

April 16, 2003

Water Docket, Attn: Docket ID # OW-2002-0050
U.S. Environmental Protection Agency
Mail Code 4101T
1200 Pennsylvania Ave.
Washington, D.C. 20460

Re: Docket ID # OW-2002-0050, Comments pertaining to the Advanced Notice of Proposed Rulemaking on the Clean Water Act Regulatory Definition of "Waters of the United States" in light of the SWANCC Decision.

To Whom It May Concern:

The South Carolina Department of Health and Environmental Control (SCDHEC) is the agency responsible for implementing the regulations governing the use of water resources within the State. SCDHEC's Bureau of Water (BOW) implements the 401 Water Quality Certification program statewide and is pleased to provide the following in response to the Advanced Notice of Proposed Rulemaking (ANPRM) on the Clean Water Act (CWA) Regulatory Definition of "Waters of the United States" issued by the U.S. Army Corps of Engineers (ACOE) and the Environmental Protection Agency (EPA) and published in the Federal Register on January 15, 2003. SCDHEC's Office of Ocean and Coastal Resource Management (OCRM) implements the Coastal Zone Management Program for the State and has already provided a response to the ANPRM.

In South Carolina (SC) the discharge of fill material into waters of the State, including wetlands is largely dependent on the Federal 404/401 CWA program administered by the Army Corps of Engineers, Charleston District, and the SCDHEC's BOW. The State relies on the CWA, Section 401 and the Coastal Zone Management Program, supported by state and federal natural resource agencies as the primary tools to regulate placement of fill into State waters, including wetlands. The State does not currently have a permitting program for placing fill into waters of the State, including wetlands, outside of the Federal 404/401 programs for 99% of State waters (a State permitting program exists for salt water wetlands only). In addition, given the current

budget situation and controversial nature of wetlands regulation within SC, the State is not likely to be able to replicate the Federal 404 permitting and State 401 certification processes that regulated these areas before the Solid Waste Agency of Northern Cook County v. ACOE, 531 U.S. 159 (2001) (SWANCC) decision.

The need for the ANPRM was generated in light of the U.S. Supreme Court decision in SWANCC. The ANPRM solicits information on the extent of resources which could be impacted by jurisdictional changes, the functions and values of wetlands and other waters of the United States that may be impacted by jurisdictional changes, and what factors in 33 CFR 328.3(a)(3)(i)-(iii) should be considered when determining Clean Water Act (CWA) jurisdiction over isolated, intrastate, non-navigable waters.

Potential Impact to Water Resources through Jurisdictional Changes

Using National Wetland Inventory data, SCDHEC-BOW conducted two Geographical Information Systems (GIS) analyses (attached). One analysis included intermittent streams for connectivity and the other excluded intermittent streams for connectivity in determining if wetlands are isolated from surface waters. The GIS analyses determined that SC contains approximately 3,526,693 acres of wetlands. An estimated 312,613 acres, roughly 9%, would be considered isolated wetlands, if intermittent streams are used to determine connectivity for jurisdictional purposes. Approximately 562,684 acres, roughly 16%, of the total wetlands would be removed from regulation by the State if intermittent streams are not used to determine jurisdiction. These acreages of water resources alone, left wholly unprotected in the face of some of the fastest growing counties in the country, are likely to contribute to increased water quality problems in State waters. Coupled with the fact that approximately 25% of State wetlands have been historically altered, the prospect of 41% (25%+16%) of our State wetlands in danger or already impacted is daunting. These estimates do not include the placement of fill in wetlands that may be permitted in the future through the existing 404/401 Federal and State programs within the State.

Some of the areas that may lose jurisdiction and protection from the State (401) and Federal (404) regulatory programs include Carolina Bays. These unique wetland habitats have been impacted historically, as well. Of the approximately 4,000 Carolina Bays present in SC, less than 500 larger than 2 acres remain without impacts (Bennet and Nelson, 1991). Developers are revisiting wetland areas that have been removed from CWA jurisdiction since the SWANCC decision. These areas are being redelineated and determined non-jurisdictional wetlands ripe for impacts without a permitting process. In some cases, these areas deemed non-jurisdictional were part of a compensation package for previously permitted impacts to other wetlands, further confusing the wetlands regulatory arena in SC.

Functions and Values of Water Resources Potentially Impacted through Jurisdictional Changes

The water resources outlined above are important to the overall aquatic ecosystem for many reasons including wildlife habitat, flood control, water quality improvement, and recharge and discharge areas for groundwater.

Removing 16% of the existing wetlands in SC from Federal and State regulation under the 404/401 program could significantly affect existing wildlife habitat areas. These wetlands provide connectivity between larger riverine wetland systems for wildlife moving along wetland and water corridors and play a large role in providing essential wildlife habitat (Batt et al. 1989). The value of these non-jurisdictional, perhaps isolated, wetlands is intimately tied to their position in the landscape with respect to other wetlands. A wetland's position within the landscape of uplands, wetland and other waterbodies, regardless of its size, becomes the most important attribute for habitat value. The more isolated wetland has the greater potential to act as a stepping-stone to connect other more distant wetlands and therefore more habitat value in terms of biodiversity (Semlitsch, 2000).

Non-jurisdictional wetlands have high productivity and fluctuating water levels, generally resulting in high seasonal concentrations of prey organisms many of which are amphibians, which are an important component of the food chain for a large variety of species (Moler and Franz, 1987). Declining amphibian populations worldwide have been reported and in the United States attributed to the rapid habitat loss of these types of wetlands (Dodd, 1997).

In terms of flood control and water quality improvement these wetlands have the ability to detain large volumes of rain and stormwater runoff from the surrounding landscape, thereby significantly reducing flood volumes and flows. For example, we can make simple estimates of water storage ability by assuming an average depth of 3" within the 562,684 acres of wetlands that have lost Federal jurisdiction. This would convert to an area of 2.45×10^{10} square feet and 6.12×10^9 cubic feet of storage. This reveals that these wetlands could provide an estimated 4.58×10^{10} gallons of water storage across the State during flooding events. For comparison, one of the State's largest lakes, Lake Murray, holds approximately 1.5×10^9 gallons of water at normal pool.

When stormwater is detained within wetlands not directly connected by surface water to other waterbodies, biogeochemical cycling and physical processes retain nutrients, sediments, and other pollutants (Mitsch and Gosselink, 1993) within the wetlands. When this water is detained, evaporated, or discharged to ground water (Stone and Stone, 1994), this improves water quality within the larger watershed by decreasing the amounts of nutrients, sediments and other pollutants that can eventually reach other waterbodies. Detention ponds, a common form of stormwater treatment, rely on the same methods for the treatment of stormwater before it enters waters of the State. Removing these areas from regulation would directly affect the ability of the existing Federal and State entities to protect water quality within jurisdictional and non-jurisdictional areas. In SC's surface

waters, nonpoint sources such as stormwater runoff, are responsible for most partial or complete nonattainment of classified uses in State waters. (SCDHEC 2002 305(b) Water Quality Assessment Report for South Carolina). The cost of constructing facilities to replace the lost function these non-jurisdictional wetlands provide would be astronomical.

Factors that should be Considered in Jurisdictional Determinations

The CWA maintains a clear purpose to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters” (CWA 33 CFR). Given the well documented and briefly detailed above functions, values and extent of the isolated wetlands in SC, it appears clear that a “nexus” exists between these waters and the navigable waters that are undeniably covered by the CWA. This nexus, according to the Supreme Court in *United States v. Riverside Bayview Homes, Inc.* (1985) 474 U.S. 121, 106 S. Ct. 455, provides clear reasoning to give isolated wetlands and other non-navigable waters of the State jurisdictional status.

In summary, the SWANCC decision, the Wilson decision and the Tulloch rule have resulted in large scale erosion of the Federal (404) and State (401) regulatory programs for wetlands in SC. As a result of the jurisdictional changes related to a broad interpretation of the SWANCC decision approximately 16% (intermittent streams excluded in GIS analysis) to 9% (intermittent streams included in GIS analysis) of the State’s wetlands would no longer be regulated through the Federal 404 permitting and State 401 certification programs. SCDHEC-BOW recommends that isolated wetlands, either connected by intermittent streams or not, are jurisdictional based on factors outside of the Migratory Bird Rule and believes that a narrow interpretation of the SWANCC decision would benefit water quality within our State. This recommendation is based on the large body of evidence, briefly touched on above, that indicates these waters are integral to the physical, chemical, and biological integrity of the waters of the United States. It is also based on the knowledge that isolated wetlands have hydrological connections to current jurisdictional waters, either intermittent or ephemeral, surface or subsurface, which are not readily apparent and in some cases only occur during large flooding events (Leibowitz and Vining, 2003). The State is working towards introducing legislation to alleviate these Federal jurisdictional issues, but does not anticipate the passage of an effective State wetlands permitting program.

Thank you for allowing us the opportunity to comment.

Sincerely,

Alton C. Boozer, Chief
Bureau of Water

attachments

BQE:ACB

Cc: Charleston District, ACOE
Region 4, EPA

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