#### Arkansas Basin Implementation Plan Revised Goals & Actions

# Storage Goals

- 1. Continue to develop storage opportunities to support Basin needs
  - a. Support new storage both within and outside the Arkansas Basin to help meet the Arkansas Basin water supply gap, mitigate water supply risks, optimize water resources, and provide multi-purpose benefits.
  - b. Work with the State Engineers Office of Dam Safety to identify storage facilities that can be renovated due to aging infrastructure, restored due to loss of storage from sedimentation or fill restrictions, or enhanced for additional storage.
  - c. Support funding, including grant contributions where appropriate, for storage restoration and expansion projects.
  - d. Investigate storage needs on a subregional basis and align with planned projects
  - e. Protect the ability to store water imported from other basins into the Arkansas Basin.
  - f. Promote more flexible ways to store fully consumable water.
- 2. Develop alluvial and designated basin aquifer storage in gap areas within the Basin
  - Quantify alluvial storage opportunities in the sub-regions of the Basin, Upper Ark, Huerfano/Purgatoire, Fountain Creek and Lower Ark, beginning with locations identified in CWP Technical Update Storage memo.
  - b. Develop a feasibility study and action plan for aquifer storage focusing on the needs and opportunities in different sub-regions, differentiating between "holding" storage and "recharge" storage.
- 3. Promote multiple uses at existing and new storage facilities
  - a. Support rehabilitation efforts with grant funds, especially if the project includes environmental and recreational attributes.
  - b. Engage Colorado Parks and Wildlife and other stakeholders in project discussions.
  - c. Work with stakeholders in the basin to identify and encourage opportunities to create storage for multiple purposes and participants.
  - d. Support State of Colorado efforts to obtain an "If & When" storage account in John Martin Reservoir.

# **Municipal & Industrial Goals**

- 1. Meet the Projected Municipal Supply Gap in each subregion within the Basin.
  - a. Characterize current water supplies by subregion and future supply vulnerabilities.
  - Support projects within and outside the Basin that will help meet the Arkansas Basin M&I water supply gap, maintain existing supplies, better manage vulnerable supplies, and maximize utilization of water users' entitlements.
  - c. Support reasonable efforts to prevent Arkansas Basin water being exported from the Basin.
- 2. Support regional efforts for cost-effective solutions to local water supply gaps.
  - a. Provide the opportunity to build partnerships to support the ability of all Arkansas Basin communities especially small rural communities to pursue projects and address infrastructure challenges.
  - b. Support projects that increase efficiency on current supplies, and the ability to move water to where it is needed
- 3. Reduce groundwater dependence on unsustainable aquifers for municipal users.
  - a. Promote tools to help manage groundwater resources.
  - b. Characterize groundwater supply vulnerabilities in the future with respect to both quantity and quality.
  - c. Develop strategies to address groundwater vulnerabilities, including identifying emergency supplies.
- 4. Develop collaborative solutions between municipal, agricultural, and E&R users of water, particularly in drought conditions.
  - a. Recognize relationship with Ag goals and renewed focus on broadening partnerships.
  - b. Document lessons learned from existing Ark Basin ATM/water-sharing projects and provide recommendations on programmatic elements for water sharing success.

# **Agricultural Goals**

- 1. Support projects within and outside the Basin that will help meet the Arkansas Basin Agriculture water supply gap, maintain existing supplies, better manage vulnerable supplies, and maximize utilization of water users' entitlements.
- 2. Sustain a productive agricultural economy in the Basin that sustains viable rural, agriculturalbased communities.
  - a. Quantify economic potential/vulnerabilities under the five planning scenarios.

- b. Support efforts that maximize productivity while making the most efficient use of ag water supplies.
- 3. Provide augmentation water as needed to support increased farm efficiencies.
  - a. Support augmentation projects that allow increased efficiencies (transition to sprinklers, canal and reservoir linings, smaller storage at key locations).
  - b. Help establish long-term sources of augmentation water and end reliance on municipal excesses and year-to-year leases
- Support the development of viable ATM/water-sharing projects between agriculture and municipal interests to mitigate the impacts of drought and provide risk management for agriculture and municipal interests, and facilitate responsible and sustainable water sharing arrangements.
  - a. Convene a committee to research and discuss lessons learned from existing projects and make recommendations for future projects.
- 5. Sustain recreation and environmental activities that depend on habitat and open space associated with farm and ranch land.
  - a. Quantify the value agricultural lands provide as wildlife habitat and for recreation.
  - b. Look at current multi-purpose projects and identify successful strategies that support both ag and E&R values.

# **Environment & Recreation Goals**

- 1. Support projects and programs within and outside the Basin that protect Arkansas Basin E&R water supply needs and collaborate with municipal and ag users to enhance E&R values.
  - a. Support mitigation of risks to E&R values related to potential future reductions of imported water supplies.
- 2. Maintain or improve native fish populations, restore habitat for fish species, and maintain or improve recreational fishing opportunities.
  - a. Continue to support the preservation of native fish species.
  - b. Continue to support the Voluntary Flow Management Program (VFMP), and refinement of the program for fisheries.
  - c. Support and help maintain the Gold Medal status of the Arkansas River.
  - d. Support collaborative stream management plans in high-priority watersheds.
  - e. Support the maintenance of current access areas for fishing to protect riparian habitat and help identify opportunities for additional public access to fishing areas.

- 3. Maintain, or improve boating opportunities, including rafting, kayaking, and other nonmotorized and motorized boating.
  - a. Continue to support and refine the VFMP for instream boating, including stream gaging and forecasting technology.
  - b. Support the maintenance of current access areas for boating, including safety considerations.
  - c. Help identify opportunities for additional public access to instream and flatwater boating areas.
- 4. Maintain or improve aquatic, riparian, and avian habitat (including wetlands) that would support environmental features and recreational opportunities.
  - a. For all Ag and M&I projects, consider the opportunities to E&R and look for multiple benefits.
  - b. Support the maintenance, improvement, and/or restoration of these habitats.
  - c. Monitor the provision of water to the John Martin Reservoir wetlands.
  - d. Support the maintenance, improvement and/or restoration of wetlands throughout the basin.

#### Watershed Health Goals

1. Maintain, improve, or restore critical water supply watersheds that could affect Arkansas Basin water uses and environmental and recreational values.

a. Identify "at-risk" watersheds with important environmental and recreational attributes and/or critical water supply values and promote proactive wildfire risk reduction through forest health protection and improvement activities in those watersheds.

b. Promote watershed health and water quality as shared values to all Arkansas Basin water users.

- c. Support and collaborate with ARWC to develop strategies and solutions.
- 2. Improve water quality as it relates to the environment and/or recreation.

a. Support efforts to reduce contaminants and improve water quality issues in the Upper Arkansas River (mine tailings) and Lower Arkansas River (salts, selenium), as well as sedimentation from fire impacted areas.