliminary Planning Objectives (What do you hope to accomplish and what needs would an action help meet?)	Preliminary Planning Constraints (What are sideboards and limits including environmental concerns?)
	improve habitats for extant and other threatened and endangered species, native species including restoration of extirpated native species where applicable, and other wildlife and fish populations, including game species.		protection of threatened, endangered, and native species.	5 th order stream habitats persist in the Gila watershed to sustain viable and resilient populations of resident Species of Greatest Conservation Need and Federal and State listed threatened and endangered species.
Recreation Opportunities				
	Provide for diverse recreation activities.	Decline in recreational opportunities on the river.	Provide recreation activities.	
Water Rights				
	Restore water rights previously lost as a result of the 1964 AZ v. CA decree.	Need to rectify the injustice to Gila/San Francisco water basin residents due to the Supreme Court ruling of 1968 and its related impact.	Identify legal validity of “lost” rights and explore avenues to restore losses.	
	Assure water rights can be fulfilled.		Preserve and fulfill existing water rights.	
		Too few water rights.		
		Federalized water rights.		Minimize potential risks to supply associated with diversions managed by Interior.
		Potential export of water supplies.		Avoid export of water supplies to outside the 4-

9/1/09 rev*	General Desired Future Condition Statements	Problems Identified at the March 2, 2009 Implementation and Technical Committee Meeting worded as reported in SCDP.	Preliminary Planning Objectives (What do you hope to accomplish and what needs would an action help meet?)	Preliminary Planning Constraints (What are sideboards and limits including environmental concerns?)
				county area.
		A threat from an entity in the state that says it already owns the water.		
Economic Factors				
	Opportunities exist for economic growth in a healthy regional economy including maintaining a diverse, robust, and sustainable agricultural community compatible with area ecology.			Avoid actions that would limit economic growth in the area.
		Need for lowest possible water cost.	Develop cost effective alternatives.	
Community Values				
	Maintain the local, rural character, customs, culture, and values in the Gila Valley including livestock, farms, and recreation.			Avoid actions that substantially alter local, rural character, customs, culture and values.
	Create or maintain a region where residents can obtain adequate food, shelter, and livelihood while protecting the environment and its communities.		Develop ecologically appropriate and sustainable alternatives.	
	Private property owners can operate and manage farms and			Preserve the ability of private property owners to

9/1/09 rev*	General Desired Future Condition Statements	Problems Identified at the March 2, 2009 Implementation and Technical Committee Meeting worded as reported in SCDP.	Preliminary Planning Objectives (What do you hope to accomplish and what needs would an action help meet?)	Preliminary Planning Constraints (What are sideboards and limits including environmental concerns?)
	land to maintain the desirable ecological and environmental climate along the river.			implement best management practices to preserve ecological and environmental health.
	AWSA benefits contribute to the general welfare of the residents of Catron, Grant, Hidalgo, and Luna counties.		Create benefits for each county.	
Other				
	Elected officials make all decisions concerning present and future water management.			
	Cooperative relationships exist between state and federal resource agencies and private entities to promote conservation and other common efforts.		Promote positive working partnerships among and between all resource managers, public and private. Develop creative mechanisms to resolve existing conflicts related to land use and riparian management.	
	A regulatory framework exists to accommodate and reward best water management practices.			
	The four-county area has a plan for distributing future revenues from the AWSA to support	Identifying how to maximize opportunities under the AWSA.	Recommend a preferred set of water supply and demand management options to the	

9/1/09 rev*	General Desired Future Condition Statements	Problems Identified at the March 2, 2009 Implementation and Technical Committee Meeting worded as reported in SCDP.	Preliminary Planning Objectives (What do you hope to accomplish and what needs would an action help meet?)	Preliminary Planning Constraints (What are sideboards and limits including environmental concerns?)
	locally generated water supply/demand projects.		<p>Interstate Stream Commission for consideration when distributing the benefits of the AWSA.</p> <p>Recommended options should include conceptual design and preliminary cost/benefit estimates.</p> <p>Identify data gaps that limit the extent that promising alternatives can be determined, and recommend additional data collection to be conducted to reduce these uncertainties.</p>	

NOTE: These objectives and constraints will likely continue to evolve throughout the process as additional technical information becomes available.

* Approved at July 13, 2009 Implementation Committee meeting. Changes are in italics from previous version.