



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 9 2005

Ms. Jeanne Christie
Executive Director
Association of State Wetland Managers
2 Basin Road
Wjndham, Maine 04062

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Dear Ms. Christie:

Thank you for your letter of December 19, 2005, indicating that the Association of State Wetland Managers (ASWM) is developing an amicus brief in support of the federal government in the two cases currently before the U.S. Supreme Court, *Rapanes v. United States* and *Carabell v. U.S. Army Corps of Engineers*. I appreciate ASWM's interest in these important cases.

Your letter requests information on a nationwide scale regarding the extent of non-navigable tributaries and adjacent wetlands, as well as on the number of drinking water intakes and Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permits on such waters. The Environmental Protection Agency (EPA) has received information from the public and conducted its own data search on these and related issues. Much of the data, for example, are extracted from national data sets and compared to information provided to EPA in public responses to the 2003 Advance Notice of Proposed Rulemaking (ANPRM) for the Clean Water Act Regulatory Definition of "Waters of the United States." Most of the data used to conduct these analyses is publicly available. While these data represent a factual summary of information obtained from the public and from government data sets, we have included any appropriate caveats where assumptions have been necessary in order to respond to your specific questions.

Some of the analyses and data are identified below as preliminary because they are still being peer reviewed. Data and analyses reviewed and approved through an outside peer review process include the NHD methodology and analysis using start reaches and intermittent/ephemeral waters as a conservative approximation for "non-navigable" waters, and the location of NPDES dischargers into such waters

The extent of non-navigable tributaries is difficult to estimate nationwide because navigability is not a parameter included in national databases. For example, the publicly available National Hydrology Dataset (NHD) maintained by the U.S. Geological Survey does not distinguish between navigable and non-navigable waters. Instead, the NHD characterizes stream reaches based on flow characteristics such as perennial and intermittent/ephemeral. We are providing data on the linear extent of

intermittent/ephemeral streams and "start reaches," stream segments in the NHD that lie at the head of the tributary system and have no other streams flowing into them, because streams with these characteristics are likely to be non-navigable waters. We believe that the length of streams in these two categories provides a conservative range of the extent of non-navigable waters in the U.S.

Based on available 1:100,000 scale data from the NHD, we estimate that 53% of stream kilometers (2,915,824 km) in the U.S. outside Alaska are start reaches. Similarly, queries to the NHD indicate that 59% (3,214,641 km) of the total kilometers of streams in the U.S., excluding Alaska, are intermittent/ephemeral. This information suggests that the linear extent of non-navigable waters ranges from between 53% - 59% of the total length of streams in the U.S., excluding Alaska. These estimates appear consistent with those submitted by states commenting in response to the ANPRM.

EPA has conducted a preliminary analysis to estimate the number of wastewater sources authorized under the Clean Water Act's Section 402 permits program to discharge into either start reaches or intermittent/ephemeral streams nationwide based on data from the NHD and EPA's national database for the NPDES program, the Permit Compliance System (PCS), excluding Alaska. An analysis of PCS data from June 2004 shows that approximately 85% of the individual permits (approximately 37,000 out of 43,000 permits in PCS at that time) have data necessary for determining the location of discharges with respect to intermittent/ephemeral streams and start reaches. As noted above, these water features from NHD have characteristics of non-navigable waters. EPA estimates that over 40% of the 37,000 permits with locational data discharge into either start reaches or intermittent/ephemeral streams, excluding Alaska. Approximately 28% of these discharges are from municipal sewage treatment systems, systems that treat domestic sewage as well as wastewater from commercial and industrial users. The other 72% include an array of discharges from over 500 industrial categories, ranging from elementary and secondary schools to petroleum refining to industrial organic chemical facilities. The discharges covered by this estimate represent most of the individual discharges but do not include the much larger number of discharges covered by storm water and non-storm water general permits (permits that cover multiple, typically smaller, discharges, for which EPA lacks sufficient locational data). These data also are consistent with data submitted by states commenting in response to the ANPRM.

We have also developed a preliminary estimate of public drinking water system intakes receiving water from start reaches or ephemeral/intermittent streams, based on NHD data and information regarding source water protection areas (SWPAs). Preliminary estimates indicate that over 85% of identified SWPAs (for surface water intakes used as a drinking water source) included start reaches, and approximately 60% contain intermittent/ephemeral streams. In total, over 90% of surface water protection areas contain start reaches or intermittent/ephemeral streams. Public drinking water systems which use these intakes (as well as other sources) are estimated to provide drinking water to over 110 million people. Of the over 14,000 public water supply systems using surface waters, RPA has located (on the NHD) and mapped SWPAs for over 7,400 intakes (excluding Alaska but including Puerto Rico) serving 5,646 public

water supply systems. For the purposes of this analysis, SWPAs encompass the drainage area of up to 15 miles upstream from a drinking water intake, and any SWPA that contains at least one start, reach or intermittent/ephemeral stream is included in the count. Please note that this analysis is preliminary, but nonetheless illustrates the important relationship between public health and the water quality of headwater, intermittent, and ephemeral streams.

EPA remains committed to the protection of aquatic resources under the CWA. As you know, President Bush announced an aggressive new national goal to move beyond no net loss of wetlands in America to achieve an overall increase of the Nation's wetlands. The President's challenge is to restore, improve and protect at least three million additional acres of wetlands over the next five years. For the President's Initiative, EPA committed to restore 6,000 acres of wetlands by 2009 and to improve 6,000 acres of wetlands by 2009. We are currently putting together a tracking and reporting system to measure progress towards these goals.

Thank you again for your interest in these cases. If you have further questions, please feel free to contact me or call Dave Evans, Director of the Wetlands Division, at (202) 566-0535.

Sincerely,

A handwritten signature in black ink, appearing to read "B. H. Grumbles", with a long horizontal flourish extending to the right.

Benjamin H. Grumbles
Assistant Administrator