

Arkansas Game & Fish Commission

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Scott Henderson
Director

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Water Docket

ENVIRONMENTAL PROTECTION AGENCY

Mailcode 4101T

1200 Pennsylvania Ave., NW

Washington, DC 20460

Attention: Docket ID No.OW-2002-0050

Dear Sir or Madam:

The Arkansas Game and Fish Commission (AGFC) is providing these comments to the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (Corps) in regard to the January 15, 2003 "*Advance Notice of Proposed Rulemaking on the Clean Water Act Regulatory Definition of 'Waters of the United States,'*" (ANPRM; FR Doc. 03-960).

The AGFC is the primary agency responsible for the protection and management of Arkansas' fish and wildlife resources, many of which are wholly or partially dependent upon waters of the United States, including wetlands. With responsibility over both resident and migratory fish and wildlife, we are concerned with the health of wetland systems throughout Arkansas, as well as those across North America, that migratory wildlife depend upon.

We strongly discourage you from restricting the extent of federal protection for any areas currently considered "waters of the United States" subject to the Clean Water Act: perennial, intermittent, and ephemeral streams and their wetlands. Further, we urge you to review your policy on isolated waters, including wetlands, and consider subsurface hydrologic connectivity as a criterion for continuing jurisdiction over them. We will support these positions with information on Arkansas resources, below.

The ANPRM proposes unprecedented, broad restrictions in jurisdiction that would transform federal protections for aquatic and wetland resources. Isolated waters, tributary waters, and the meaning of adjacency and navigation are all brought into question. Legally, this is an apparent reversal of 30 years of regulation and case law.

In 1985, the Supreme Court upheld Congress's grant of broad jurisdiction, based on the recognition that all waters are connected, noting that ["water] moves in hydrologic

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cycles.” US. v. Riverside Bayview Homes, Inc., 474 U.S. 121, 132 (1985). The narrow SWANCC decision should not completely undermine that previous, broader ruling. Further, in the last 30 years a growing body of scientific evidence increasingly illustrates the connection of these waters and their biota. The Clean Water Act was intended to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33USC 1251(a). This cannot be done without protection of the tributary systems, and the wetlands throughout the watershed. We will address issues of biological integrity for each of the potential reductions in jurisdiction: tributary systems, adjacent wetlands, and “isolated wetlands.”

Tributary systems:

Arkansas is rich with mountain streams, most of which are tributary orders away from any river used or historically used for commercial navigation (i.e., barge traffic). One such river is the Buffalo, an Ozark Zone Blue Ribbon smallmouth bass stream and a national recreation destination. Sportfishing in Arkansas resulted in a 2001 economic output of \$843 million (American Sportfishing Association; Southwick Associates). Removing the Buffalo National River, its tributaries, or similar streams from CWA jurisdiction would have devastating impacts both to the biological integrity of the stream, and the economy of Arkansas.

Moving further upstream, many first-order tributaries of the Ozark Mountains originate in Karst topography, where seeps and caves support endemic crayfish and the endangered Ozark cave fish. Removing these areas from CWA jurisdiction could not only impact rare and endangered species, but also reduce habitat, threatening additional endemic species with extinction.

In karst topography, sinkhole and spring run flow moves through eroded paths in the bedrock. In some mountain streams, seasonal stream flow may be inter-gravel or below the surface, only to reappear miles downstream. It might be argued by some that sinks, springs and upstream reaches should be considered isolated, since the surficial flow of water is interrupted. However, dye experiments have clearly shown these areas to be connected in the subsurface, and that water quality in the upper reach affects water quality in the lower. To make arguments of isolation ignores important hydrologic pathways and aquatic functions.

Impacts to these tributary streams, whether by filling or degradation of water quality, will have an impact on the biological, chemical and physical integrity of downstream waters. Many of the fish that live in the larger rivers spawn in the mountain streams. For these reasons, we urge you to continue extending jurisdiction over all streams, and not to reduce jurisdiction to only areas that are traditionally navigable.

Adjacent Wetlands:

Wetlands adjacent to streams, whether at the headwaters or in the bottomland hardwood areas of the state, provide functions critical for maintaining the biological, chemical and physical integrity of the nation’s waters. In Arkansas, we have classified our wetlands using a hydrogeomorphic approach, and characterized the functions of each class (<http://www.mawpt.org/wetlands/classification/classes.asp>). Adjacent wetlands typically comprise a mosaic of wetland types, each of which adds to the functional integrity of the aquatic/wetland ecosystem. For instance, many fish in the large rivers spawn in the bottomland forest wetlands immediately adjacent to the large streams and their tributaries, while pools in wetlands further upstream, where predatory

fish are not as abundant, are important breeding grounds for many amphibians. All adjacent wetland intercept overland flows, and therefore protect the physical and chemical integrity of their streams by recycling nutrients, reducing sedimentation and erosion in streams, reducing flood peaks and draw downs, and providing carbon and other nutrients to aquatic food webs.

Historically, the largest percentage of the Mississippi Flyway's mallard population (Cache River EIS) has wintered in the wooded and moist soil wetlands of Arkansas. Management of waterfowl and waterfowl habitat is a major responsibility of AGFC. In addition to their ecological and societal importance, waterfowl are a tremendously valuable interstate and international economic resource. According to U.S. Fish and Wildlife Service reports, 3 million migratory bird hunters, including approximately 1.6 million waterfowl hunters, expended approximately \$1.4 billion in 2001 for hunting related goods and services. An economic analysis of migratory bird recreation completed in 1991 documented expenditures of \$1.3 billion, having a total economic multiplier effect of \$3.9 billion considering the 46,000 additional jobs and \$176 million in sales and income tax revenues produced. The 2001 study documented that 14% of migratory bird hunting took place in a state other than the one in which the participant resided. Arkansas is a premier destination for many of the nation's waterfowl hunters – in 2001 over 170,000 migratory bird hunters, mostly waterfowl hunters, spent over \$118 million in our state. The economy of many Arkansas communities is based on these expenditures.

These same wetlands host an amazing array and quantity of webless migratory birds. Arkansas birding websites and list servers are now spinning with postings about the progress of wading bird and songbird migration. In 2001, 464,000 people observed wild birds around the home and 149,000 more took bird watching trips for a total of 55 million activity days (NSFWAR, 2001). Much of the \$244 million of wildlife-watching expenditures in Arkansas during 2001 may be attributed to bird watching.

The functional role of adjacent wetlands does not cease at a specific distance from the stream, but rather changes in nature gradually, with the more distant and upstream wetlands often supporting less common or lesser-known species. All three federally listed plants in Arkansas are restricted to specific wetland habitats. One of these, *Harperella (Ptilimnium nodosum)* lives only in wetlands adjacent to low-order Ouachita Mountain tributaries. While known populations of this species are protected under the Endangered Species Act, the loss of CWA protection for these areas could impact undocumented populations, as well as reduce populations of similar species whose status is not yet known.

Isolated Wetlands:

While some guidance has been issued on the subject, we urge you to revisit jurisdictional determinations over wetlands that are not surficially or spatially connected to streams, so-called isolated wetlands. The AGFC has serious concerns over any action that potentially lessens protection of wetlands, particularly those that are geographically isolated and by their nature provide the greatest production potential for North American waterfowl. Small wetlands, many of which are surficially and spatially isolated, play a critical role in the annual life cycle needs of North American waterfowl. For example, the prairie pothole region is the single most important waterfowl breeding area in North America. An estimated 50% of the average total annual production of ducks comes from the potholes in years of average precipitation, and 70% or more

during wet years. Even though wetlands in the prairie-pothole region are mostly spatially isolated, most are hydrologically connected via groundwater, and are therefore not functionally isolated. In addition, vernal pools in flat wetlands within Arkansas are vitally important to the wintering habitat of waterfowl. Depending on the adopted definitions and jurisdictional status of isolated wetlands, tributaries, and adjacent wetlands, these areas could lose their CWA protection, and compromise duck populations.

The AGFC urges EPA and the Corps to consider the subsurface hydraulic functionality when defining the term "isolated waters". While many wetlands may appear to be isolated on the surface, most are in fact hydrologically connected in the subsurface, or seasonally via headwater tributaries. The future of many of Arkansas' wildlife resources is dependent on protection of these small, surficially isolated wetlands.

In addition, isolated waters and wetlands throughout the state support many rare and endemic species that contribute to Arkansas biological diversity and natural heritage. Several species of salamanders and toads must migrate over the woodland or meadow floor to locate vernal pools and other isolated wetlands for breeding. These wetlands provide a nursery relatively free of fish predators. Two of the three Federally listed plant species rely exclusively on isolated wetland types: Pondberry (*Lindera melissifolia*) relies primarily on Sand Ponds and Valley Train ponds, both spatially isolated wetland types in sandy glacial outwash deposits of the Mississippi alluvial plain; Geocarpon (*Geocarpon minimum*) depends on alkali slicks in wet prairie habitats.

Most of the streams in the Mississippi Alluvial Plain and West Gulf Coastal Plain have tributaries that originate in flatwood wetlands. Some of the wet flats are immediately adjacent to the headwater tributaries, but large expanses of them may be considered isolated, since they are often part of an upland/wetland mosaic. These wet flats store a lot of precipitation that would otherwise run overland to the small streams, making them very flashy and prone to erosion. This water also provides base flow for these tributaries through slow release of this water via subsurface transport. Large expanses of these wet flats could be compromised if the protections of isolated wetlands or tributaries are removed, and degradation of downstream areas is sure to follow.

Conclusion:

The EPA and Corps have been valuable federal partners in wetland protection, research and education. However, by issuing the joint guidance memorandum and proposing new rule-making, the agencies have gone well beyond their obligation under the SWANCC decision and consequently initiated a major federal action that may place them in violation of NEPA, if not the CWA. To protect the public interest in waters of the United States, we do not need a crazy-quilt of state wetland laws. We need a context of federal law and regulation that recognizes the diversity and function of all wetlands and reflects the advances in wetland science.

We respectfully request that the Corps and EPA develop their guidance to include all streams, whether ephemeral, intermittent or perennial, all tributaries, and all associated wetlands as jurisdictional under the Clean Water Act. Further, we urge you to define "isolated waters" to afford maximum protection to all wetlands that are functionally connected. AGFC believes that the intent of the CWA cannot be fully achieved without protection of tributary systems, all adjacent wetlands, no matter the distance from a stream, and spatially isolated wetlands.

Sincerely yours,

Scott Henderson, Director
ARKANSAS GAME & FISH COMMISSION