



IN REPLY REFER TO:

United States Department of the Interior

FISH AND WILDLIFE SERVICE
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October 23, 2014

Arkansas Natural Resources Commission
Attention Water Plan
101 E. Capitol Ave., Suite 350
Little Rock, AR 72201

Dear Water Planning Staff:

The U.S. Fish and Wildlife Service (Service) is the federal agency in charge of administering the Endangered Species Act (ESA) and reviewing federally funded or permitted projects to assess concerns regarding fish and wildlife resources. We also manage ten National Wildlife Refuges in Arkansas and deliver cooperative conservation on private lands via our Partners for Fish and Wildlife Program. Adequate water quantity and quality are critical components of healthy ecosystems and thus of primary concern to our agency. The wise use of water resources will shape the future of fish and wildlife conservation in Arkansas. The development of a water plan that balances the demands of natural ecosystems with those of agriculture, industry, and municipalities will help determine if our state lives up to its "Natural State" moniker.

The Service was directly involved in the development of the State Water Plan over the last year. Our staff attended statewide and regional planning meetings hosted by the Arkansas Natural Resources Commission (ANRC) and provided input from the perspective of fish and wildlife resource conservation. Our comments and recommendations regarding the draft Executive Summary of the Arkansas Water Plan Update (Plan) follow.

Many watersheds in Arkansas either currently exhibit or are predicted to develop a gap between the demand for water and amount of water available from groundwater aquifers. This has led to great declines in groundwater levels and will likely result in reductions of the long-term viability of these resources. In some areas, the amount of surface water available for use fills this gap and in some cases results in a surplus of water available to meet demands. In other watersheds, there is high demand for groundwater and little surface water available to fill the gap.

The situations described above dictated that the state develop a definition of "excess" surface water to use when considering permit requests for non-riparian diversions. By law only diversions not exceeding this amount may be permitted for non-riparian uses. Currently, this volume is defined as 25% of the average annual flows above that necessary to meet existing uses, instream flow requirements, and future demands. Instream flow requirements include fish and wildlife flows, water quality, aquifer recharge, and navigation. The flows needed to maintain viable populations of fish and wildlife are of utmost concern to the Service. By accounting for these flows and allowing at most 25% of the flows above that amount to be

diverted from river basins, a buffer was provided and streams were protected from non-riparian diversions that may have resulted in significant impacts to biological resources.

In the current version of the Plan, the ANRC is recommending that the 25% limitation be removed and non-riparian transfer amounts be dictated by the results of scientific studies that ensure seasonal flows appropriate to meet existing uses, instream flow requirements and future demands. In some cases, this might mean that 100% of "excess" volume could be permitted for diversion to non-riparian uses. This leaves no room for error when calculating the flow requirements for fish and wildlife and other uses.

At this time, the state is using the Arkansas Method (developed in 1990) to calculate seasonal fish and wildlife needs. In recent years, scientists that study stream and floodplain ecology and hydrology have improved methods for determining stream flows that are required to maintain the ecological viability of streams and their associated floodplains. Existing fish and wildlife communities evolved under conditions that were characterized by annual and seasonal variations, as well as longer term cycles such as droughts and floods. It is difficult to derive a single flow limitation that would mimic these scenarios and provide the habitats necessary to provide long-term viability of fish and wildlife communities. The Plan states that:

"...there is a need to shift to using empirical, risk-based ecological response/flow relationships as the foundation for determining fish and wildlife flows in the future."

We recommend that you continue to work with experts within state and federal agencies and from academia to develop and adopt such methodologies to better describe the requirements of fish and wildlife in Arkansas' river basins. Until such improved methodologies are incorporated into the process of determining "excess" water, we recommend that the 25% limitation stay in place as a buffer to ensure that non-riparian diversions do not result in irreparable harm to the state's valuable fish and wildlife resources.

The diversion of surface water for riparian uses is another issue affecting instream resources in Arkansas. Under state law, riparian landowners enjoy free and unrestricted use of the streamflow, provided their use does not negatively affect the availability of water for other riparian users. Riparian landowners can practically drain a stream as long as no other landowners file a complaint or lawsuit. This practice is not unheard of in eastern Arkansas on some of the smaller waterways like Bayou DeView and Bayou Bartholomew. Surface water overuse is exacerbated in drought years when incoming flows are reduced and demands for diversions are increased.

Theoretically, the ANRC has the legal authority to declare droughts and/or water shortages and allocate water use on an emergency basis during these periods. As pointed out within the Plan, the authority to declare a water shortage and allocate water use has never been exercised, despite the fact that streams in eastern Arkansas are routinely drawn down to critically low levels or even to the point that no flow exists or stream beds are exposed. Bayou DeView in the late 1990s is an example of a resource affected on Service-owned property. Although it routinely has very low levels due to natural conditions exacerbated by pumping for irrigation, the stream bed that year was exposed and thousands of freshwater mussels were killed. Undoubtedly other aquatic organisms were negatively affected as well. The situation was so concerning that the Service

contacted ANRC and requested declaration of a water shortage and implementation of an emergency allocation plan. The Commission chose not to act, either for political, bureaucratic, or other unknown reasons. Even if the Commission had chosen to act, by the time any actions were implemented, the peak pumping season would have ended or rainfall would have relieved the drought. The inability or unwillingness of the ANRC to carry out these responsibilities is unacceptable.

According to the Plan, the ANRC hopes to improve this deficiency. One of the stated goals of the Plan is to:

“Refine criteria for declaring drought, water shortages and excess water, and advance policies and procedures for allocating water during times of shortage or drought.”

We hope that this effort to plan on the front end, before a drought or other water shortage occurs, will improve the overall implementation of this ANRC responsibility.

We appreciate the opportunity to provide input on the development of the plan this past year. As the Plan evolves, we would like to continue to be a part of this process as a participant on the Water Resource Planning Regions (WRPR) workgroups. We would also like to participate on any Issue-specific Implementation Teams that focus on water needs of fish and wildlife or the development of new “excess” water definitions. Additionally, we would like to serve as one of the experts on the Science and Technical Advisory Panel. Finally, we would like to be involved in the event that ANRC develops a coordinated drought contingency response network. Thank you for considering our comments and concerns regarding this draft Executive Summary of Arkansas Water Plan Update.

Sincerely,



Melvin Tobin
Deputy Field Supervisor

cc: Keith Weaver, Cache River NWR
Bo Sloan, White River NWR
Arkansas Game and Fish Commission
Arkansas Natural Heritage Commission
Arkansas Audubon Society
The Nature Conservancy, Arkansas Chapter